



DEPARTMENT of HEALTH and HUMAN SERVICES

**Fiscal Year
2009**

**Centers for Disease Control
and Prevention**

*Justification of
Estimates for
Appropriation Committees*

INTRODUCTION

The FY 2009 Congressional Justification is one of several documents that fulfill the Department of Health and Human Services' (HHS') performance planning and reporting requirements. HHS achieves full compliance with the Government Performance and Results Act of 1993 and Office of Management and Budget Circulars A-11 and A-136 through HHS agencies' FY 2009 Congressional Justifications and Online Performance Appendices, the Agency Financial Report and the HHS Performance Highlights. These documents can be found at <http://www.hhs.gov/budget/docbudget.htm> and <http://www.hhs.gov/afr/>.

The Performance Highlights briefly summarize key past and planned performance and financial information. The Agency Financial Report provides fiscal and high-level performance results. The FY 2009 Department's Congressional Justifications fully integrate HHS' FY 2007 Annual Performance Report and FY 2009 Annual Performance Plan into its various volumes. The Congressional Justifications are supplemented by the Online Performance Appendices. Where the Justifications focus on key performance measures and summarize program results, the Appendices provide performance information that is more detailed for all HHS measures.

The CDC Congressional Justification and Online Performance Appendix can be found at <http://www.CDC.gov>.

MESSAGE FROM THE DIRECTOR



As the Director of the Centers for Disease Control and Prevention and the Administrator of the Agency for Toxic Substances and Disease Registry, it is my pleasure to present the agency's budget request for Fiscal Year (FY) 2009. In response to the evolving public health challenges of the 21st century, this budget addresses a balanced portfolio of health protection activities, emphasizing both urgent threats we must be prepared to face tomorrow and the urgent realities we are confronting today. This dual emphasis reflects CDC's complex mission in the 21st century – to protect the public's health against major calamities such as pandemic influenza, natural disasters, and terrorism, while remaining focused on the threats to health and welfare that Americans face each day, including chronic diseases, injuries and disabilities.

CDC's mission is focused on maintaining health, not treating illness; on health protection (through health promotion, prevention and preparedness), not disease care; on integrated programs that work, not narrowly defined activities. And most importantly, we are committed to achieving the best possible value from our public health investments across our federal, state, local, tribal and territorial health network. We center our efforts on a set of fundamental Health Protection Goals designed to accelerate health impact, reduce health disparities, and protect people at home and abroad from current and imminent health threats. These overarching goals articulate CDC's vision in the following four areas: *Healthy People in Every Stage of Life*; *Healthy People in Healthy Places*; *People Prepared for Emerging Health Threats*; and *Healthy People in a Healthy World*.

As we evaluate our investments in the context of the FY 2009 budget cycle, I stress the importance of these agency-wide Health Protection Goals and the need to direct investments to areas that demonstrate the greatest public health impact. Moreover, as the goals are refined and implemented, CDC will continue to improve our capacity to measure and demonstrate the impact of our health protection activities and the benefit that accrues to the public as a result of the agency's efforts. These efforts support the HHS FY 2007-2012 Strategic Plan and the Secretary's 500 Day Plan to achieve measurable improvements in health.

The expected life span of Americans continues to exceed previous generations, and we have a historic opportunity to ensure people are healthy at every life stage. For many priorities, we know what to do to improve health and it is imperative that we bring interventions to scale to elicit the greatest good for the greatest number of people. For others, CDC needs to support and conduct health protection research to find new interventions that work and effective ways to disseminate them. Maintaining the agency's critical programmatic investments into FY 2009 will allow us to advance our core health protection mission, providing the leadership and investment required to move our nation firmly in the direction of better health.

In highlighting our accomplishments and prioritizing our investments, the FY 2009 budget request reinforces CDC's position as America's health protection leader and conveys our vision for continuing this important work in the future.

Sincerely,

A handwritten signature in dark ink, reading "Julie Louise Gerberding". The signature is fluid and cursive, with the first name "Julie" being the most prominent.

Julie Louise Gerberding, M.D., M.P.H.

Director, Centers for Disease Control and Prevention, and

Administrator, Agency for Toxic Substances and Disease Registry

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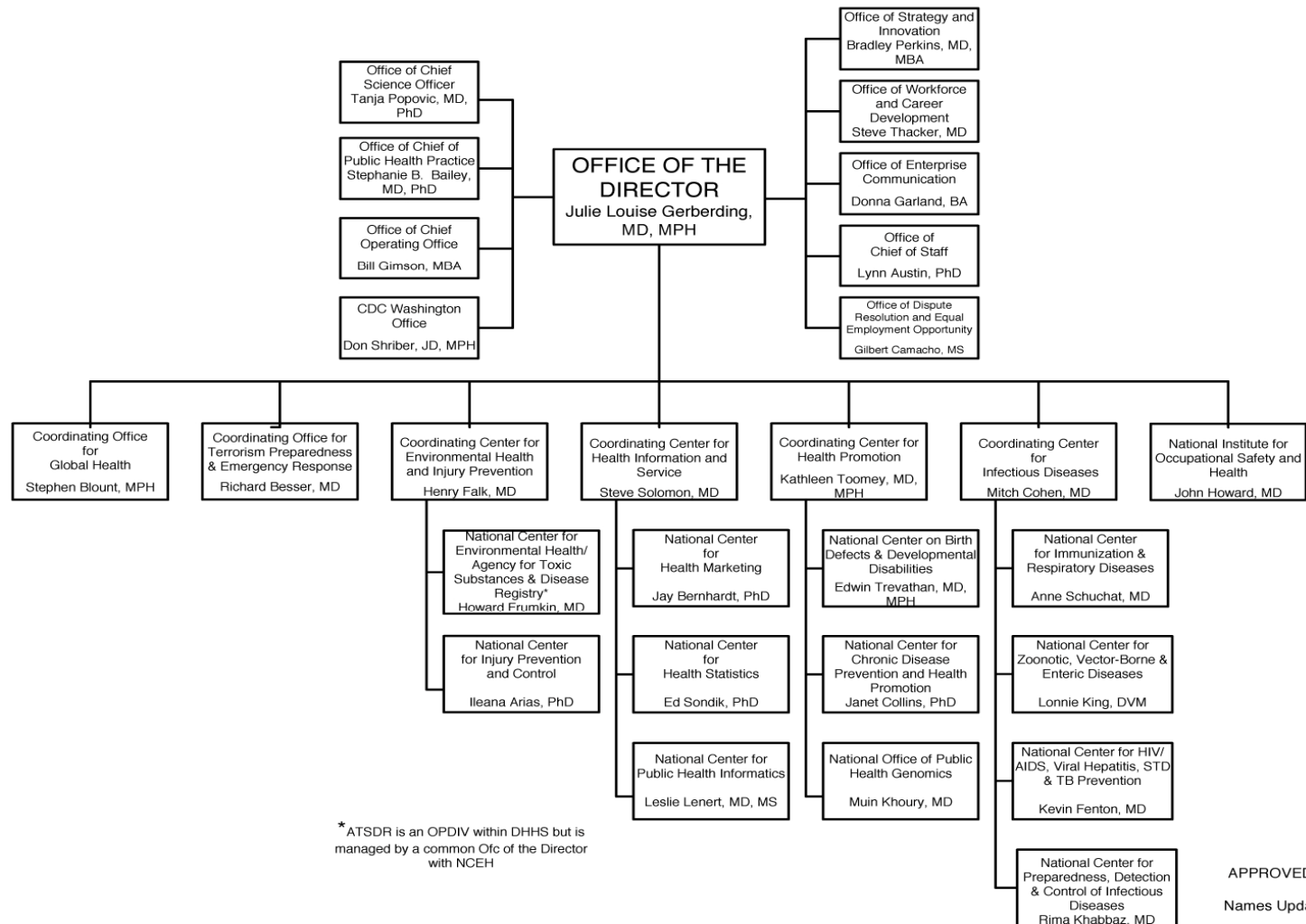
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ORGANIZATIONAL CHART

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)**



EXECUTIVE SUMMARY

INTRODUCTION AND MISSION

AGENCY MISSION

When the Centers for Disease Control and Prevention (CDC) was founded in 1946, the major threats to public health involved infectious diseases. Today, as a leading public health agency in the United States and abroad, CDC faces contemporary urgent health threats like terrorism and SARS in addition to fighting less sensational public health realities such as obesity and heart disease. Accordingly, CDC's mission and scope have evolved to face the broad range of public health threats and challenges of the 21st Century. CDC strives to maintain a balanced portfolio of health protection activities, emphasizing both the urgent threats we must be prepared to face tomorrow and the urgent realities we are confronting today.

CDC's Mission: To promote health and quality of life by preventing and controlling disease, injury, and disability.

The world today is more interconnected than ever, necessitating a new, broader approach to public health. CDC collaborates with a diverse set of local, state, and international partners to prevent, monitor, investigate, and resolve the wide range of complex health issues facing the United States and global communities. CDC also recognizes the importance of providing and delivering health information directly to citizens when, where, and how they need it most. CDC's scientific expertise and workforce remains committed to basing all public health decisions on the highest quality of scientific data and research—thus assuring the trust given to us by our partners and individuals.

The Agency's work directly supports the Secretary's 500-Day Plan for the Department of Health and Human Services (HHS), the newly developed HHS strategic plan, and the Administration's priorities, transforming public health to ensure that its science and programs continue to secure the homeland, improve the human condition around the world, and protect the lives of Americans. As diligent stewards of the public dollars with which we are entrusted each year, CDC focuses its efforts to accelerate health impact, reduce health disparities, and protect people from current and imminent health threats.

HEALTH PROTECTION GOALS

CDC has refocused its efforts, reflected in its core Health Protection Goals, to accelerate health impact, reduce health disparities, and protect people from current and imminent health threats. These goals are organized in four thematic areas:

- *Healthy People in Every Stage of Life* – CDC is customizing science and programs in the areas where it can accelerate health impact by focusing on Americans' health protection needs during each stage of life. Recognizing that many health problems that occur in adulthood can be prevented by mitigating risk factors early in life, the life stage goals take an early and lifelong approach to prevention. By using the unique routes by which people at various stages of life receive health information most effectively, CDC will improve its ability to develop targeted prevention-oriented health solutions.
- *Healthy People in Healthy Places* – CDC is exploring the potential for accelerating health impact by improving the quality and safety of the places where Americans live, work, learn, and play. By bringing CDC science and programs together to focus on these environments, we will ensure that we are doing everything we can to improve the lives and health of Americans.

- *People Prepared for Emerging Health Threats* – CDC has shifted the strategic focus of its preparedness investments from building infrastructure to improving the speed at which the agency and its partners respond to public health emergencies. Our preparedness goals are designed to directly measure how quickly we prevent, detect, investigate, and control public health emergencies resulting from natural disasters, terrorism, infectious disease, and occupational and environmental threats. CDC is using scenario analysis to identify key factors for improving response time. The first scenarios to be addressed include influenza, anthrax, plague, emerging infections, and toxic chemical and radiation exposure.
- *Healthy People in a Healthy World* – The pace at which global threats are emerging is accelerating with increasing international travel and the interconnectivity of national economies. Recognizing the growing health, economic, and political consequences of global health threats, CDC is working with American and international partners to dramatically increase the scale and effectiveness of its efforts to protect Americans at home and abroad and to promote health globally.

BUDGET OVERVIEW

The FY 2009 President's Budget submission includes a total funding level for CDC/ATSDR of \$8.8 billion, which reflects a decrease of approximately \$412.1 million below the FY 2008 Enacted level. The FY 2009 budget request for CDC addresses a balanced portfolio of health protection activities emphasizing both urgent threats we must be prepared to face tomorrow and the urgent realities we are confronting today. This dual emphasis reflects CDC's complex mission in the 21st Century – to protect the public's health against major calamities such as pandemic influenza, natural disasters, and terrorism, while remaining focused on the threats to health and well-being that Americans face each day, including chronic diseases, injuries, and disabilities. CDC continues its strong commitment to advancing the field of public health and accelerating health impact by focusing its efforts on a balance between these urgent threats and urgent realities.

CDC remains committed to allocating resources in a way that maximizes our ability to enhance public health capabilities at the federal, state, and local level. Currently, CDC executes and tracks hundreds of budget lines, corresponding with program activities across the agency. Reduced direction at this detailed level would increase CDC's ability to address programmatic and scientific areas using a more coordinated, science-based approach to public health. Therefore, CDC requests a simplified FY 2009 budget with fewer budget levels set by Congress. CDC will continue to be accountable for health impact across priority areas determined by Congress.

INCREASED PROGRAM INVESTMENTS (+\$168.4 MILLION)**Vaccines for Children Program (VFC) (+\$64.0 million)**

The VFC Program allows vulnerable children access to lifesaving vaccines as a part of routine preventive care, focusing on children without insurance, those eligible for Medicaid, and American Indian/Alaska Native children. Children with commercial insurance that lacks an immunization benefit are also entitled to VFC vaccine, but only at Federally Qualified Health Centers (FQHCs) or Rural Health Clinics (RHCs). The current FY 2009 estimate for the VFC program is \$2,766,230,000, an increase of \$64,024,000 above the current FY 2008 estimate. This increase reflects the net difference between a rise in vaccine purchase costs based on inflation and a savings of \$55,700,000 in FY 2008 due to vaccine inventory reduction as additional grantees transition to the vaccine management business improvement plan (VMBIP) consolidated distribution contract.

Quarantine Stations (+\$33.5 million)

The FY 2009 request includes a \$33,485,000 increase to support Quarantine station maintenance and expansion. The 20 quarantine stations operated by CDC across the U.S. serve to limit the introduction of infectious diseases into the U.S. and to prevent the spread of diseases such as tuberculosis, smallpox and cholera. These stations serve over 120 million airline passengers who fly internationally each year. The importance of quarantine stations continues to rise as new infectious diseases such as SARS and avian influenza emerge and more people travel internationally. The requested FY 2009 increase of \$33,485,000, for an overall investment of \$53,355,000, will fully staff existing domestic stations and add five new international quarantine stations.

Strategic National Stockpile (+\$19.9 million)

The FY 2009 estimate includes a \$19,881,000 increase to support the Strategic National Stockpile (SNS), enabling CDC to continue to purchase, warehouse and manage medical countermeasures. These countermeasures are necessary to provide an adequate response during a catastrophic public health event to treat affected populations, prevent additional illness, and provide medical services and shelter. CDC will also continue to advance the Federal Medical Station (FMS) program designed for low to mid-acuity patient hospital bed surge for victims of catastrophic health events in FY 2009. CDC will continue working towards the achievement of 100 percent preparedness of state public health agencies regarding the use of materials contained in the SNS.

BioSense (+\$15.6 million)

The FY 2009 request includes a \$15,611,000 increase for BioSense. Data received by the BioSense system improves the nation's capabilities for rapid disease detection, monitoring and real-time situational awareness through access to existing data from health care organizations. These data are available simultaneously to state and local health departments, participating hospitals, and CDC, through a web-based application that is accessed through the CDC Secure Data Network. The requested FY 2009 funding increase will enable BioSense to expand from over 800 users in 124 state and local public health jurisdictions by implementing new connections with emerging Regional Health Information Organizations (RHIOs) and Health Information Exchanges (HIEs).

National Center for Health Statistics (+\$11.1 million)

The FY 2009 request includes an increase of \$11,065,000 that will allow the program to continue providing timely, accurate estimates of high priority health measures. CDC will maintain and enhance a variety of surveys and statistical programs that are critical not only to CDC, but throughout government at the federal, state and local level. With the increase, CDC will ensure full 12-month reporting of birth and death data from the states; maintain full field operations of the National Health and Nutrition Examination Survey (NHANES); enhance mechanisms for data access and use through the NHANES tutorial and web-based data access tools; enable the National Health Interview Survey to return to its designed sample size of 100,000, providing improved estimates for smaller population sizes; maintain and redesign systems of the National Health Care Surveys in response to changing patterns of health care delivery and public health; and transition from ICD-9-CM to ICD-10-CM code sets to improve comparability between mortality and morbidity data in the U.S. and internationally.

Upgrading CDC Capacity (+\$10.6 million)

The FY 2009 request includes an increase of \$10,576,000 for Upgrading CDC Capacity. This increase will ensure that all-hazards preparedness and emergency response activities continue building and enhancing systems at the federal, state and local levels catalyzing and implementing preparedness and response capabilities. Within this requested increase, \$10,000,000 will be used to further develop CDC's radiological response capabilities through the creation of a radiologic-specific Laboratory Response Network, or LRN-R. Building a dedicated CDC capability for radiological events will further define surveillance needs and gaps, allowing the development of appropriate data elements to be inserted into existing state, local, and federal surveillance systems to guide detection and monitoring of a radiological event.

Pandemic Influenza (+\$3.1 million)

The FY 2009 request includes an increase of \$3,131,000 for CDC's Influenza Program. This funding will work to minimize domestic and global illness, suffering, and death from seasonal influenza; investigate and contain the spread of avian influenza; and minimize the illness and death that will occur during the next influenza pandemic. Funding will also fund influenza pandemic preparedness priorities such as risk communications.

HIV/AIDS, Domestic Testing Initiative (+\$10.6 million)

At the President's request, CDC has undertaken the Domestic HIV/AIDS Initiative to increase testing in medical and community-based settings, make voluntary testing a routine part of medical care, and create new testing guidelines, models and best practices. The initiative is focused on areas and populations with the highest burden of disease. The FY 2009 budget request includes an increase for Domestic Testing and Early Diagnosis Program for an overall investment of \$93,000,000.

PROGRAM REDUCTIONS AND ELIMINATIONS (-\$574.4 MILLION)

Upgrading State and Local Capacity (-\$135.5 million)

The FY 2009 request includes a decrease of \$135,497,000 for upgrading state and local capacity, including a decrease of \$128,475,00 for the Public Health Emergency Preparedness (PHEP) state and local cooperative agreement program. CDC will continue to strengthen the nation's public health preparedness by supporting 62 grantees with funding, technical assistance and program evaluation services to improve their ability to detect and respond to public health threats. Under the Pandemic and All Hazards Preparedness Act (PAHPA), grant cycles will shift during FY 2009 to better align with state funding cycles. CDC will complete this shift in FY 2009 by providing grantees with a nine-month and three-week funding cycle to coincide with a June 1st state funding start date. This shift, along with the funding reduction will allow monthly funding levels to the states to be maintained at FY 2008 funding levels. CDC will continue to provide all hazards preparedness planning, exercise, evaluation and technical assistance services to the grantees in FY 2009. FY 2010 grantee funding will resume the 12-month cycle as grants will have completed realignment.

Within the Upgrading State and Local Capacity program, CDC will implement and establish the Real Time Disease Detection system, with data collection and analysis to ensue in following fiscal years. The receipt, analysis, and evaluation of national health related data enables early event detection and health situational awareness needed to identify, contain, and minimize terrorist threats in the U.S. Under the Pandemic and All Hazards Preparedness Act (PAHPA) legislation, CDC is responsible for the design and development of a new national electronic data collection network. This network will collect and analyze public health data from governmental and private entities within "real time" of an exposure or release.

Preventive Health and Health Services Block Grant (-\$97.3 million)

CDC proposes the elimination of the Preventive Health and Health Services Block Grant (PHHSBG). As CDC strives to improve efficiency and effectiveness, other existing resources will continue to be available for programs which have traditionally addressed similar public health issues.

World Trade Center (-\$83.1 million)

The FY 2009 request of \$25,000,000 reflects a decrease of \$83,083,000 from the FY 2008 Enacted level.

Building and Facilities (-\$55.0 million)

For FY 2009, CDC requests no funding for the Buildings and Facilities Program, a decrease of \$55,022,000 from the FY 2008 Enacted level. In FY 2009, CDC will sustain existing facilities with carryover balances from previous appropriation.

Business Services Support (-\$31.4 million)

The FY 2009 request includes a decrease of \$31,352,000 for Business Services Support (BSS). The BSS budget line covers a variety of critical administrative costs, including rent, utilities, telecommunications, and security. With the proposed funding, CDC will continue to strive to fulfill needs and mandatory requirements.

Individual Learning Accounts / Administrative Cost (-\$31.0 million)

The CDC FY 2009 request includes an across-the-board reduction of \$31,000,000 from the FY 2008 Enacted level related to CDC's Individual Learning Accounts (ILA's) and other administrative costs. ILA's and administrative costs are shared across CDC; therefore this reduction is applied directly to programs across the agency with the exception of the Public Health Service (PHS) Evaluation Transfer activities. Existing CDC/ATSDR staff will be able to utilize carryover balances for training in FY 2009.

Congressional Projects (-\$26.7 million)

Funding for Public Health Improvement and Leadership is reduced in FY 2009 to reflect the removal of FY 2008 Congressional Projects.

All Other Emerging Infectious Diseases (-\$24.0 million)

The FY 2009 request includes a decrease of \$24,000,000 for this activity. Funding appropriated in FY 2007 (for pandemic influenza preparedness) and in FY 2008 supported improvements in State infrastructure for surveillance of emerging infectious diseases.

Mining Research (-\$11.2 million)

The FY 2009 request includes a decrease of \$11,178,000 for Mining Research. In FY 2006 and FY 2007 CDC received \$23,000,000 in supplemental funding to implement the mandate included in the Mine Improvement and New Emergency Response Act (MINER Act). Mine Research activities will continue with base resources in FY 2009.

National Occupational Research Agenda (NORA) (-\$10.4 million)

The FY 2009 request includes a decrease of \$10,374,000 for the National Occupational Research Agenda (NORA). NORA funds are used to establish and maintain public-private partnerships and to create a new culture of priority-driven research. Now in its second decade, NORA is pursuing an industry sector-based approach to move research results into workplace practice and to ensure the most direct connection possible with workers, business, and other partners.

Steps to a Healthier U.S. (-\$9.6 million)

The FY 2009 request includes a decrease of \$9,553,000 for the Steps program. Steps is changing the grant structure and will fund 50 Steps Community Grants. Based on lessons learned from the initial Steps communities, the Steps Program will broaden its reach and impact to activate change in communities across the United States. Communities will identify local priorities, using science-based tools and strategies to respond, and evaluate the success of their interventions. Tools, resources, and training will be provided to community leaders and public health professionals to equip these entities to effectively confront the growing national crisis in obesity and other chronic diseases in their communities.

Leadership and Management (-\$8.9 million)

The FY 2009 request includes a decrease of \$8,923,000 in funding for Leadership and Management. CDC's Leadership and Management activity supports areas such as strategy and innovation, goals management, and health disparities. With the requested funding amount, CDC will continue to ensure that essential administration and coordination activities continue.

Environmental Health Laboratory (-\$7.4 million)

The FY 2009 request includes a decrease of \$7,440,000 for the CDC's National Center for Environmental Health (NCEH) Laboratory. This activity provides technical assistance to State screening labs, assisting in developing new screening tools and methods to increase accuracy and expand the number of disorders screened, and population-based pilot testing to ensure the effectiveness of new screening tools. CDC also provides technical assistance and training to States in bio-monitoring.

Safe Water (-\$7.2 million)

The FY 2009 request does not include funding for this program, redirecting resources to other high priority public health activities. The decrease will eliminate research, surveillance, and technical assistance activities associated with Pfisteria issues. This program was also proposed for termination in the FY 2007 Budget.

West Nile Virus (WNV) (-\$6.9 million)

The FY 2009 request includes a decrease of \$6,932,000 for West Nile Virus. CDC has awarded funds to 57 state, local, and territorial public health agencies to assist in the development of comprehensive, long-term disease monitoring, prevention, and control programs for WNV. WNV funding has built infrastructure and led to the enhancement of state-based programs to make states better able to prevent, detect, and respond to the threat of WNV and other vector-borne infectious diseases. The establishment of this national program has also enhanced viral laboratory capacity, veterinarian epidemiology capacity, and surveillance of disease. The FY 2009 Budget will decrease the amount of funds available to state and local health departments. Several years of CDC funds have allowed states to develop and enhance their WNV activities. CDC will distribute funds according to the profile of the WNV epidemic.

Johanna's Law (-\$6.5 million)

In FY 2008, CDC was funded to continue activities authorized by Johanna's Law: The Gynecologic Cancer Education and Awareness Act. In FY 2009 CDC is not requesting funds for Johanna's Law. The FY 2009 Budget continues to support funding for gynecologic cancer prevention through the National Education Campaign.

Director's Discretionary Fund (-\$5.9 million)

The FY 2009 request includes a decrease of \$5,895,000 for The Director's Discretionary Fund, which would eliminate this activity. This funding has given the CDC Director the flexibility to address a number of important public health issues. The agency will work to assure that many of the major issues facing the public health system can be effectively addressed.

Demonstration Project for Teen Pregnancy (-\$2.9 million)

The FY 2009 request includes a decrease of \$2,948,000 for the Demonstration Project for Teen Pregnancy. CDC received funding to assist states with preventing teen pregnancies by providing information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. In FY 2009, CDC does not request funding for the demonstration project. CDC will continue its work with teen pregnancy prevention through other programmatic mechanisms.

Pioneering Healthier Communities - YMCA (-\$2.9 million)

The FY 2009 Budget includes no funding for this activity. CDC will continue to support community health promotion activities through other funding mechanisms.

National Center for Health Marketing (-\$2.1 million)

The FY 2009 request includes a decrease of \$2,140,000 for the National Center for Health Marketing (NCHM). The Health Marketing program conducts activities that involve creating, communicating, and delivering health information and interventions using customer-centered and science-based strategies to protect and promote the health of diverse populations. With the requested funding, CDC will work to maintain the existing activities of the Health Marketing program.

National Amyotrophic Lateral Sclerosis (ALS) (-\$2.0 million)

The FY 2009 request of \$863,000 reflects a decrease of \$1,950,000 from the FY 2008 Enacted level. Funding for this activity supports the maintenance of a national amyotrophic lateral sclerosis (ALS) registry to include other neurodegenerative disorders.

Education and Research Centers (ERCs) (-\$1.7 million)

The FY 2009 request includes a decrease of \$1,731,000 for the Education and Research Centers. CDC has established partnerships with 52 academic institutions that comprise the academic network responsible for the nation's Occupational Safety and Health (OSH) training infrastructure. CDC funds 17 University-based ERCs to train occupational safety and health specialists. The ERCs are located in 17 states, representing each HHS Region: AL, OH, CA (two ERCs), CO, MA, IL, MD, IA, MI, MN, NY & NJ, NC, FL, TX, UT, WA.

Mind Research Program (-\$1.7 million)

The FY 2009 request includes a decrease of \$1,719,000 for the Mind Body Research Program. This program will end its five-year cooperative agreement cycle in FY 2008. In FY 2009, the Mind Body Research Program will not be continued.

Real Time Lab Reporting (-\$1.6 million)

The FY 2009 request includes \$7,470,000 for the Real Time Lab Reporting program, a decrease of \$1,552,000 below the FY 2008 Enacted level. This funding will be used to continue FY 2008 releases of LRN Results Messenger, which will provide for the general availability of LRN-Chemical functionality to support data exchange for LRN laboratories performing chemical terrorism testing in FY 2009. Given existing and ongoing programmatic progress, additional laboratories will gain the capability to submit Health Level 7 (HL7) standardized messages to CDC despite the funding decrease.

Heart Disease and Stroke (-\$1.0 million)

The FY 2009 request includes a decrease of \$1,064,000 for heart Disease and Stroke. CDC will continue its heart disease and stroke prevention activities in partnership with state health departments, as well as with other governmental and non-governmental organizations. This program will be supported at the FY 2008 Budget level.

Food Allergies (-\$0.5 million)

The FY 2009 request includes a decrease of \$491,000 for the Food Allergies program, which will eliminate this program. CDC was funded to manage the risk of food allergies and anaphylaxis in schools and provide parents with enhanced information on these conditions via the Internet. In FY 2009, CDC is not requesting funds for the food allergy project.

ALL PURPOSE TABLE

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION ALL PURPOSE TABLE (DOLLARS IN THOUSANDS)			
Budget Activity	FY 2007 Actual ¹	FY 2008 Enacted ²	FY 2009 Estimate
Infectious Diseases ³			
Budget Authority	\$1,796,792	\$1,891,741	\$1,857,183
PHS Evaluation Transfers	\$12,794	\$12,794	\$12,794
<i>Subtotal, Infectious Diseases -</i>	\$1,809,586	\$1,904,535	\$1,869,977
Health Promotion	\$947,004	\$961,193	\$932,073
Health Information and Service ⁴			
Budget Authority	\$136,247	\$89,868	\$132,970
PHS Evaluation Transfers	\$133,826	\$186,910	\$151,385
<i>Subtotal, Health Information and Service -</i>	\$270,073	\$276,778	\$284,355
Environmental Health and Injury Prevention	\$282,752	\$289,323	\$270,872
Occupational Safety and Health			
Budget Authority	\$227,620	\$286,985	\$183,573
PHS Evaluation Transfers	\$87,480	\$94,969	\$87,480
<i>Subtotal, Occupational Safety and Health -</i>	\$315,100	\$381,954	\$271,053
Global Health ^{5, 6}			
Budget Authority	\$307,497	\$302,371	\$302,025
<i>Subtotal, Global Health -</i>	\$307,497	\$302,371	\$302,025
Public Health Research (PHS Evaluation Transfers)	\$31,000	\$31,000	\$31,000
Public Health Improvement and Leadership (PHIL)			
Budget Authority	\$202,559	\$224,899	\$182,143
<i>Subtotal, PHIL -</i>	\$202,559	\$224,899	\$182,143
Preventive Health & Health Services Block Grant (PHHSBG)	\$99,000	\$97,270	\$0
Buildings and Facilities	\$134,400	\$55,022	\$0
Business Services Support ^{7, 8}	\$378,289	\$371,847	\$337,906
Terrorism ⁹			
Budget Authority	\$1,472,553	\$1,479,455	\$1,419,264
<i>Subtotal, Terrorism -</i>	\$1,472,553	\$1,479,455	\$1,419,264
Unspecified Reductions	\$0	\$0	\$0
<i>Total, L/HHS/ED -</i>	\$5,984,713	\$6,049,974	\$5,618,009
<i>Total, L/HHS/ED (inc. PHS) -</i>	\$6,249,813	\$6,375,647	\$5,900,668
PHS Evaluation Transfer (non-add)	\$265,100	\$325,673	\$282,659
Agency for Toxic Substances and Disease Registry	\$75,212	\$74,039	\$72,882
Vaccines for Children	\$2,735,925	\$2,702,206	\$2,766,230
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) ¹⁰	\$52,336	\$55,358	\$55,358
User Fees	\$2,226	\$2,226	\$2,226
<i>Total, CDC/ATSDR Program Level -</i>	\$9,115,512	\$9,209,476	\$8,797,364
<i>Full-Time Equivalents (FTEs) -</i>	8,579	8,896	8,829

¹ The FY 2007 Enacted reflects the Joint Resolution level including a proposed budget reprogramming and supplementals for World Trade Center and Mine Safety.

² The FY 2008 Enacted funding levels have been revised to reflect proposed consolidation of Flu funding.

³ Funding in FY 2007 and FY 2008 for Section 317 Immunization Program include a comparability adjustment of -\$2.1 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁴ Funding in FY 2007 and FY 2008 for the National Center for Health Marketing include a comparability adjustment of +\$2.1 million. In FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities.

⁵ Funding does not include transfers to CDC from the Department of State Office of the Global AIDS Coordinator (\$917.2 million to date in FY 2007), as part of the President's Emergency Plan for AIDS Relief.

⁶ Funding in FY 2007 and FY 2008 for Global AIDS Program include a comparability adjustment of -\$0.6 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁷ Funding in FY 2007 for Business Services Support include a comparability adjustment of -\$0.039 million for activities that were jointly funded in prior years, and are financed centrally in the General Departmental Management account in the FY 2008 request.

⁸ Funding in FY 2007 and FY 2008 for the Business Services Support include a comparability adjustment of +\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support administrative and Business Services Support activities.

⁹ Funding in FY 2007 and FY 2008 for Strategic National Stockpile program include a comparability adjustment of -\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support Business Services Support activities.

¹⁰ Reflects the proposed EEOICPA transfer from the Department of Labor. The FY 2007 and FY 2008 funding levels have been made comparable to reflect the proposed transfer.

EXECUTIVE SUMMARY
FY 2007 APPROPRIATION ADJUSTMENTS

FY 2007 APPROPRIATION ADJUSTMENTS

CENTERS FOR DISEASE CONTROL AND PREVENTION ALL PURPOSE TABLE (DOLLARS IN THOUSANDS)							
Budget Activity	FY 2007 Enacted ¹	FY 2007 Adjustments					FY 2007 Comparable Actual
		CDC Reallocations and Transfers	Flu Adjustments	Other Adjustments	Emergency Supplemental	Comparable Adjustments	
Infectious Diseases ²							
Budget Authority	\$1,791,437	(\$17,534)	\$25,000	\$0	\$0	(\$2,111)	\$1,796,792
PHS Evaluation Transfers	\$12,794	\$0	\$0	\$0	\$0	\$0	\$12,794
<i>Subtotal, Infectious Diseases -</i>	<i>\$1,804,231</i>	<i>(\$17,534)</i>	<i>\$25,000</i>	<i>\$0</i>	<i>\$0</i>	<i>(\$2,111)</i>	<i>\$1,809,586</i>
Health Promotion	\$959,662	(\$12,658)	\$0	\$0	\$0	\$0	\$947,004
Health Information and Service ³							
Budget Authority	\$88,418	\$48,162	(\$3,000)	\$0	\$0	\$2,667	\$136,247
PHS Evaluation Transfers	\$134,235	(\$409)	\$0	\$0	\$0	\$0	\$133,826
<i>Subtotal, Health Information and Service -</i>	<i>\$222,653</i>	<i>\$47,753</i>	<i>(\$3,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$2,667</i>	<i>\$270,073</i>
Environmental Health and Injury Prevention	\$288,104	(\$5,352)	\$0	\$0	\$0	\$0	\$282,752
Occupational Safety and Health							
Budget Authority	\$167,028	(\$2,408)	\$0	\$0	\$63,000	\$0	\$227,620
PHS Evaluation Transfers	\$87,071	\$409	\$0	\$0	\$0	\$0	\$87,480
<i>Subtotal, Occupational Safety and Health -</i>	<i>\$254,099</i>	<i>(\$1,999)</i>	<i>\$0</i>	<i>\$0</i>	<i>\$63,000</i>	<i>\$0</i>	<i>\$315,100</i>
Global Health ^{4,5}							
Budget Authority	\$334,038	(\$3,985)	(\$22,000)	\$0	\$0	(\$556)	\$307,497
<i>Subtotal, Global Health -</i>	<i>\$334,038</i>	<i>(\$3,985)</i>	<i>(\$22,000)</i>	<i>\$0</i>	<i>\$0</i>	<i>(\$556)</i>	<i>\$307,497</i>
Public Health Research (PHS Evaluation Transfers)	\$31,000	\$0	\$0	\$0	\$0	\$0	\$31,000
Public Health Improvement and Leadership (PHIL)							
Budget Authority	\$189,808	\$12,751	\$0	\$0	\$0	\$0	\$202,559
<i>Subtotal, PHIL -</i>	<i>\$189,808</i>	<i>\$12,751</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$202,559</i>
Preventive Health & Health Services Block Grant (PHHSBG)	\$99,000	\$0	\$0	\$0	\$0	\$0	\$99,000
Buildings and Facilities	\$134,400	\$0	\$0	\$0	\$0	\$0	\$134,400
Business Services Support ^{6,7}	\$344,338	\$26,594	\$0	\$0	\$0	\$7,357	\$378,289
Terrorism ⁸							
Budget Authority	\$1,541,300	(\$45,570)	\$0	(\$15,820)	\$0	(\$7,357)	\$1,479,910
<i>Subtotal, Terrorism -</i>	<i>\$1,541,300</i>	<i>(\$45,570)</i>	<i>\$0</i>	<i>(\$15,820)</i>	<i>\$0</i>	<i>(\$7,357)</i>	<i>\$1,479,910</i>
Total, LHHS/ED -	\$5,937,533	\$0	\$0	(\$15,820)	\$63,000	\$0	\$5,984,713
Total, LHHS/ED (inc. PHS and supplementals) -	\$6,202,633	\$0	\$0	(\$15,820)	\$63,000	\$0	\$6,249,813
PHS Evaluation Transfer (non-add)	\$265,100	\$0	\$0	\$0	\$0	\$0	\$265,100
Agency for Toxic Substances and Disease Registry	\$75,212	\$0	\$0	\$0	\$0	\$0	\$75,212
Vaccines for Children	\$2,735,925	\$0	\$0	\$0	\$0	\$0	\$2,735,925
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) ⁹	\$0	\$0	\$0	\$0	\$0	\$52,336	\$52,336
User Fees	\$2,226	\$0	\$0	\$0	\$0	\$0	\$2,226
Total, CDC/ATSDR Program Level -	\$9,185,401	\$0	\$0	(\$15,820)	\$63,000	\$0	\$9,115,512

¹ The FY 2007 Enacted reflects the Joint Resolution level.

² Funding in FY 2007 for Section 317 Immunization Program includes a comparability adjustment of -\$2.1 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

³ Funding in FY 2007 for the National Center for Health Marketing includes a comparability adjustment of +\$2.1 million. In FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities.

⁴ Funding does not include transfers to CDC from the Department of State Office of the Global AIDS Coordinator (\$917.2 million to date in FY 2007), as part of the President's Emergency Plan for AIDS Relief.

⁵ Funding in FY 2007 for Global AIDS Program includes a comparability adjustment of -\$0.6 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁶ Funding in FY 2007 for Business Services Support includes a comparability adjustment of -\$0.039 million for activities that were jointly funded in prior years, and are financed centrally in the General Departmental Management account in the FY 2008 request.

⁷ Funding in FY 2007 for the Business Services Support includes a comparability adjustment of +\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support administrative and business support service activities.

⁸ Funding in FY 2007 for Strategic National Stockpile program includes a comparability adjustment of -\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support Business Services Support activities.

⁹ Reflects the proposed EEOICPA transfer from the Department of Labor. The FY 2007 funding levels has been made comparable to reflect the proposed transfer.

FY 2008 APPROPRIATION ADJUSTMENTS

FY 2008 APPROPRIATION ADJUSTMENTS CENTERS FOR DISEASE CONTROL AND PREVENTION ALL PURPOSE TABLE (DOLLARS IN THOUSANDS)					
Budget Activity	FY 2008 Omnibus Bill	FY 2008 Adjustments			FY 2008 Enacted
		1.747% Reduction	Flu Adjustments	Comparable Adjustments	
Infectious Diseases ¹					
Budget Authority	\$1,824,103	(\$31,867)	\$101,616	(\$2,111)	\$1,891,741
PHS Evaluation Transfers	\$12,794	\$0	\$0	\$0	\$12,794
Subtotal, Infectious Diseases -	\$1,836,897	(\$31,867)	\$101,616	(\$2,111)	\$1,904,535
Health Promotion	\$978,284	(\$17,091)	\$0	\$0	\$961,193
Health Information and Service ²					
Budget Authority	\$113,168	(\$1,976)	(\$23,991)	\$2,667	\$89,868
PHS Evaluation Transfers	\$186,910	\$0	\$0	\$0	\$186,910
Subtotal, Health Information and Service -	\$300,078	(\$1,976)	(\$23,991)	\$2,667	\$276,778
Environmental Health and Injury Prevention	\$294,467	(\$5,144)	\$0	\$0	\$289,323
Occupational Safety and Health					
Budget Authority	\$291,084	(\$4,099)	\$0	\$0	\$286,985
PHS Evaluation Transfers	\$94,969	\$0	\$0	\$0	\$94,969
Subtotal, Occupational Safety and Health -	\$386,053	(\$4,099)	\$0	\$0	\$381,954
Global Health ^{3,4}					
Budget Authority	\$377,352	(\$6,592)	(\$67,833)	(\$556)	\$302,371
Subtotal, Global Health -	\$377,352	(\$6,592)	(\$67,833)	(\$556)	\$302,371
Public Health Research (PHS Evaluation Transfers)	\$31,000	\$0	\$0	\$0	\$31,000
Public Health Improvement and Leadership (PHIL)					
Budget Authority	\$228,898	(\$3,999)	\$0	\$0	\$224,899
Subtotal, PHIL -	\$228,898	(\$3,999)	\$0	\$0	\$224,899
Preventive Health & Health Services Block Grant (PHHSBG)	\$99,000	(\$1,730)	\$0	\$0	\$97,270
Buildings and Facilities	\$56,000	(\$978)	\$0	\$0	\$55,022
Business Services Support ⁵	\$370,971	(\$6,481)	\$0	\$7,357	\$371,847
Terrorism ⁶					
Budget Authority	\$1,523,214	(\$26,610)	(\$9,792)	(\$7,357)	\$1,479,455
Subtotal, Terrorism -	\$1,523,214	(\$26,610)	(\$9,792)	(\$7,357)	\$1,479,455
Total, L/HHS/ED -	\$6,156,541	(\$106,567)	\$0	\$0	\$6,049,974
Total, L/HHS/ED (inc. PHS and supplementals) -	\$6,482,214	(\$106,567)	\$0	\$0	\$6,375,647
PHS Evaluation Transfer (non-add)	\$325,673	\$0	\$0	\$0	\$325,673
Agency for Toxic Substances and Disease Registry	\$75,212	(\$1,173)	\$0	\$0	\$74,039
Vaccines for Children	\$2,702,206	\$0	\$0	\$0	\$2,702,206
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) ⁷	\$0	\$0	\$0	\$55,358	\$55,358
User Fees	\$2,226	\$0	\$0	\$0	\$2,226
Total, CDC/ATSDR Program Level -	\$9,261,858	(\$107,740)	\$0	\$0	\$9,209,476

¹ Funding in FY 2008 for Section 317 Immunization Program includes a comparability adjustment of -\$2.1 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

² Funding in FY 2008 for the National Center for Health Marketing includes a comparability adjustment of +\$2.1 million. In FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities.

³ Funding does not include transfers to CDC from the Department of State Office of the Global AIDS Coordinator (\$917.2 million to date in FY 2007), as part of the President's Emergency Plan for AIDS Relief.

⁴ Funding in FY 2008 for Global AIDS Program includes a comparability adjustment of -\$0.6 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁵ Funding in FY 2008 for the Business Services Support includes a comparability adjustment of +\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support administrative and business support service activities.

⁶ Funding in FY 2008 for Strategic National Stockpile program includes a comparability adjustment of -\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support Business Services Support activities.

⁷ Reflects the proposed EEOICPA transfer from the Department of Labor. The FY 2008 funding levels has been made comparable to reflect the proposed transfer

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BUDGET EXHIBITS

APPROPRIATION LANGUAGE AND ANALYSIS

CENTERS FOR DISEASE CONTROL AND PREVENTION APPROPRIATION LANGUAGE

DISEASE CONTROL, RESEARCH, AND TRAINING

To carry out titles II, III, VII, XI, XV, XVII, XIX, XXI, and XXVI of the Public Health Service Act ("PHS Act"), sections 101, 102, 103, 201, 202, 203, 301, 501, and 514 of the Federal Mine Safety and Health Act of 1977, section 13 of the Mine Improvement and New Emergency Response Act of 2006, sections 20, 21, and 22 of the Occupational Safety and Health Act of 1970, title IV of the Immigration and Nationality Act, section 501 of the Refugee Education Assistance Act of 1980, and for expenses necessary to support activities related to countering potential biological, disease, nuclear, radiological, and chemical threats to civilian populations; including purchase and insurance of official motor vehicles in foreign countries; and purchase, hire, maintenance, and operation of aircraft, \$5,673,368,000, ~~of which \$56,000,000 shall remain available until expended for equipment, construction and renovation of facilities; of which \$570,307,000 shall remain available until expended for the Strategic National Stockpile; of which \$27,215,000 shall be available for public health improvement activities specified in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act); of which \$118,727,000 for international HIV/AIDS shall remain available until September 30, 2009~~ **2010; of which, of the funds made available under this heading for domestic HIV/AIDS, \$30,000,000 shall remain available until expended for section 2625 of the PHS Act;** and of which \$25,000,000 shall be available until expended to provide screening and treatment for first response emergency services personnel; ~~residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center: Provided, That of this amount, \$56,500,000 is designated as described in section 5 (in the matter preceding division A of this consolidated Act).~~ In addition, such sums as may be derived from authorized user fees, which shall be credited to this account: *Provided*, That in addition to amounts provided herein, the following amounts shall be available from amounts available under section 241 of the Public Health Service Act: (1) \$12,794,000 to carry out the National Immunization Surveys; (2) \$124,701,000 to carry out the National Center for Health Statistics surveys; (3) \$24,751,000 to carry out information systems standards development and architecture and applications-based research used at local public health levels; (4) \$1,933,000 for Health Marketing; (5) \$31,000,000 to carry out Public Health Research; and (6) \$87,480,000 to carry out research activities within the National Occupational Research Agenda: *Provided further*, That none of the funds made available for injury prevention and control at the Centers for Disease Control and Prevention may be used, in whole or in part, to advocate or promote gun control: ~~*Provided further*, That up to \$31,800,000 shall be made available until expended for Individual Learning Accounts for full-time equivalent employees of the Centers for Disease Control and Prevention: *Provided further*, That the Director may redirect the total amount made available under authority of Public Law 101-502, section 3, dated November 3, 1990, to activities the Director may so designate: *Provided further*, That the Committees on Appropriations of the House of Representatives and the Senate are to be notified promptly of any such transfer: *Provided further*, That not to exceed \$12,500,000 may be available for making grants under section 1509 of the Public Health Service Act to not less than 15 States, tribes, or tribal organizations: *Provided further*, That notwithstanding any other provision of law, the Centers for Disease Control and Prevention shall award a single contract or related contracts for development and construction of the next building or facility designated in the Buildings and Facilities Master Plan that collectively include the full scope of the project: *Provided further*, That the solicitation and contract shall contain the clause 'availability of funds' found at 48 CFR 52.232-18: *Provided further*, That of the funds appropriated, \$10,000 is for official reception and representation expenses when specifically approved by the Director of the Centers for Disease Control and Prevention: *Provided further*, That employees of the Centers for Disease Control and Prevention or the Public Health Service, both civilian and Commissioned Officers, detailed to States, municipalities, or other organizations under authority of section 214 of the Public Health Service Act, or in overseas assignments, shall be treated as non-Federal employees for reporting purposes only and shall not be included within any personnel ceiling applicable to the Agency, Service, or the Department of Health and Human Services during the period of detail or assignment: *Provided further*, That out of funds made available under this heading for domestic HIV/AIDS testing, up to \$30,000,000 shall be for States eligible under section 2625 of the Public Health Service Act as of December 31, 2007 and shall be distributed by May 31, 2008 based on standard criteria relating to a~~

~~State's epidemiological profile, and of which not more than \$1,000,000 may be made available to any one State, and any amounts that have not been obligated by May 31, 2008 shall be used to make grants authorized by other provisions of the Public Health Service Act to States and local public health departments for HIV prevention activities.~~ ***In addition, for necessary expenses to administer the Energy Employees Occupational Illness Compensation Act, \$55,358,000, to remain available until expended: Provided, That this amount shall be available consistent with the provision regarding administrative expenses in Section 151 of Division B, Title I of Public Law 106-554.***

CENTERS FOR DISEASE CONTROL AND PREVENTION LANGUAGE ANALYSIS

LANGUAGE ANALYSIS

PURCHASE AND LANGUAGE PROVISION	EXPLANATION
"...including purchase and insurance of official motor vehicles in foreign countries..."	No specific authorization exists for the provision regarding insurance; however, experience of the Centers for Disease Control and Prevention (CDC) in stationing Public Health Service officials overseas and at the Mexican Border indicates that this provision is essential. Unless adequate automobile insurance is provided, Public Health Service officials could be subject to arbitrary arrest if they were involved in an accident.
"...and purchase, hire, maintenance, and operation of aircraft..."	CDC must maintain the ability to purchase or hire aircraft for deployment of the Strategic National Stockpile or other emergency response operations; testing of new insecticides and formulations; and for applying the insecticides when outbreaks of mosquito-borne disease, such as encephalitis, occur in populous areas where no other method can be used to control the spread of the disease.
"...of which \$56,000,000 shall remain available until expended for equipment, construction, and renovation of facilities..."	The FY 2009 Budget request for CDC does not include funding for equipment, construction, and renovation of facilities.
"...of which \$27,215,000 shall be available for public health improvement activities..."	The FY 2009 Budget request does not include one-time project costs included in the FY 2008 enacted appropriation.
"...of which \$30,000,000 shall remain available until expended for section 2625 of the PHS act."	Provides specific authorization for CDC to fund HIV/AIDS testing in states with laws or regulations for voluntary opt-out testing of clients at sexually transmitted disease clinics and substance abuse centers, as authorized in the Ryan White HIV/AIDS Treatment and Modernization Act.
"...for first response emergency services personnel, residents, students, and others related to the September 11, 2001 terrorist attacks on the World Trade Center..."	This language reflects the prioritization of resources for first response emergency services personnel consistent with the program's direction in FY 2006 and FY 2007.
"...that of this amount, \$56,500,000 is designated as described in section 5..."	The FY 2009 Budget request does not include funds for this purpose in the manner specified in the FY 2008 enacted appropriation.
"...such sums as may be derived from authorized user fees, which shall be credited to this account."	Provides specific authorization to allow all funds collected as user fees to be deposited to this appropriation.
"That up to \$31,800,000 shall be made available until expended for Individual Learning Accounts..."	The FY 2009 Budget request for CDC does not include funding for Individual Learning Accounts.
"...shall award a single contract or related contracts for development and construction..."	The FY 2009 Budget request for CDC does not include funding for equipment, construction, and renovation of facilities.
"...that the solicitation and contract shall contain the clause 'availability of funds' found at 48 CFR 52.232-18..."	The FY 2009 Budget request for CDC does not include funding for equipment, construction, and renovation of facilities.

	EXPLANATION
"...that employees of the Centers for Disease Control and Prevention or the Public Health Service, both civilian and Commissioned Officers, detailed to States, municipalities, or other organizations under authority of section 214 of the Public Health Service Act, or in overseas assignments..."	The FY 2009 Budget request for CDC does not include a provision which allows employees detailed to States, municipalities, or other organizations, or on overseas assignments, to be exempt from applicable personnel ceilings during the period of detail or assignment.
"...of which not more than \$1,000,000 may be made available to any one State, and any amounts that have not been obligated by May 31, 2008 shall be used to make grants authorized by other provisions of the Public Health Service Act to States and local public health departments for HIV prevention activities..."	The above provision providing no-year funding for the purpose of HIV/AIDS testing in states with laws or regulations for voluntary opt-out testing, as authorized in the Ryan White HIV/AIDS Treatment and Modernization Act., is included in place of this language.
"...for necessary expenses to administer the Energy Employees Occupational Illness Compensation Act, \$53, 358,000, to remain available until expended..."	The FY 2009 Budget request for CDC includes new language to permit the direct appropriation of resources for the Energy Employees Occupational Illness Compensation Program (EEOICPA) to the Department of Health and Human Services rather than the Department of Labor.

HEALTH AND HUMAN SERVICES GENERAL PROVISIONS LANGUAGE

~~Sec. 216. Funds which are available for Individual Learning Accounts for employees of the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry may be transferred to "Disease Control, Research, and Training," to be available only for Individual Learning Accounts: Provided, That such funds may be used for any individual full time equivalent employee while such employee is employed either by CDC or ATSDR.~~

HEALTH AND HUMAN SERVICES GENERAL PROVISIONS LANGUAGE ANALYSIS

PURCHASE AND LANGUAGE PROVISION	EXPLANATION
<i>Section 216: Funds which are for Individual Learning Accounts for employees of the Centers for Disease control and Prevention and the Agency for Toxic Substances and Disease Registry may be transferred into "Disease Control, Research, and Training" appropriation, to be available only for Individual Learning Accounts: Provided, That the total available for such accounts under the heading "Disease Control, Research, and Training" or "Toxic Substances and Environmental Public Health" for any individual full time equivalent employee may be used while such employee is employed by either agency: Provided further, that such transferred funds shall remain available until expended.</i>	<p>The FY 2009 Budget request for CDC and ATSDR does not include funding for Individual Learning Accounts.</p>

AMOUNTS AVAILABLE FOR OBLIGATION

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION DISEASE, CONTROL, RESEARCH AND TRAINING AMOUNTS AVAILABLE FOR OBLIGATION ¹			
	FY 2007 Actual	FY 2008 Enacted	FY 2009 Budget
General Fund Discretionary Appropriation:			
Annual	5,900,572,000	6,156,541,000	5,618,009,000
Rescission	-	(106,567,000)	-
Unobligated balance permanently reduced - Bulk Monovalent	(29,680,000)	-	-
Subtotal, adjusted Appropriation	5,870,892,000	6,049,974,000	5,618,009,000
Transfers to Other Accounts (Section 202 Transfer to CMS)	(100,000,000)	-	-
Transfers from Other Accounts (Office of the Secretary)	-	-	-
Transfers from Other Accounts (Department of State)	-	-	-
Subtotal, adjusted General Fund Discr. Appropriation	5,770,892,000	6,049,974,000	5,618,009,000
Mandatory Appropriation:			
Appropriation (CRADA)	3,000,000	3,000,000	3,000,000
Appropriation (EEOICPA)			55,358,000
Transfer (Vaccines for Children)	2,735,925,000	2,702,206,000	2,766,230,000
Subtotal, adjusted Mandatory Appropriation	2,738,925,000	2,705,206,000	2,824,588,000
Receipts from CRADA	3,496,000	1,000,000	1,000,000
Recovery of prior year Obligations	(4,081,000)		
Unobligated balance start of year	(466,305,000)	(419,221,000)	(418,000,000)
Unobligated balance expiring	(3,716,000)		
Unobligated balance end of year	419,221,000	418,000,000	419,000,000
Total Obligations	8,458,432,000	8,754,959,000	8,444,597,000

¹ Excludes the following amounts for reimbursements: FY 2007 \$485,443,000; FY 2008 \$615,000,000; and FY 2009 \$635,000,000.

SUMMARY OF CHANGES

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION SUMMARY OF CHANGES (DOLLARS IN THOUSANDS)				
	Dollars		FTEs	
FY 2009 Budget (Budget Authority)	\$5,618,009		8,509	
FY 2008 Enacted (Budget Authority)	\$6,049,974		8,583	
Net Change	(\$431,965)		(75)	
	FY 2008 Enacted		Change from Base	
	FTE	Budget Authority	FTE	Budget Authority
Increases: ¹				
1. Pandemic Influenza	---	\$154,632	---	\$3,131
2. HIV/AIDS Research & Domestic - State and Local Health Departments	---	\$454,796	---	\$25,868
3. Health Statistics	---	\$113,636	---	\$11,065
4. Upgrading CDC Capacity	---	\$120,744	---	\$10,576
5. Biosense	---	\$34,389	---	\$15,611
6. Quarantine Stations	---	\$9,870	---	\$33,485
7. Strategic National Stockpile	---	\$551,509	---	\$19,881
Total Increases	N/A	\$1,439,576	N/A	\$119,617
Decreases: ¹				
1. HIV/AIDS Research & Domestic - National/Regional/Other Organizations	---	\$165,343	---	(\$23,494)
2. West Nile Virus	---	\$26,299	---	(\$6,932)
3. All Other Emerging Infectious Diseases	---	\$130,281	---	(\$23,976)
4. Heart Disease and Stroke	---	\$50,101	---	(\$1,064)
5. Johanna's Law	---	\$6,466	---	(\$6,466)
6. Mind-Body Institute	---	\$1,719	---	(\$1,719)
7. Pioneering Healthier Communities (YMCA)	---	\$2,948	---	(\$2,948)
8. Food Allergies	---	\$491	---	(\$491)
9. Steps to a Healthier U.S.	---	\$25,158	---	(\$9,553)
10. Demonstration Project for Teen Pregnancy	---	\$2,948	---	(\$2,948)
11. Health Marketing	---	\$92,652	---	(\$2,140)
12. Environmental Health Laboratory	---	\$33,797	---	(\$7,440)
13. Environmental Health Activities - Safe Water	---	\$7,199	---	(\$7,199)
14. Environmental Health Activities - Amyotrophic Lateral Sclerosis Registry (ALS)	---	\$2,821	---	(\$1,950)
15. Occupational Safety and Health Research - Education and Research Centers	---	\$21,425	---	(\$1,731)
16. Occupational Safety and Health Research - Personal Protective Technology	---	\$12,804	---	(\$156)
17. National Occupational Research Agenda (NORA)	---	\$109,889	---	(\$10,374)
18. World Trade Center	---	\$108,083	---	(\$83,083)
19. Occupational Safety and Health Research - Mining Research	---	\$49,126	---	(\$11,178)
20. Leadership and Management	---	\$158,255	---	(\$37,152)
21. Director's Discretionary Fund	---	\$5,895	---	(\$5,895)
22. Congressional Projects	---	\$26,740	---	(\$26,740)
23. Public Health Workforce Development	---	\$34,009	---	(\$431)
24. Preventive Health and Health Services Block Grant	---	\$97,270	---	(\$97,270)
25. Buildings and Facilities	---	\$55,022	---	(\$55,022)
26. Business Services Support	---	\$371,847	---	(\$31,352)
27. Upgrading State and Local Capacity	---	\$746,039	---	(\$135,497)
28. Real-Time Lab Reporting	---	\$9,022	---	(\$1,552)
29. Individual Learning Accounts ¹	---	N/A	---	(\$29,843)
Total Decreases	N/A	\$2,353,649	0	(\$625,596)
Built-In:				
1. January 2009 Pay Raise/Locality Pay	---	---	---	18,796
2. Annualization of FY 2008 Pay Increase	---	---	---	7,501
3. One Less Day of Pay	---	---	---	(3,285)
4. Within-Grade Increases	---	---	---	15,431
5. Rental Payments to GSA and Others	---	---	---	1,521
6. HHS Service & Supply Fund	---	---	---	1,752
7. Medical Inflation	---	---	---	9,524
8. Inflation Costs on Other Objects	---	---	---	30,929
Total Built-In	8,583	\$6,049,974	(75)	82,168
1. Absorption of Current Services	---	---	---	(\$82,168)
Total	---	---	---	(\$82,168)
Total Increases (Budget Authority)	8,583	\$6,049,974	(75)	\$201,785
Total Decreases (Budget Authority)	N/A	N/A	0	(\$707,764)
NET CHANGE - L/HHS/ED BUDGET AUTHORITY	8,583	\$6,049,974	(75)	(\$505,979)
Program Level Changes				
1. Vaccines for Children	---	\$2,702,206	---	\$64,024
2. ATSDR	313	\$74,039	7	(\$1,157)
3. PHS Evaluation Transfers	---	\$325,673	---	(\$43,014)
4. User Fees	---	\$2,226	---	\$0
Total - Program Level Net Increase	313	\$3,104,144	7	\$19,853
NET CHANGE: BUDGET AUTHORITY & PROGRAM LEVEL	8,896	\$9,154,118	(75)	(\$486,126)

¹ Increases and decreases do not reflect ILA reductions. The total ILA reduction is displayed on a separate line.

BUDGET AUTHORITY BY ACTIVITY (ALL PURPOSE TABLE)

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION ALL PURPOSE TABLE (DOLLARS IN THOUSANDS)			
Budget Activity	FY 2007 Actual ¹	FY 2008 Enacted ²	FY 2009 Estimate
Infectious Diseases ³			
Budget Authority	\$1,796,792	\$1,891,741	\$1,857,183
PHS Evaluation Transfers	\$12,794	\$12,794	\$12,794
<i>Subtotal, Infectious Diseases -</i>	\$1,809,586	\$1,904,535	\$1,869,977
Health Promotion	\$947,004	\$961,193	\$932,073
Health Information and Service ⁴			
Budget Authority	\$136,247	\$89,868	\$132,970
PHS Evaluation Transfers	\$133,826	\$186,910	\$151,385
<i>Subtotal, Health Information and Service -</i>	\$270,073	\$276,778	\$284,355
Environmental Health and Injury Prevention	\$282,752	\$289,323	\$270,872
Occupational Safety and Health			
Budget Authority	\$227,620	\$286,985	\$183,573
PHS Evaluation Transfers	\$87,480	\$94,969	\$87,480
<i>Subtotal, Occupational Safety and Health -</i>	\$315,100	\$381,954	\$271,053
Global Health ^{5, 6}			
Budget Authority	\$307,497	\$302,371	\$302,025
<i>Subtotal, Global Health -</i>	\$307,497	\$302,371	\$302,025
Public Health Research (PHS Evaluation Transfers)	\$31,000	\$31,000	\$31,000
Public Health Improvement and Leadership (PHIL)			
Budget Authority	\$202,559	\$224,899	\$182,143
<i>Subtotal, PHIL -</i>	\$202,559	\$224,899	\$182,143
Preventive Health & Health Services Block Grant (PHHSBG)	\$99,000	\$97,270	\$0
Buildings and Facilities	\$134,400	\$55,022	\$0
Business Services Support ^{7, 8}	\$378,289	\$371,847	\$337,906
Terrorism ⁹			
Budget Authority	\$1,472,553	\$1,479,455	\$1,419,264
<i>Subtotal, Terrorism -</i>	\$1,472,553	\$1,479,455	\$1,419,264
Unspecified Reductions	\$0	\$0	\$0
<i>Total, L/HHS/ED -</i>	\$5,984,713	\$6,049,974	\$5,618,009
<i>Total, L/HHS/ED (inc. PHS) -</i>	\$6,249,813	\$6,375,647	\$5,900,668
PHS Evaluation Transfer (non-add)	\$265,100	\$325,673	\$282,659
Agency for Toxic Substances and Disease Registry	\$75,212	\$74,039	\$72,882
Vaccines for Children	\$2,735,925	\$2,702,206	\$2,766,230
Energy Employees Occupational Illness Compensation Program Act (EEOICPA) ¹⁰	\$52,336	\$55,358	\$55,358
User Fees	\$2,226	\$2,226	\$2,226
<i>Total, CDC/ATSDR Program Level -</i>	\$9,115,512	\$9,209,476	\$8,797,364
<i>Full-Time Equivalents (FTEs) -</i>	8,579	8,896	8,829

¹ The FY 2007 Enacted reflects the Joint Resolution level including a proposed budget reprogramming and supplementals for World Trade Center and Mine Safety.

² The FY 2008 Enacted funding levels have been revised to reflect proposed consolidation of Flu funding.

³ Funding in FY 2007 and FY 2008 for Section 317 Immunization Program include a comparability adjustment of -\$2.1 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁴ Funding in FY 2007 and FY 2008 for the National Center for Health Marketing include a comparability adjustment of +\$2.1 million. In FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities.

⁵ Funding does not include transfers to CDC from the Department of State Office of the Global AIDS Coordinator (\$917.2 million to date in FY 2007), as part of the President's Emergency Plan for AIDS Relief.

⁶ Funding in FY 2007 and FY 2008 for Global AIDS Program include a comparability adjustment of -\$0.6 million. In the FY 2009 budget, CDC is proposing to transfer the funds to support AIDS Clearing House activities currently financed by the National Center for Health Marketing.

⁷ Funding in FY 2007 and FY 2008 for Business Services Support include a comparability adjustment of -\$0.039 million for activities that were jointly funded in prior years, and are financed centrally in the General Departmental Management account in the FY 2008 request.

⁸ Funding in FY 2007 and FY 2008 for the Business Services Support include a comparability adjustment of +\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support administrative and Business Services Support activities.

⁹ Funding in FY 2007 and FY 2008 for Strategic National Stockpile program include a comparability adjustment of -\$7.4 million. In FY 2009 budget, CDC is proposing to transfer the funds to support Business Services Support activities.

¹⁰ Reflects the proposed EEOICPA transfer from the Department of Labor. The FY 2007 and FY 2008 funding levels have been made comparable to reflect the proposed transfer.

AUTHORIZING LEGISLATION

DOLLARS IN THOUSANDS	FY 2008 AMOUNT AUTHORIZED	FY 2008 ENACTED	FY 2009 AMOUNT AUTHORIZED	FY 2009 ESTIMATE
Infectious Diseases:				
Immunization and Respiratory Diseases	Indefinite	\$684,634	Indefinite	\$686,465
PHSA §§ 301, 307, 310, 311, 317, 317(a), 317(j), 317(k)(1), 319, 319E, 327, 340C, 352, 2125, 2126, 2127, Title XXI, 1928 of Social Security Act (42 U.S.C 1396s)				
<u>Pandemic Influenza:</u> 317N3, 317S5, 319, 319C(1), 319F(2), 322, 325, 327 Immigration and Nationality Action 212 Immigration and Nationality Action 232 Pandemic and All Hazards Preparedness Act (PAHPA) of 2006				
HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	Indefinite	\$1,002,130	Indefinite	\$1,000,037
PHSA §§ 301, 306 ¹ , 307, 308(d), 310, 311, 317, 317(a), 318B ¹ , 322, 325, 327, 352, 1102, 2317, 2320, 2341, 2500, 2521-2524, 2625 International authorities: P.L. 110-161 sec. 215				
Zoonotic, Vector-Borne, and Enteric Diseases	Indefinite	\$67,846	Indefinite	\$60,632
PHSA §§ 301, 307, 310, 311, 317, 317P, 317R, 317S, 319, 319E, 319F ³ , 319G ³ , 327, 352, 361- 363, 1102, Immigration and Nationality Act §§ 212, 232				
Preparedness, Detection, and Control of Infectious Diseases	Indefinite	\$149,925	Indefinite	\$122,843
PHSA §§ 301, 304, 307, 310, 311, 317, 317G, 319, 319D, 319E, 319G, 322, 325, 327, 352, 361-369, 1222, 1182 Immigration and Nationality Act §§ 212, 232 Refugee Health Act 1980 §§ 412				
Health Promotion:				
Chronic Disease Prevention, Health Promotion, and Genomics	Indefinite	\$833,827	Indefinite	\$805,321
PHSA §§ 301, 307, 310, 311, 317, 317C, 317D, 317H ² , 317K ² , 317K(a), 317K(b), 317L ² , 317M ² , 330E, 399B-399D ² , 399F ¹ , 399H-399L, 399W- 399Z ² , 1102, 1501-1510, 1509, 1701, 1702, 1703, 1704, 1706 ¹ Comprehensive Smoking Education Act of 1984 Comprehensive Smokeless Tobacco Health Education Act of 1986 Fertility Clinic Success Rate and Certification Act of 1992 Asthmatic Schoolchildren's Treatment and Health Management Act of 2004				

	AMOUNT AUTHORIZED	ENACTED	AMOUNT AUTHORIZED	FY 2009 ESTIMATE
Benign Brain Tumor Cancer Registries Amendment Act Prematurity Research Expansion and Education for Mothers who Deliver Infants Early Act (S. 707) Public Health Cigarette Smoking Act of 1969				
Birth Defects, Developmental Disabilities, Disabilities & Health	Indefinite	\$127,366	Indefinite	\$126,752
PHSA §§ 301, 307, 310, 311, 317, 317C, 317J ² , 317Q, 327, 352, 399G, 399H, 399I, 399J, 399M ¹ , 1102, 1108 ² PHSA Title IV ² 42 U.S.C. Section 247b-4b, "Developmental disabilities surveillance and research programs"				
Health Information and Service:				
Health Statistics	Indefinite	\$113,636	Indefinite	\$124,701
PHSA §§ 301, 304, 306 ¹ 307, 308 1% Evaluation: PHSA § 241 (non-add) (Superseded in the FY 2002 Labor HHS Appropriations Act - Section 206)	Not more than 1.25% of amounts appropriated for PHSA programs as determined by the Secretary		Not more than 1.25% of amounts appropriated for PHSA programs as determined by the Secretary	
Public Health Informatics	Indefinite	\$70,490	Indefinite	\$70,075
PHSA §§ 301, 304, 306 ¹ , 308, 307, 310, 311, 317, 318 ¹ , 319, 319A ³ , 319B ¹ , 319C ³ , 327, 352, 391 ² , 1102, 2315, 2341, Clinical Laboratory Improvement Amendments of 1988, § 4				
Health Marketing	Indefinite	\$92,652	Indefinite	\$89,579
PHSA §§ 301, 304, 307, 308, 310, 311, 317, 318 ¹ , 319, 319A ³ , 319B ¹ , 319C ³ , 327, 352, 391 ² , 1102, 2315, 2341, 2521				
Environmental Health and Injury:				
Environmental Health	Indefinite	\$154,486	Indefinite	\$136,606
PHSA §§ 301, 307, 310, 311, 317, 317A ² , 317B, 317I ² , 327, 352, 361, 399N, 1102 Housing and Community Development Act, 1021 (15 U.S.C. 2685) Title 50 – sections 1512 and 1521 of the Chemical Weapons Elimination Activities Housing and Community Development (Lead Abatement) Act of 1992 (42 U.S.C. § 4851 et seq.)				
Injury Prevention and Control	Indefinite	\$134,837	Indefinite	\$134,266
PHSA §§ 301, 307, 310, 311, 317, 319, 327, 352, 391-394A ² , 1252 Use of Allotments for Rape Prevention Education (393B ³) Section 4, P.L. 104-166 (expired)				

	AMOUNT AUTHORIZED	ENACTED	AMOUNT AUTHORIZED	FY 2009 ESTIMATE
Sec 318 (42 USC Sec. 10418) of the Family Violence Prevention and Services Act of 2003				
Occupational Safety and Health:				
Occupational Safety and Health	Indefinite	\$381,954	Indefinite	\$271,053
PHSA §§ 301, 304, 306 ¹ , 307, 310, 311, 317, 317A ² , 317B, 327 Occupational Safety and Health Act of 1970 (P.L. 91-596), §§ 9, 20-22 (29 USC 657) Federal Mine Safety and Health Act of 1977, P.L. 91-173 as amended by P.L. 95-164, §§ 101, 102, 103, 202, 203, 204, 205, 206, 301, 501, 502, 508 and PL 95-239 § 19 (30 USC 904) Federal Fire Prevention and Control Act, § 209, (29U.S.C.671(a)) Radiation Exposure Compensation Act, §§ 6 and 12(42U.S.C.2210) Housing and Community Development Act of 1922 §1021 (15 U.S.C. 2685) Energy Employees Occupational Illness Compensation Program Act (2000) 42 U.S.C. 7384, et. Seq. (as amended) Floyd D. Spence National Defense Authorization Act §§ 3611, 3612, 3623, 3624, 3625, 3626 of P.L. 106-393 National Defense Authorization Act for Fiscal Year 2006, PL 109-163 Toxic Substances Control Act (15 USC 2682) Prohibition of Age Discrimination Act (29 USC 623) Mine Improvement and New Emergency Response Act of 2006 (MINER Act), P.L. 109-236 (29 U.S.C. 671, 30 U.S.C. 963 and 965) §§ 6, 11 and 13				
Global Health:				
Global Health	Indefinite	\$302,371	Indefinite	\$302,025
PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341 Foreign Assistance Act of 1961 §§ 104, 627, 628 Federal Employee International Organization Service Act § 3 International Health Research Act of 1960 § 5 Agriculture Trade Development and Assistance Act of 1954 § 104 Economy Act 22 U.S.C. 3968 Foreign Employees Compensation Program 41 U.S.C. 253 International Competition Requirement Exception)				

	AMOUNT AUTHORIZED	ENACTED	AMOUNT AUTHORIZED	FY 2009 ESTIMATE
P.L. 107-116 sec. 215 HR 5656 § 220 FY 2001 Appropriations Bill				
Public Health Research:				
Public Health Research	Indefinite	\$31,000	Indefinite	\$31,000
PHSA §§ 301, 304, 307, 310, 317, 327	Not more than 1.25% of amounts appropriated for PHSA programs as determined by the Secretary		Not more than 1.25% of amounts appropriated for PHSA programs as determined by the Secretary	
Public Health Improvement and Leadership:				
Public Health Improvement	Indefinite	\$224,899	Indefinite	\$182,143
PHSA §§ 301, 304, 306 ¹ , 307, 308, 310, 311, 317, 317(F), 319, 319A ³ , 322, 325, 327, 352, 361 -369, 391 ² , 399(F), 399G, 1102, 2315, 2341 Federal Technology Transfer Act of 1986, (15 U.S.C. 3710) Bayh-Dole Act of 1980, P.L. 96-517 Clinical Laboratory Improvement Amendments of 1988, § 4				
Preventive Health and Health Services Block Grant:				
Preventive Health and Health Services Block Grant	Indefinite	\$97,270	Indefinite	--
Grants: PHSA Title XIX ¹ Prevention Activities: PHSA §§ 214, 301, 304, 306 ¹ , 307, 308, 310, 311, 317J ² , 327 Violent Crime Reduction Programs 40151 of P.L. 103-322				
Buildings and Facilities:				
Buildings and Facilities	Indefinite	\$55,022	Indefinite	--
PHSA §§ 304 (b)(4), 319D ³ , 321(a)				
Business Services Support:				
Business Services Support	Indefinite	\$371,847	Indefinite	\$337,906
PHSA §§ 301, 304, 307, 310, 317 ³ , 317F ¹ , 319, 327, 361, 362, 368, 399F ¹ Federal Technology Transfer Act of 1986, (15 U.S.C. 3710) Bayh-Dole Act of 1980, P.L. 96-517				
Terrorism:				
Terrorism	Indefinite	\$1,479,455	Indefinite	\$1,419,264
PHSA §§ 301, 307, 311, 317 ³ , 319, 319A ³ 319C-1, 319D ³ , 319F ³ , 319G ³ , 351A, 361-368 (42 U.S.C. 262 note), 2801-2811 Public Health Security and Bioterrorism				

	AMOUNT AUTHORIZED	ENACTED	AMOUNT AUTHORIZED	FY 2009 ESTIMATE
Preparedness and Response Act of 2002 Pandemic and All Hazards Preparedness Act of 2006				
Reimbursables and Trust Funds: (non-add)				
PHSA §§ 301, 306(b)(4) ¹ , 353 Clinical Laboratory Improvement Act User fee: Labor-HHS FY Appropriations	Indefinite		Indefinite	
Agency for Toxic Substances and Disease Registry:				
ATSDR	Indefinite	\$74,039	Indefinite	\$72,882
The Great Lakes Critical Programs Act of 1990, 33 U.S.C. § 1268 Section 104(i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S.C § 9604(i) The Defense Environmental Restoration Program, 10 U.S.C. § 2704 The Resource Conservation and Recovery Act, as amended, 42 U.S.C § 321 et seq. The Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.				
Total Appropriation		\$6,449,686		\$5,973,550

¹ Expired Prior to 2005

² Expired 2005

³ Expired 2006

⁴ Expired 2007

APPROPRIATIONS HISTORY

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION ¹ APPROPRIATION HISTORY TABLE DISEASE CONTROL, RESEARCH, AND TRAINING				
	Estimate	House Allowance	Senate Allowance	Appropriation
1997	2,229,900,000	2,187,018,000	2,209,950,000	2,302,168,000 ²
1998	2,316,317,000 ³	2,388,737,000	2,368,133,000	2,374,625,000 ⁴
1998 Supplemental	--	--	--	9,000,000 ⁵
1999	2,457,197,000	2,591,433,000	2,366,644,000 ⁶	2,609,520,000 ⁷
1999 Offset	--	--	--	(2,800,000) ⁸
1999 Resc./1% Transfer	--	--	--	(3,539,000)
2000	2,855,440,000 ⁹	2,810,476,000	2,802,838,000	2,961,761,000 ¹⁰
2000 Rescission	--	--	--	(16,810,000)
2001	3,239,487,000	3,290,369,000	3,204,496,000	3,868,027,000
2001 Rescission	--	--	--	(2,317,000)
2001 Sec's 1% Transfer	--	--	--	(2,936,000)
2002	3,878,530,000	4,077,060,000	4,418,910,000	4,293,151,000 ¹¹
2002 Rescission	--	--	--	(1,894,000)
2002 Rescission	--	--	--	(2,698,000)
2003	4,066,315,000	4,288,857,000	4,387,249,000	4,296,566,000
2003 Rescission	--	--	--	(27,927,000)
2003 Supplemental ¹²	--	--	--	16,000,000
2004 ¹³	4,157,330,000	4,538,689,000	4,494,496,000	4,367,165,000
2005 ^{13 14}	4,213,553,000	4,228,778,000	4,538,592,000	4,533,911,000
2005 Labor/HHS Reduction	--	--	--	(1,944,000)
2005 Rescission	--	--	--	(36,256,000)
2005 Supplemental ¹⁴	--	--	--	15,000,000
2006 ^{13 15}	3,910,963,000	5,945,991,000	6,064,115,000	5,884,934,000
2006 Rescission	--	--	--	(58,848,000)
2006 Supplemental ¹⁶	--	--	--	275,000,000
2006 Supplemental ¹⁷	--	--	--	218,000,000
2006 Section 202 Transfer to CMS	--	--	--	(4,002,000)
2007 ^{13 15 16 18}	5,783,205,000	6,073,503,000	6,095,900,000	5,736,913,000
2008 ^{13 15}	5,716,690,000	6,141,753,000	6,157,169,000	6,156,541,000
2008 Rescission	--	--	--	(106,567,000)
2009	5,616,852,000	--	--	--

¹ Does not include funding for ATSDR

² Includes \$32,000,000 for the transfer of the Bureau of Mines. Transfer occurred in FY 1997.

³ Includes \$522,000 supplemental increase for ICASS activities.

⁴ Includes \$509,000 supplemental increase for ICASS activities/transfer from Department of State and a \$4,436,000 million reduction due to the exercise of the Secretary's 1% Transfer Authority.

⁵ This supplemental increase was provided for emergency Polio eradication efforts in Africa.

⁶ Does not include emergency funding provided under the Public Health and Social Services Emergency Fund (PHSSEF) for \$228,400,000 or \$25,000,000 in interagency transfer from NIH for state tobacco control activities.

⁷ Does not include \$156,600,000 in FY 1999 for emergency funding provided under the PHSSEF for Bioterrorism, Polio & Measles, and the Environmental Health Laboratory.

⁸ This offset was used to fund Bioterrorism across the Department of Health and Human Services.

⁹ Revised to include \$35,000,000 for Global HIV initiative. Does not include \$20,000,000 (\$18,040,000 with rescission of \$1,960,000) transferred from NIH for Anthrax.

¹⁰ Does not include \$229,000,000 (\$228,680,000 with rescission of \$320,000) in FY 2000 for emergency funding provided under the PHSSEF for Bioterrorism, Global AIDS, Polio, Malaria, Micronutrient Malnutrition, and the Environmental Health Laboratory.

¹¹ Includes Retirement accruals of +\$57,297,000; Management Reform Savings of -\$27,295,000

¹² Emergency Wartime Supplemental Appropriations Act, 2003 PL 108-11 for SARS

¹³ FY 2004, FY 2005, FY 2006, FY 2007 and FY 2008 funding levels for the Estimate reflect the Proposed Law for Immunization.

¹⁴ FY 2005 includes a one time supplemental of \$15,000,000 for avian influenza through the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005.

¹⁵ Beginning in FY 2006, Terrorism funds are directly appropriated to CDC instead of being appropriated to the Public Health and Social Service Emergency Fund (PHSSEF). As a result, FY 2006 House, Senate, and Appropriation totals include Terrorism funds. The FY 2007 and FY 2008 levels also include Terrorism funding.

¹⁶ FY 2006 includes a one-time supplemental of \$275,000,000 million for pandemic influenza and World Trade Center activities through P.L.109-141, Department of Defense Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act, 2006

¹⁷ FY 2006 includes a one time supplemental of \$218,000,000 million for pandemic influenza, mining safety, and mosquito abatement through P.L. 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006.

¹⁸ The FY 2007 appropriation amount listed is the FY 2007 estimated CR level based on a year long Continuing Resolution.

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION ¹ APPROPRIATION HISTORY TABLE TERRORISM FUNDING				
	Estimate	House Allowance	Senate Allowance	Appropriation
1999	---	43,000,000 ¹	81,000,000	123,600,000
2000	118,000,000	138,000,000	189,000,000	155,000,000
2000 Rescission	---	---	---	(320,000)
2001	148,500,000	182,000,000	148,500,000	180,919,000
2002	181,919,000	231,919,000	181,919,000	181,919,000
2002 PHSSEF ²	---	---	---	2,070,000,000
2002 Rescission ³	---	---	---	(396,000)
2003 ⁴	1,116,740,000	1,522,940,000	1,536,740,000	---
2003 Transfer ⁵	(400,000,000)	---	---	---
2004 ⁴	1,116,156,000	1,116,156,000	1,116,156,000	1,507,211,000
2004 Transfer ⁶	(400,584,000)	---	---	---
2005	1,509,571,000	1,637,760,000	1,639,571,000	1,577,612,000
2005 Labor/HHS Reduction	---	---	---	(271,000)
2005 Rescission	---	---	---	(12,584,000)
2005 Supplemental ⁷	---	---	---	58,000,000
2006 ^{8,9}	1,796,723,000	---	---	---

¹This funding was an amendment to the original House mark, which did not include Bioterrorism.

²Public Health and Social Services Emergency Fund

³Administrative and Related Expenses Reduction.

⁴Funding will be provided through the Public Health and Social Services Emergency Fund (PHSSEF).

⁵\$300,000,000 for the National Pharmaceutical Stockpile and \$100,000,000 for Smallpox to the Department of Homeland Security.

⁶Same transfer as FY 2003 to the Department of Homeland Security, plus an additional \$584,000 for support/overhead.

⁷FY 2005 includes a one time supplemental of \$58,000,000 for avian influenza through the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005.

⁸Starting with the FY 2006 House Mark, Terrorism funds are directly appropriated to CDC instead of being appropriated to the Public Health and Social Service Emergency Fund (PHSSEF). As a result these funds are now included in CDC's appropriation history table.

⁹The FY 2006 President's Budget for Terrorism was amended after submission of the FY 2006 Justification of Estimates for Appropriations Committee to include an additional \$150,000,000 for influenza activities through the Strategic National Stockpile.

NARRATIVE BY ACTIVITY

COORDINATING CENTER FOR INFECTIOUS DISEASES

				FY 2009 +/- FY 2008
Budget Authority	\$1,796,792,000	\$1,891,741,000	\$1,857,183,000	-\$34,558,000
PHS Evaluation Transfers	\$12,794,000	\$12,794,000	\$12,794,000	\$0
Total	\$1,809,586,000	\$1,904,535,000	\$1,869,977,000	-\$34,558,000
FTE	2,405	2,484	2,451	-33

SUMMARY OF THE REQUEST

The Infectious Diseases budget supports critical management and coordination functions for infectious disease science, program, and policy, including infectious disease specific epidemiology and laboratory activities. The four functional areas by which the budget activity is organized are: vaccine preventable diseases, routes of disease transmission, sexually transmitted diseases, and preparedness and response. The specific budget categories within Infectious Diseases are: 1) Immunization and Respiratory Diseases; 2) Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), Viral Hepatitis, Sexually Transmitted Diseases (STDs) and Tuberculosis (TB) Prevention; 3) Zoonotic, Vector-Borne, and Enteric Diseases, and 4) Preparedness, Detection and Control of Infectious Diseases.

CDC requests \$1,869,977,000 for the Coordinating Center for Infectious Diseases, a decrease of \$34,558,000 below the FY 2008 Enacted level. This request includes \$9,156,000 for an Individual Learning Account (ILA) and administrative reduction. This includes:

- \$686,465,000 for the Immunization and Respiratory Diseases program, an increase of \$1,831,000 above the FY 2008 enacted level to prevent disease, disability and death through immunization and the control of respiratory and related diseases; reduce burden of complications associated with pneumonia and influenza; and improve preparedness and response capacity for a potential influenza pandemic.
- \$1,000,037,000 for the HIV/AIDS, Viral Hepatitis, STD and TB Prevention program, a decrease of \$2,093,000 below the FY 2008 Enacted level to prevent, eliminate and control diseases, disability and death caused by HIV/AIDS, non-HIV retroviruses, viral hepatitis, STDs, TB and non-tuberculosis mycobacteria.
- \$60,632,000 for the Zoonotic, Vector-Borne and Enteric Diseases program, a decrease of \$7,214,000 below the FY 2008 Enacted level to protect, identify, investigate, diagnose as well as prevent and control diseases associated with zoonotic (animal to-human transmission) vector-borne (insects or ticks) waterborne and foodborne (enteric).
- \$122,843,000 for the Preparedness, Detection and Control of Infectious Diseases program, a decrease of \$27,082,000 over the FY 2008 Enacted level to improve the detection of disease emergencies and outbreaks and to provide sound epidemiological and operational response during events. These resources enhance and promote improved laboratory practices as well as help develop, evaluate and implement methods and systems to improve overall laboratory quality.

IMMUNIZATION AND RESPIRATORY DISEASES

				FY 2009 +/- FY 2008
Section 317 Immunization Program	\$450,837,000	\$465,901,000	\$465,002,000	-\$899,000
Program Operations	\$61,967,000	\$61,458,000	\$61,366,000	-\$92,000
Influenza	\$72,626,000	\$157,275,000	\$160,097,000	+\$2,822,000
Total	\$585,430,000	\$684,634,000	\$686,465,000	+\$1,831,000

SUMMARY OF THE REQUEST

CDC provides leadership in preventing disease, disability, and death through immunization and by control of respiratory and related diseases. With a strategy that will improve prevention of and response to seasonal influenza, CDC is working throughout the world, in support of the President's National Strategy on Pandemic Influenza, the Department of Health and Human Services Pandemic Influenza Plan, and other initiatives to ensure that the U.S. is prepared for an influenza pandemic. In the U.S., immunization programs have made a major contribution to the elimination of many vaccine-preventable diseases and significant reductions in the incidence of others. Immunization and Influenza programs nationally and internationally are supported by CDC's infectious disease infrastructure that integrates epidemiologic and laboratory capacity, advancing our knowledge of disease burden and effective strategies to prevent disease. Immunization and Respiratory Disease programs, supported by this strong integrated infrastructure improve national, state, local and global public health capacity to respond to outbreaks of respiratory and related infectious diseases.

CDC requests \$686,465,000 for Immunization and Respiratory Diseases, an increase of \$1,831,000 above the FY 2008 Enacted level. This request includes a reduction of \$1,302,000 for Individual Learning Accounts (ILA) and administrative costs. This includes:

- \$526,328,000 for the Immunization Program, a decrease of \$991,000 below the FY 2008 Enacted level to support efforts to plan, develop and maintain a public health infrastructure that helps assure high immunization coverage levels and low incidence of vaccine-preventable diseases.
- \$160,097,000 for the Influenza Program, an increase of \$2,822,000 above the FY 2008 Enacted level to provide the highest quality of public health preparedness and response to limit morbidity and mortality from domestic and global, including seasonal (annual) influenza, avian and pandemic influenza.

These programs are among the Infectious Disease programs subject to reauthorization. Immunization and Respiratory Disease related Infectious Disease Programs do not anticipate reauthorization action in FY 2009.

Consistent with the multi-center funding streams for infectious disease activities, related National Center for Immunization and Respiratory Disease functions and programs not described in the Immunization or Influenza sections are described in the following sections:

- Emerging Infections and Antimicrobial Resistance sections of Preparedness, Detection, Control of Infections Diseases
- Food Safety section of Zoonotic, Vector Borne and Enteric Diseases
- Global Immunization section of Global Health
- Anthrax activities in Terrorism and Emergency Response

IMMUNIZATION PROGRAM

				FY 2009 +/- FY 2008
Section 317 Immunization Program	\$450,837,000	\$465,901,000	\$465,002,000	-\$899,000
Program Operations	\$61,967,000	\$61,458,000	\$61,366,000	-\$92,000
Total	\$512,804,000	\$527,359,000	\$526,368,000	-\$991,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317(a), 317(j), 317(k)(1), 319, 319E, 327, 340C, 352, 2125, 2126, 2127, Title XXI, 1928 of Social Security Act (42 USC 1396s)

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural; Formula Grants/Cooperative Agreements; Contracts; and Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Vaccines are one of the most successful and cost-effective public health tools for preventing disease and death.

For every \$1.00 spent on an individual vaccine:
<ul style="list-style-type: none"> ○ Diphtheria-Tetanus-acellular Pertussis (DTaP) saves \$27.00 ○ Measles, Mumps, and Rubella (MMR) saves \$26.00 ○ Perinatal Hepatitis B saves \$14.70 ○ Varicella saves \$5.40 ○ Inactivated Polio (IPV) saves \$5.45
For every \$1.00 spent:
<ul style="list-style-type: none"> ○ Childhood Series (7 vaccines) saves \$16.50¹

¹ Series includes DTaP, Td, Hib, IPV, MMR, Hep B and Varicella
Source: various peer reviewed publications. Direct and indirect savings included.

An economic impact evaluation of seven vaccines (DTaP, Td, Hib, polio, MMR, hepatitis B, and varicella) routinely given as part of the childhood immunization schedule found that vaccines are tremendously cost-effective. Routine childhood vaccination with these seven vaccines resulted in annual cost saving of \$9,900,000,000 in direct medical cost and an additional \$33,400,000,000 in indirect cost savings.

In 1962, with the enactment of the Vaccination Assistance Act, the Section 317 Immunization Program (Section 317 of the Public Health Service Act) was created. The Program is a discretionary federal grant program to 64 state and local public health immunization programs that include all 50 states, six city/urban areas, and eight U.S. territories and protectorates. The purpose of the Section 317 Program is to support efforts to plan, develop, and maintain a public health infrastructure that helps assure high immunization coverage levels and low incidence of vaccine-preventable diseases. As part of this effort, the Section 317 Program provides vaccines to underinsured children and adolescents not served by the Vaccines for Children (VFC) program and, as funding permits, to uninsured and underinsured adults.

Since 1994, the VFC program, established by Section 1928 of the Social Security Act, has allowed eligible children to receive vaccinations as part of routine care, supporting the reintegration of

vaccination and primary care. The VFC program serves children through 18 years of age without insurance, those eligible for Medicaid, American Indian/Alaska Native children, and underinsured children who receive care through Federally Qualified Health Centers (FQHCs) or Rural Health Centers (RHCs). Through VFC, CDC provides funding to 61 state and local public health immunization programs that include all 50 states, six city/urban areas, and five U.S. territories and protectorates.

Although the VFC program was established subsequent and separate from the Section 317 Program, the Section 317 Program remains the most significant source of federal funding for most jurisdictional vaccine program operations. Immunization infrastructure is crucial, especially when public health priorities can shift rapidly in the event of an outbreak of a vaccine-preventable disease or a bioterrorism event. Managing resources to address urgent events or unanticipated shortages pose challenges to state programs.

CDC supports the immunization efforts of states by providing extramural support and funding through grants and contracts for vaccine purchase and operations/infrastructure activities. Over 90 percent of Section 317 Program funds are provided to states through grants for vaccine purchase and state operations and infrastructure. The remaining funds are used intramurally by CDC or for contracts in support of the immunization program's operations and infrastructure. Funding supports the following activities:

- Vaccine purchase grants – supports the purchase of the Advisory Committee on Immunization Practices (ACIP) recommended vaccines through CDC's consolidated vaccine purchase contracts available to state and local health departments.
- Integration of new vaccines into routine medical care – increases vaccination coverage rates, and decreases racial and ethnic disparities.
- Front-line public health professionals – includes nurses who administer vaccines; professionals who work with immunization providers to improve their immunization practices and handling of vaccines; and immunization managers who coordinate and direct the complex activities needed to assure vaccination of a population.
- Immunization information systems – tracks the vaccination status of individuals, thus ensuring that individuals are vaccinated appropriately and on-time to minimize susceptibility to vaccine preventable diseases while saving money by eliminating unnecessary immunizations.
- Disease surveillance systems – monitors the occurrence of vaccine preventable diseases at the state and local levels. Surveillance of vaccine-preventable diseases also facilitates faster response to outbreaks.
- Education and outreach activities – supports educational campaigns, public and private provider education, and quality assurance and improvement reviews.
- Post-licensure vaccine safety surveillance and research activities – identifies and analyzes safety concerns; tests potential vaccine related hypotheses; standardizes case definitions and clinical guidelines for studying vaccine adverse events; collaborates with partners to develop a scientifically robust vaccine safety research agenda; and fortify the nation's vaccine safety infrastructure to prepare for and respond to public health emergencies.

Assuring strong immunization programs are in place to protect Americans requires ongoing evaluation of immunization coverage as well as understanding the impact of vaccination efforts on disease outcomes. Thus there are four key performance measures for the program that track impact on disease reduction, immunization coverage, improved vaccine safety surveillance, and improved efficiency.

Impact on Disease Reduction – Measuring the disease reduction impact of vaccines provides essential information to ensure that U.S. immunization vaccine policies in place are effective and safe (see outcome table). For the past four years, the reduction in the number of indigenous cases targets have been met or exceeded for six out of nine routinely recommended childhood vaccines (paralytic polio, rubella, measles, diphtheria, congenital rubella syndrome, and tetanus). Although disease reduction achievements are largely due to reaching and maintaining high vaccine coverage levels, disease outbreaks occur even among diseases controlled by ongoing immunization. Hence, U.S. vaccination coverage information, as well as disease incidence information is essential to responding when vaccine-preventable disease outbreaks occur. For example:

- To address challenges in reducing pertussis disease, one of the vaccine-preventable diseases for which disease rates remain high, it is likely that new vaccination recommendations for adolescents and adults to receive DTaP vaccine may accelerate the reduction of pertussis disease among children.
- In addition, improved laboratory diagnostics can improve understanding about the molecular epidemiology of the disease, and this information can be used to improve disease control measures. Appropriate laboratory confirmation of disease was part of the challenge in setting and achieving disease reduction targets for *Haemophilis influenza* type B.
- Furthermore, inadequate laboratory diagnostics can hamper disease investigations and responses as was the case in 2006 when the U.S. experienced the largest outbreak of mumps in 20 years. CDC is working to ensure that lessons learned from the 2005-2006 outbreak and specific enhancements in mumps prevention and control are fully applied to reverse the increase in disease cases.

Immunization Coverage – The nation's childhood immunization coverage rates are at record high levels for most vaccines and for all the vaccination series measures. As childhood immunization coverage rates increase, cases of vaccine preventable diseases decline significantly.

One performance measure is used to ensure that children are appropriately vaccinated by age two (see output table). For the past five years, the 90 percent coverage target has been exceeded for four of the seven routinely recommended childhood vaccines (Hib, MMR, hepatitis B, and polio) and has almost reached the 90 percent target for varicella (currently at 89 percent).

- To sustain current high coverage rates and increase coverage rates for vaccines that have not yet reached the 90 percent target, CDC provides funding, guidance, and technical assistance to state and local immunization programs so that they may conduct provider assessments, develop and utilize immunization information systems, and provide education and training to both public and private immunization providers.

Another important performance measure is the increased proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease among persons 65 years of age and older (see output table). During the past decade, vaccination coverage levels among older adults have slowly increased as CDC implemented national strategies and promoted adult and adolescent immunization among healthcare providers and state and local governments. Influenza vaccination coverage levels among the elderly have increased from 30 percent in 1989 to 64 percent in 2006 and pneumococcal vaccination levels have increased from 15 percent in 1989 to 57 percent in 2006 (most recent data available).

- Despite the increases in coverage, the performance targets have not been met and coverage has plateaued in recent years and remains well below the 2010 target of 90 percent coverage. To reach these ambitious targets, CDC and its partners will continue to aggressively promote vaccination. Efforts will encourage healthcare providers to

recommend influenza vaccine to their patients and encourage vaccination of healthcare providers, a recommended group with consistently low vaccine coverage.

Improved Vaccine Safety Surveillance and Research – Improved vaccine safety is evaluated through the goal of increasing the total population of managed care organization members from which Vaccine Safety Datalink (VSD) data are derived annually. The VSD Project includes eight managed care organizations that represent a total of more than nine million members of which comprehensive medical information is collected for approximately 5.5 million people annually. Since 2005 a total population of nine million has been achieved. However, the performance target of 10 million has not yet been met due to challenges with increasing populations in large-linked databases which is contingent on cooperating entities, resources, and technologies. In addition, there have been several significant accomplishments in the area of improved vaccine safety surveillance and research not captured by this performance measure. For example,

- Findings from Vaccine Adverse Event Reporting System (VAERS) and the VSD Project resulted in changes to the newly licensed MCV4 (Menactra®) vaccine's recommendations and instructions for use. CDC published three Morbidity and Mortality Weekly Report articles to inform public health professionals of this information in FY 2006 and 2007.
- VSD published a major study in the New England Journal of Medicine addressing the hypothesized relationship between thimerosal and neurodevelopmental outcomes. This study found no evidence that thimerosal is associated with neurodevelopmental outcomes.
- The Brighton Collaboration completed 24 case definitions for use in immunization safety surveillance and research, and 16 were published in 2007 in the Journal of Vaccine.
- The Clinical Immunization Safety Assessment (CISA) Network established a centralized registry of clinical data and a repository of biological specimens, which are useful in increasing our understanding of virologic, immunologic, and genetic markers for post-vaccination adverse events.

Improved Efficiency – The Section 317 Program was among the first round of programs OMB reviewed with its PART tool unveiled with the FY 2004 budget submission. The review gave the Section 317 Program high marks for its design, function, and success in achieving dramatic disease reduction through childhood vaccination. PART found that the program would be improved by a more specific mechanism to link successful outcomes to program processes and budgets. Subsequent to the PART review, the program initiated the vaccine management business improvement project (VMBIP) to revamp the entire vaccine distribution process and enhance the efficiency and accountability of vaccine management systems. Efficiencies anticipated include improved management of vaccine inventory through use of distribution best practices and increased visibility of the location of vaccines throughout the public vaccine supply chain. Full implementation is anticipated to gain efficiencies by reducing vaccine wastage and reducing inventory holding costs.

- The program consistently meets or exceeds its targets for this measure. As of October 2007, 34 of the 64 immunization program grantees have transitioned inventories to the centralized distributor, and the number of depots has been reduced by 36 percent (from 396 depots to 253) thus exceeding the anticipated reduction target of 17 percent. Currently, CDC is on track to meet the target of reducing inventory depots by 98 percent by January 2010.

FUNDING HISTORY TABLE

	AMOUNT
FY 1999	\$367,015,000
FY 2000	\$373,882,000
FY 2001	\$446,028,000
FY 2002	\$493,567,000
FY 2003	\$502,765,000
FY 2004	\$468,789,000
FY 2005	\$493,032,000
FY 2006	\$517,199,000
FY 2007	\$512,804,000
FY 2008	\$527,359,000

BUDGET REQUEST

CDC requests \$526,368,000 for Section 317 Immunization Program activities in FY 2009, a decrease of \$991,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. This includes:

- \$465,002,000 for the Section 317 Program vaccine purchase and state operations and infrastructure grants, and
- \$61,366,000 for program operations activities.

The Section 317 Program's budget will be used to continue to support efforts to plan, develop, and maintain a public health infrastructure that helps assure high immunization coverage levels and low incidence of vaccine-preventable diseases. The Section 317 Program budget will continue to provide vaccines to underinsured children and adolescents not served by the VFC program and to uninsured and underinsured adults. In addition, the Section 317 Program budget will support immunization infrastructure activities including vaccine safety surveillance and research activities.

Subsequent to the PART review, the program initiated the vaccine management business improvement project (VMBIP) to revamp the entire vaccine distribution process and enhance the efficiency and accountability of vaccine management systems. CDC will continue to leverage commercial best practices to address all aspects of vaccine procurement, ordering, distribution, and management and achieve efficiencies through VMBIP. Vaccine management and accountability needs have grown dramatically since the inception of the immunization program. VMBIP has increased overall program efficiency through inventory reduction and increased visibility of the location of vaccines throughout the program, enhancing CDC's ability to address public health emergencies such as vaccine shortages. VMBIP will also improve accountability at the individual immunization provider level. Through VMBIP, CDC is working to build a foundation that will support the long-term requirements and accountability of the program.

The following are a few of the program's key outputs:

- The number of grantees achieving 80 percent on the 4:3:1:3:3:1 series (four (4) doses DTP or DTaP, three (3) doses Polio, one (1) dose MMR, three (3) doses Hib, three (3) doses Hepatitis B vaccine, and one (1) dose of PCV7) has increased from one grantee in 2002 to 12 grantees in 2006. One of the major challenges in achieving this target is the number of new vaccines developed, licensed, and recommended for routine use for children, adolescents, and/or adults since 2000, as well as the expansion of routine recommendations for vaccine use (such as expansion of the routine recommendation for individuals of annual influenza vaccination). With funding in FY 2009, an estimated 42 grantees will be achieving an 80 percent level on the 4:3:1:3:3:1 series.

- The number of grantees using Section 317 Program funds to purchase vaccines for adults off the federal adult vaccine contract has increased from 43 grantees in 2004 to 48 in 2007. Grantees prioritize Section 317 Program funds to meet the needs of priority populations who primarily seek vaccination at local health departments. Through this program, states and grantees have broad decision-making ability as to which ages, life stages, high-risk groups, or diseases will be targeted. However, historically, the vast majority of funds are devoted to vaccinating children. Vaccines are provided to uninsured and underinsured adults as funding is available. With FY 2009 funding, an estimated 48 grantees will continue to use Section 317 funds to purchase vaccines for adults.
- The number of children able to be fully vaccinated with Section 317 Program funds is based on the amount of 317 vaccine purchase funding available divided by the least expensive cost to fully vaccinate a child with all routinely recommended vaccines. Consequently, the number of children represents the maximum number of children that can be vaccinated with Section 317 Program funds. Though the available funding has increased since 2004, the number of children able to be vaccinated has decreased due to the dramatic increase in the cost to vaccinate; from \$472 in 2004 to a cost of \$924 for males and \$1,214 for females (as of December, 2007). With FY 2009 funding, an estimated 232,883 children will be fully vaccinated.

Adolescent vaccination is a new challenge facing the program. Since 2005, three new vaccines specifically for older children have been licensed and recommended in the U.S. In order to achieve the target of more than 90 percent vaccination coverage among adolescents for the five vaccines, an adolescent vaccination infrastructure is needed to deliver the new vaccines at the state level and conduct routine adolescent vaccination assessment.

A major challenge related to immunizations is extending the success in childhood immunization to the adult population. In contrast to children, the burden of vaccine-preventable diseases in adults in the U.S. remains high. Approximately 46,700 U.S. adults die annually of vaccine-preventable diseases.

A challenge for vaccine safety monitoring and evaluation is to have the necessary systems in place to keep pace with the increasing number of vaccines recommended for use in the U.S. In order to address this challenge, CDC needs to establish methods to integrate new electronic technologies; implement new education, outreach and training to increase the use of standardized case definitions by scientists, health care providers and the public; and integrate CDC vaccine safety data systems with other federal and state data sources (e.g., state immunization information systems, private health care groups, and electronic medical records).

OUTCOME TABLE

						FY 2007				Out-Year Target ⁶
Long-Term Objective 1.E: Efficiency Measure										
1.E.1	Make vaccine distribution more efficient and improve availability of vaccine inventory by reducing the number of vaccine inventory depots in the U.S. [E]	N/A	>400 (Met)	Award contract to centralize distribution, validate existing baseline	Yes (Met)	Reduce inventory depots by approximately 17%	36% reduction (exceeded)	Reduce inventory depots by 50%	Reduce inventory depots by 98%	Maintain 98% reduction in inventory depots
Long-Term Objective 1.1: Reduce the number of indigenous cases of vaccine-preventable diseases										
1.1.1	The number of indigenous cases of paralytic polio ¹ , rubella ¹ , measles ¹ , <i>Haemophilus influenzae</i> invasive disease (type b and unknown types) ² , diphtheria ³ , congenital rubella syndrome ^{4,5} , and tetanus ³ will remain at or be reduced to 0 by 2010. [O]									
	- <i>Paralytic Polio</i>	0 (Met)	0 (Met)	0	0 (Met)	0	9/2008	0	0	0
	- <i>Rubella</i>	7 (Exceeded)	7 (Exceeded)	15	11 (Exceeded)	8	9/2008	8	5	0
	- <i>Measles</i>	10 (Exceeded)	42 (Exceeded)	50	24 (Exceeded)	45	9/2008	35	25	0
	- <i>Haemophilus influenzae</i>	196 b + unknown (Unmet)	226 b + unknown (Unmet)	150	208 b + unknown (Unmet)	150	9/2008	150	75	0
	- <i>Diphtheria</i>	0 (Exceeded)	0 (Exceeded)	5	0 (Exceeded)	4	9/2008	4	3	0
	- <i>Congenital rubella Syndrome</i>	0 (Exceeded)	0 (Exceeded)	5	0 (Exceeded)	4	9/2008	3	2	0
	- <i>Tetanus</i>	6 (Exceeded)	5 (Exceeded)	25	12 (Exceeded)	13	9/2008	10	8	0
1.1.2	Reduce the number of indigenous cases of mumps in persons of all ages from 666 (1998 baseline) to 0 by 2010.[O] ⁵	258 (Unmet)	314 (Unmet)	200	6,584 (Unmet)	200	9/2008	200	100	0

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
IMMUNIZATION AND RESPIRATORY DISEASES

						FY 2007				Out-Year Target ⁶
1.1.3	Reduce the number of indigenous cases of pertussis among children under 7 years of age. [O]	6,850 (Unmet)	7,347 (Unmet)	2,300	3,841 (Unmet)	2,300	9/2008	2,300	2,150	2000
Long Term Objective 1.4: Protect Americans from infectious disease – pneumococcal										
1.4.1	By 2010, reduce the rates of invasive pneumococcal disease in children under 5 years of age to 46 per 100,000. [O]	N/A	21.3 (Exceeded)	48	20.8 (Exceeded)	47	6/2008	46	46	46
1.4.1	By 2010, reduce the rates of invasive pneumococcal disease in adults aged 65 years and older to 42 per 100,000. [O]	N/A	38.8 (Exceeded)	47	40.5 (Exceeded)	45	6/2008	42	42	42

¹All ages

²Children under five years of age

³Persons under 35 years of age

⁴Children under one year of age. Result column indicates all cases – indigenous and imported. Imported cases will be differentiated in 2007, but those data are not yet available.

⁵Results column indicates all cases – indigenous and imported. Imported cases will be differentiated in 2007, but those data are not yet available.

⁶Outyear targets reflect Healthy People 2010 targets.

OUTPUT TABLE

						FY 2007				Out-Year Target ⁶
Long Term Objective 1.2: Ensure that children and adolescents are appropriately vaccinated.										
nization coverage of at least 90% in children 19- to 35-months of age for:										
										At least 90% coverage
										At least 90% coverage
										At least 90% coverage
										At least 90% coverage
										At least 90% coverage
										At least 90% coverage

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
IMMUNIZATION AND RESPIRATORY DISEASES

						FY 2007				Out- Year Target/%
										At least 90% coverage
	-									90% cover- age
Long Term Objective 1.3: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.										
										90%
										90%
										60%
										60%
Long Term Objective 1.5: Improve vaccine safety surveillance.										
										10 million
Other Immunization and Respiratory Disease Outputs										
										N/A
										N/A
										N/A

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
IMMUNIZATION AND RESPIRATORY DISEASES

						FY 2007				Out- Year Target/%
	-									N/A
										N/A
										N/A
									\$526.4	

¹The change in reporting this output is due to the fact that additional data are available that enable the program to more accurately estimate this output. When estimates for FY 2007 and FY 2008 were provided, the only data available were for 2002 through 2004. Now that 2005 data are available the program is able to offer more accurate estimates.

²Rotavirus was licensed, recommended, and funded for part of FY 2006.

³Outyear targets reflect Healthy People 2010 targets.

⁴The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLES

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS SECTION 317				
				FY 2009+/- FY 2008
Alabama	\$8,390,033	\$8,683,439	\$8,683,439	\$0
Alaska	\$3,702,770	\$3,842,352	\$3,842,352	\$0
Arizona	\$10,270,161	\$10,622,454	\$10,622,454	\$0
Arkansas	\$2,572,901	\$2,645,913	\$2,645,913	\$0
California	\$52,577,481	\$54,314,049	\$54,314,049	\$0
Colorado	\$4,872,877	\$5,019,435	\$5,019,435	\$0
Connecticut	\$7,911,840	\$8,206,052	\$8,206,052	\$0
Delaware	\$1,064,559	\$1,090,294	\$1,090,294	\$0
District of Columbia (DC)	\$1,909,185	\$1,962,526	\$1,962,526	\$0
Florida	\$19,874,964	\$20,543,420	\$20,543,420	\$0
Georgia	\$10,428,140	\$10,762,007	\$10,762,007	\$0
Hawaii	\$4,114,379	\$4,256,449	\$4,256,449	\$0
Idaho	\$4,990,098	\$5,175,756	\$5,175,756	\$0
Illinois	\$5,267,881	\$5,452,194	\$5,452,194	\$0
Indiana	\$6,890,528	\$7,147,687	\$7,147,687	\$0
Iowa	\$4,197,982	\$4,345,674	\$4,345,674	\$0
Kansas	\$2,555,287	\$2,632,356	\$2,632,356	\$0
Kentucky	\$2,547,154	\$2,601,403	\$2,601,403	\$0
Louisiana	\$5,808,033	\$6,026,159	\$6,026,159	\$0
Maine	\$5,907,230	\$6,118,073	\$6,118,073	\$0
Maryland	\$3,830,678	\$3,911,201	\$3,911,201	\$0
Massachusetts	\$9,718,300	\$10,061,847	\$10,061,847	\$0
Michigan	\$13,309,640	\$13,760,584	\$13,760,584	\$0
Minnesota	\$7,377,766	\$7,630,794	\$7,630,794	\$0
Mississippi	\$2,818,314	\$2,919,102	\$2,919,102	\$0
Missouri	\$7,330,561	\$7,601,518	\$7,601,518	\$0
Montana	\$1,837,900	\$1,899,233	\$1,899,233	\$0
Nebraska	\$4,382,243	\$4,540,094	\$4,540,094	\$0
Nevada	\$5,019,069	\$5,203,347	\$5,203,347	\$0
New Hampshire	\$3,642,835	\$3,774,699	\$3,774,699	\$0
New Jersey	\$7,791,944	\$8,031,509	\$8,031,509	\$0
New Mexico	\$2,201,932	\$2,279,404	\$2,279,404	\$0
New York	\$10,710,535	\$11,012,081	\$11,012,081	\$0
North Carolina	\$12,067,656	\$12,493,250	\$12,493,250	\$0
North Dakota	\$3,786,778	\$3,932,354	\$3,932,354	\$0
Ohio	\$9,412,798	\$9,714,448	\$9,714,448	\$0
Oklahoma	\$3,500,215	\$3,599,253	\$3,599,253	\$0
Oregon	\$3,023,549	\$3,097,157	\$3,097,157	\$0
Pennsylvania	\$11,732,213	\$12,133,829	\$12,133,829	\$0

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
IMMUNIZATION AND RESPIRATORY DISEASES

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS SECTION 317				
				FY 2009+/- FY 2008
Rhode Island	\$5,204,284	\$5,402,231	\$5,402,231	\$0
South Carolina	\$4,750,031	\$4,903,005	\$4,903,005	\$0
South Dakota	\$2,366,509	\$2,453,916	\$2,453,916	\$0
Tennessee	\$6,712,887	\$6,946,087	\$6,946,087	\$0
Texas	\$30,720,741	\$31,788,979	\$31,788,979	\$0
Utah	\$5,179,918	\$5,365,401	\$5,365,401	\$0
Vermont	\$3,067,746	\$3,178,115	\$3,178,115	\$0
Virginia	\$12,960,379	\$13,461,666	\$13,461,666	\$0
Washington	\$13,191,575	\$13,674,182	\$13,674,182	\$0
West Virginia	\$2,598,126	\$2,680,264	\$2,680,264	\$0
Wisconsin	\$5,828,344	\$6,003,007	\$6,003,007	\$0
Wyoming	\$913,670	\$941,501	\$941,501	\$0
Chicago	\$4,697,974	\$4,820,679	\$4,820,679	\$0
Houston	\$1,812,908	\$1,850,595	\$1,850,595	\$0
New York City	\$8,907,890	\$9,138,942	\$9,138,942	\$0
Philadelphia	\$2,046,866	\$2,095,587	\$2,095,587	\$0
San Antonio	\$2,004,916	\$2,053,861	\$2,053,861	\$0
American Samoa	\$338,434	\$345,842	\$345,842	\$0
Guam	\$356,307	\$364,515	\$364,515	\$0
Marshall Islands	\$1,192,940	\$1,226,817	\$1,226,817	\$0
Micronesia	\$1,626,866	\$1,678,782	\$1,678,782	\$0
Northern Mariana Islands	\$748,692	\$769,161	\$769,161	\$0
Puerto Rico	\$1,676,920	\$1,746,426	\$1,746,426	\$0
Republic Of Palau	\$3,166,960	\$3,235,860	\$3,235,860	\$0
Virgin Islands	\$912,050	\$933,874	\$933,874	\$0
				\$0
Other Adjustments ¹	\$38,504,663	\$39,791,235	\$38,892,235	-\$899,000
				-\$899,000
				-\$899,000

¹ Adjustments include costs associated with remaining state vaccine resources due to vaccine purchase contracts that span fiscal years, special projects, and program support services.

CENTERS FOR DISEASE CONTROL AND PREVENTION				
STATE/FORMULA GRANTS				
VACCINE FOR CHILDREN (VFC) PROGRAM				
				FY 2009+/- FY 2008
Alabama	\$42,356,476	\$46,191,491	\$47,522,644	\$1,331,153
Alaska	\$10,003,466	\$10,909,194	\$11,223,577	\$314,383
Arizona	\$47,602,254	\$51,912,229	\$53,408,244	\$1,496,015
Arkansas	\$25,835,725	\$28,174,928	\$28,986,878	\$811,949
California	\$270,856,761	\$295,380,512	\$303,892,833	\$8,512,321
Colorado	\$25,589,794	\$27,906,730	\$28,710,950	\$804,220
Connecticut	\$22,849,589	\$24,918,423	\$25,636,526	\$718,103
Delaware	\$6,769,530	\$7,382,453	\$7,595,201	\$212,749
District of Columbia (DC)	\$6,998,666	\$7,632,335	\$7,852,285	\$219,950
Florida	\$116,024,778	\$126,529,824	\$130,176,180	\$3,646,356
Georgia	\$90,269,596	\$98,442,732	\$101,279,670	\$2,836,938
Hawaii	\$9,774,947	\$10,659,985	\$10,967,186	\$307,201
Idaho	\$13,070,539	\$14,253,964	\$14,664,737	\$410,773
Illinois	\$66,778,391	\$72,824,601	\$74,923,271	\$2,098,670
Indiana	\$41,224,251	\$44,956,752	\$46,252,323	\$1,295,571
Iowa	\$15,607,912	\$17,021,074	\$17,511,590	\$490,516
Kansas	\$12,836,589	\$13,998,832	\$14,402,253	\$403,420
Kentucky	\$23,062,769	\$25,150,905	\$25,875,707	\$724,803
Louisiana	\$48,630,644	\$53,033,731	\$54,562,065	\$1,528,334
Maine	\$8,509,789	\$9,280,278	\$9,547,718	\$267,440
Maryland	\$43,232,649	\$47,146,994	\$48,505,683	\$1,358,689
Massachusetts	\$46,705,647	\$50,934,442	\$52,402,278	\$1,467,836
Michigan	\$58,662,232	\$63,973,593	\$65,817,193	\$1,843,601
Minnesota	\$16,761,583	\$18,279,200	\$18,805,973	\$526,773
Mississippi	\$31,068,297	\$33,881,264	\$34,857,659	\$976,395
Missouri	\$32,861,986	\$35,837,356	\$36,870,123	\$1,032,766
Montana	\$5,479,767	\$5,975,913	\$6,148,128	\$172,215
Nebraska	\$10,355,523	\$11,293,126	\$11,618,573	\$325,447
Nevada	\$23,852,302	\$26,011,923	\$26,761,539	\$749,616
New Hampshire	\$9,422,440	\$10,275,561	\$10,571,684	\$296,123
New Jersey	\$47,226,265	\$51,502,197	\$52,986,395	\$1,484,198
New Mexico	\$35,691,639	\$38,923,210	\$40,044,905	\$1,121,695
New York	\$66,233,863	\$72,230,770	\$74,312,328	\$2,081,557
North Carolina	\$77,527,125	\$84,546,539	\$86,983,014	\$2,436,475

CENTERS FOR DISEASE CONTROL AND PREVENTION				
STATE/FORMULA GRANTS				
VACCINE FOR CHILDREN (VFC) PROGRAM				
				FY 2009+/- FY 2008
North Dakota	\$4,229,595	\$4,612,548	\$4,745,473	\$132,925
Ohio	\$63,935,106	\$69,723,880	\$71,733,193	\$2,009,313
Oklahoma	\$38,036,818	\$41,480,725	\$42,676,123	\$1,195,398
Oregon	\$21,261,675	\$23,186,737	\$23,854,936	\$668,199
Pennsylvania	\$49,147,874	\$53,597,792	\$55,142,381	\$1,544,589
Rhode Island	\$10,302,529	\$11,235,334	\$11,559,116	\$323,782
South Carolina	\$40,958,104	\$44,666,508	\$45,953,714	\$1,287,206
South Dakota	\$9,093,527	\$9,916,867	\$10,202,653	\$285,786
Tennessee	\$43,020,388	\$46,915,515	\$48,267,533	\$1,352,018
Texas	\$239,764,316	\$261,472,914	\$269,008,080	\$7,535,166
Utah	\$10,312,467	\$11,246,172	\$11,570,266	\$324,094
Vermont	\$6,134,711	\$6,690,157	\$6,882,955	\$192,798
Virginia	\$27,084,805	\$29,537,101	\$30,388,306	\$851,205
Washington	\$58,282,978	\$63,560,001	\$65,391,682	\$1,831,682
West Virginia	\$11,962,243	\$13,045,322	\$13,421,264	\$375,942
Wisconsin	\$30,084,913	\$32,808,843	\$33,754,333	\$945,490
Wyoming	\$4,643,926	\$5,064,394	\$5,210,340	\$145,946
Chicago	\$32,597,332	\$35,548,740	\$36,573,189	\$1,024,449
Houston	\$834,139	\$909,663	\$935,878	\$26,215
New York City	\$81,926,191	\$89,343,904	\$91,918,630	\$2,574,726
Philadelphia	\$19,399,305	\$21,155,745	\$21,765,414	\$609,669
San Antonio	\$15,694,881	\$17,115,917	\$17,609,166	\$493,249
American Samoa	\$609,621	\$664,817	\$683,976	\$19,159
Guam	\$1,743,606	\$1,901,475	\$1,956,272	\$54,797
N Mariana Island	\$969,582	\$1,057,369	\$1,087,840	\$30,471
Puerto Rico	\$40,139,759	\$43,774,069	\$45,035,557	\$1,261,488
Virgin Islands	\$1,495,065	\$1,630,430	\$1,677,416	\$46,986
				\$71,447,000
Other Adjustments ¹	\$462,526,042	\$222,970,000	\$215,547,000	-\$7,423,000
				-\$7,423,000
				\$64,024,000

¹ Adjustments include costs associated with remaining state vaccine resources due to vaccine purchase contracts that span fiscal years, vaccines stockpile purchases, storage and rotations, special projects, and program support services.

INFLUENZA

				FY 2009 +/- FY 2008
Seasonal Influenza	\$2,626,000	\$2,643,000	\$2,638,000	-\$5,000
Pandemic Influenza	\$70,000,000	\$154,632,000	\$157,459,000	+\$2,827,000
Total	\$72,626,000	\$157,275,000	\$160,097,000	+\$2,822,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 3173, 317(a), 317(j), 317(j)(1)3, 317(k)(1), 317N3, 317S5, 319, 319C 1) 319E, 319F(2), 322, 325, 327, 340C, 352, 361-369, 2102 (6), 2102(7) 2125, 2126, 2127, Title XXI, 1928 of Social Security Act (42 USC 1396s); Immigration and Nationality Act §§ 212, 232; Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006.

FY 2009 Authorization Indefinite

Allocation Methods:Direct
Federal/Intramural, Competitive Grants/Cooperative Agreements, Contracts; and Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The CDC Influenza Program provides the highest quality of public health preparedness and response to limit illness and death from domestic and global influenza, including:

- **Seasonal influenza** – annual epidemics of influenza among humans, estimated to cause 200,000 hospitalizations and 36,000 deaths each year in the U.S.
- **Avian influenza** – ongoing outbreaks of influenza among birds with occasional transmission of infection to humans. Over 300 human infections from the H5N1 strain of avian influenza have been reported; 62 percent of cases have resulted in death.
- **Pandemic influenza** – genetic changes to avian influenza viruses leading to global human-to-human transmission of a novel strain; impacts include 30 percent of population infected, social and economic disruption, severe disease, and death. A severe pandemic such as the 1918 pandemic occurring in the U.S. is projected to cause 90 million infections and 1.9 million deaths.

The CDC Influenza Program began with the establishment of national and international influenza surveillance in 1956. The Program serves people of all ages in the U.S. and globally, with emphasis on services to populations at high risk of complications, illness, and death from influenza. CDC has made great progress in many critical areas including health monitoring, epidemiology, laboratory capabilities, response, and recovery.

The program collaborates with many governmental and non-governmental organizations to provide and support domestic and international disease surveillance; epidemiological and laboratory research; rapid response to influenza outbreaks; guidance for prevention of influenza disease; vaccine development; and education and promotion of health information about influenza and its prevention.

The program also forms the core of CDC's pandemic influenza preparedness activities. In responding to an influenza pandemic, CDC would operate under the National Incident Management System and work with international, federal, state, and other partners to ensure a rapid and coordinated response in order to: (1) immediately detect cases of infection due to novel influenza viruses with pandemic potential; (2) contain outbreaks due to these influenza viruses; (3) prevent illness and death by delaying the introduction and reducing the transmission of pandemic viruses in

the U.S.; and (4) assist state, local, territorial, and tribal nation (SLTT) partners in the management of influenza pandemic events.

CDC organizes and reports influenza accomplishments under six overarching goals.

1. Increase use and development of interventions known to prevent influenza illness in humans

- Worked with partners to increase use, production, and distribution of annual influenza vaccine.

Influenza Vaccine Production and Distribution for 2000 – 2007 Seasons

Influenza Season	Doses Produced (in millions)	Doses Distributed in Millions (%) ^{1, 2}
2000-2001	77.9	70.4 (90%)
2001-2002	87.7	77.7 (89%)
2002-2003	95.0	83.0 (87%)
2003-2004	86.9	83.1 (96%)
2004-2005	61.0	57.0 (93%)
2005-2006	88.1	81.1 (92%)
2006-2007	115.0	102.5 (89%)
2007-2008 (projected)	132.0 (projected)	109.3 (as of 11/23/2007)

¹ Data provided by vaccine manufacturers. CDC does not have data on the number of influenza vaccine doses administered or not used each year.

² Doses not distributed are destroyed because they expire at the end of the influenza season.

- Led the Annual Influenza Vaccination Campaign, including National Influenza Vaccination Week, which resulted (in 2006) in coverage in 96 broadcast news markets, representing more than 67 percent of the U.S. population.
- Received and characterized over 3,000 influenza viruses needed for strain selection for seasonal influenza vaccine, in collaboration with the Federal Drug Administration (FDA) and the World Health Organization (WHO).
- Principle WHO partner in determination of virus selection for annual influenza vaccines and creation of vaccine strains for dissemination to manufacturers for production.
- Developed the first two H5N1 pandemic influenza vaccine candidates, representing viruses from Indonesia and China, for use in manufacturing of pre-pandemic vaccines.
- Expanded use of the Countermeasure and Response Administration Application system to support specific requirements of tracking vaccine doses administered on a national basis. The application helps ensure that targeted groups receive vaccine and determine the extent, impact, and aid in recall of vaccine should adverse events occur.
- Developed and exercised methods for distribution of pandemic influenza vaccine.

2. Decrease the time needed to detect and report cases of influenza virus infection with pandemic potential.

- Developed methods and trained public health laboratories to perform advanced technology (RT PCR) rapid testing (four hour) to identify H5 viruses and distributed reagents globally to more than 100 National Influenza Centers to diagnose seasonal and H5 avian influenza.
- Awarded approximately \$11,000,000 in awards to support development of new rapid point-of-care devices for clinics and settings that detect seasonal and potential pandemic viruses.

- Analyzed 134 H5N1 viruses to assess ongoing genotype changes and track the molecular evolution of the H5N1 viruses in Southeast Asia to assess its capacity to cause human disease.
- Distributed close to \$72,000,000 to over 40 countries and WHO Headquarters and Regional Offices along with technical assistance to develop capacity and support development of pandemic plans; improved epidemiologic investigation and response capacity; laboratory infrastructure and testing; training; and risk communications.
- Investigated H5N1 virus outbreaks among humans in 20 countries in collaboration with WHO and country ministries of health.
- Trained over 5,000 public health professionals representing Asia, Africa, and South America, from more than 100 countries in rapid outbreak response to avian influenza.
- Established new U.S. national requirements for reporting of laboratory-confirmed influenza deaths in children and early detection of novel influenza infections in humans.

3. *Improve the timeliness and accuracy of communications regarding seasonal, avian, and pandemic influenza.*

- Developed audience-centered communication materials to specific groups (e.g., vulnerable populations, physicians).
- Launched daily media monitoring report for avian and potential pandemic influenza.
- Trained and exercised 85 CDC staff to help in pandemic training and response.
- In collaboration with ministers of health and other partners, trained 92 communication professionals from every Pan-American Health Organization (PAHO) country to develop and deliver culturally relevant risk communications.
- Supported a global pandemic influenza communications workshop in Cairo, Egypt for 115 members from 28 nations globally.
- Strengthened U.S. emergency communication infrastructure by developing risk communication materials (e.g., messages, checklists); expanded production and partnerships in media programming, including new media; expanded participants in the CDC risk communication network; and built readiness capacity for global partners to use risk communication principles and provide appropriate information and communication.

4. *Decrease the time to effectively identify causes, risk factors, and appropriate interventions regarding seasonal, avian, and pandemic influenza.*

- Developed and disseminated community mitigation guidance using early, targeted, layered non-pharmaceutical interventions to reduce pandemic impact on communities.
- Developed Influenza Data Summary (IDS) tool, a module that collates influenza surveillance and automated clinical data for display using the CDC Biosense system.
- Completed public engagement and development of Ethical Guidelines in Pandemic Influenza, made available to the public in February 2007.
- In collaboration with WHO Headquarters and Regional Offices, provided technical assistance to develop standard surveillance protocols for influenza, severe respiratory disease, and potential cases of avian influenza to work towards implementation of the International Health Regulations for potential events of public health concern.

- Established active, population-based surveillance in key U.S. regions for influenza risk factors and outcomes, allowing more rapid characterization of people most affected by influenza and measures to attain the most impact on infection prevention and treatment.
- Identified means by which avian influenza viruses cause severe disease when they infect human cells enabling better therapies and vaccines.

5. *Decrease the time needed to provide countermeasures for seasonal, avian, and pandemic influenza.*

- Built Strategic National Stockpile (SNS) inventory to 37 million antiviral regimens, 104 million N95 respirators, and 51 million surgical masks.
- Conducted 14 drills, tabletop simulations, and major functional exercises to identify potential gaps in pandemic preparedness and response, both within CDC and with other federal and state partners. After-action reports informed changes in operations plans.
- Developed the North American Plan for Avian and Pandemic Influenza in coordination with other federal agencies and counterparts in Mexico and Canada to strengthen collaborative public health efforts associated with border crossings, international airports, and other components of a comprehensive global migration and quarantine system.
- Developed protocols for rapid response training that were used to train epidemiologists and health care workers from more than 100 countries. Development of containment training materials has been piloted in three regional trainings in the WHO Regional Office for Africa (AFRO). These training tools will be fine-tuned for global use.
- Pre-positioned 253,800 antiviral regimens overseas to support international containment in coordination with the Department of Defense and the Department of State.
- Trained officials from 50 state health departments in rapid response procedures; funded and provided materials for states to train additional local public health staff. Developed a web-based program to expand training access for public health department staff.
- Supported expanded research on community use of non-pharmaceutical interventions to reduce and prevent influenza transmission through more than \$5,000,000 in awards.
- In FY 2006 and FY 2007, provided technical assistance to 62 state, local, tribal, and territorial grantees to plan, analyze, and exercise community pandemic influenza preparedness.

6. *Decrease the time needed to restore health services and environmental safety to pre-event levels.*

- Developed and submitted four consensus recommendations for surge capacity and allocation of scarce resources through the Critical Care Collaborative.
- Developed standard approach to diagnostic and surveillance testing for each interval of the pandemic to prevent influenza laboratories from becoming overwhelmed.
- Developed staffing, stockpile, communications, and surge testing needs for incorporation into a pandemic laboratory surge plan; this is essential for quick implementation and turn-around times during initial stages of a pandemic.
- To prepare for surge during a pandemic, determined that 200 - 250 trained staff will be needed to maintain CDC Influenza laboratory needs. Developing estimates for local level staffing needs.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$2,733,000
FY 2005	\$2,710,000
FY 2006	\$2,659,000
FY 2007	\$72,626,000
FY 2008	\$157,275,000

BUDGET REQUEST

CDC requests \$160,097,000 for Influenza Program activities in FY 2009, an increase of \$2,822,000 above the FY 2008 Enacted level. In FY 2009, CDC has consolidated all funding for Influenza within the Immunization and Respiratory Diseases budget rather than displaying funding within several budget categories. This request includes a reduction of \$309,000 for Individual Learning Accounts (ILA) and administrative costs. This includes:

- \$157,459,000 for pandemic influenza activities, an increase of \$2,827,000 to fund influenza pandemic preparedness priorities such as risk communications, and
- \$2,638,000 for annual/seasonal influenza activities.

CDC's Influenza Program funding works to minimize domestic and global illness, suffering, and death from seasonal influenza; investigate and contain the spread of avian influenza; and minimizes the illness and death that will occur during the next influenza pandemic. Specifically, CDC will use FY 2009 influenza funding to achieve the following:

- Reduce the time between detection of a pandemic and the development and administration of a vaccine that is well matched to the pandemic strain.
- Continue enhancement and support of the Countermeasure and Response Administration application. This national tracking system allows all levels of public health to ensure that targeted groups receive adequate supplies of scarce vaccine; to help understand effectiveness; in an adverse event to provide denominator data in determining extent, and impact; and to aid in product recall.
 - Initial development has been completed and is currently being tested by the 62 project areas via a pilot. Using the pilot results as a guide, funding will be used for enhancement and development to ensure each of the options are supported.
 - In addition, remaining development includes Health Level 7 (HL7) data exchange and detailed data collection based on CDC guidance, development of library of candidate vaccine viruses for H5, H7, H9, and other influenza viruses with pandemic potential.
- Reduce the time to detect a pandemic in the U.S., including developing better tests to detect influenza virus. In FY 2009, CDC strives to:
 - Sustain sentinel physician reporters and increase the use of electronic data to detect increase in influenza-like illness earlier.
 - Build the capability to detect and report novel influenza virus infections at state and local levels. Increasing the number of state/local health departments supported to build epidemiological and laboratory capacity for influenza.
 - Reach a level of 55 state/local health departments that support building epidemiological and laboratory capacity for influenza. In addition, these sites will

provide dedicated staff and laboratory support to more rapidly investigate suspect cases, to serve as local subject matter experts for emergent influenza events, and to provide for local training and risk communications activities.

- Reduce the time to detect a pandemic internationally through development and maintenance of surveillance, diagnostic, and rapid response capabilities.
 - Sustain the target of approximately 40 countries that receive funding for international influenza assistance.
 - Allow for further training and use of CDC laboratory methods for accurate and timely detection of potentially pandemic influenza virus infections.
 - Rapid response teams within funded countries will be trained and exercised to assure efficient and rapid investigations and interventions.
 - Allow for a network of CDC field staff and international public health partners that greatly facilitate rapid communication and decision-making on emergent avian and potentially pandemic influenza events.
- Increase the timeliness and effectiveness of communications for the public to prepare and respond to a pandemic. Funding in FY 2009 will be used to continue to strengthen risk communications by:
 - Identifying and filling critical gaps in the Nation's emergency communication infrastructure by developing information and communication with the target audience;
 - Developing additional mechanisms, messages, materials, and processes with target audiences to ensure their readiness;
 - Expanding production and partnerships for media programming;
 - Increasing the number of active risk communicators in CDC's risk communication network to build bench strength and add redundancy in the event of partial staff incapacitation during a pandemic influenza event;
 - Continuing to build readiness capacity in global partners (e.g., China and Central America) to use risk communication principles and provide appropriate information and communication to their citizens.
- Respond quickly and effectively to reduce transmission of the virus causing the pandemic using community mitigation strategies and antiviral drugs to treat and prevent infection.
- Procure, develop, and test plans to distribute countermeasures such as antiviral drugs, masks, and respirators at the outset of pandemic.
- Sustain the medical care system during a pandemic.

New strategies for FY 2009 include expansion of drills, tabletop simulations and functional exercises coordinated with government and non-governmental organizations at local, state, federal, and international levels to identify and address gaps in preparedness and to clarify leadership roles and responsibilities.

OUTPUT TABLE

						FY 20				Out- Year Target
Long Term Objective 1.6: Protect Americans from infectious diseases – Influenza.										
1.6.1	By 2010, enhance preparedness for pandemic influenza by establishing influenza networks globally through bilateral cooperative agreements that are actively producing usable samples for testing as measured by geographic and population coverage.	9 networks; 1 with 100% geographic coverage; 70% population coverage; 8 with 10-40% geographic coverage and 10-40% population coverage per county network	12 Exceeded	9 networks	13 Exceeded	20 networks	30 Exceeded	30 networks	30 networks	N/A
Other Influenza Outputs										
1.G	Number of reporting domestic sentinel physician sites to improve influenza surveillance	891	1000	1300	1300	1,300	1300	1,300	1,300	1,300
1.H	Number of state/local health departments supported to build epidemiological and lab capacity for influenza	47	47	47	47	47	47	55	55	55
1.I	Number of countries receiving funds for international influenza	N/A	N/A	35-40	35-40	35-40	35-40	35-40	35-40	35-40
	Appropriated Amount (\$ Million)¹	\$2.7	\$2.7	\$2.7		\$72.6		\$157.3	\$160.1	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

HIV/AIDS, Research and Domestic	\$695,454,000	\$691,860,000	\$691,147,000	-\$713,000
Viral Hepatitis	\$17,354,000	\$17,582,000	\$17,504,000	-\$78,000
Sexually Transmitted Diseases (STDs)	\$155,037,000	\$152,329,000	\$151,651,000	-\$678,000
Tuberculosis (TB)	\$134,668,000	\$140,359,000	\$139,735,000	-\$624,000
Total	\$1,002,513,000	\$1,002,130,000	\$1,000,037,000	-\$2,093,000

SUMMARY OF THE REQUEST

CDC maximizes public health and safety nationally and internationally through the elimination, prevention, and control of diseases, disability, and death caused by HIV/AIDS, non-HIV retroviruses, viral hepatitis, STDs, TB and non-tuberculous mycobacteria. CDC works in collaboration with partners at community, state, national, and international levels applying well-integrated, multidisciplinary programs of research, surveillance, risk factor and disease intervention, and evaluation. These efforts are guided by three overarching priorities:

- Reducing Health Disparities – Improving the health of populations disproportionately affected by HIV, viral hepatitis, STDs, TB, and other related diseases and conditions.
- Encouraging Program Collaboration and Service Integration – Striving to provide prevention services that are holistic, evidence-based, comprehensive, and high quality to appropriate populations at every interaction with the health care system.
- Maximizing Global Synergies – Cultivating partnerships in prevention and research to maximize health impact around the world.

CDC requests \$1,000,037,000 for HIV/AIDS, viral hepatitis, STD, and TB, a decrease of \$2,093,000 below the FY 2008 Enacted level. This request includes \$4,466,000 for an Individual Learning Account (ILA) and an administrative reduction. This includes:

- \$691,147,000 for the Domestic HIV/AIDS Prevention Program, a decrease of \$713,000 below the FY 2008 Enacted level to sustain activities to track the epidemic, research and implement prevention interventions, and deliver technical assistance to HIV prevention partners.
- \$17,504,000 for the Viral Hepatitis Program, a decrease of \$78,000 below the FY 2008 Enacted level to fund prevention education, surveillance, counseling, diagnosis, management, and treatment of acute and chronic viral hepatitis infections.
- \$151,651,000 for the STD Program, a decrease of \$678,000 below the FY 2008 Enacted level to support research, surveillance, policy development, and assistance to states, territories, and local health departments to prevent and control STDs.
- \$139,735,000 for the TB program, a decrease of \$624,000 below the FY 2008 Enacted level to support research, TB prevention and control services, public information and education programs, and partner education, training, and clinical skills improvement activities to prevent, control, and eliminate TB.

These programs are among the Infectious Disease programs subject to reauthorization.

EFFICIENCY MEASURE

						FY 20				Out-Year Target
Efficiency Measure 2.E.1:										
2.E.1	Increase the efficiency of core HIV/AIDS surveillance as measured by the cost per estimated case of HIV/AIDS diagnosed each year.	\$807	\$887	\$940	Available 6/2008	\$870	Available 12/2008	\$840	\$775	NA

CDC supports HIV/AIDS surveillance in collaboration with state and territorial health departments as a key component of its HIV prevention efforts. HIV/AIDS case surveillance data provide information on what populations are most affected by HIV/AIDS and are used to guide prevention, treatment and support programs at the local, state, and national levels. This measure reflects efficiencies that are being achieved in HIV surveillance nationally. While differing methods of HIV case surveillance have been implemented in different states, CDC recommends confidential, name-based surveillance of HIV infection as the best means of providing accurate, reliable and unduplicated data. To monitor trends in the epidemic at a national level, CDC can only analyze data from states with mature, confidential, name-based HIV reporting systems. The number of states included in this analysis has risen over the years as additional states adopt confidential, name-based HIV reporting methods, and as those systems are implemented and stabilize. Because CDC provides technical and financial support to HIV and AIDS reporting systems regardless of the type of reporting used, funds allocated to states to conduct core case surveillance are not anticipated to rise dramatically with the adoption and maturation of confidential, name-based surveillance in more states. Additional efficiencies might also be achieved as surveillance systems work with existing resources to accommodate increased reports of HIV resulting from widespread implementation of HIV screening.

DOMESTIC HIV/AIDS PREVENTION

BA	\$695,454,000	\$691,860,000	\$691,147,000	-\$713,000

*Includes up to \$30,000,000 for the RWHATMA Early Diagnosis Program

AUTHORIZING LEGISLATION

PHSA §§ 301, 306, 307, 308(d), 310, 311, 317, 317(a), 318, 318B, 327, 352, 1102, 2317, 2320, 2341, 2500, 2521- 2524, Early Diagnosis Grant Program 2625; International authorities: P.L. 110-161, Section 215.

FY 2009 Authorization.....Indefinite

Allocation Methods.....Direct Federal/Intramural;
Competitive Grant/Cooperative Agreements; Formula Grants/Cooperative Agreements; Contracts,
and Other.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC has provided leadership in preventing and controlling HIV infection since the first cases of AIDS were discovered in 1981. CDC's efforts are aimed at reducing the number of new infections in the U.S. each year, with special attention to those populations most affected by disease. Other measurable goals of the HIV prevention program are to:

- Reduce HIV transmission rates
- Reduce behaviors related to the acquisition of HIV
- Increase the proportion of those who are infected who are aware of their infection
- Link those who are infected with effective prevention, care and treatment programs

Considerable progress has been made in these areas over the past two decades. Perinatal AIDS cases have declined from almost 1,000 per year in the early 1990s to less than 70 per year today. Racial disparities in HIV/AIDS diagnoses as measured by black:white rate ratios have declined, and multiple sources of data point to declines in new infections among injection drug users (IDUs). Further, effective prevention interventions have been identified, developed and adapted to the needs of populations most at risk today. A strong public health infrastructure, involving the affected communities has been developed and public health professionals trained to implement these interventions. In addition, effective systems have been developed and deployed to monitor the epidemic and related risk factors.

Surveillance

CDC carefully monitors the status of HIV and AIDS by race, risk group, and gender, enabling communities to base public health strategies on the best possible understanding of the epidemic. This effort includes HIV and AIDS case reporting, and systems to estimate HIV incidence and monitor trends in risk behaviors and provision of care. CDC conducts surveillance activities in conjunction with state and local health departments. Recent accomplishments include:

- The expansion of confidential, name-based HIV case surveillance. Currently 48 states have adopted policies for confidential, name-based HIV surveillance, and 33 of those states have systems sufficiently mature to allow analysis of trends. These 33 states account for almost two thirds of the estimated HIV/AIDS cases in the nation.

- The development of new methods to estimate HIV incidence, with the use of the most current available laboratory technology. These estimates, to be finalized and issued in 2008, will provide the clearest picture of the epidemic in the U.S. to date and improve our ability to focus prevention efforts on those most at risk.
- The initiation of behavioral surveillance for the three groups at highest risk for acquiring HIV infection: MSM, IDU, and high-risk heterosexuals.

Prevention Research

CDC conducts biomedical and behavioral research to better understand the complex factors that lead to HIV infection and to identify effective approaches to prevent infection. Priorities for HIV research include research related to diagnostic tests, microbicides, vaccines, and behavioral research focused on eliminating health disparities.

- Data from Project START, a four-site intervention trial sponsored by CDC, demonstrated the efficacy of a sexual risk reduction intervention for young incarcerated men.
- The Collaborative Injection Drug Users Study III/Drug Users Intervention Trial, a multi-site study funded by CDC to evaluate primary prevention for injection drug users was shown to produce a 76 percent decline in injection risk compared to baseline. Declines were also shown for sexual risk behaviors.

Capacity Building and Technical Assistance

CDC works to ensure that organizations implementing HIV prevention programs at the state and local level are equipped with the information and training necessary to implement effective programs and build long-term capacity for prevention in their communities. To build the capacity of its state and community-based organization (CBO) partners to prevent HIV, CDC: 1) supports national meetings and satellite broadcasts as a forum for sharing new ideas and best practices; 2) funds non-governmental organizations to provide training and materials; 3) provides direct technical assistance to CBOs and health departments; and 4) synthesizes and disseminates information on science-based interventions. Recent accomplishments include:

- From September 2006 to September 2007, provision of training in the Diffusion of Effective Behavioral Interventions (DEBI) to a total of 387 health department employees and 1659 CBO employees. During this time period, 156 DEBI trainings on 12 different interventions were conducted.
- Identification of an additional 31 evidence-based prevention interventions, bringing the total number of evidence-based interventions identified by CDC to 49. Descriptions of these interventions, including target population, methods, and findings are available on CDC's website.

Prevention Interventions

The primary component in CDC's fight against HIV/AIDS is the support and funding of HIV prevention programs. Programs consist of interventions intended to eliminate or reduce risky behavior and improve the health of the people served. CDC provides funding to state and local health departments as well as to CBOs to conduct HIV prevention programs with at-risk uninfected populations and persons living with HIV and AIDS in a variety of settings across the nation. All prevention programs funded by CDC are designed to meet the cultural needs, expectations, and values of the populations they serve. In addition, CDC helps to ensure that available prevention funding goes to those who need it the most by involving affected communities in the HIV prevention community planning process. Through the community planning process, communities prioritize populations to be served.

Key prevention strategies include:

- HIV Prevention Counseling, Testing, and Referral Services – CDC issues guidelines that are used for counseling, testing and referral services in traditional and non-traditional settings and provides financial support for counseling and testing services provided at publicly funded clinics.
- Partner Notification, Including Partner Counseling and Referral Services (PCRS) with Strong Linkages to Prevention and Treatment/Care Services – CDC issues guidance on conducting PCRS and provides funding to grantees to ensure that PCRS is a high priority and that services are offered to HIV-infected persons.
- Prevention for High-Risk Populations – CDC supports prevention services for persons infected with HIV/AIDS and other high-risk populations. In addition, CDC encourages grantees to work with the primary health care clinics in their communities to integrate HIV prevention services into care and treatment services.
- Health Education and Risk Reduction (HE/RR) Activities – CDC supports focused health communications campaigns directly and provides funding for state and local health departments and CBOs to offer HE/RR services for those most at-risk of transmitting or acquiring HIV infection.
- Perinatal Transmission Prevention – CDC provides funding for state and local health departments to work with all health-care providers to promote routine, universal HIV screening of all of their pregnant patients. In addition, CDC grantees work with organizations involved in prenatal and postnatal care for HIV-infected women to ensure that appropriate HIV prevention counseling, testing, and therapies are provided to reduce the risk of perinatal transmission.

Recent initiatives to support HIV prevention interventions include:

- The Heightened National Response to the HIV/AIDS Crisis Among African Americans. CDC convened a partnership of influential leaders from the African-American community in March 2007. In total, participants committed to more than 60 actions to engage communities in HIV awareness, communication and testing activities.
- Launch of the President's Domestic HIV initiative in 2007. Initial funding of \$45 million is expected to result in the testing of approximately 1.5 million Americans, and the identification of more than 20,000 previously undiagnosed infections.

Program Evaluation and Policy Development

CDC develops policies and recommendations to guide HIV prevention programs across the nation and supports monitoring and evaluation to ensure that programs are effectively implemented. All programs funded by CDC are required to develop evaluation plans and activities, establish performance indicators, and target activities to those persons living with HIV/AIDS and those at highest risk for HIV acquisition and transmission.

- One of the most significant actions to strengthen the assessment of program impact and effectiveness in reducing HIV infections is CDC's Program Evaluation and Monitoring System (PEMS). PEMS will improve CDC's ability to monitor, evaluate, and coordinate HIV prevention programs and ensure that timely and verifiable data are available for use by both grantees and CDC.
- CDC continues to promote the uptake of its recently released recommendations for routine HIV testing. To this end, CDC has worked closely with professional medical associations

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and other federal agencies to encourage them to conduct and support HIV screening in health care settings.

FUNDING HISTORY TABLE

1999	N/A	N/A	\$0	\$656,590,000
2000 ¹	\$564,458,000	\$87,706,000	\$35,000,000	\$687,164,000
2001	\$653,462,000	\$96,199,000	\$104,527,000	\$854,188,000
2002	\$689,169,000	\$96,038,000	\$168,720,000	\$953,927,000
2003 ²	\$699,620,000	\$93,977,000	\$182,569,000	\$976,166,000
2004 ^{2,3}	\$667,940,000	\$70,032,000	\$266,864,000	\$1,004,836,000
2005 ⁶	\$662,267,000	\$69,438,000	\$123,830,000	\$855,535,000
2006 ⁶	\$651,657,000	\$64,008,000	\$122,560,000	\$838,225,000
2007	\$695,454,000	\$62,802,000	\$120,985,000	\$879,241,000
2008	\$691,860,000	\$61,704,000	\$118,863,000	\$872,427,000

¹ Due to a budget restructuring in FY 2002, funding levels in 2000 are not directly comparable to those of previous years.

² Global AIDS amounts include funding for the Prevention of Mother to Child HIV Transmission initiative, which was transferred to the Department of State Office of the Global AIDS Coordinator in 2005

³ In FY 2004, CDC's budget was restructured to separate actual program costs from the administration and management of those programs. Funding levels are not comparable to those of previous years.

⁴ Amount for Global AIDS Program does not include PEPFAR funding.

⁵ From 2000 to 2003 CDC-wide HIV/AIDS funding is comprised of specific activities within the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), and the National Center for Infectious Diseases (NCID). From 2004 to 2009, CDC-wide HIV/AIDS funding was comprised of activities conducted by NCHHSTP, NCCDPHP, NCID, and the National Center for Birth Defects and Developmental Disabilities (NCBDDD).

⁶ HIV/AIDS Basic Research was moved to the CDC Research, Surveillance, Analysis, and Technical line under HIV/AIDS, Viral Hepatitis, STD, and TB Prevention in 2006.

CDC-WIDE HIV/AIDS TABLE

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION CDC-WIDE HIV/AIDS (DOLLARS IN THOUSANDS)			
			FY 2009 Estimate
HIV, STD, and TB Prevention			
1. State and Local Health Departments	\$454,175	\$454,796	\$478,527
2. Directly Funded Community, National, Regional and Other Organizations			\$141,218
3. CDC Research, Surveillance Analysis, Technical Assistance, and Program Support			\$71,402
Subtotal, HIV, STD, and TB Prevention	\$695,454	\$691,860	\$691,147
Global HIV/AIDS	\$120,985	\$118,863	\$118,727
Chronic Disease Prevention and Health Promotion	\$45,769	\$44,969	\$44,785
Birth Defects, Developmental Disabilities	\$17,033	\$16,735	\$16,655
Total, CDC	\$879,241	\$872,427	\$871,314

BUDGET REQUEST

For FY 2009, CDC requests \$691,147,000 for Research and Domestic HIV/AIDS prevention activities, a decrease of \$713,000 below the FY 2008 Enacted level. This request includes \$3,087,000 for an Individual Learning Account (ILA) and an administrative reduction.

Of this request, \$478,527,000 is requested for State and Local Health Departments, an increase of \$23,731,000 above the FY 2008 Enacted level. The request includes \$63,000,000 for the President's Domestic HIV/AIDS Initiative to increase testing in medical and community-based settings. The testing initiative focuses on areas and populations with the highest burden of disease and includes \$30,000,000 for the Early Diagnosis Program authorized in the Ryan White HIV/AIDS Treatment Modernization Act of 2006.

In addition, \$141,218,000 is requested for National/Regional/Other Organizations, a decrease of \$24,125,000 over the FY 2008 Enacted level, for expiring grants made to nongovernmental organizations including community-based and national and regional organizations.

In FY 2009, CDC will continue to work to reduce new HIV infections, reduce behaviors associated with HIV transmission and acquisition, increase knowledge of HIV infection, and link infected persons into needed prevention, care and treatment services. Emphasis will continue to be placed on ensuring that those who are infected have an opportunity to learn of their infection and receive supportive prevention interventions. About 25 percent of those who are infected are unaware of their infection, and because those who are unaware of their infection are unable to take advantage of treatments to preserve their health and protect the health of their partners. In addition, CDC will continue to emphasize prevention for those most affected by HIV/AIDS, especially racial and ethnic populations and men who have sex with men. Efforts to integrate services for HIV, viral hepatitis, STD, and TB prevention will also be supported. Finally, CDC will continue to build the systems needed to monitor the epidemic, strengthen prevention programs and capacity of grantees to deliver effective prevention services, and evaluate our efforts.

Specific activities to be supported in 2008 and 2009 include:

Surveillance

CDC will continue in conjunction with state and local health departments to conduct HIV and AIDS surveillance nationwide. In FY 2009, CDC will:

- Fund 65 areas for HIV/AIDS surveillance. Data from this system will provide national estimates of HIV/AIDS, help local areas describe and plan for HIV prevention programs, and guide the allocation of over \$2 billion in federal funding for treatment, prevention and housing assistance programs.
- Fund up to 25 areas to estimate HIV incidence. This system utilizes newly available laboratory technology to ascertain new infections among all those reported through routine HIV case surveillance. Data from this system will be released in FY 2008 and provide the clearest picture to date of new infections in the U.S. Such data are critical to identifying the most recent trends in HIV transmission, populations at greatest risk of new infections, and enabling prevention programs to be targeted to those most at risk.
- Fund up to 22 cities to conduct surveillance for behavioral risks for HIV infection in at-risk populations. Data from this system have revealed very high prevalence (46 percent) of HIV among African American MSM, high rates of risk behaviors including use of crystal meth and other drugs among all MSM, and growing use of the Internet to meet sex partners. Data from the next round of surveys will address IDU risk and heterosexual risk.

- Support the Medical Monitoring Project (MMP) to assess provision of care for those in care and treatment. MMP is a nationally representative, population-based surveillance system designed to assess clinical outcomes, behaviors and the quality of care for persons living with HIV.

Prevention Research

CDC will sustain research to better understand the complex factors that lead to HIV infection and to identify effective approaches to prevent infection.

- Funding will support research on new biomedical interventions including microbicides and prophylactic use of antiretrovirals. Most recently, CDC has initiated trials investigating the safety and efficacy of the prophylactic use of tenofovir alone and tenofovir with amtricitabine. These trials are designed to answer important questions about the safety and efficacy of these antiretroviral medications for use in preventing HIV infection.

Capacity Building and Technical Assistance

CDC will continue to build the capacity of its state and CBO partners to prevent HIV through training, technical assistance, and synthesis and dissemination of science-based interventions. In FY 2009, CDC will reduce the number of awards to capacity building assistance providers.

- CDC will continue to train up to 1000 providers each year to implement science-based interventions for high-risk populations including those infected with HIV, and will fund 18 capacity building assistance providers supporting CBOs and state and local health departments.
- CDC will develop a new comprehensive capacity building assistance (CBA) program announcement to provide more focused CBA for funded grantees. The new announcement will include extensive input from grantees to ensure that critical CBA activities are included and funded.
- CDC will disseminate information about effective interventions identified through the prevention research synthesis project. To date, 7 of the 49 identified interventions have been disseminated. An additional 16 are currently being packaged or prepared for dissemination in the near future. These additional interventions will provide more up to date options for addressing the prevention needs of at risk populations.

Prevention Intervention Activities

CDC will continue to provide funding to 65 state and local health departments as well as directly funded CBOs to conduct HIV prevention programs with at-risk populations and in a variety of settings across the nation.

- In 2007, CDC began an initiative to increase HIV testing in jurisdictions with the highest number of cases of AIDS among African Americans. Twenty-three jurisdictions were funded. These jurisdictions account for more than 80 percent of the national HIV/AIDS epidemic among African Americans. This effort is expected to result in the testing of approximately 1.5 million Americans, and the identification of more than 20,000 persons with previously undiagnosed infections. These individuals will be able to access care and treatment to protect their health, and, since those who are aware of their infection are much more likely to take steps to protect their partners, this effort is expected to prevent thousands of infections in the first year alone.
- In FY 2008, \$53 million (an increase of \$8 million) was appropriated for this initiative to continue to support testing in jurisdictions with a high burden of disease among African Americans.

- Early Diagnosis Program – In addition to these programs, in FY 2008, CDC will allocate up to \$30 million of the funds appropriated for the HIV Testing initiative to jurisdictions with HIV testing policies specified in section 209 of the Ryan White HIV/AIDS Treatment Modernization Act of 2006. Funds will be spent on activities specified in the Act.
- CDC will also continue to implement the Heightened National Response to the HIV/AIDS Crisis Among African Americans. Key strategies include: expanding the reach of prevention services, increasing opportunities for diagnosing and treating HIV, developing new, effective prevention interventions, and mobilizing broader community action.
- CDC will announce a new cycle of HIV prevention funding for CBOs. CDC will support CBOs in providing effective, science-based HIV prevention interventions for persons at-risk of acquiring or transmitting HIV.

Program Evaluation and Policy Development

CDC will continue to develop evidence-based recommendations to support and guide HIV prevention programs. CDC will also continue to require rigorous evaluation of HIV prevention activities. The implementation of PEMS will improve CDC's ability to monitor, evaluate, and coordinate prevention programs of grantees.

In 2008, health departments and CBOs will begin reporting on performance indicators established at base-line and one-year intervals that detail, for example, the number of people served, tested for HIV, and linked to prevention, care and treatment services.

In FY 2009:

- CDC will increase the percentage of HIV prevention program grantees using PEMS to monitor program implementation. When fully implemented PEMS will be used by all health departments and CBOs funded through CDC HIV prevention cooperative agreements and will provide quantitative data to show program progress toward meeting implementation goals.
- CDC is developing updated guidance for the provision of partner counseling and referral services. PCRS services, which aim to reach the sex and drug using partners of HIV-infected persons, are important and effective HIV prevention interventions. This critical update will streamline provision of services and be made consistent with partner notification services for STD prevention.
- CDC will continue to work with health-care providers to effectively implement its Revised HIV Testing Recommendations for Adults, Adolescents, and Pregnant Women in Health Care Settings.

Despite the successes made in the HIV/AIDS surveillance, research and prevention, several challenges remain. Certain subpopulations including men who have sex with men (MSM) remain at increased HIV risk. The availability of effective treatments has led many to be more complacent about their HIV risk, and HIV/AIDS-related stigma also inhibits the recognition of HIV risk. Public health must identify and respond to ever new changes in this environment.

To address these challenges and make continued progress in HIV prevention, CDC focuses on five key activities: surveillance; prevention research; capacity building and technical assistance; intervention activities including testing programs and other prevention activities carried out by state, local and CBOs; and program evaluation and policy development. The vast majority of CDC's domestic HIV/AIDS funding is spent extramurally through cooperative agreements to private-sector, state and local health departments, education agencies, and non-governmental organizations, including CBOs and CBAs.

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OUTCOME TABLE

						FY 20				Out-Year Target
Long-Term Objective 2.1: Decrease the Annual HIV Incidence Rate.										
2.1.1	Decrease the annual HIV incidence rate		6/2008	NA	3/2009	NA	3/2010	TBD	TBD	TBD
2.1.2	Decrease the number of pediatric AIDS cases.	47	68	<100	Available 3/2008	<100	Available 11/2008	<75	<75	NA
2.1.3	Reduce the black:white rate ratio of HIV/AIDS diagnoses.	9.09:1	8.71:1	8.7:1	Available 3/2008	8.4:1	Available 11/2008	8.4:1	8.2:1	NA
2.1.4	Reduce the Hispanic:white rate ratio of HIV/AIDS diagnoses.	3.6:1	3.5:1	3.5:1	Available 3/2008	3.4:1	Available 11/2008	3.4:1	3.3:1	NA
2.1.5	Increase the number of states with mature, name-based HIV surveillance systems.	33	33	33	33	34	Available 3/2008	35	37	NA
2.1.6	Increase the percentage of HIV prevention program grantees using PEMS to monitor program implementation.			Baseline	0	20%	Available 11/2008	45%	65%	80%
2.1.7	Increase the number of evidence-based prevention interventions that are packaged and available for use in the field by prevention program grantees.	11	14	[trend data]	14	15	Available 11/2008	18	21	NA
2.1.8	Increase the number of Agencies trained each year to implement DEBIs.	1,068	1,114	[trend data]	987	1,100	Available 2/2008	1,100	1,100	NA
Long-Term Objective 2.2: Decrease the Rate of HIV Transmission by HIV-infected persons.										
2.2.1	Decrease the rate of HIV transmission by HIV-infected persons		Baseline-8/2008	NA	Available 3/2009	NA	Available 3/2010	TBD	TBD	TBD
2.2.2	Decrease risky sexual and drug using behaviors among persons at risk for transmitting HIV.					Baseline	Available 11/2008	TBD	TBD	NA
Long-Term Objective 2.3: Decrease risky sexual and drug using behaviors among persons at risk for acquiring HIV.										
2.3.1	Decrease risky sexual and drug-using behaviors among persons at risk for acquiring HIV	MSM – 47%	IDU – Available 12/2008	Baseline	HRH – Available 12/2008	MSM – 47%	Available 12/2008	TBD	TBD	MSM – 45% in 2013
2.3.2	Increase the proportion of persons at risk for HIV who received HIV prevention interventions.	MSM – 18.9%	IDU – Available 12/2008	Baseline	HRH – Available 12/2008	MSM – 20%	Available 12/2009	IDU – TBD	HRH – TBD	NA
Long-Term Objective 2.4: Increase the proportion of HIV-infected people in the United States who know they are infected.										
2.4.1	Increase the proportion of HIV-infected people in the United States who know they are infected*		Available 6/2008	NA	NA	NA	NA	NA	NA	80% in 2015
2.4.2	Increase the proportion of persons with HIV-positive test results from	84%	83%	86%	Available 10/2008	87%	Available 11/2009	88%	90%	NA

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INFECTIOUS DISEASES
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						FY 20				Out- Year Target
	publicly funded counseling and testing sites who receive their test results.									
2.4.3	Increase the proportion of people with HIV diagnosed before progression to AIDS.	77.8%	76.5%	78%	Available 3/2008	79%	Available 11/2008	79%	80%	NA
Long-Term Objective 2.5: Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to Prevention Counseling and Referral Services (PCRS).										
2.5.1	Increase the percentage of HIV-infected person in publicly funded counseling and testing sites who were referred to PCRS*							Baseline-11/2009	NA	TBD
2.5.2	Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to medical care and attended their first appointment.							Baseline-11/2009	TBD	N/A
2.5.3	Increase the percentage of HIV-infected persons in publicly funded counseling and testing sites who were referred to HIV prevention services.							Baseline-11/2009	TBD	N/A
2.5.4	Increase the percentage of HIV-infected persons in medical care who initiated medical care within three months of diagnosis.					Baseline	11/2008	TBD	TBD	N/A

*NA: Annual targets not established for this long-term goal.

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OUTPUT TABLE

						FY 2007				Out-Year Target
2.A	Areas funded for HIV prevention	65	65	65	65	65	65	65	65	N/A
2.B	Areas funded for HIV/AIDS surveillance	65	65	65	65	65	65	65	65	N/A
2.C	Number of areas funded to estimate HIV incidence	34	34	34	34	34	34	25	25	N/A
2.D	Number of jurisdictions to conduct surveillance for behavioral risks for HIV infection in high-risk groups	24	24	24	24	24	24	21	21	N/A
2.E	Number of capacity building assistance providers supporting minority CBOs	30	31	31	31	31	32	31	18	N/A
2.F	Number of CBOs funded to support community level interventions	166	162	162	162	162	164	162	147	N/A
2.G	Number of jurisdictions funded with enhanced testing activities	0	0	0	0	0	23	23	23	N/A
2.H	Number of HIV tests supported through the HIV testing initiative*	N/A	N/A	N/A	N/A	N/A	1,500,000	1,500,000	1,500,000	N/A
2.I	Minority postdoctoral fellowships	4	3	4	3	3	4	3	3	N/A
	Appropriated Amount (\$ Million)* ¹	\$667.9	\$662.3	\$651.7		\$695.5		\$691.9	\$691.1	

*Precise targets are not available at this time.

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLES

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS HIV/AIDS SURVEILLANCE PROGRAM	
	FY 2007 Actual ¹³
Alabama ⁴	\$855,835
Alaska	\$120,010
Arizona ⁴	\$630,733
Arkansas	\$215,333
California ²	\$2,503,358
Colorado ¹²	\$1,483,874
Connecticut ⁵	\$992,965
Delaware ¹¹	\$218,628
District of Columbia ⁵	\$1,757,516
Florida ²	\$3,278,335
Georgia ⁵	\$1,235,185
Hawaii	\$175,975
Idaho	\$69,747
Illinois ⁴	\$729,058
Indiana ⁸	\$758,488
Iowa	\$176,112
Kansas	\$143,735
Kentucky	\$133,063
Louisiana ⁶	\$1,479,984
Maine	\$105,487
Maryland ²	\$1,749,181
Massachusetts ⁵	\$1,096,037
Michigan ¹²	\$1,701,840
Minnesota	\$257,870
Mississippi ⁴	\$334,518
Missouri ⁵	\$1,161,182
Montana	\$66,893
Nebraska	\$142,515
Nevada ¹⁰	\$785,703
New Hampshire	\$93,099
New Jersey ²	\$3,372,243

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
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CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS HIV/AIDS SURVEILLANCE PROGRAM	
	FY 2007 Actual ¹³
New Mexico	\$234,483
New York ⁷	\$2,733,243
North Carolina ⁴	\$792,412
North Dakota	\$63,329
Ohio ⁴	\$911,402
Oklahoma ⁴	\$484,092
Oregon	\$291,031
Pennsylvania ¹	\$616,209
Rhode Island	\$224,293
South Carolina ⁴	\$809,337
South Dakota	\$61,003
Tennessee ⁴	\$942,399
Texas ²	\$2,229,005
Utah	\$177,801
Vermont	\$84,325
Virginia ⁵	\$827,536
Washington ²	\$1,704,245
West Virginia	\$208,934
Wisconsin	\$399,453
Wyoming	\$61,819
Chicago ³	\$1,433,107
Houston ²	\$1,705,603
Los Angeles ⁹	\$2,369,850
New York City ²	\$3,968,220
Philadelphia ²	\$1,212,151
San Francisco ⁹	\$1,849,740
American Samoa	\$6,719
Guam	\$22,975
Marshall Islands	\$17,672
Micronesia	\$17,273
Northern Mariana Islands	\$22,712
Palau	\$22,091
Puerto Rico ⁵	\$1,136,524

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CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS HIV/AIDS SURVEILLANCE PROGRAM	
	FY 2007 Actual ¹³
Virgin Islands	\$120,495
	\$55,585,985

¹ Amount includes for Incidence Surveillance; see below for number of grantees and total funding.

² Amount includes funding for Incidence and Behavioral Surveillance; see below for number of grantees and total funding.

³ Amount includes funding for Direct Assistance, Incidence, and Behavioral Surveillance; see below for number of grantees and total funding.

⁴ Amount includes funding for Incidence Surveillance and EPI/EVAL TA; see below for number of grantees and total funding.

⁵ Amount includes funding for Incidence and Behavioral Surveillance, and EPI/EVAL TA; see below for number of grantees and total funding.

⁶ Amount includes funding for Incidence and Behavioral Surveillance, EPI/EVAL TA, and ALOHA; see below for number of grantees and total funding.

⁷ Amount includes funding for Incidence and Behavioral Surveillance, STARHS, and ALOHA; see below for number of grantees and total funding.

⁸ Amount includes funding for Incidence Surveillance, EPI/EVAL TA, and ALOHA; see below for number of grantees and total funding.

⁹ Amount includes funding for Incidence and Behavioral Surveillance, and Name-Based Reporting; see below for number of grantees and total funding.

¹⁰ Amount includes funding for Behavioral Surveillance and EPI/EVAL TA; see below for number of grantees and total funding.

¹¹ Amount includes funding for EPI/EVAL TA; see below for number of grantees and total funding.

¹² Amount includes funding for Incidence and Behavioral Surveillance and ALOHA; see below for number of grantees and total funding.

¹³ In addition to Core Surveillance, support was provided to selected health departments in FY 2007 for the following projects: Incidence Surveillance, Behavioral Surveillance, Capacity Building for Epidemiologic and Program Evaluation Activities (EPI/EVAL TA), Laboratory Testing For Recent HIV Infection (STARHS), Augmenting Laboratory Outcomes In HIV Assessment (ALOHA), and Name-Based HIV Reporting Supplement for Los Angeles And San Francisco.

Non-Core Elements: FY 2007

	Number of Grantees	FY 07 Funding
INCIDENCE SURVEILLANCE:	34	\$14,294,781
BEHAVIORAL SURVEILLANCE:	24	\$8,257,656
EPI/EVAL TA:	20	\$1,810,897
STARHS:	1	\$449,472
ALOHA:	5	\$481,072
NAME-BASED REPORTING	2	\$497,326

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

HIV PREVENTION PROJECTS FOR STATE/LOCAL HEALTH DEPARTMENTS	
	FY 2007 Actual*
Alabama ¹	\$2,129,587
Alaska	\$1,417,619
Arizona	\$3,028,369
Arkansas	\$1,582,922
California ²	\$13,618,189
Colorado	\$4,387,622
Connecticut ²	\$6,260,601
Delaware ²	\$1,888,920
District of Columbia ³	\$5,736,854
Florida ³	\$19,255,996
Georgia ²	\$8,090,047
Hawaii	\$2,041,255
Idaho	\$883,103
Illinois ²	\$4,068,878
Indiana	\$2,508,313
Iowa	\$1,649,372
Kansas	\$1,617,269
Kentucky ¹	\$1,921,570
Louisiana ³	\$5,227,602
Maine	\$1,613,073
Maryland ²	\$9,737,986
Massachusetts	\$8,655,094
Michigan	\$6,386,659
Minnesota	\$3,171,739
Mississippi	\$1,835,920
Missouri	\$3,737,842
Montana	\$1,263,843
Nebraska	\$1,205,605
Nevada	\$2,756,285
New Hampshire	\$1,598,713
New Jersey ²	\$13,192,984
New Mexico	\$2,270,963

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

HIV PREVENTION PROJECTS FOR STATE/LOCAL HEALTH DEPARTMENTS	
	FY 2007 Actual*
New York ²	\$26,785,716
North Carolina ¹	\$4,208,066
North Dakota	\$672,678
Ohio	\$5,206,904
Oklahoma	\$2,434,358
Oregon	\$3,018,171
Pennsylvania	\$4,377,928
Rhode Island	\$1,642,131
South Carolina ³	\$4,460,943
South Dakota	\$642,291
Tennessee	\$3,913,051
Texas ²	\$12,936,907
Utah	\$1,071,870
Vermont	\$1,460,681
Virginia ¹	\$4,938,495
Washington	\$3,337,579
West Virginia	\$1,684,759
Wisconsin	\$2,788,528
Wyoming	\$787,249
Chicago	\$5,443,889
Houston	\$5,092,037
Los Angeles	\$12,888,698
New York City ¹	\$21,281,593
Philadelphia ³	\$6,327,782
San Francisco	\$9,005,739
American Samoa	\$174,435
Guam	\$499,622
Marshall Islands	\$122,518
Micronesia	\$212,866

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

HIV PREVENTION PROJECTS FOR STATE/LOCAL HEALTH DEPARTMENTS	
	FY 2007 Actual*
Northern Mariana Islands	\$192,386
Palau	\$235,697
Puerto Rico ²	\$4,051,694
Virgin Islands	\$407,698
	\$297,045,753

* Amounts reflect new funding only. Approximately \$3 million in unobligated funds was used as an offset.

¹ Amount includes Direct Assistance; see below for number of grantees and funding.

² Amount includes funding for perinatal prevention; see below for number of grantees and funding.

³ Amount includes Direct Assistance and perinatal prevention funds: see below for number of grantees and funding.

Additional Components:

	NUMBER OF GRANTEES	FY 07 FUNDING
DIRECT ASSISTANCE:	10	\$1,383,499
PERINATAL PREVENTION	15	\$5,845,208

VIRAL HEPATITIS

				FY 2009 +/- FY 2008
BA	\$17,354,000	\$17,582,000	\$17,504,000	-\$78,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 306, 307, 308(d), 310, 311, 317, 317(a), 317N

FY 2009 Authorization.....Indefinite

Allocation Methods.....Direct Federal/Intramural;
Competitive Grant/Cooperative Agreements; Contracts, and Other.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Since early in its history, CDC has been involved in viral hepatitis prevention and control programs. In 2006 the Division of Viral Hepatitis was transferred to NCHHSTP, which has enabled CDC to better integrate the prevention and control of viral hepatitis infections and disease into public health programs (such as STD treatment and HIV counseling and testing facilities) for individuals with similar risk factors and to collaborate more effectively with international partners in halting the spread of viral hepatitis.

CDC conducts surveillance, research, education and training, and program development in order to provide leadership and coordination for the viral hepatitis prevention and control efforts of public and private sector partners in the U.S., with activities focusing on hepatitis A virus (HAV), hepatitis B virus (HBV), and hepatitis C virus (HCV). All three viruses can cause an acute illness characterized by nausea, malaise, abdominal pain, and jaundice. HBV and HCV also can produce a chronic infection that is associated with an increased risk for chronic liver disease and hepatocellular carcinoma.

CDC has issued recommendations to eliminate HBV in the U.S., as well as guidelines for prevention and control of HAV and HCV. The availability of effective vaccines for HAV and HBV has enabled great progress in the control of these two infections.

- Hepatitis A incidence has decreased by approximately 88 percent nationwide. The 2005 rate of 1.5 new cases per 100,000 population was the lowest ever recorded.
- Among Alaska Natives and American Indians, which are the populations with the highest disease rates in the pre-vaccine era, hepatitis A incidence has declined by 99 percent, thereby eliminating a racial disparity in health.
- Childhood immunization and perinatal screening programs have produced similar results in regard to hepatitis B. The 2005 rate of 1.9 cases of acute hepatitis B per 100,000 population was also the lowest rate ever recorded, and rates among children aged less than 19 years have decreased 96 percent since 1990, from 2.4 to 0.1 per 100,000.
- As a result of CDC's measures to prevent perinatal HBV transmission, more than 95 percent of pregnant women in the United States are now screened for HBV infection during pregnancy. Since the implementation of routine childhood hepatitis B immunization, an estimated 6,800 perinatal infections and an additional 18,700 infections during the first 10 years of life have been prevented annually in the United States.
- Hepatitis B incidence has declined most among children and adolescents in Asian/Pacific Islander, Alaska Native, and black populations, eliminating another racial disparity in health.

- Targeted prevention efforts have yielded a decline of approximately 80 percent in hepatitis C incidence since the late 1980s. Blood donor screening has virtually eliminated transfusion-associated cases of HCV infection, which are now estimated to occur less than once per 2 million transfused units of blood.

Challenges remain, however, and viral hepatitis still represents a major health concern for the citizens of the U.S.

- Hepatitis A vaccination coverage remains low among some populations at risk, and new infections continue to occur. Large, multi-state outbreaks have been caused by the distribution of food contaminated with the hepatitis A virus (HAV). An estimated 42,000 new HAV infections occurred in this country in 2005.

More significantly, adults engaged in risk behaviors and members of certain ethnic populations continue to be at increased risk for infection with and transmission of the hepatitis B and hepatitis C viruses (HBV and HCV).

- The prevalence of HBV infection among young men who have sex with men (MSM), for example, has changed little from that which was observed when vaccine first became available more than 20 years ago.
- While hepatitis B immunization is routinely recommended for MSM, other persons with multiple sex partners, and injection drug users (IDUs), numerous barriers such as the lack of ongoing availability and/or administration of the vaccine have limited implementation of this prevention activity.

Specific CDC activities to prevent and control viral hepatitis include:

- Supporting adult viral hepatitis prevention coordinators in 55 health departments to facilitate activities including: 1) promoting program integration to increase effectiveness and efficiency in public health and clinical settings; 2) identifying resources for hepatitis A and B vaccination and improving vaccine coverage among vulnerable populations; 3) increasing the number of persons with chronic infections who know their status, and developing referral networks to address their needs; and 4) reducing health disparities among Asian Americans in regard to HBV infection and among blacks in regard to HCV infection.
- Educating health care and public health professionals to improve identification of persons at risk for chronic infection as well as ensuring appropriate counseling, diagnosis, management, and treatment. Particular emphasis is placed on integrating hepatitis control activities with other services for at-risk populations.
- Continuing to monitor acute infections, helping more states adopt surveillance for chronic HBV and HCV infections, evaluating nationwide surveillance activities, and implementing enhanced surveillance in selected states and counties.

FUNDING HISTORY TABLE*

	AMOUNT
FY 2004	\$18,065,000
FY 2005	\$17,912,000
FY 2006	\$17,578,000
FY 2007	\$17,354,000
FY 2008	\$17,582,000

*Additional funding for hepatitis control is provided in the Food Safety and the Emerging Infections budget activities.

BUDGET REQUEST

The CDC FY 2009 request includes \$17,504,000 for Viral Hepatitis, a decrease of \$78,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and an administrative reduction. All other activities will be supported at the FY 2008 Enacted level. Hepatitis A outbreak response and hepatitis B control activities are also supported in the emerging infections and food safety budget lines.

Since 1995, the reported incidence of hepatitis A, B, and C has declined by 75 percent or more. These data both confirm and inform the efficacy of public health interventions, including vaccination (for hepatitis A and B), screening of the blood supply, and other health interventions, such as decreasing injection drug use.

In FY 2009, CDC will fund viral hepatitis prevention and control activities in 55 areas. CDC will also continue its hepatitis prevention and control activities by sustaining support to education and training, epidemiology and surveillance activities, and laboratory research.

Epidemiology and Surveillance Activities

CDC will continue to monitor and evaluate rates and risk factors associated with acute and chronic infections with hepatitis viruses; conduct research, including outbreak investigations, clinical trials and population-based demonstration projects; and provide consultation to state, local, national, and international authorities.

- CDC will fund seven viral hepatitis surveillance sites to implement enhanced surveillance and develop best practices for monitoring chronic HBV and HCV infections, and aims to achieve the following target for FY 2009:
- Increase the number of areas reporting chronic hepatitis C virus infections to CDC from 24 in 2004 to 35 states.

Education, Training, and Program Collaboration

CDC will fund Viral Hepatitis Education and Training Projects to develop and disseminate viral hepatitis education and training materials.

CDC will continue to provide leadership in program collaboration and service integration for populations affected by viral hepatitis, HIV/AIDS, STDs and TB, with a particular focus on appropriate integration of screening and immunization for viral hepatitis into HIV/AIDS and STD prevention programs.

CDC will continue to provide technical assistance, recommendations, and guidelines for the prevention and control of viral hepatitis such as the following:

- In 2006, CDC published a comprehensive immunization strategy to eliminate transmission of HBV in the United States, outlining a national strategy to accomplish this important public health objective.
- In 2007, CDC published a Public Health Reports Supplement titled "Integrating Viral Hepatitis Prevention into Public Health Settings." This supplement detailed and encouraged the integration of viral hepatitis prevention into public health settings to achieve better health outcomes especially for those populations at highest risk for HCV, HIV, and STDs.
- In 2008, CDC will publish screening guidelines for hepatitis B infection.

Laboratory Research

CDC will continue to conduct and support laboratory studies related to the epidemiology, molecular epidemiology, and natural history of acute and chronic infections with hepatitis viruses and liver

disease; develop and validate diagnostic approaches to identify infections with hepatitis viruses; develop and evaluate methods to prevent acute and chronic infection and disease outcomes, including vaccines; and ensure the transfer to partners of state-of-the-art methods and approaches for the identification and diagnosis of infections with hepatitis viruses.

OUTCOME TABLE

						FY 20				Out-Year Target
Long-Term Objective 2.6: Reduce the Rates of Viral Hepatitis in the United States.										
2.6.1	Reduce the rate of new cases of hepatitis A (per 100,000 population) ¹	1.9	1.5	2.6	1.2	2.5	Available 7/2008	2.4	2.4	2
2.6.2	Reduce the rate of new cases of hepatitis B (per 100,000 population) ²	2.1	1.9	*	1.6	1.9	Available 7/2008	1.8	1.8	1.5
2.6.3	Increase the proportion of individuals knowing their hepatitis C virus infection status	Baseline	50%	NA	NA	NA	NA	NA	NA	NA
2.6.4	Increase the number of areas reporting chronic hepatitis C virus infections to CDC to 50 states and New York City and the District of Columbia	24	29	*	NA	NA	36	33	35	37

* New measure established in 2007.

¹ Target is consistent with Healthy People 2010 goals for hepatitis A. Additional funding to support hepatitis A outbreak response and vaccination is provided in the food safety and immunization budget lines.

² Additional funding to support hepatitis B control and immunization is provided in the Emerging Infections line.

OUTPUT TABLE

						FY 20				Out- Year Target
2.J	Number of sites funded for viral hepatitis surveillance	*	*	*	7	7	7	7	7	NA
2.K	Number of areas funded for viral hepatitis prevention activities	*	*	*	52	52	52	52	52	NA
	Appropriated Amount (\$ Million)¹	\$18.1	\$17.9	\$17.6		\$17.4		\$17.6	\$17.5	

* The Division of Viral Hepatitis was added to NCHHSTP Fiscal Year 2007

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

SEXUALLY TRANSMITTED DISEASES (STDs)

BA	\$155,037,000	\$152,329,000	\$151,651,000	-\$678,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 306, 307, 308(d), 310, 311, 317, 317(a), 317P, 318, 318A, 322, 325, 327, 352, Tuskegee Health Benefits: P.L. 103-333

FY2009 Authorization Indefinite

Allocation Methods..... Direct Federal/Intramural; Competitive Grant/Cooperative Agreements; Formula Grants/Cooperative Agreements; Contracts, and Other.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Grant programs to states to prevent and control STDs were first authorized in the National Venereal Disease Control Act of 1938. In 1957, the program was transferred to CDC where it evolved to address changing demographics in the U.S., changes in the disease burden, and changing prevention modalities. For instance, in the early 1990s, a program to reduce STD-related infertility was implemented, after trials demonstrated that screening of young women for chlamydia could reduce high rates of disease in this population. The primary authorizing language for CDC's STD Prevention Program is section 318 of the Public Health Service Act. Infertility prevention activities are authorized under section 318A, and HPV-related activities are authorized under section 317P.

STDs remain a "hidden epidemic" in the United States, with about 19 million new infections each year. They are among the most costly and preventable diseases in the U.S., mainly affecting adolescents and adults, and are the source of some of the most profound racial disparities in health. CDC supports STD prevention and control. The program's overarching long-term goal is to reduce the rates of non-HIV STDs in the U.S. This goal is accomplished by:

- Monitoring disease trends using national and local data to focus and assess current prevention activities.
- Conducting behavioral, clinical, and health services research and program evaluation to provide a scientific base for improving program efforts.
- Providing education and training through guideline development, 10 regional STD/HIV Prevention Training Centers, and programs to ensure that healthcare professionals are prepared to provide optimal STD treatment, care, and prevention services.
- Building national partnerships for STD prevention to educate health professionals, the public, and policymakers about the importance of STD prevention and the impact of STDs on the health of Americans, particularly women and infants, adolescents, and minority populations.
- Providing financial, direct personnel, and technical assistance to state and local health departments to deliver clinical and prevention services.

About 75 percent of CDC's STD prevention funds are allocated through Comprehensive STD Prevention Systems (CSPS) grants to state, local, and territorial health departments, promoting a community-wide, science-based, interdisciplinary systems approach to STD prevention as recommended by the Institute of Medicine (IOM) in its report, *The Hidden Epidemic: Confronting*

Sexually Transmitted Diseases. Two foci are syphilis elimination and infertility prevention. CDC also supports special surveillance studies for human papillomavirus (HPV) and herpes simplex 2 (HSV-2); supports epidemiologic, behavioral, laboratory and health services research on a variety of STDs; provides program support, training, and health communications for national STD prevention programs; and develops recommendations for HPV vaccines and implementation issues pertinent to such vaccines.

Infertility Prevention Program

The national Infertility Prevention Program, a collaboration between CDC and the Office of Population Affairs, supports chlamydia screening and treatment services for low-income, sexually active women attending family planning, sexually transmitted diseases, and other women's healthcare clinics through cooperative agreements. Screening is necessary because Chlamydia is usually asymptomatic and, if untreated, can cause severe health consequences for females, including pelvic inflammatory disease (PID), ectopic pregnancy, and infertility. Up to 40 percent of females with untreated chlamydia infections develop PID, and 20 percent of those may become infertile. CDC also conducts research to identify the biological and behavioral determinants of chlamydia transmission and assess the feasibility, acceptability, and cost-effectiveness of chlamydia screening for males. CDC supports screening programs in all 65 STD project areas. CDC recommends annual screening of all sexually active women 25 years and younger for chlamydia.

- Between 1988 and 2006, screening programs supported by CDC in HHS Region 10 (serving Alaska, Idaho, Oregon and Washington) have demonstrated a decline in chlamydia positivity of 50 percent (from 15.1 percent to 7.5 percent) among 15 to 24-year-old women in participating family planning clinics.
- In 2006, the median state-specific prevalence among women 15 to 24 years of age screened in family planning clinics was 6.7 percent.

Syphilis Elimination

In 1999, CDC launched its National Plan to Eliminate Syphilis from the U.S. to capitalize on a decade of declining rates of syphilis. The plan was designed to end the sustained transmission of the disease in the U.S. by focusing efforts on the populations most affected by syphilis—heterosexual minority populations, particularly African Americans. In these populations, substantial progress has been made in reducing the burden of syphilis, yet overall syphilis rates have been on the rise, largely because of increasing rates of syphilis among men who have sex with men (MSM). CDC provides additional funding through a component of the CSPS to a limited number of jurisdictions to address syphilis. Funding is based in part upon a formula utilizing syphilis cases. CDC, with its partners, has:

- Reduced the reported rate of primary and secondary syphilis among females 50 percent from 2.0 cases per 100,000 population in 1999 to 1.0 cases per 100,000 population in 2006.
- Reduced the reported rate of congenital syphilis 41 percent from 14.5 cases per 100,000 live births in 1999 to 8.5 cases per 100,000 live births in 2006.
- Decreased black-to-white ratio of reported syphilis 79 percent from 28.6:1 in 1999 to 5.9:1 in 2006.

Human Papillomavirus (HPV) and other STDs

CDC also supports developing recommendations for HPV vaccines and implementation issues pertinent to such vaccines, including monitoring HPV vaccine impact through new surveillance programs. In addition, CDC supports special surveillance studies for HPV and HSV-2;

epidemiologic, behavioral, laboratory and health services research on a variety of STDs; and program support, training and health communications for STD prevention programs nationally. Accomplishments include:

- Development of an HPV Webpage with fact sheets in English and Spanish. Through December 2006, there were 6.7 million page views of this material.
- Developed educational materials for providers, patients and the general public.
- Conducted sentinel surveillance of HPV infection and published results.
- Initiated behavioral studies of the impact of HPV-related diagnoses.

STD/HIV Training Centers

The National Network of STD/HIV Prevention Training Centers (PTCs) is a CDC-funded group of 10 regional centers created in partnership with health departments and universities. The PTCs are dedicated to increasing the knowledge and skills of health professionals in the areas of sexual and reproductive health. The National Network provides health professionals with a spectrum of state-of-the-art educational opportunities including experiential learning with an emphasis on prevention.

- From April 2006 - March 2007 32,414 students have been trained, 12,895 course hours have been provided and 1,010 training events have occurred.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$158,580,000
FY 2005	\$159,633,000
FY 2006	\$157,201,000
FY 2007	\$155,037,000
FY 2008	\$152,329,000

BUDGET REQUEST

The CDC FY 2009 request includes \$151,651,000 for STD prevention, a decrease of \$678,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and an administrative reduction. All other activities will be supported at the FY 2008 Enacted level.

CDC will continue its STD prevention and control activities in conjunction with state and local health departments. Some key activities, objectives and targets that will guide activities in FY 2009 are:

STD Prevention

About 75 percent of CDC's STD prevention budget supports cooperative agreements for the Comprehensive STD Prevention Systems (CSPS). CSPS grants support state, local, and territorial health department efforts to provide community and individual behavior change interventions; ensure medical, laboratory services and partner services; conduct surveillance and data management; provide or ensure training and professional development; and ensure a documented STD outbreak response plan.

- In 2009, CDC will provide technical and financial assistance to 65 grantees for STD prevention activities.
- Reported cases of nationally-notifiable STDs have leveled or increased in recent years, putting intense pressure on state and local health departments to address these STDs with diminished state and local funding and national funding that has remained level.

- Increase in reported chlamydia cases and rates per 100,000 population of 5.6 percent between 2005 and 2006. Increase partly reflects increased screening and use of more sensitive screening tests, but also likely a real increase in infections. CDC aims to reduce any increases in infection and has set targets for no increase in reported cases in family planning clinics and for decreases in prevalence among high risk women.
- Following a 74 percent decline in reported rate of gonorrhea between 1975 and 1997, the rate of reported gonorrhea plateaued for several years, but increased in 2005 and 2006. In 2009, CDC aims to halt these increases and bring rates in women down to 2005 levels.
- The rate of primary and secondary (P&S) syphilis decreased throughout the 1990s, and in 2000 reached an all-time low. After reaching a nadir in 2001, diagnoses of primary and secondary syphilis are again on the increase. Today, more than 60 percent of new infections are diagnosed in men who have sex with men (MSM), presenting the challenge of the need to address two distinctly different syphilis epidemics. In 2009, CDC aims to reverse these increases by redoubling prevention for MSM.

Because STDs are increasingly diagnosed in the private sector, in 2009, CDC will broaden its efforts to include new partnerships with professional organizations, private health care providers and the general public, while maintaining its support and work within the public sector.

- In 2006, 76 percent of Chlamydia cases, 65 percent of gonorrhea cases, and 65 percent of primary and secondary syphilis cases were reported from the private sector.

Drug resistance is an increasingly important concern in the treatment and prevention of gonorrhea. In FYs 2008 and 2009, CDC will continue to monitor the presence of drug resistant gonorrhea through the Gonococcal Isolates Surveillance Project, a model national sentinel surveillance system that monitors antimicrobial resistance to *Neisseria gonorrhoeae* in the U.S. CDC will also work with NIH and others to identify potential treatments for resistant infections.

- In April 2007, based on preliminary 2006 data that showed widespread fluoroquinolone-resistance among both heterosexuals and men who have sex with men (MSM), CDC revised its gonorrhea treatment guidelines, no longer recommending that this class of antibiotics be used to treat gonorrhea in the United States in any population or geographic area.
- With the loss of fluoroquinolones, recommended gonorrhea treatments are limited to a single class of antibiotics, cephalosporins. At the same time, local and state surveillance capacity for monitoring resistant gonorrhea has diminished over time with the increasing use of nucleic acid amplification tests as fewer U.S. laboratories are conducting culture and susceptibility testing.

There are numerous other challenges to core STD prevention and control efforts:

- With diminishing treatment options for gonorrhea, program areas will need to be able to quickly identify gonorrhea treatment failures, which may reflect resistant cases and respond to outbreaks of resistant gonorrhea to contain the spread of infection for which there may be no treatment options in the near future. Program capacity does not currently exist for this.
- Data systems for disease surveillance are outdated and unable to keep pace with technology. Outbreak detection and timely recognition of disease resistance is thus severely impaired and difficult to achieve.

Infertility Prevention

The Infertility Prevention Program will continue to be supported as part of the CSPS in FY 2009. The Infertility Prevention Program provides grants or cooperative agreements to 65 state and local

STD prevention programs and regional infertility programs to ensure clinical services including chlamydia and gonorrhea screening and treatment of young, sexually active women and their sexual partners; support laboratory testing; and develop surveillance and data management systems to ensure collection of all CDC core data elements.

Chlamydia screening is ranked as a highly-cost effective clinical preventive service with low delivery rate (<50 percent adherence to guidance in the private sector) CDC has set a priority to increase chlamydia screening rates nationally and has developed an initiative to engage partners in the private sector on this important reproductive health issue. In 2008 and 2009, CDC will continue to pursue important elements of the initiative, including:

- Collaboration with the Partnership for Prevention, a national nonprofit organization, to promote the use of high-impact preventive services, including chlamydia screening.
- Conducting research to address barriers to screening, the role of partner services, and the potential of male screening.
- Creating a National Chlamydia Screening Coordinator position to coordinate CDC's private sector relationships and initiative, and convening a coalition of national partners with common interest in preventing Chlamydia.

In FY 2009, CDC will fund 65 state and local STD prevention programs (through Comprehensive STD Prevention Program) and 10 regional infertility programs, with the following targets for FY 2009:

- Reduce the prevalence of chlamydia among high-risk women under age 25 to 8.7 percent.
- Reduce the prevalence of chlamydia among women under age 25 in publicly funded family planning clinics to 6.3 percent.
- Reduce the incidence of gonorrhea in women aged 15 to 44 to 276 per 100,000 population.

In FY 2009, CDC is undertaking policy initiatives to assist STD prevention programs with implementation of Expedited Partner Therapy (EPT), the practice of providing treatment to partners of persons diagnosed with an STD without clinical examination or encounter with those partners.

In 2006, CDC recommended EPT as a useful option for treatment of partners of patients diagnosed with chlamydia and gonorrhea, and further collaboration with partners such as the American Medical Association, the American Bar Association, and the Counsel of State Governments will speed the adoption of this important healthcare practice. In FY 2009, CDC will begin implementing stage 1 and stage 2 of this effort.

Syphilis Elimination

At least \$30.0 million will support the Syphilis Elimination (SE) efforts in FY 2009. This funding, awarded as a component of CSPS grants, supports enhanced surveillance; community involvement and partnerships; rapid outbreak response capabilities; and enhanced health promotion.

CDC plans to fund 42 syphilis elimination programs and award 15 percent of funds to project areas to support non-governmental organizations serving affected populations.

- To be more responsive to the evolving syphilis epidemic, wide variation in project area funding, and overall level funding, in 2008, CDC implemented a new SE funding formula.

To improve monitoring of syphilis elimination activities and progress toward meeting elimination objectives, CDC provides guidance for Evidence-based Action Planning for SE.

- SE programs are required to use an evidence-based action plan to guide the collection of information on the target populations, interventions provided, resources allocated, and

outcomes to facilitate program assessment, improve effectiveness, and inform decisions about future program development.

Other Activities

In 2009, CDC will continue to conduct Human Papillomavirus (HPV) surveillance and evaluate vaccination impact.

- CDC has undertaken a number of projects to monitor the impact of HPV vaccination, including: 1) monitoring CIN 2/3 by establishing a network of geographically diverse sentinel sites from well-defined populations; 2) monitoring changes in anogenital warts; and 3) monitoring the behavioral impact of the HPV vaccine (e.g., Pap testing and sexual behavior).

CDC plans to sustain funding of 10 STD/HIV regional prevention training centers. Training courses focus on such topics as HIV/AIDS, adolescent health, racial and sexual minorities, correctional health, substance abuse and women's health.

OUTCOME TABLE

						FY 20				Out-Year Target
Long-Term Objective 2.7: Reduce the rates of Non-HIV Sexually Transmitted Diseases (STDs) in the United States.										
2.7.1	Reduce pelvic inflammatory disease in the United States	132,000 visits	176,000 visits	NA	NA	NA	NA	NA	NA	<150,000
2.7.2	Reduce the prevalence of chlamydia among high-risk women under age 25	9.70%	9.20%	9.30%	13.10%	9.30%	Available 10/2008	9.00%	8.70%	8.50%
2.7.3	Reduce the prevalence of chlamydia among women under age 25, in publicly funded family planning clinics	6.30%	6.30%	6.30%	6.70%	6.30%	Available 10/2008	6.30%	6.30%	6.30%
2.7.4	Reduce the incidence of gonorrhea in women aged 15 to 44 (per 100,000 population)	267/100,000	275/100,000	278/100,000	290/100,000	278/100,000	Available 10/2008	276/100,000	276/100,000	<276/100,000
2.7.5	Eliminate syphilis in the United States	2.7/100,000	3.0/100,000	NA	NA	NA	NA	NA	NA	<3.2/100,000
2.7.6a	Reduce the incidence of P&S syphilis in men (per 100,000 population)	4.7/100,000	5.1/100,000	Establish baseline	5.7/100,000	4.5/100,000	Available 10/2008	5.5/100,000	5.4/100,000	<5.4/100,000
2.7.6b	Reduce the incidence of P&S syphilis in women (per 100,000)	0.8/100,000	0.9/100,000	0.58/100,000	1.0/100,000	0.8/100,000	Available 10/2008	0.9/100,000	0.9/100,000	<0.9/100,000
2.7.7	Reduce the incidence of congenital syphilis per 100,000 live births	9.1/100,000	8.0/100,000	8.8/100,000	8.5/100,000	8.8/100,000	Available 10/2008	8.5/100,000	8.5/100,000	<8.5/100,000
2.7.8	Reduce the racial disparity of P&S syphilis (reported ratio is black:white)	5.5:1	5.4:1	5.6:1	5.9:1	5.6:1	Available 10/2008	5.5:1	5.4:1	<5.4:1

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

OUTPUT TABLE

						FY 2007				Out-Year Target
2.L	Technical and financial assistance to grantees for STD Prevention	65	65	65	65	65	65	65	65	NA
2.M	Syphilis Elimination Programs Funded	35	35	38	38	38	38	42	33	NA
2.N	Regional Infertility Programs Funded	10	10	10	10	10	10	10	10	NA
2.O	STD/HIV Regional Prevention Training Centers Funded	10	10	10	10	10	10	10	10	NA
2.P	Percent of Syphilis elimination funds awarded to project areas to support organizations serving affected populations	30	30	30	30	30	30	30	15	NA
	Appropriated Amount (\$ Million)¹	\$158.6	\$159.6	\$157.2		\$155.0		\$152.3	\$151.7	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS COMPREHENSIVE SEXUALLY TRANSMITTED DISEASES (STD) PREVENTION PROGRAM	
	FY 2007 Actual**
Alabama*	\$2,019,893
Alaska	\$435,671
Arizona*	\$1,850,872
Arkansas	\$1,167,046
California*	\$6,329,518
Colorado*	\$2,729,237
Connecticut	\$1,075,807
Delaware	\$376,338
District of Columbia	\$1,827,494
Florida*	\$4,741,460
Georgia*	\$3,914,402
Hawaii*	\$364,241
Idaho	\$406,587
Illinois*	\$2,199,752
Indiana	\$1,969,769
Iowa	\$718,099
Kansas	\$784,223
Kentucky	\$1,066,816
Louisiana*	\$2,253,216
Maine	\$310,433
Maryland*	\$3,914,718
Massachusetts	\$1,797,120
Michigan*	\$2,852,484
Minnesota*	\$1,117,758
Mississippi	\$1,293,651
Missouri	\$2,365,701
Montana	\$310,383
Nebraska	\$451,852
Nevada*	\$494,623
New Hampshire	\$266,001

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS COMPREHENSIVE SEXUALLY TRANSMITTED DISEASES (STD) PREVENTION PROGRAM	
	FY 2007 Actual**
New Jersey	\$3,473,725
New Mexico*	\$955,222
New York	\$2,823,332
North Carolina*	\$4,609,097
North Dakota	\$264,085
Ohio*	\$3,811,272
Oklahoma*	\$1,257,875
Oregon*	\$1,200,961
Pennsylvania	\$2,259,157
Rhode Island	\$413,167
South Carolina*	\$1,857,929
South Dakota	\$208,185
Tennessee	\$2,929,853
Texas*	\$7,684,458
Utah	\$483,117
Vermont	\$171,655
Virginia*	\$2,266,679
Washington*	\$2,991,068
West Virginia	\$698,685
Wisconsin	\$1,480,500
Wyoming	\$253,886
Indian Tribes (NW Portland)	\$202,130
Chicago	\$3,395,467
Los Angeles	\$3,920,358
New York City*	\$6,176,922
Philadelphia*	\$3,398,490
San Francisco	\$2,292,878
American Samoa	\$55,929
Guam	\$100,751
Marshall Islands	\$136,934
Micronesia	\$66,558
Northern Mariana Islands*	\$119,067
Palau	\$43,609
Puerto Rico*	\$1,876,696

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS COMPREHENSIVE SEXUALLY TRANSMITTED DISEASES (STD) PREVENTION PROGRAM	
	FY 2007 Actual**
Virgin Islands	\$193,222
	\$115,478,084

* Grantee received funding from one or more of the following supplements: Comprehensive STD Prevention Systems (\$1,578,211); Preventive Training Centers (\$497,523); STD Surveillance Network (\$96,000); Potential Extramural Projects (\$187,500)

**Excludes HIV/STD co infection funds.

TUBERCULOSIS (TB)

BA	\$134,668,000	\$140,359,000	\$139,735,000	-\$624,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 306, 307, 308(d), 310, 311, 317, 317(a), 317E

FY 2009 Authorization..... Indefinite

Allocation Methods.....Direct Federal/Intramural;
Competitive Grant/Cooperative Agreements; Formula Grants/Cooperative Agreements; Contracts,
and Other.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The Public Health Service has supported efforts to control TB in the U.S. since the early 20th century, and programs to support TB control in the States were transferred to CDC in 1960. These programs were so successful that by 1972, TB was no longer thought to be a threat and categorical funding for TB was eliminated. However, the lack of specific support for TB control programs at the national level, an increase in homelessness and the HIV epidemic led to a resurgence of TB in the late 1980s, and, with it, multi-drug resistant (MDR) TB. Intensive efforts brought the disease under control again and the nation is back on track toward its goal of eliminating tuberculosis. In 2006, the lowest number of U.S. cases (13,779) was reported. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 48 percent. In addition, the case rate is the lowest ever, at 4.6 cases per 100,000 population.

Yet, the high global burden of disease, coupled with continued problems of drug resistant strains and a failure to develop better tools for TB control threaten our ability to eliminate TB in the U.S. and hamper efforts to control TB globally as the decreasing trend in the annual case rate has slowed from an annual average decline of 6.6 percent for 1993 through 2002 to an annual average decline of 3.1 percent for 2003 through 2006.

Success in eliminating TB ultimately depends on: (1) treating infectious patients quickly and completely; (2) treating them with drugs that work; (3) treating their close contacts; (4) treating persons with latent infection who are at high risk of developing the disease; (5) maintaining timely, complete local, state, and national TB information systems to monitor elimination efforts; and (6) helping to control the spread of TB globally.

CDC provides leadership and assistance to domestic and international efforts to prevent, control, and eliminate TB. CDC's national TB program provides grants to states and other entities for prevention and control services; researches the prevention and control of TB; funds demonstration projects; sponsors public information and education programs; and supports education, training, and clinical skills improvement activities to address TB.

State TB Control Programs

CDC funds 68 cooperative agreements with state and local health departments (approximately one-third are formula based) for TB prevention and control, including technical and financial assistance, laboratory support, model centers, and healthcare worker training. CDC works with 41 state and local TB advisory committees that represent patients and providers. Recent accomplishments include:

- Achieved continued reductions in TB morbidity in the U.S., even in the wake of high global burden of disease. In 2006, 26 states met the definition for low incidence (≤ 3.5 cases per 100,000 population), similar to 2005.
- Ensured that over 85 percent of TB patients receive a curative course of treatment within 12 months of diagnosis (some patients require more than 12 months of treatment) and conducting contact investigations to identify persons who may have been exposed to people with active TB.
- Trained public health laboratorians and developing performance indicators for TB control programs.

Applied Clinical and Epidemiologic TB Research

CDC collaborates, through contracts and interagency agreements, with the Veterans Administration and other partners to maintain a consortium for TB clinical trials research. CDC also supports the Tuberculosis Epidemiologic Studies Consortium to strengthen TB epidemiological, behavioral, economic, laboratory, and operational research capacity within states, cities, and academic institutions. This research has yielded a number of results:

- A CDC study concluded that treatment of latent TB can significantly reduce TB burden in the U.S.
- Another study found that TB bacteria which are resistant to low doses of isoniazid (INH), a first-line drug for TB, may be susceptible to higher doses of the drug.
- A comparison of the use of the tuberculin skin test (TST) and whole-blood interferon-gamma release assays found that the blood tests do not interact with the BCG vaccine, used in many parts of the world, and are as sensitive as the TST. This may improve efficiency in identifying those who need to complete treatment for latent TB infection.

Global Partnerships

CDC provides leadership and technical assistance in infection control, epidemiology, surveillance (including drug resistance surveys), program and laboratory services development, monitoring and evaluation, operations research and training, improving diagnostic services, and identifying clinical factors important to TB outcomes. These efforts build upon the successful program to control TB in the United States. CDC collaborates with U.S. partners to reduce TB in high-burden countries by developing guidelines, recommendations, and policies.

- Over the past three years, CDC has been supporting TB control efforts in more than 25 countries on 5 continents. For example, a CDC team recently collaborated with the World Health Organization (WHO) and others to conduct a TB/HIV planning and operational research workshop in Kiev, Ukraine.
- In addition, CDC is a founding member of the Stop TB Partnership, a global effort of more than 500 governmental and non-governmental organizations, housed by the WHO. Members of the Stop TB Partnership work towards achieving the 2006-2015 Millennium Development Goals of reducing global TB deaths by 50 percent and the number of persons suffering from TB by 50 percent.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$137,356,000
FY 2005	\$138,811,000
FY 2006	\$136,697,000
FY 2007	\$134,668,000
FY 2008	\$140,359,000

BUDGET REQUEST

The CDC FY 2009 request includes \$139,735,000 for TB, a decrease of \$624,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and an administrative reduction. All other activities will be supported at the FY 2008 Enacted level.

In FY 2009, CDC will continue its TB control activities in conjunction with state and local health departments. CDC will provide financial and technical aid to 68 cities, states, and territories to conduct TB prevention and control activities and collect TB surveillance data. Key targets in FY 2009 are to:

- Decrease the rate of cases of TB among U.S.-born persons to 1.8 per 100,000 population.
- Increase the percentage of TB patients who complete a course of curative TB treatment within 12 months of initiation of treatment to be greater than 88 percent.
- Increase the percentage of contacts of infectious cases that are placed on treatment for latent TB infection and complete a treatment regimen to be equal to or greater than 43 percent.

Fifty states will participate in the TB Genotyping Network, which allows health officials to detect outbreaks almost immediately by analyzing the fingerprints of individual TB strains from across the nation.

CDC will sustain support to applied clinical and epidemiologic TB research partners.

- CDC recently examined the efficacy of two blood tests for the detection of TB infection in an effort to increase completed treatment of latent infection in those most at risk to progress to TB disease.
- CDC explored the use of isoniazid (INH) in treating a highly INH-resistant TB strain to determine the most effective and safe way to address this common drug resistance.
- CDC examined the scope and impact of treatment of latent TB infection, concluding that treatment of latent infection can significantly decrease the TB burden in the United States.
- In FY 2009 CDC will fund 2 TB research consortia; conduct 2 studies under the TB Clinical Trials Consortia; and execute at least three task orders under the TB Epidemiologic Studies Consortia.

CDC will continue to support its international partners in the global effort to eliminate TB.

- HHS and CDC recently improved the overseas TB screening program by requiring use of automated culturing, drug-susceptibility testing, and TB drug treatment according to US standards. The new program has been codified and published under the title, "2007 Technical Instructions for Tuberculosis Screening and Treatment."

- CDC is also working to decrease importation of TB through the implementation of the Electronic Disease Notification (EDN) project, a web-based system that centralizes data sent to U.S. quarantine stations and notifies them of newly arriving immigrants and refugees recently cured of TB or latently infected with *M. tuberculosis*. EDN is currently established in Alabama, Arizona, Colorado, Hawaii, Maryland, Michigan, Ohio, Rhode Island, Washington, Texas, Florida (includes four counties), New York City and New York State, Illinois, Minnesota, Virginia, Massachusetts, and Georgia.
- CDC is also building program and laboratory capacity for TB control programs in the Pacific Island jurisdictions by improving coordination at the regional reference laboratory, improving the local capacity to conduct more specific TB diagnostic tests, and improving procedures for specimen shipping.
- CDC staff provide ongoing technical assistance to foreign countries with a high burden of TB and to those having a strategic interest for TB control efforts in the United States; at least 75 such technical assistance visits were made in FY 2007.
- Integration of services to HIV and TB infected persons will be supported.

OUTCOME TABLE

						FY 20				Out- Year Target
Long-Term Objective 2.8: Decrease the Rate of Cases of TB among U.S.-Born Persons in the United States										
2.8.1	Decrease the rate of cases of TB among U.S.-born persons (per 100,000 population)	2.6	2.5	2.2	2.3	2.1	Available 9/2008	1.9	1.8	<2.0
2.8.2	Increase the percentage of TB patients who complete a course of curative TB treatment within 12 months of initiation of treatment (some patients require more than 12 months)	82.30%	Available 9/2008	86.20%	Available 2/2009	87.30%	Available 9/2010	>87.5%	>88%	>88.5%
2.8.3	Increase the percentage of TB patients with initial positive culture who also have drug susceptibility results	92.90%	92.40%	95%	92.20%	95%	Available 9/2008	95%	>95%	>95%
2.8.4	Increase the percentage of infected contacts of infectious (Acid-Fast Bacillus [AFB] smear-positive) cases that are placed on treatment for latent TB infection and complete a treatment regimen	43.3%	Available 12/2008	59%	Available 12/2009	43%	Available 12/2010	≥43%	≥43%	≥43%

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

OUTPUT TABLE

						FY 2007				Out- Year Target
2.Q	Number of cities, states, and territories provided financial and technical aid to conduct TB prevention and control activities and collect TB surveillance data	68	68	68	68	68	68	68	68	NA
2.R	Number of research consortia funded	2	2	2	2	2	2	2	2	NA
2.S	Number of studies funded under the TB Clinical Trials Consortia	3	3	3	2	2	2	2	2	NA
2.T	Number of task orders funded under the TB Epidemiologic Studies Consortia	11	9	11	3	3	3	3	3	NA
2.U	Number of communications disseminated via CD-ROM	10,500	11,000	11,500	11,200	11,200	11,200	11,200	11,200	NA
2.V	Number of state public health laboratories participating in the TB Genotyping Network	50	50	50	50	50	50	50	50	NA
	Appropriated Amount (\$ Million)¹	\$137.4	\$138.8	\$136.7		\$134.7		\$140.4	\$139.7	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE FUNDING TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2007 DISCRETIONARY STATE/FORMULA GRANTS TUBERCULOSIS (TB) ELIMINATION & LABORATORY PROGRAM FOR STATE/LOCAL HEALTH DEPARTMENTS			
			Total
Alabama	\$944,594	\$108,791	\$1,053,385
Alaska	\$300,633	\$160,167	\$460,800
Arizona	\$918,594	\$103,779	\$1,022,373
Arkansas	\$567,671	\$121,010	\$688,681
California*	\$6,761,033	\$325,664	\$7,086,697
Colorado	\$370,415	\$104,522	\$474,937
Connecticut*	\$541,986	\$79,087	\$621,073
Delaware	\$818,345	\$19,336	\$837,681
District of Columbia	\$224,177	\$81,208	\$305,385
Florida*	\$6,603,457	\$331,918	\$6,935,375
Georgia*	\$1,351,616	\$237,575	\$1,589,191
Hawaii	\$774,602	\$86,683	\$861,285
Idaho	\$142,344	\$27,108	\$169,452
Illinois	\$885,154	\$206,148	\$1,091,302
Indiana	\$578,678	\$114,368	\$693,046
Iowa	\$312,112	\$153,170	\$465,282
Kansas	\$330,107	\$37,549	\$367,656
Kentucky	\$837,088	\$108,297	\$945,385
Louisiana	\$1,145,114	\$138,637	\$1,283,751
Maine	\$89,295	\$83,648	\$172,943
Maryland	\$745,515	\$207,090	\$952,605
Massachusetts	\$1,002,064	\$153,211	\$1,155,275
Michigan	\$631,851	\$129,954	\$761,805
Minnesota	\$691,293	\$129,571	\$820,864
Mississippi	\$774,921	\$56,778	\$831,699
Missouri	\$450,210	\$76,465	\$526,675
Montana	\$149,390	\$22,895	\$172,285
Nebraska	\$173,796	\$29,158	\$202,954
Nevada*	\$392,841	\$68,272	\$461,113
New Hampshire	\$178,650	\$96,723	\$275,373

CENTERS FOR DISEASE CONTROL AND PREVENTION			
FY 2007 DISCRETIONARY STATE/FORMULA GRANTS			
TUBERCULOSIS (TB) ELIMINATION & LABORATORY PROGRAM			
FOR STATE/LOCAL HEALTH DEPARTMENTS			
			Total
New Jersey*	\$3,803,120	\$79,017	\$3,882,137
New Mexico	\$333,008	\$55,778	\$388,786
New York	\$2,033,032	\$184,144	\$2,217,176
North Carolina	\$1,452,606	\$173,489	\$1,626,095
North Dakota	\$114,478	\$54,719	\$169,197
Ohio	\$913,818	\$61,994	\$975,812
Oklahoma	\$573,807	\$174,845	\$748,652
Oregon	\$528,035	\$165,082	\$693,117
Pennsylvania	\$548,388	\$65,396	\$613,784
Rhode Island	\$399,565	\$74,214	\$473,779
South Carolina	\$1,110,365	\$51,777	\$1,162,142
South Dakota	\$227,061	\$10,844	\$237,905
Tennessee	\$1,265,876	\$105,662	\$1,371,538
Texas*	\$6,069,648	\$410,601	\$6,480,249
Utah	\$322,496	\$37,585	\$360,081
Vermont	\$109,146	\$16,830	\$125,976
Virginia	\$762,372	\$96,547	\$858,919
Washington	\$1,222,859	\$113,315	\$1,336,174
West Virginia	\$270,881	\$69,571	\$340,452
Wisconsin	\$319,672	\$42,932	\$362,604
Wyoming	\$159,906	\$24,018	\$183,924
Baltimore	\$509,939	\$0	\$509,939
Chicago	\$1,759,701	\$0	\$1,759,701
Detroit	\$296,244	\$0	\$296,244
Houston	\$2,173,476	\$186,644	\$2,360,120
Los Angeles	\$4,110,380	\$258,447	\$4,368,827
New York City*	\$9,598,847	\$856,465	\$10,455,312
Philadelphia	\$630,358	\$142,447	\$772,805
San Diego*	\$1,345,448	\$157,299	\$1,502,747
San Francisco*	\$2,683,710	\$155,697	\$2,839,407
American Samoa	\$79,587	\$18,820	\$98,407
Guam	\$310,976	\$83,455	\$394,431
Marshall Islands	\$102,131	\$25,244	\$127,375
Micronesia	\$133,241	\$34,055	\$167,296
Northern Mariana Islands	\$100,281	\$18,314	\$118,595

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
HIV/AIDS, VIRAL HEPATITIS, STD, AND TB PREVENTION

CENTERS FOR DISEASE CONTROL AND PREVENTION			
FY 2007 DISCRETIONARY STATE/FORMULA GRANTS			
TUBERCULOSIS (TB) ELIMINATION & LABORATORY PROGRAM			
FOR STATE/LOCAL HEALTH DEPARTMENTS			
			Total
Palau	\$114,867	\$12,675	\$127,542
Puerto Rico	\$607,026	\$145,189	\$752,215
Virgin Islands	\$71,164	\$0	\$71,164
			\$84,616,954

* Grantee received funding from one or more of the following supplements: Outbreak support (\$184,213); Laboratory Services (54,851); Emerging Infectious Disease Support (\$235,403); Regional Training and Medical Consultation Centers (\$48,105); Binational Support (\$194,080); Laboratory Staff Training (\$15,000).

** Includes funding to all grantees for human resource development.

*** Does not include supplemental funding for HIV/TB coinfection programs.

ZOOONOTIC, VECTOR-BORNE, AND ENTERIC DISEASES

				FY 2009 +/- FY 2008
Hanta Virus/Special Pathogens	\$3,818,000	\$3,751,000	\$3,734,000	-\$17,000
Lyme Disease	\$5,364,000	\$5,270,000	\$5,246,000	-\$24,000
West Nile Virus	\$26,767,000	\$26,299,000	\$19,277,000	-\$7,022,000
Prion Disease	\$5,349,000	\$5,256,000	\$5,232,000	-\$24,000
All Other Food Safety	\$22,920,000	\$22,520,000	\$22,415,000	-\$105,000
Chronic Fatigue Syndrome (CFS)	\$4,834,000	\$4,750,000	\$4,728,000	-\$22,000
Total	\$69,052,000	\$67,846,000	\$60,632,000	-\$7,214,000

SUMMARY OF THE REQUEST

Multiple factors have come together to create a new epidemiological era characterized by increases in emerging and reemerging infectious diseases. These include: zoonotic diseases transmitted from animals to humans (SARS, plague, Hanta virus, and influenza); vector-borne diseases carried by mosquitoes and ticks (West Nile virus, Lyme disease, dengue, and malaria); foodborne illnesses (*E. coli* outbreaks and *Salmonella* infections); and waterborne disease challenges (chlorine-resistant pathogens and recreational water contamination). These threats demonstrate that animals, people, and the environment are inextricably linked, that animal health strategies impact public health, and that the strategies to protect both should be coordinated.

CDC has brought together similarly focused programs in the National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) to provide national and international scientific and programmatic leadership for zoonotic, vector-borne, foodborne, waterborne, mycotic, and related infections to identify, investigate, diagnose, treat, and prevent these diseases. Gaining a better understanding of these diseases and the ecologies from which they have emerged requires extensive interaction and collaboration among professionals from multiple disciplines, not just across CDC and the traditional public health community, but also among agricultural, wildlife, companion animal, and environmental agencies and organizations.

The CDC FY 2009 request includes \$60,632,000 million for Zoonotic, Vector-Borne, and Enteric Diseases, a decrease of \$7,214,000 below the FY 2008 Enacted level, which includes a \$282,000 Individual Learning Account (ILA) and administrative reduction.

- \$3,734,000 for Hanta Virus/Special Pathogens (such as Ebola, Rift Valley fever) for basic and applied laboratory and epidemiological research on special pathogens, as well as global outbreak response.
- \$5,246,000 for Lyme disease to support basic and applied laboratory and epidemiology research targeted at the prevention, detection, and control of Lyme disease.
- \$19,277,000 for West Nile Virus (WNV) to support a national coordinated plan for the detection and control of West Nile virus, including grants to states for surveillance, working with partners on prevention practices and programs, and conducting epidemiological and laboratory research.
- \$5,232,000 for Prion Disease for basic and applied laboratory and epidemiological research conducted at CDC and with partners such as the National Prion Disease Pathology Surveillance Center.

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
ZOO NOTIC, VECTOR-BORNE, AND ENTERIC DISEASES

- \$22,415,000 for All Other Food Safety to support collaborative surveillance systems, work with state and local partners as well as USDA and FDA, conduct laboratory and epidemiologic research, and respond to foodborne disease outbreaks.
- \$4,728,000 for Chronic Fatigue Syndrome (CFS) for basic and applied laboratory and epidemiologic research at CDC and with partner organizations.

WEST NILE VIRUS

				FY 2009 +/- FY 2008
BA	\$26,767,000	\$26,299,000	\$19,277,000	-\$7,022,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317P, 317R, 317S, 319, 319E, 319F, 319G, 327, 352, 361-363, 1102, Immigration and Nationality Act §§ 212, 232

FY 2009 Authorization Indefinite

Allocation MethodsDirect

Federal/Intramural, Contract, Competitive Grant/Cooperative Agreement

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC's West Nile virus (WNV) program was initiated in 1999 when WNV was first identified in New York City. The purpose of the WNV program is to reduce the burden of disease caused by WNV and other medically important arboviruses. CDC, in collaboration with other partners, defines disease etiology, ecology, and pathogenesis in order to develop methods and strategies for disease diagnosis, surveillance, prevention and control; and provides diagnostic reference consultation, epidemic aid and epidemiologic consultation to State and local health departments, other components of CDC, other Federal agencies, and national and international health organizations. As a World Health Organization Collaborating Center for Reference and Research on Arboviruses, CDC also provides technical expertise and assistance in professional training activities to national and international health workers and scientists on West Nile virus and other arthropod-borne viruses.

CDC's WNV program provides funding for intramural programs and for extramural national and international arboviral prevention and control activities through a variety of cooperative agreements, grants, interagency agreements and contracts. CDC partners with federal, state, tribal and local agencies, vector and mosquito control associations, universities, and private industry to identify and develop mosquito-borne disease control and prevention practices and programs. National funding provides support to all states, some large cities/counties, and Puerto Rico to assist in the development of comprehensive, long-term disease monitoring, prevention, and control programs.

A major component of this cooperative agreement is the national arbovirus surveillance real-time data collection electronic disease monitoring system known as "ArboNet" which is coordinated by CDC and integrates human, equine, and other veterinary species, avian, and mosquito reports from state health departments. As of November 2007, ArboNet has received reports of 2060 birds, 7746 mosquito pools, 407 horses, and 3265 humans infected with WNV. Other cooperative agreements include support of a collaborative project with Tulane University for a controlled study to evaluate the effects of WNV in pregnancy and a collaboration with the Association of State and Territorial Health Officials (ASTHO) to distribute, evaluate, and revise the guidelines entitled "Public Health Confronts the Mosquito: Developing Sustainable State and Local Mosquito Control Programs", originally developed in 2004.

Extramural support for international activities includes the following projects: 1) a collaborative study with the Medical Entomology Research and Training Unit/Guatemala (MERTU/G) and the Ministries of Health and Agriculture in El Salvador and Guatemala to establish a sustainable early warning system to detect human and equine arboviruses as they circulate in the region; 2) a collaboration between CDC and the Pan American Health Organization (PAHO) to develop and

implement programs to strengthen WNV and other arboviral surveillance and laboratory diagnosis capabilities in Latin American countries; 3) a cooperative agreement with China conducting surveillance activities to determine the distribution of arboviruses and the burden of disease in China while also developing the expertise to plan and implement routine arboviral surveillance; and 4) support for a project to determine the functional outcome for survivors of Nipah virus and Japanese encephalitis in Bangladesh.

Other West Nile virus activities and accomplishments include the following.

- CDC has developed and implemented strategies and protocols that resulted in programs screening the entire U.S. blood supply for WNV contamination beginning in July 2003. In 2007, all blood donations were screened for WNV.
- CDC conducted research to systematically sequence the flavivirus and alphavirus genomes, which assisted in the ability to detect the outbreak of Zika virus (a virus related to WNV) in Yap, an island in the Federated States of Micronesia, and to investigate adverse events associated with yellow fever and vaccines.
- CDC collaborated with Fort Dodge Animal Health to develop the world's first licensed DNA vaccine. The vaccine, which protects horses from WNV, was licensed in 2005, and the technology is now in clinical trials for humans. To further expand the use of the WNV DNA vaccine, CDC tested the efficacy of the WNV DNA vaccine in multivalent formulations with Japanese encephalitis virus and dengue virus DNA vaccines through a contract with the Southwest Foundation for Biomedical Research.
- To help control WNV vectors, CDC collaborated with state and local mosquito control and health agencies to study the behavior, ecology, and pesticide susceptibility of key WNV vectors. Due to the detection of resistance to certain pesticides, CDC is working with local agencies to develop and implement resistance and management plans.
- CDC provided laboratory training to all State health departments on WNV diagnosis to establish rapid diagnostic testing in laboratories throughout the U. S. and the Caribbean. CDC developed standardized diagnostic protocols for antiviral antibody and viral nucleic acid detection in clinical specimens, permitting rapid diagnosis of WNV infection. In 2007, Puerto Rico detected WNV activity for the first time; ongoing CDC support allowed health officials to accurately and rapidly detect this outbreak.
- CDC continues to maintain a world reference collection of arboviruses. This collection is one of two international resources for identification of unknown etiologic agents and diagnosis of arboviral infections.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$34,633,000
FY 2005	\$37,809,000
FY 2006	\$44,982,000
FY 2007	\$26,767,000
FY 2008	\$26,299,000

BUDGET REQUEST

CDC's FY 2009 request includes \$19,277,000 for West Nile virus, a decrease of \$7,022,000 (of which \$90,000 is for an Individual Learning Account and administrative reduction) below the FY 2008 Enacted level. CDC's West Nile virus (WNV) program is in support of CDC's goals of People

Prepared for Emerging Health Threats and Healthy People in Every Stage of Life. The WNV program will continue to focus on four main goals in fiscal year 2009: 1) disease surveillance and outbreak response; 2) applied research to develop diagnostic tests, drugs, vaccines, and surveillance and prevention tools; 3) public health infrastructure and training; and 4) disease prevention and control. CDC's WNV program has resulted in a dramatic increase in national, state, and local capacities to identify and respond to outbreaks of endemic or newly introduced arboviral pathogens. Federal funds have been used by public health officials to leverage state funding in support of enhanced expertise in vector-borne diseases in 57 state and large local health departments. In addition, CDC has investigated international arboviral outbreaks, and has developed specific surveillance and control projects in Latin America, China, India, and Kenya. These demonstration projects help inform national arboviral prevention and control efforts, and will strengthen CDC's capacity and readiness to respond to future introductions of other exotic arboviral pathogens in the U.S.

The key challenge to the WNV program is to maintain the newly acquired national, state, and local expertise in vector-borne viral diseases, as the disease becomes more endemic in the U.S. Maintenance of this expertise is critical to CDC's capacity to respond to WNV and other arboviral outbreaks nationally and internationally and is directly tied to the nation's preparedness goals. Other challenges include maintaining intramural research programs which have fostered the development of vaccines, rapid diagnostic assays, novel methods for mosquito control, improved approaches to predict arboviral outbreaks, new prophylactic and therapeutic antiviral agents, improved methods for identification of viruses in ecological specimens such as mosquitoes and birds, and an enhanced capacity to respond to national and international arboviral outbreaks.

OUTPUT TABLE

						FY 2007			FY 2009 Target
3.A	Number of national surveillance and response programs in state and large local health departments for WNV and other arboviruses.	57	57	57	57	57	57	57	57
Appropriated Amount (\$ Million) ¹		\$34.6	\$37.8	\$45.0		\$26.8		\$26.3	\$19.3

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

ALL OTHER FOOD SAFETY

				FY 2009 +/- FY 2008
BA	\$22,920,000	\$22,520,000	\$22,415,000	-\$105,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317P, 317R, 317S, 19, 319E, 319F, 319G, 327, 352, 361-363, 1102, Immigration and Nationality Act §§ 212, 232

FY2009 Authorization Indefinite

Allocation MethodsDirect
Federal, Contract, Competitive Grant/Cooperative Agreement

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC's food safety activities were consolidated in a Food Safety Initiative in 1998 to address the public health challenge of foodborne diseases. CDC estimates that each year 76 million U.S. citizens suffer from foodborne illnesses; 325,000 are hospitalized, approximately 5,000 die, and the economic burden is estimated to be greater than \$6 billion. More than 1,000 foodborne disease outbreaks occur each year in the U.S., each one making groups of people ill and requiring public health and food industry resources to investigate and control.

CDC's Food Safety Program budget supports critical activities in State health departments in all 50 states, as well as activities at CDC. Funds to state and large city health departments are distributed through CDC's Emerging Infections Program (EIP) and the Epidemiology and Laboratory Capacity Building Program (ELC) cooperative agreements. The Food Safety Program improves the health of the entire population, as every one is at risk for foodborne illness; however young children, the elderly, and those already suffering from other illnesses are at particular risk for severe consequences.

CDC investigates and consults on outbreaks of foodborne and diarrheal diseases in collaboration with States, providing epidemiologic assistance, laboratory support, and expert consultation on large, severe or unusual events. In collaboration with local, state and territorial partners and USDA and FDA, CDC develops and implements prevention strategies for foodborne and waterborne diseases in consultation with the food industry. CDC also provides up-to-date foodborne disease outbreak investigation and surveillance training for teams composed of local and state epidemiologists, laboratorians, environmental health and other public health professionals. To date, more than 1,150 public health professionals have been trained. Additionally, robust foodborne disease surveillance and response also provides the first response to deliberate contamination of the food supply.

The cornerstone of CDC's Food Safety Program is building and supporting the enhanced collaborative surveillance networks that are detecting outbreaks sooner, making investigations faster, helping to identify new points of control and prevention, and documenting the health burden and sources of these infections. These networks and activities include PulseNet, FoodNet, OutbreakNet, and CalciNet among others.

PulseNet

PulseNet is the national network for fingerprinting bacterial foodborne pathogens and works in collaboration with public health laboratories in all 50 states, Canada, and FDA and USDA, to facilitate early recognition and investigation of outbreaks (see <http://www.cdc.gov/pulsenet/> for more information). States receive CDC PulseNet funding through ELC and EIP cooperative agreements. Through surveillance with state partners, CDC has identified and investigated large multistate outbreaks of *E. coli* O157 and *Salmonella* infections and botulism, which led to potential illnesses being avoided by notifying the public, and by concerted FDA, USDA, state and local control measures. CDC now has more than 250,000 “Fingerprints” in the national databases for seven pathogens. More are being added by state partners each year, and PulseNet identified more than 300 clusters in 2006. CDC has exceeded performance targets for 2004-2007 for the number of foodborne isolates submitted to the national database.

FoodNet

FoodNet is a network of enhanced surveillance that provides detailed data on individual cases of foodborne illness, the organisms that cause them, and the foods or other exposures that are sources of the infections outside of the outbreak setting (see <http://www.cdc.gov/foodnet/> for more information). With sites in ten states and in collaboration with USDA and FDA, FoodNet provides the most comprehensive information available on the trends of foodborne illness and progress towards national goals for controlling and preventing them. FoodNet data are being used to revise the general estimate of burden of illness for the U.S. is being revised. CDC will continue to lead an international effort to develop standard measures for the burden of foodborne disease.

OutbreakNet

OutbreakNet is a national CDC coordinated network of public health officials in local and state health departments and federal agencies who investigate outbreaks of enteric diseases. In addition to collaborating on foodborne outbreak investigations, State OutbreakNet members report findings of their outbreak investigations to CDC through the Electronic Foodborne Outbreak Reporting System (eFORS), a national web-based reporting system with advanced data security and management functions. Each year CDC leads about 20 investigations and provides extensive consultation to states and local health departments on approximately 80 other investigations. In FY 2006 – FY 2007, OutbreakNet investigations included outbreaks of botulism caused by pasteurized carrot juice and canned chili sauce, of *E. coli* O157 infections caused by leafy greens, ground beef, and pepperoni pizza, and of *Salmonella* infections caused by peanut butter, tomatoes, vegan snacks, dry dog food, and poultry pot pies. These data are now being used to evaluate how the burden of foodborne illness can be attributed to specific food commodities.

- The eFORS system collects extensive information on over 1,000 foodborne outbreak investigations annually. This system demonstrated a 90 percent decrease in outbreaks due to *Salmonella* in eggs between 1993 and 2003.
- eFORS has also demonstrated that the proportion of outbreaks due to contaminated produce has increased substantially over the past three decades.

CIFOR

The Council to Improve Foodborne Outbreak Response (CIFOR) is a CDC-funded collaboration of six associations and three federal agencies to identify and address barriers to rapid foodborne disease outbreak detection, investigation, reporting, control, and prevention (see <http://www.cifor.us/> for more information). Three of the associations (Association of Public Health Laboratories, Council of State and Territorial Epidemiologists, and the National Association of County and City Health Officials) receive CDC funding for CIFOR projects through cooperative

agreements and one of the associations (the National Environmental Health Association) receives funding through a contract. CIFOR's goal is to improve performance and coordination of local, state and federal public health agencies involved in epidemiology, environmental health, laboratory science, and regulatory affairs.

DPDx

Many laboratories in the U.S. are unfamiliar with morphologic or molecular parasitic diagnosis, which is essential to maintain surveillance and detection capabilities for foodborne outbreaks. The DPDx project assists and strengthens the laboratory diagnosis of parasitic diseases in the U.S. by providing online diagnostic consultation (telediagnosis) for over 100 parasitic diseases as well as education, diagnostic materials, and laboratory protocols to improve parasite identification through internet-based tools and training workshops (see <http://www.dpd.cdc.gov/DPDx/> for more information). DPDx has increased the efficiency in providing diagnostic parasitology assistance to public health and private laboratories by decreasing the turnaround time for assistance from days to hours, and by decreasing the cost of providing diagnostic assistance.

Caliciviruses

Human caliciviruses, including noroviruses, cause an estimated 23 million cases of gastroenteritis each year in the U.S. Approximately 40 percent of these cases result from foodborne transmission. CDC's Calicivirus program provides technical support and subject matter expertise to state and local health departments and international partners to investigate and respond to calicivirus outbreaks, and to better understand the disease burden and epidemiology of caliciviruses.

- During FY 2007, CDC assisted with the investigation of more than 161 outbreaks for gastroenteritis in 25 states and on cruise ships.
- One of the major components of the Calicivirus program is Calicinet, a new sequence database surveillance system that collects molecular data from calicivirus outbreaks throughout the U.S. This database will allow CDC scientists to better understand the epidemiology of caliciviruses and identify and evaluate specific control measures.

Hepatitis

CDC also provides technical support, consultation, and analysis to state and local health departments to characterize the disease burden from Hepatitis A, identify and monitor risk factors for infection and their trends, detect and investigate transmission and outbreaks, and evaluate the effectiveness of prevention programs. Hepatitis A and Hepatitis E viruses (HAV and HEV) are spread by eating or drinking contaminated food or water or through close contact with an infected person. While HEV remains uncommon in the U.S., an estimated 40,000 cases of acute HAV infection occur in this country each year. Vaccination, outbreak response, and food safety programs are the primary interventions used to prevent Hepatitis A.

- Hepatitis A incidence has decreased by approximately 88 percent nationwide since the mid-1990s, when Hepatitis A vaccine became available and recommendations were made. CDC exceeded its performance measure to reduce the rate of new cases of Hepatitis A in 2005 and 2006.
- Among the populations with the highest disease rates in the pre-vaccine era (Alaska Natives and American Indians), Hepatitis A incidence has declined by 99 percent, eliminating this racial disparity in health.

The Safe Water System

CDC has continued to expand the collaborative CDC Safe Water System (SWS), now in 23 countries, empowering families in developing countries to make their drinking water safe through a

variety of public and private partnerships (see <http://www.cdc.gov/safewater/> for more information). Food Safety funds support staff salaries for this project. The SWS program in Kenya won a World Bank Award in 2006 for innovative prevention, which uses local women's groups to market a basket of water treatment, mosquito bednets, vitamins, and other simple health interventions. A public private partnership with Proctor and Gamble led to a simple product approved for use in the U.S. and distributed throughout the developing world to make muddy, contaminated water drinkable. This collaboration received the 2007 Circle of Excellence Award from the Henry M. Jackson Foundation for the Advancement of Military Medicine.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$23,851,000
FY 2005	\$23,649,000
FY 2006	\$23,208,000
FY 2007	\$22,920,000
FY 2008	\$22,520,000

BUDGET REQUEST

The CDC FY 2009 request includes \$22,415,000 for All Other Food Safety, a decrease of 105,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. The FY 2009 budget will continue to support CDC's investigation, research and response to foodborne and diarrheal diseases including laboratory surveillance and epidemic aid and consultation on events that are naturally occurring or result from acts of bioterrorism. The Food Safety Program is in support of the Secretary's Preparedness Goals and are linked to CDC goals of Healthy People in Every Stage of Life, Healthy People in Healthy Places and People Prepared for Emerging Health Threats. CDC's Food Safety Office has integrated performance plans with the safety budget. All program plan dollars are allocated to discrete projects, cooperative agreements, grants, contracts, or interagency agreements. Projects have measurable goals and are objectively reviewed every year by stakeholder representatives. Cooperative agreements, contracts, and grants are reviewed annually. This process assures food safety activities are based on mission priorities, assures results are measurable, provides accountability for funds spent, and includes all stakeholders in the planning process.

FY 2009 funding will continue to support CDC's enhanced collaborative surveillance networks, including FoodNet, PulseNet, Outbreak Net, and CaliciNet. Funds will be used to make improvements and enhancements related to speed, completeness, and reliability of the data collected through these systems. In particular, FY 2009 funding will be used for the following.

- To enhance the Electronic Foodborne Outbreak Reporting System (eFORS) to include outbreaks of enteric diseases due to contaminated water, person to person, and animal contact; to collect a wide variety of data on the incidence of foodborne illnesses and associated pathogens; and to collect data on patient, physician, and laboratory behaviors related to these illnesses.
- To assist CDC in working with CIFOR partners to complete comprehensive foodborne outbreak response guidelines and an on-line repository of outbreak response tools and other resources for state and local health departments and federal agencies.
- To continue epidemiologic and laboratory research related to food safety. Specific projects supported with FY 2009 funds include the development and refinement of second generation PulseNet methods for quicker identification of disease clusters and outbreaks and identification of risk factors for foodborne illness using FoodNet case-control studies.

Key challenges related to the detection, prevention, and control of foodborne diseases include identifying new and emerging pathogens that may appear in the food supply, as well as new foods not previously recognized as sources of infection. Another challenge will be enhancing the capacities of local and state health departments to rapidly detect and respond to outbreaks of foodborne illness, with better and faster methods and tools. To address these challenges, CDC is building partnerships with external Centers of Excellence to investigate the ecologies that spread contamination among the animals and plants that we eat, so that contamination can be reduced on the farm. CDC is also working to better identify foodborne disease caused by infected food handlers, such as Hepatitis A and Norovirus, and to assess the effectiveness of interventions and response. CDC is also working to increase partnerships with regulatory agencies and with the food industry to develop, evaluate and improve new prevention strategies. CDC is strengthening international networks to identify and investigate multinational outbreaks and to improve health and sanitation in other countries.

CDC is building on its food safety accomplishments and performance and will be making enhancements on specific control measures for foodborne diseases in FY 2009. A summary of FoodNet data from 1996 to 2006 published in April 2007, showed significant declines in rates of infection with *Listeria* and *Campylobacter*, indicating we are on track toward the Healthy People 2010 objectives for those infections. As most of the declines occurred before 2003, continued efforts are needed for both these infections. In FY 2009, CDC, in collaboration with FDA, will continue to broaden implementation of a national *Listeria* Action Plan to further reduce *Listeria* cases through efficient risk management, empowering consumers, and improving consumer safety. After the incidence of *E. coli* O157 infections declined to a low in 2004, it increased again in the last two years, returning to previous levels. This recent increase is unlikely to be related to contamination of ground beef, which remains at low levels, and may be related to contamination of fresh produce and other non-beef foods. In FY 2009, interagency dialogue will continue to increase development and application of effective prevention strategies for *E. coli* O157 in produce and other foods to decrease these rates in the future. Rates of infection with *Salmonella* have not changed significantly since 1996. This may reflect increasing *Salmonella* contamination in poultry and challenges related to fresh produce. In FY 2009, new interagency efforts in research and interventions to improve the effectiveness of food safety measures for *Salmonella* will continue.

OUTCOME TABLE

						FY 2007 Target				Out Year Target
Long-Term Objective 3.1: Reduce the incidence of infection of four key foodborne pathogens by 50%.										
3.1.1	By 2010, reduce the incidence of infection with four key foodborne pathogens by 50%. [O]									
	Campylobacter,	12.9	12.72 (exceeded)	16.10	12.71 (exceede d)	15.14	5/2008	14.20	13.25	N/A
	Escherichia coli 0157:H7	0.9	1.06 (exceeded)	1.30	1.31 (unmet)	1.22	5/2008	1.15	1.08	N/A
	Listeria monocytogenes,	0.27	0.30 (exceeded)	0.33	0.31 (exceede d)	0.31	5/2008	0.29	0.27	N/A
	Salmonella Species	14.7	14.55 (unmet)	8.90	14.81 (unmet)	8.39	5/2008	7.84	7.31	N/A

OUTPUT TABLE

						FY 2007			FY 2009 Target
3.B	Number of countries receiving PulseNet Trainings and Protocols	14	17	17	17	5	5	10	10
3.C	Number of Public Health Laboratories capable of accessing CaliciNet to detect viral diseases	34	40	42	45	46	46	47	47
3.D	Number of States and Territories reporting food-borne disease data to CDC electronically	54	54	54	54	54	54	54	54
Appropriated Amount (\$ Million) ¹		\$23.9	\$23.6	\$23.2		\$22.9			\$22.4

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

ALL OTHER: HANTA VIRUS/SPECIAL PATHOGENS, LYME DISEASE, CHRONIC FATIGUE SYNDROME, PRION DISEASE

				FY 2009 +/- FY 2008
Chronic Fatigue Syndrome (CFS)	\$4,834,000	\$4,750,000	\$4,728,000	-\$22,000
Prion Disease	\$5,349,000	\$5,256,000	\$5,232,000	-\$24,000
Hanta Virus/Special Pathogens	\$3,818,000	\$3,751,000	\$3,734,000	-\$17,000
Lyme Disease	\$5,364,000	\$5,270,000	\$5,246,000	-\$24,000
Total	\$19,365,000	\$19,027,000	\$18,940,000	-\$87,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317P, 317R, 317S, 319, 319E, 319F, 319G, 327, 352, 361-363, 1102, Immigration and Nationality Act §§ 212, 232

FY2009 Authorization..... Indefinite

Allocation MethodsDirect
Federal/Intramural, Contract, Competitive Grant/Cooperative Agreement

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC conducts basic and applied laboratory, epidemiology research, and outbreak response and provides technical assistance for the prevention, detection, and control of infectious diseases within the following programs.

Hantavirus/Special Pathogens

CDC is continuing surveillance and epidemiological studies on hantaviruses in the U.S. and globally. CDC provides reagents, technical advice, response teams, and epidemiological investigations in order to improve diagnostic and reagent capability for hantaviruses and other hemorrhagic fever viruses. Additionally, through its laboratory work, CDC has developed more sensitive assays for detection of these viruses. Research has been conducted to obtain the complete genome sequences of 13 Crimean Congo hemorrhagic fever virus strains, 40 Rift Valley fever virus strains, and 28 Marburg virus strains. These data documented the movement of these viruses over large distances and formed the basis for the development and validation of improved molecular detection assays that can more accurately and rapidly detect and diagnose pathogens.

- In 2007, CDC responded to outbreaks of Marburg hemorrhagic fever in Uganda and Ebola hemorrhagic fever in the Democratic Republic of the Congo (DRC) and Uganda. In addition to detecting and controlling human disease, CDC is continuing its investigation on the potential animal reservoir(s) for Ebola and Marburg viruses.
- CDC also responded to the Rift Valley fever virus outbreak in Kenya in early 2007 and coordinated detection, control and prevention efforts. CDC led the effort in establishing, equipping and training a Rift Valley fever veterinary diagnostic laboratory in Kabete, Kenya, and continues to provide scientific and reagent support for the operation of the laboratory. This work has translated into collaborations with USDA to establish Rift Valley fever diagnostics for U.S. animal health diagnosis.

CDC's Special Pathogens program first received direct funding in 1993 after the first recorded hantavirus outbreak in the U.S. The program provides technical assistance to other national and international organizational entities, participates in outbreak responses and conducts epidemiologic studies on the detection, prevention, and control of highly hazardous viral diseases. CDC also

provides primary isolation, identification, and characterization of highly hazardous disease agents that require biosafety level 3 or 4 laboratory conditions for their safe handling and has the ability to rapidly deploy a field diagnostic laboratory. The Special Pathogens program develops, evaluates, and improves treatment, prevention, and laboratory diagnosis of hazardous disease agents as well as methods for epidemiologic management of suspected cases.

Lyme Disease

CDC's Lyme Disease program formally began in 1989. Currently, CDC conducts national surveillance of Lyme disease, and multidisciplinary public health-oriented research aimed at developing effective disease prevention and control measures for vector-borne bacterial zoonoses, including Lyme disease. CDC's intramural Lyme disease program provides laboratory diagnostic reference consultation, technical assistance, outbreak response, and epidemiologic consultation, upon request, to state and local health departments, other components of CDC, federal agencies, and national and international health organizations.

In 2007, slightly more than half of CDC's budget for Lyme disease was awarded in extramural cooperative agreements with 10 institutions. These funds were used for a variety of projects aimed at identifying areas of increased Lyme disease risk, developing improved diagnostic tests, evaluating interventions for tick control and community-based prevention, and improving prevention education efforts. Collaboration with universities, industry, and public health partners is central in promoting sound disease prevention policies and practices for Lyme disease.

- In 2007, CDC initiated ongoing financial support for Lyme disease surveillance in 10 states (Connecticut, Delaware, Massachusetts, Maryland, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin) where the disease is highly endemic.
- CDC worked with State health departments and the Council of State and Territorial Epidemiologists to revise the national surveillance case definition for Lyme disease and worked with the Infectious Disease Society of America to develop a physician education program for Lyme disease diagnosis and treatment.
- CDC research has demonstrated that natural products from Alaska yellow cedar effectively repel and kill ticks that transmit Lyme disease, by research conducted through a cooperative agreement with the Connecticut Department of Public Health, which began in 2006. Studies have also been initiated on bio-friendly fungal preparations for use as a tick control agent.
- Through a cooperative agreement with the New Jersey Department of Health and Senior Services, CDC is conducting field trials of doxycycline-treated rodent bait boxes which have shown 100 percent efficacy in eliminating Lyme disease in the reservoir rodent population.

Prion Disease

Prion diseases, or transmissible spongiform encephalopathies, are a family of rare progressive neurodegenerative disorders that affect both humans and animals. Prion diseases are usually rapidly progressive and always fatal. CDC began this program shortly after the announcement by British health authorities in March 1996, of the emergence of what we now recognize as a new prion disease called variant Creutzfeldt-Jakob disease (vCJD) that has been etiologically linked to the ongoing international outbreak of bovine spongiform encephalopathy (BSE, commonly known as Mad Cow Disease). Through a competitive five year cooperative agreement awarded in FY 2007, CDC continues to support the National Prion Disease Pathology Surveillance Center (NPDPPSC) at Case Western Reserve University to provide diagnostic services for suspected cases of prion disease and to acquire tissue samples and clinical information from as many suspected cases of human prion disease occurring in the U.S. as possible. The resulting information is used to monitor the occurrence of prion disease in the U.S. and to investigate possible cases in which

the disease has been acquired from other humans or from animals. CDC is also collaborating with state health departments, clinicians, patient groups, and pathologists to try to further increase the number of persons with clinically diagnosed and suspected prion disease who undergo state-of-the-art neuropathologic study. A key purpose of these latter activities is to provide early warning of the emergence of any new human prion disease in the U.S., including vCJD and possibly a human form of the chronic wasting disease (CWD) found in deer, elk, and moose. As of mid 2007, CWD has been recognized among free ranging animals in eleven states. CDC is also continuing collaborative studies with:

- The Wyoming Department of Health and the Colorado Department of the Environment to monitor the incidence of prion disease among licensed hunters who may be exposed to CWD.
- The American Red Cross to determine the risk, if any, of transfusion transmission of the agents of the classic forms of CJD, the types of human prion disease endemic in the U.S. This activity has increased in importance because of recent reports from the United Kingdom that vCJD is readily transmitted through blood transfusions.
- The National Institutes of Health and the Food and Drug Administration to continue monitoring the risk of CJD among persons who received pituitary-derived human growth hormone through the National Hormone and Pituitary Program between 1963 and 1985.

Chronic Fatigue Syndrome

Chronic fatigue syndrome (CFS) is a debilitating and complex disorder characterized by profound fatigue that is not improved by bed rest and that may be worsened by physical or mental activity. CDC studies have estimated that between 4 and 7 million adults in the U.S. suffer from CFS. Only half have sought medical attention and fewer than 20 percent of those who suffer the illness have received medical care. CDC has been involved in chronic fatigue syndrome public health research since 1986, when the illness was first described. The current program objective is to reduce population morbidity associated with CFS through a five-pronged strategy: 1) surveillance to estimate prevalence and incidence and identify and evaluate risk factors; 2) in-hospital clinical studies to evaluate risk factors and identify biomarkers; 3) genetic studies; 4) modeling to tie together data from surveillance, clinical studies and laboratory measurements; and 5) education of health care providers and the public. Specific accomplishments include:

- Identifying and evaluating risk factors for CFS that can be used in prevention efforts. Stress over the lifespan is a pivotal risk factor for CFS. CDC has also identified possible involved areas of interactions between the hypothalamus, the pituitary gland, and the adrenal or suprarenal gland. CDC is beginning an in-hospital study through a contract at Emory University to test specific hypotheses.
- Characterizing the clinical characteristics of CFS through collaborative studies on the clinical course of CFS in provider practices.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$18,756,000
FY 2005	\$19,587,000
FY 2006	\$19,607,000
FY 2007	\$19,365,000
FY 2008	\$19,027,000

BUDGET REQUEST

Hanta virus/Special Pathogens

The CDC FY 2009 request includes \$3,734,000 for Hantavirus/Special Pathogens, a decrease of \$17,000 for an Individual Learning Account (ILA) and administrative reduction. The funds will support basic and applied laboratory and epidemiologic research conducted at CDC and with partner organizations, including research into the pathogenic mechanisms of hantaviruses and other hemorrhagic fever viruses to enable the development of sensitive and specific rapid assays for detecting viruses or evidence of their infection in humans and animal hosts. This will enhance CDC's ability to respond to outbreaks of these diseases domestically and globally. Funding will support CDC's response to outbreaks of special pathogens globally.

In FY 2009 and future years, key challenges related to the prevention, detection, and control of hantavirus and special pathogens include recruiting, training, and retaining a cadre of staff from multi-disciplinary backgrounds who are ready and able to respond to simultaneous outbreaks of hantavirus or hemorrhagic fever in multiple locations.

Lyme Disease

The CDC FY 2009 request includes \$5,246,000 for Lyme Disease, a decrease of \$24,000 for an Individual Learning Account (ILA) and administrative reduction. The overall goal is to develop a more sustainable and consistent surveillance system, improved diagnostic tests, and more effective prevention methods that ultimately will lead to a reduction in the number of Lyme disease cases. To achieve these goals, CDC will consolidate multiple cooperative agreements and will initiate some research contracts. The funds will support:

- Applied laboratory and epidemiologic research conducted at CDC and with partner organizations to enhance diagnostic and surveillance capabilities and conduct research aimed at advancing new methods for Lyme disease prevention.
- Field evaluation and industry collaboration aimed at licensing natural product insecticides for tick control, field evaluation of novel reservoir-targeted oral vaccines for Lyme disease, and the evaluation of antibiotic bait formulations for elimination of Lyme disease spirochetes in animal reservoirs.
- Research studies for determining the cause of Lyme disease like illness acquired in regions of the U.S. where the Lyme disease agent has not been detected in humans by culture or serology.

In FY 2009 and future years, key challenges related to the prevention, detection, and control of Lyme Disease include the current lack of a human vaccine for Lyme disease prevention, a simple and effective method for controlling tick vectors, and the expansion of deer populations in suburban areas and subsequent increasing exposure risks for Lyme disease in larger regions of the U.S.

Prion Disease

The CDC FY 2009 request includes \$5,232,000 for Prion Diseases, a decrease of \$22,000 for an Individual Learning Account (ILA) and administrative reduction. The funds will support:

- Basic and applied laboratory and epidemiologic research conducted at CDC and with partner organizations.
- Enhancement of surveillance for chronic wasting disease and to conduct research on improved diagnostic assays for human prion disease. This will result in better understanding of the impact of prion diseases and reduction of exposure risks.

In FY 2009 and future years, key challenges related to the prevention, detection, and control of prion diseases include continuing to monitor the potential introduction of prion diseases into the U.S. from animal sources and continuing to evaluate previously unrecognized routes of transmission of prion diseases.

Chronic Fatigue Syndrome

For FY 2009, CDC requests \$4,728,000 for Chronic Fatigue Syndrome to support basic and applied laboratory and epidemiologic research conducted at CDC and with partner organizations. Specifically, FY 2009 funds will support population-based surveillance and implementation of a patient registry-based on provider surveillance, enhanced provider education, and clinical research to clarify biomarkers and the pathophysiology of CFS. This will result in better understanding of the disease burden and economic impact of CFS, improved recognition of cases, and identification of targets for future interventions.

In FY 2009 and future years, key challenges related to the prevention, detection, and control of CFS include identifying incident cases to better understand the progression of CFS.

OUTPUT TABLE

						FY 2007			FY 2009 Target
3.E	Number of Research Programs Involved In Improving the Understanding of Lyme Disease by Examining New Methods for Testing, Prevention, and Control ¹	10	10	10	10	10	10	3	3
Appropriated Amount (\$ Million) ²		\$18.7	\$19.6	\$19.6		\$19.4		\$19.0	\$18.9

¹ To achieve its Lyme disease goals, CDC will be consolidating multiple cooperative agreements, and will be funding some research through contracts.

²The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PREPAREDNESS, DETECTION, AND CONTROL OF INFECTIOUS DISEASES

				FY 2009 +/- FY 2008
Antimicrobial Resistance	\$17,220,000	\$16,919,000	\$16,502,000	-\$417,000
Patient Safety	\$2,773,000	\$2,725,000	\$2,658,000	-\$67,000
All Other Emerging Infectious Diseases	\$132,598,000	\$130,281,000	\$103,683,000	-\$26,598,000
Total	\$152,591,000	\$149,925,000	\$122,843,000	-\$27,082,000

SUMMARY OF THE REQUEST

CDC protects populations domestically and internationally through leadership, partnerships, epidemiologic and laboratory studies, and the use of quality systems, standards, and practices. CDC, through the newly created National Center for Preparedness, Detection, and Control of Infectious Diseases, collaborates with national and global partners to conduct, coordinate, and support infectious disease surveillance, research, and prevention. By building capacity, CDC coordinates activities related to vulnerable populations, healthcare quality, quarantine, research, surveillance, emerging infectious diseases, and laboratory services. In addition, CDC programs lead the improvement of domestic and international laboratory practices in clinical and public health laboratories through a quality systems approach.

The CDC FY 2009 request includes \$122,843,000 for Preparedness, Detection, and Control of Infectious Diseases, a decrease of \$27,082,000 below the FY 2008 Enacted level, which includes a \$3,106,000 Individual Learning Account (ILA) and administrative reduction.

- \$16,502,000 for Antimicrobial Resistance to support activities related to monitoring antimicrobial use, health provider education, and reduce the spread of antimicrobial resistance in traditional healthcare settings like hospitals and elsewhere including long-term care facilities, outpatient surgery clinics, and other ambulatory care facilities.
- \$2,658,000 for Patient Safety to promote healthcare quality and patient safety and expand public health infection control and prevention programs with academic medical centers, federal, state, and local health agencies, and private sector consortia.
- \$103,683,000 for All Other Emerging Infectious Diseases, a decrease of \$26,598,000 (of which \$2,622,000 is for an ILA and administrative reduction) below the FY 2008 Enacted level, to support surveillance, epidemic investigations, epidemiological research, training, public education, communication with public health institutions locally and globally, and CDC's infectious disease laboratories.

These programs are not among the Infectious Disease programs subject to reauthorization.

ALL OTHER: ANTIMICROBIAL RESISTANCE & PATIENT SAFETY

				FY 2009 +/- FY 2008
Antimicrobial Resistance	\$17,220,000	\$16,919,000	\$16,502,000	-\$417,000
Patient Safety	\$2,773,000	\$2,725,000	\$2,658,000	-\$67,000
Total	\$19,993,000	\$19,644,000	\$19,160,000	-\$484,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 311, 317, 317G, 319, 319D, 322, 325, 327, 352, 361-369, 1222, 1182, Immigration and Nationality Act §§ 212, 232, Refugee Health Act §§ 412

FY 2009 Authorization.....Indefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grant/Cooperative Agreements

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Antimicrobial Resistance

CDC has supported antimicrobial resistance activities since 1996. CDC's antimicrobial resistance program comprises a multi-faceted approach, involving surveillance and epidemiologic and laboratory research to guide and inform prevention efforts; outbreak assistance in collaboration with state and local health departments to help identify additional risk factors and control measures; funding state health departments to help improve laboratory detection and monitoring of antimicrobial resistant infections; the development of "best practices" guidelines for healthcare facilities and workers; and collaborations with a wide range of public and private partners. Evaluating these activities, developing communication tools, and providing education for healthcare providers, patients, at-risk populations, and the public are also critical components of CDC's strategy to prevent antimicrobial resistance.

CDC's Antimicrobial Resistance activities support three of the HHS Secretary's goals: 1) reduce the major health threats to the health and well-being of Americans; 2) enhance the capacity and productivity of the Nation's health science research enterprise; and 3) improve the quality of health care services. CDC's Antimicrobial Resistance activities support two of CDC's goals: 1) People Prepared for Emerging Health Threats and 2) Healthy People in a Healthy World.

Get Smart

Since 2000, funding and technical assistance has been provided to states to develop, implement, and evaluate local campaigns promoting appropriate antibiotic use.

- CDC's public health campaign "Get Smart: Know When Antibiotics Work" involves an alliance of partners working to reduce inappropriate antibiotic use and reduce the spread of resistance to antibiotics in the community for upper respiratory infections (see <http://www.cdc.gov/drugresistance/community/> for more information). Today, more than 85 campaign partners and 17 funded state-based programs collaborate with the "Get Smart" campaign on projects, such as developing educational curricula for medical students and residents, delivering multicultural outreach, developing guidelines for appropriate antibiotic use, monitoring antibiotic utilization, widely disseminating educational materials and media campaign resources, and implementing innovative community initiatives. States are funded through the Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement (ELC) to develop, implement, and evaluate local campaigns, developing and

testing new campaign messages and materials regarding patient safety for the general public and antibiotic choice for providers, and forming new partnerships to address changing trends in health care (such as retail clinics, free and low-cost antibiotic programs at chain pharmacies, employer-based health clinics).

- In 2004, a new program emerged from the “Get Smart” campaign. Get Smart: Know When Antibiotics Work on the Farm, a program commonly referred to as Get Smart on the Farm, works to promote appropriate antibiotic use in veterinary medicine and animal agriculture (see http://www.cdc.gov/narms/get_smart.htm for more information). CDC works with human health professionals, food animal producers, animal owners, and the general public, to support the development of curricula for veterinary students that will educate future veterinarians on the appropriate use of antimicrobial agents in animals to help mitigate the development and spread of resistance in human, animal, and zoonotic pathogens and other bacteria. In collaboration with FDA’s Center for Veterinary Medicine, CDC conducted surveillance of retail meat to determine the prevalence and type of antimicrobial resistance among the enteric bacteria found on retail meat purchased at grocery stores.

Active Bacterial Core Surveillance

CDC’s Emerging Infections Program’s (EIP) Active Bacterial Core surveillance (ABCs) provides accurate, detailed estimates of serious infections that afflict persons of all ages in the U.S. ABCs is an active, laboratory and population-based surveillance system for invasive bacterial infections (see <http://www.cdc.gov/ncidod/dbmd/abcs/> for more information). Current pathogens under surveillance include *Streptococcus pneumoniae*, groups A and B streptococcus (GAS and GBS), *Neisseria meningitidis*, *Haemophilus influenzae*, and methicillin-resistant *Staphylococcus aureus* (MRSA). ABCs is conducted in 10 EIP sites; the population under surveillance varies by pathogen and ranges from 15 to 39 million persons under surveillance.

CDC uses the ABC Surveillance system to monitor invasive MRSA infections and is working to prevent MRSA infections through adoption of evidence-based prevention strategies. CDC provides technical support and resources to MRSA prevention partners including the Centers for Medicare and Medicaid Services (CMS), the Institute for Healthcare Improvement (IHI), the Veterans Administration (VA), and the Pittsburgh Regional Health Initiative.

- Since 2000, CDC has conducted the Pittsburgh Regional Health Initiative with Hospitals in Southwestern Pennsylvania to prevent healthcare-associated infections. Following a successful collaboration that resulted in a 70 percent reduction in catheter-associated bloodstream infections, the region is now building a similar collaborative effort to implement and evaluate a multi-faceted strategy for prevention of MRSA in healthcare settings. Demonstration projects in two Pittsburgh hospitals have resulted in a greater than 50 percent reduction in healthcare-associated MRSA infection rates over the last three years.
- ABCs assessed the impact of revised guidelines for prevention of neonatal group B streptococcal disease, the leading cause of life threatening infections in newborns. Surveillance data showed a 33% overall reduction in newborns to rates of 0.3 per 1000 live births, which met the Healthy People 2010 goal. Because additional analyses indicated that disease remained more common among black infants, CDC designed and implemented studies to determine the cause for this health disparity.

Through GPRA/PART and HP2010 measures, CDC has documented dramatic reductions in the number of antibiotics prescribed for ear infections in children under age five. Greater resistance among many of the pathogens that cause ear infections has fueled an increase in the use of broader-spectrum and generally more expensive antibacterial agents.

Other Activities to Combat Resistance

- CDC co-chairs the U.S. Interagency Task Force on Antimicrobial Resistance, which developed “A Public Health Action Plan to Combat Antimicrobial Resistance Part I: Domestic Issues” to focus federal efforts on the problem of antimicrobial resistance. The Task Force’s sixth annual report was released in 2007 (see <http://www.cdc.gov/drugresistance/actionplan/index.htm> for more information).
- CDC’s Extramural Grant Program in Applied Research on Antimicrobial Resistance has awarded more than \$14 million to date to help combat the growing issues of resistance. Examples of outcomes from this program include: 1) development of new interpretive criteria for pathogens of public health importance; 2) characterization of MRSA strains using a variety of molecular and biochemical techniques; and 3) calculations of economic costs of infections that are resistant to one or more antimicrobial agents compared with infections that are susceptible to those agents.
- CDC’s Campaign to Prevent Antimicrobial Resistance aims to prevent antimicrobial resistance in healthcare settings (see <http://www.cdc.gov/drugresistance/healthcare/default.htm> for more information). The campaign centers on four main strategies: prevent infection, diagnose and treat infection, use antimicrobials wisely, and prevent transmission. Multiple 12-step programs are being developed targeting clinicians who treat populations including hospitalized adults, dialysis patients, hospitalized children, and long-term care patients. Educational tools and materials are being developed for each population.
- CDC monitors changes in antimicrobial resistance of enteric bacteria over time to determine the burden of resistant disease and to develop interventions to reduce the burden of illness through the National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS), a collaborative effort among CDC, all 50 state health departments, and FDA’s Center for Veterinary Medicine (see <http://www.cdc.gov/narms/> for more information).

Patient Safety

CDC’s patient safety program aims to prevent healthcare-associated infections which in hospitals are among the most common adverse events in healthcare. CDC estimates that approximately 1.7 million healthcare-associated infections, with 99,000 associated deaths, occur each year in U.S. hospitals. Medical errors and other preventable adverse events have been estimated to cost \$29.0 billion in direct healthcare expenditures annually. In response, CDC has expanded public health infection control and prevention programs with academic medical centers, federal, state, and local health agencies, and private sector consortia. Increasing adherence to CDC recommended practices to prevent infections, recognizing excellence in healthcare facilities that adhere to recommended practices, and providing public data on healthcare facility performance for consumers, healthcare professionals, and policy makers are critical pillars of a successful national effort to eliminate healthcare-associated infections including MRSA infections.

National Healthcare Safety Network

The National Healthcare Safety Network (NHSN) is an important tool to improve patient safety in the U.S. and is used for public reporting of healthcare-associated infections (see <http://www.cdc.gov/ncidod/dhqp/nhsn.html> for more information). Through this network, CDC monitors infections, antimicrobial resistance, and other adverse events in hospitals around the country. NHSN assists states that are considering legislation to mandate public disclosure of healthcare-associated infections data. This guidance has been critical in supporting state efforts to implement evidence based best practices regarding reporting. Currently, 40 states have passed or are considering legislation to require public reporting.

- In FY 2007, CDC expanded the NHSN to 1,000 sites in 46 states including 7 states with mandatory reporting using NHSN (California, Colorado, Connecticut, New York, South Carolina, Tennessee, and Vermont).
- CDC has expanded the ability of NHSN to accept electronic data from healthcare information systems and laboratory information systems by initiating pilot projects to develop standards and protocols for electronic reporting of bloodstream infections and microbiology data.
- Through its PART measures, CDC has documented reductions in the rate of central line associated bloodstream infections in medical/surgical ICU patients. In 2006, results from the NHSN reported a rate of 2.2 infections per 1000 central line-days which exceeded its target of 3.62 infections per 1000 central line-days.

Outbreak Response

Outbreak investigations are an important component of CDC's patient safety program and have alerted public health authorities about nation-wide threats to patient safety and prevented additional patient morbidity and mortality. CDC investigates outbreaks of adverse events in patients resulting from contaminated and defective medical devices or from contaminated medications that increase the patient's risk of infections or other adverse effects. A large investigation has led to the discovery of a new, highly virulent strain of *Clostridium difficile* that is causing considerable morbidity and mortality in healthcare facilities across the country and around the world. By alerting public health authorities to the danger posed by this strain and educating members of the healthcare community about how best to control its spread, future infections have been prevented, lives saved, and excess healthcare costs averted.

NEISS-CADES

CDC supports and coordinates the National Electronic Injury Surveillance System – Cooperative Adverse Drug Event Surveillance (NEISS-CADES) project that provides timely, detailed, and nationally representative data on the problem of serious adverse drug events (ADEs) from medications used in non-hospital settings. CDC also supports activities to determine the burden of ADEs that result in emergency department visits. CDC scientific contributions fill a unique niche and data gap and have been done in collaboration with FDA and the Consumer Protection Agency.

- CDC produced the first detailed national estimates ADEs treated in hospital emergency departments showing that over 700,000 individuals are treated in emergency departments for ADEs each year. Findings have helped identify high risk patient groups, medications, and circumstances so that safety efforts can be focused to provide the greatest benefit to the greatest number of Americans at reasonable cost.
- Data have been critical in moving prevention efforts forward with particular impact on cough and cold medicine use in children, anticoagulant use in the elderly, and insulin use in people with Diabetes mellitus.

Other Patient Safety activities include the following.

- CDC supports and manages the Prevention Epicenter Program cooperative agreement, working directly with the Epicenter investigators to coordinate and supervise a wide range of scientific project activities to detect and prevent healthcare-associated infections. Through the research conducted by the Epicenter Program, CDC demonstrated the impact of daily chlorhexidine baths among ICU patients to decrease MRSA and vancomycin-resistant enterococci (VRE) transmission.

- CDC builds sustainable infrastructure through long-term projects with front-line providers of healthcare to implement CDC guidelines and recommendations with new partners such as the Institute for Healthcare Improvement, Voluntary Hospital Association, Inc. and the American Medical Association to address adherence to hand hygiene guidelines, prevention of healthcare-associated infections, prevention and control of MRSA, and appropriate antimicrobial use in healthcare settings.
- CDC develops and disseminates national guidelines for prevention of healthcare-associated infections and antimicrobial resistance in conjunction with the federal Healthcare Infection Control Practices Advisory Committee (HICPAC). In 2006, CDC and HICPAC released guidelines for the Management of Multidrug-Resistant Organisms in Healthcare Settings (which includes MRSA), and in 2007, CDC published Guidelines for Isolation Precautions.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$20,852,000
FY 2005	\$20,675,000
FY 2006	\$20,252,000
FY 2007	\$19,993,000
FY 2008	\$19,644,000

BUDGET REQUEST

Antimicrobial Resistance

CDC's FY 2009 request includes \$16,502,000 for Antimicrobial Resistance, a decrease of \$417,000 for an Individual Learning Account (ILA) and administrative reduction. These funds will support CDC's investigation, research and response to antimicrobial resistant diseases including laboratory surveillance, epidemic aid and consultation on events that are naturally occurring, and the Get Smart campaigns. All program plan dollars are allocated to discrete projects, cooperative agreements, grants, or interagency agreements. Projects have measurable goals and are objectively reviewed every year by stakeholder representatives. Specifically, the funding will support:

- Activities to reduce the spread of antimicrobial resistance. This is accomplished through (1) improved monitoring of drug resistance and antimicrobial use; (2) improving prescription practices by healthcare providers and educating the public about health problems associated with inappropriate use of antimicrobial agents; and (3) improved infection control practices to prevent the transmission of drug-resistant infections in traditional healthcare settings like hospitals and elsewhere including long-term care facilities, outpatient surgery clinics and other ambulatory care facilities.
- The Pittsburgh Regional Health Initiative with Hospitals in Southwestern Pennsylvania to prevent healthcare-associated infections. The region will continue to build collaborative efforts to implement and evaluate a multi-faceted strategy for prevention of MRSA in healthcare settings. The initial successes of the MRSA interventions in southwestern Pennsylvania have lead to other National MRSA Prevention Initiatives, including the U.S. Department of Veterans Affairs Healthcare System, regional hospital groups in Pennsylvania and Maryland, increasing the number of hospitals demonstrating successful prevention of MRSA infections.
- The Active Bacterial Core surveillance (ABCs) program. ABCs pneumococcal data describing changes in serotype distributions will continue to be used to determine which

pneumococcal serotypes will be included in new vaccine formulations. Recent emergence of a new multidrug resistant strain of pneumococcus, that is not covered by the pediatric vaccine, has heightened the importance of sustaining appropriate antibiotic use programs as well as development of next generation vaccines.

- The development of appropriate antibiotic use measures for The National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS is used by more than 90 percent of America's health plans to measure performance on the important dimensions of care and service. These measures should further institutionalize appropriate antibiotic use with health care systems.

Patient Safety

CDC's FY 2009 request includes \$2,658,000 for Patient Safety, a decrease of \$67,000 for an Individual Learning Account (ILA) and administrative reduction. These funds will support activities to prevent healthcare associated infections, including the following:

- Laboratory training and proficiency testing programs with educational critiques for clinical microbiology laboratories in the U.S. and internationally (via the World Health Organization) to improve the accuracy of antimicrobial resistance detection and reporting and thus improve patient care.
- CDC's leadership role for HHS to develop a strong plan for fast action on eliminating MRSA infections in healthcare as a healthcare value priority. CDC is working with other HHS Operating Divisions for this initiative, including CMS and AHRQ. CDC's activities will include developing standardized case definitions utilizing electronic healthcare data, measurement tools, and reporting; providing an evidence base for effective prevention and control interventions; streamlining and automating reporting; and validation and technical monitoring.
- The implementation of the Hospital Acquired Conditions provision of the 2007 Inpatient Prospective Payment System provisions outlined by the Medicare program and CDC staff who actively work with CMS to determine and define conditions for implementation. CDC has provided technical support for the selection of Hospital Acquired Conditions and will assist CMS in the evaluation of the impact of the program on improving the adherence of US hospitals to HHS infection control guidelines that prevent hospital acquired conditions and reduce Medicare costs.
- National Healthcare Safety Network (NHSN) activities. In FY 2009, CDC anticipates demand for NHSN alone to exceed 2000 hospitals. NHSN currently serves 1000 healthcare facilities in 46 states, which is already substantially expanded from 2006, when there were fewer than 300 participating hospitals. The rapid expansion of NHSN to meet state needs for mandated public reporting of healthcare-associated infections will continue in 2009 with the addition of all hospitals in 13 states requiring NHSN including large states such as, California, Illinois, and Pennsylvania. CDC is expanding training for hospitals and states, web based instructional resources (i.e., webcasts), analytic and statistical staff, and user support including a state user's group. In addition to hospital-associated infections, NHSN is being expanded rapidly to also accommodate needs for reporting from long term care facilities, ambulatory facilities and small rural hospitals.

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
PREPAREDNESS, DETECTION, AND CONTROL OF INFECTIOUS DISEASES

OUTCOME TABLE

						FY 2007				Out- Year Target 2010
Long-Term Objective 4.1: Reduce the spread of antimicrobial resistance.										
4.1.1	Decrease the number of courses of antibiotics prescribed for ear infections in children under 5 years of age.	N/A	50	60	2/2008*	60	2/2009*	57	55	50
Long-Term Objective 2: Protect Americans from death and serious harm caused by medical errors and preventable complications of healthcare.										
4.1.2	Reduce the rate of central line associated bloodstream infections in medical/surgical ICU patients	3.7	Data not available*	3.58	2.2	3.54	5/2008	3.54	3.54	N/A

* The reporting date for results for this performance measure has been changed to February 2008 due to a delay in data results. Subsequent dates for reporting have been changed accordingly.

** The National Nosocomial Infections Surveillance (NNIS) System transitioned to the National Healthcare Safety Network (NHSN) during 2005 and the web-enabled reporting tool was not available until late that year. Specific reporting problems and lack of reporting capability lead to significant under-reporting during that year. Therefore, no results are listed for 2005. These problems were resolved and 2006 data are accurate.

OUTPUT TABLE

						FY 2007				Out- Year Target
4.A	Number of state/local health departments, health care systems funded for surveillance, prevention, control of antimicrobial resistance	N/A	N/A	49	49	49	49	48	48	N/A
4.B	Number of sites in the National Healthcare Safety Network to report health care based reporting of adverse health events and errors	N/A	N/A	385	385	1,000	1,000	1,000	2,000	N/A
	Appropriated Amount (\$ Million) ¹	\$20.9	\$20.7	\$20.3		\$20.0		\$19.6	\$19.2	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

EMERGING INFECTIOUS DISEASES

				FY 2009 +/- FY 2008
BA	\$132,598,000	\$130,281,000	\$103,683,000	-\$26,598,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 311, 317, 317G, 319, 319D, 322, 325, 327, 352, 361-369, 1222, 1182, Immigration and Nationality Act §§ 212, 232, Refugee Health Act §§ 412

FY2009 Authorization..... Indefinite

Allocation MethodsDirect
Federal/Intramural; Contract; Competitive Grant/Cooperative Agreement.

PROGRAM DESCRIPTION

In 1994, in an effort to protect the public from the potential devastating spread of emerging infectious diseases, Congress began appropriating funds to CDC to revitalize U.S. capacity to protect the public from infectious disease threats. The threat from emerging infectious diseases is real and unpredictable. Although some diseases have been conquered by modern advances, such as antibiotics and vaccines, new ones are constantly emerging (such as SARS, monkeypox, and West Nile virus), while others re-emerge in drug-resistant forms (such as MRSA in healthcare settings and communities, malaria, and tuberculosis). Deaths from infectious illnesses in the U.S. average approximately 170,000 per year. The ability of pathogens to mutate and spread into previously unknown habitats means that the toll could increase significantly.

The Epidemiology and Laboratory Capacity (ELC) program for infectious diseases supports state and local health departments to improve their ability to detect and control infectious disease outbreaks. It provides funds through cooperative agreements and technical assistance to all 50 states, six large local health departments (Chicago, Houston, Los Angeles County, New York City, Philadelphia, and Washington DC) and two territories (Palau and Puerto Rico).

The Emerging Infections Program (EIP) is a national resource of assessing the public health impact of emerging infections and evaluating methods for their prevention and control. EIPs are funded in California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New Mexico, New York, Oregon, Tennessee, and Texas. EIP funds a broad range of activities – such as surveillance, health communication, outbreak response, and research – that build and enhance national, state, and local public health capacity to rapidly detect and effectively respond to infectious disease outbreaks. The program supports CDC laboratories, research grants to academic and other partners, and cooperative agreements to build capacity in state and local health departments.

Surveillance

- As of FY 2005, 40,846 diagnostic tests have been performed through the Border Infectious Disease Surveillance project, part of the Emerging Infections Sentinel Network (EISN), enabling researchers to determine the incidence of and risk factors for hepatitis A, incidence of measles, rubella, and febrile exanthema syndromes along the border and within Mexico's border cities.
- After years of collaborative work and successful partnerships, CDC announced the elimination of dog-to-dog transmission of the canine rabies virus in the U.S. It is important to note that rabies still persists among wildlife and can infect domestic animals and humans.

- The Gonococcal Isolate Surveillance Project, in collaboration with the National Institutes of Health, developed a clinical trial to investigate the effectiveness of currently available drugs/drug combinations for treating gonorrhea and fostered collaboration with the World Health Organization (WHO) to better monitor the emergence of antibiotic resistant gonorrhea internationally.
- CDC supported enhanced hepatitis B surveillance activities in seven local health departments to monitor the health impact of new vaccination strategies, identify missed opportunities, and move towards the elimination of hepatitis B.

Health Communications

- CDC supported the *Emerging Infectious Diseases (EID)* journal which represents the scientific communication component of CDC's efforts to address emerging infections. According to the Institute of Scientific Information's impact factor rankings, EID consistently ranked in the top 5 out of 47 journals in the infectious disease category each year from 2001 to 2006.
- In 2006, the public visited CDC's Traveler's Health website 5.4 million times; 130 Travel Notices were posted to alert travelers of risks to human health and precautions to prevent travel-related illness; and CDC's Travelers' Health Team responded to more than 3,400 public inquiries.
- CDC published the 2007-2008 editions of the CDC Health Information for International Travel (The Yellow Book <http://wwwn.cdc.gov/travel/contentYellowBook.aspx>) in May 2007 through an innovative public-private partnership. The new version published includes new and enhanced chapters on avian influenza and the threat of pandemic influenza, skin and soft tissue infections, and deep vein thrombosis/pulmonary embolism, health risks for humanitarian workers and the differing responsibilities that the clinician, traveler, and travel industry each have in providing and obtaining the best information on health risks abroad.
- CDC raised awareness and created a risk communication plan for the general public about *Naegleria fowleri* brain infections acquired during lake swimming, which caused the death of six young people in 2007 and raised intense media and public questions about the safety of swimming in lakes in southern tier states. Infections with this amoeba are almost 100% fatal.

Outbreak Response

- CDC has responded to approximately 30 outbreaks of infectious disease that affected over 90,000 individuals among U.S.-bound refugee populations since 2004.
- CDC has conducted Guinea worm disease (GWD) case searches and surveillance assessments as part of the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis in five countries (Mauritania, Benin, Sierra Leone, Liberia, and Nigeria). Guinea worm disease cases in 2006 were below 20,000, down from over two million cases in the 1980s.
- CDC assisted local health authorities in response to an urban plague epizootic outbreak involving wild and zoo animals in Denver, Colorado, a human tularemia outbreak in Utah, and a human plague death in the Grand Canyon.
- CDC coordinated investigations of cyclosporiasis (an infection of the small intestines caused by *Cyclospora*, a parasite) in residents of 17 U.S. states and one Canadian province in FY 2006. Data from these investigations influenced federal regulatory policies, including new FDA alerts in FY 2006 for two imported produce cars. No U.S. outbreaks were documented

in FY 2007, which could reflect outbreak prevention because of regulatory/corrective actions or conversely, the lack of tools to link sporadic cases.

- CDC initiated an outbreak case-control investigation in March 2007 with health departments in 37 states and Puerto Rico that included 158 culture-confirmed patients with Acanthamoeba keratitis, a rare but potentially blinding infection of the cornea primarily affecting contact lens users. The investigation led to a company recall of implicated contact lens solution from the international market. CDC continues to test the disinfection efficacy of contact lens solutions against Acanthamoeba.
- CDC worked with the Council of State and Territorial Epidemiologists to improve detection and reporting of travel-related Legionnaires' disease through TALUS (Travel-associated Legionellosis Surveillance in the United States), a state-based passive surveillance system. To improve reporting, CDC has dedicated an email address for states to report cases directly without having to rely on mailing the case report form. In 2006, the enhanced CDC system detected 197 travel-associated cases and 16 clusters of travel-associated Legionnaires' disease. CDC worked with partners in the U.S. and overseas to investigate and control sources of disease for these clusters.
- In FY 2007, in collaboration with the Association of Public Health Laboratories, CDC created and pilot tested consensus performance standards for public health laboratory systems aimed at establishing performance measures for state laboratory networks and improving public-private laboratory connectivity.

Research

- CDC's Arctic Investigations Program documented the emergence of invasive *Streptococcus pneumoniae* infections among Alaska Native children due to types not covered by the PCV7 vaccine. The increased disease rates have eroded the gains from PCV7 use and likely indicate a limitation to the utility of the existing vaccine. CDC is collaborating with FDA and industry to expedite and evaluate alternative vaccine schedules and new expanded vaccines to cover the emergent disease.
- CDC upgraded drug susceptibility testing and genotyping laboratory equipment, greatly enhancing CDC's capacity to detect outbreaks and initiated a trial of a new drug regimen for patients with Multi-drug Resistant Tuberculosis.
- CDC developed new diagnostic assays for both well-recognized and newly identified respiratory viruses, including new human coronaviruses, human bocavirus, parechoviruses, and other picornaviruses human metapneumoviruses, and an adenovirus (Adenovirus 14) which caused a large outbreak of severe respiratory illness in military recruits and the community in 2007. These assays have been applied to outbreaks and epidemiologic studies to better understand disease associated with these novel pathogens. CDC helped train Thai scientists to perform these new molecular assays and improved surveillance efforts, enabling rapid identification of new pathogens during outbreaks – an essential component in monitoring for pandemic influenza.
- CDC developed humanized monoclonal antibodies specific for Venezuelan equine encephalitis virus (VEEV) to be used in diagnosis, prophylaxis, and therapy of human VEEV infections. Currently there are no approaches to prevent or cure VEEV infection.
- CDC developed new live-attenuated vaccines for dengue viruses and entered into a Cooperative Research and Development Agreement with InViragen, LLC for preclinical and clinical human vaccine trials. Currently there are no approved dengue virus vaccines.

- CDC led the public health response to a newly approved blood donation screening testing in the U.S. for serological evidence of infection with *Trypanosoma cruzi*, the parasite that causes Chagas disease by (1) issuing clinical management guidelines for those who test positive; (2) providing anti-parasitic drugs to patients who test positive (these drugs are only available through an Investigational New Drug protocol through CDC); (3) providing laboratory testing to deferred blood donors and other patients to guide clinical management; and (4) providing health communication and health educational materials to the public, clinicians, state health departments, and industry since there is little expertise in the U.S. related to Chagas disease.
- CDC consulted on 29 outbreaks of cryptosporidiosis in 2007. Since 2004, there has been a 130 percent increase in case reports and a six-fold increase in outbreaks of cryptosporidiosis that has sickened thousands of individuals and taxed the capacity of health departments to address the problem. Most of these outbreaks have been associated with use of swimming pools, which are now more vulnerable to the emergence of *Cryptosporidium*, a chlorine-resistant pathogen. This increase has prompted further investigation into the reasons for the increase, possible prevention measures, and laboratory methods needed for further investigations.
- CDC demonstrated early phase transmission of *Yersinia pestis*, the bacterium that causes plague, by several important flea species, explaining the rapid spread of plague during human epidemics and rodent epizootics.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$101,809,000
FY 2005	\$99,152,000
FY 2006	\$104,116,000
FY 2007	\$132,598,000
FY 2008	\$130,281,000

BUDGET REQUEST

CDC's FY 2009 request includes \$103,683,000 for All Other Emerging Infectious Diseases, a decrease of \$26,598,000 below the FY 2008 Enacted level, which includes \$2,622,000 reduction for ILA and administrative costs. Microbial threats to health are constantly emerging and evolving. Because it is not possible to know what new diseases will arise, the key challenge is to always be prepared for the unexpected. The world looks to CDC to rapidly detect and identify emerging pathogens and diseases, work that requires highly specialized laboratory personnel, tools, and infrastructure.

In FY 2009, CDC will supply state public health laboratories with critical reagents for a wide variety of laboratory tests and proficiency testing materials to ensure the laboratory test are being properly done. Without this assistance, state laboratories would not be able to provide confirmation of a disease that poses a public health threat from a more routine disease. By developing diagnostic tools to detect new and unknown respiratory pathogens and using these tools during outbreak investigations and in epidemiologic research, CDC will continue to build and enhance the nation's public health response capacity.

Funding will continue to support efforts that contribute to national, state, and local public health capacity to rapidly detect and effectively respond to infectious disease outbreaks including:

- Supporting the ELC and EIP programs for infectious diseases.
- Conducting epidemiological studies and developing cutting-edge laboratory tools for rapidly detecting new and re-emerging infectious diseases, serving as the national and international reference laboratories for emerging novel or unusual bacterial pathogens and respiratory viruses, enteroviruses, gastroenteroviruses, and other viral pathogens.
- Working to reduce water-borne diseases by (1) optimization of processing and extraction methods for detecting pathogens in environmental samples (such as water samples); (2) developing standardized national molecular typing methods for waterborne parasites (such as *Cryptosporidium*); (3) establishing CryptoNet, a system of standardized detection and comparison of *Cryptosporidium* isolates around the world; and (4) developing molecular typing methods for free-living amoeba (such as *Acanthamoeba*, *Naegleria*).
- Developing a comprehensive electronic disease notification system to communicate with both national and international partners about diseases and disease outbreaks occurring among mobile populations such as immigrants and refugees entering the United States.
- Implementing the new “Technical Instructions for Tuberculosis Screening and Treatment” in priority countries as determined by immigration patterns and tuberculosis burden which will improve immigrant and refugee health, prevent importation of tuberculosis into the U.S., and contribute to global tuberculosis control efforts.
- Providing leadership for the Arctic Health Initiative which will bring visibility and focus to the unique and changing health priorities of the Arctic regions.
- Supporting agency-wide collaboration on health disparities and research on the identification, prevention, and control of emerging infectious disease disparities.
- Working with partners to develop an enhanced communication and collaboration network among public health and clinical laboratories for emergency preparedness and public health surveillance. Activities will include: (1) development of the Laboratory Outreach and Communication System; (2) promotion of and improved utility and reliability of the National Laboratory Database; and (3) writing and promotion of national guidelines for best laboratory practices.
- Continuing CDC’s Model Performance Evaluation Program which provides healthcare facilities with testing samples that mimic patient specimens to test for HIV (both by traditional and rapid testing methods) and *Mycobacterium tuberculosis* drug susceptibility, in addition to periodic laboratory practice questionnaires. Approximately 1089 domestic and 244 international laboratories in 97 countries are enrolled, including 149 laboratories in PEPFAR (the President’s Emergency Plan for AIDS Relief) countries.

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES
PREPAREDNESS, DETECTION, AND CONTROL OF INFECTIOUS DISEASES

OUTPUT TABLE

						FY 2007				Out-Year Target
4.C	Number of domestic/global surveillance networks for emerging infectious diseases.	N/A	5	5	5	5	5	5	5	N/A
4.D	Number of EIP network sites	N/A	11	11	11	11	11	10	10	N/A
4.E	Number of grants for infectious disease research to academic institutions and stations	N/A	40	40	40	40	40	40	40	N/A
	Appropriated Amount (\$ Million)¹	\$101.8	\$99.2	\$104.1		\$132.6		\$130.3	\$103.7	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS EPIDEMIOLOGY AND LABORATORY CAPACITY FOR INFECTIOUS DISEASES (ELC)	
	FY 2007 Actual
Alabama	\$960,655
Alaska	\$604,696
Arizona	\$1,012,964
Arkansas	\$772,684
California	\$2,989,425
Colorado	\$1,280,828
Connecticut	\$578,239
Delaware	\$749,783
District of Columbia	\$446,889
Florida	\$847,964
Georgia	\$973,753
Hawaii	\$663,311
Idaho	\$631,653
Illinois	\$773,079
Indiana	\$594,096
Iowa	\$1,197,997
Kansas	\$654,597
Kentucky	\$434,201
Louisiana	\$2,941,747
Maine	\$792,201
Maryland	\$780,760
Massachusetts	\$1,131,323
Michigan	\$1,358,904
Minnesota	\$1,064,492
Mississippi	\$2,720,611
Missouri	\$1,024,622
Montana	\$618,545
Nebraska	\$1,113,807
Nevada	\$747,328
New Hampshire	\$854,913
New Jersey	\$1,113,987

NARRATIVE BY ACTIVITY
INFECTIOUS DISEASES

PREPAREDNESS, DETECTION, AND CONTROL OF INFECTIOUS DISEASES

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS EPIDEMIOLOGY AND LABORATORY CAPACITY FOR INFECTIOUS DISEASES (ELC)	
	FY 2007 Actual
New Mexico	\$615,182
New York	\$1,246,348
North Carolina	\$750,093
North Dakota	\$791,425
Ohio	\$1,199,772
Oklahoma	\$562,029
Oregon	\$782,362
Pennsylvania	\$1,029,056
Rhode Island	\$813,833
South Carolina	\$877,355
South Dakota	\$725,474
Tennessee	\$861,451
Texas	\$2,169,821
Utah	\$955,770
	\$0
Vermont	\$803,265
Virginia	\$1,117,530
Washington	\$1,039,231
West Virginia	\$984,918
Wisconsin	\$923,741
Wyoming	\$868,381
Chicago	\$612,345
Houston	\$894,641
Los Angeles County	\$584,657
New York City	\$1,458,538
Philadelphia	\$561,201
Washington DC	\$444,889
Palau	\$79,514
Puerto Rico	\$248,339
	\$55,986,326

HEALTH PROMOTION

				FY 2009 +/- FY 2008
BA	\$947,004,001	\$961,193,001	\$932,073,001	-\$29,120,000
FTE	1,023	1,065	1,049	-16

SUMMARY OF BUDGET REQUEST

CDC's Health Promotion activities support critical efforts particularly related to wellness, chronic disease prevention, genomics and population health, disabilities, birth defects and other reproductive outcomes, and adverse consequences of hereditary conditions. The specific budget categories within Health Promotion budget activity are: 1) Chronic Disease Prevention, Health Promotion, and Genomics and Disease Prevention and 2) Birth Defects, Developmental Disabilities, Disability and Health activities.

The CDC FY 2009 request includes \$932,073,000 for Health Promotion, a decrease of \$29,120,000 below the FY 2008 Enacted level, which includes a \$3,925,000 Individual Learning Account (ILA) and administrative reduction

- \$805,321,000 for Chronic Disease Prevention and Health Promotion program, which reflects a decrease of \$28,506,000 below the FY 2008 Enacted level. These funds are used to prevent and delay onset of chronic disease by enhancing potential for a full, satisfying, and productive living across the lifespan for people in all communities. Activities include prevention and management of heart disease and stroke, obesity and overweight, and cancer; promotion of maternal, infant, and adolescent health, healthy personal behaviors, and integrating genomics into public health research and programs. Chronic diseases are among the most prevalent, costly, and preventable of all health problems.
- \$126,752,000 for Birth Defects, Developmental Disability, and Disability and Health, a decrease of \$614,000 below the FY 2008 Enacted level. Funds for this activity are used to identify the causes of birth defects and developmental disabilities, helping children to develop and reach their full potential, and promoting health and well-being among people of all ages with and without disabilities.

The coordination of activities in the Health Promotion budget activity will assure the efficient interaction among its component programs and other CDC programs on cross-cutting health issues. For example, CDC's support of the Surgeon General's Family History Initiative draws on the expertise of chronic disease, genomics, and birth defects and promotes the health of the public through each of these areas. All activities within the Health Promotion budget activity work together to foster cross-cutting health promotion programs and enhance the potential for full, productive living.

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

				FY 2009 +/- FY 2008
Heart Disease and Stroke	\$43,562,000	\$50,101,000	\$48,838,000	-\$1,263,000
Diabetes	\$61,831,000	\$62,711,000	\$62,454,000	-\$257,000
Cancer Prevention and Control	\$301,434,000	\$309,486,000	\$301,773,000	-\$7,713,000
Arthritis and Other Chronic Diseases	\$21,661,000	\$23,915,000	\$23,817,000	-\$98,000
Tobacco	\$102,016,000	\$104,164,000	\$103,737,000	-\$427,000
Nutrition, Physical Activity, and Obesity	\$40,590,000	\$42,191,000	\$42,018,000	-\$173,000
Health Promotion	\$26,820,000	\$28,977,000	\$24,210,000	-\$4,767,000
School Health	\$54,789,001	\$54,323,001	\$53,612,001	-\$711,000
Safe Motherhood/Infant Health	\$43,100,000	\$42,347,000	\$42,174,000	-\$173,000
Oral Health	\$11,456,000	\$12,422,000	\$12,371,000	-\$51,000
Prevention Centers	\$29,149,000	\$29,131,000	\$29,012,000	-\$119,000
STEPS to a Healthier US	\$42,904,000	\$25,158,000	\$15,541,000	-\$9,617,000
Racial and Ethnic Approach to Community Health (REACH)	\$33,639,000	\$33,860,000	\$33,721,000	-\$139,000
Genomics	\$11,811,000	\$12,093,000	\$12,043,000	-\$50,000
Demonstration Project for Teen Pregnancy	\$0	\$2,948,000	\$0	-\$2,948,000
Total	\$824,762,000	\$833,827,000	\$805,321,000	-\$28,506,000

SUMMARY OF THE REQUEST

CDC aims to prevent the onset of chronic diseases; identify early the presence of chronic diseases and associated complications and reduce progression of the basic chronic condition and/or associated complications; improve the care and management of those impacted by chronic diseases; and promote healthy behavior choices through education, community and societal policies to reduce the burden of chronic diseases.

More than 1.7 million Americans die of a chronic disease each year, accounting for seven of every 10 deaths in the U.S. Chronic diseases cause major limitations in daily living for almost one of every 10 Americans, or about 25 million people. These diseases account for approximately 83 percent of the over \$1.4 trillion spent on health care each year in the U.S. Although chronic diseases are among the most prevalent and costly health problems, they are also among the most preventable.

The CDC FY 2009 requests includes \$805,321,000 for Chronic Disease Prevention, Health Promotion, and Genomics, a decrease of \$28,506,000 below the FY 2008 Enacted level, which includes a \$3,312,000 Individual Learning Account (ILA) and administrative reduction. This includes:

- \$48,838,000 for Heart Disease and Stroke, a decrease of \$1,263,000 below the FY 2008 Enacted level to fund 42 state-based Heart Disease and Stroke Prevention Programs, four multi-state Stroke Networks in areas of higher stroke burden, and six states to carry out the Paul Coverdell National Acute Stroke Registry. CDC will also conduct activities to develop surveillance capacity for heart disease and stroke prevention and standardize and improve the evaluation of policy and systems change.
- \$62,454,000 for Diabetes, a decrease of \$257,000 below the FY 2008 Enacted level to fund 50 State-based Diabetes Prevention and Control Programs, the National Diabetes Education Program, and five to 12 states for the primary prevention of diabetes. CDC will

also continue six childhood diabetes surveillance systems and fund 16 health education programs targeting minority populations.

- \$301,773,000 for Cancer Prevention and Control, a decrease of \$7,713,000 below the FY 2008 Enacted level to continue to support all states through the National Breast and Cervical Cancer Early Detection program; 48 central cancer registries through the National Program of Cancer Registries; 65 states for Comprehensive Cancer Control Programs; and continuation of ongoing activities in the early detection, prevention and education for colorectal, ovarian, prostate, blood, gynecologic and skin cancers.
- \$23,817,000 for Arthritis and Other Chronic Diseases, a decrease of \$98,000 below the FY 2008 Enacted level to continue to support State-based Arthritis Programs to emphasize expansion of evidence-based interventions available for state programs serving people with arthritis. CDC will also support the ongoing work of the four state lupus registries, which are developing the first reliable epidemiologic data on the prevalence and incidence of diagnosed lupus in the U.S. CDC will continue to increase public awareness, promote education and communication, and conduct research to address public health issues related to epilepsy.
- \$103,737,000 for Tobacco, a decrease of \$427,000 below the FY 2008 Enacted level to fund 50 State-based National Tobacco Prevention Control programs and to support the National Network of Tobacco Use Cessation Quitlines. CDC will continue to advance the science base of tobacco control by conducting and coordinating research, surveillance, and evaluation activities related to tobacco and its impact on health.
- \$42,018,000 for Nutrition, Physical Activity and Obesity, a decrease of \$173,000 below the FY 2008 Enacted level to fund between 20 and 30 states for Nutrition and Physical Activity programs to implement interventions that include policies, environmental changes, and social and behavioral approaches to slow the progression of obesity and other chronic diseases.
- \$24,210,000 for Health Promotion, a decrease of \$4,767,000 below the FY 2008 Enacted level to support the Behavioral Risk Factor Surveillance System for ongoing surveillance of critical health problems and health-related behaviors at the state and local level; to support CDC's Alzheimer's Disease and Healthy Aging Program; to continue to develop a kidney disease surveillance, epidemiology, and a health outcomes research program; and to continue support to national, state, and local organizations for Vision Screening Education and Glaucoma through CDC's Vision Health Initiative.
- \$53,612,000 for School Health, a decrease of \$711,000 below the FY 2008 Enacted level to continue support for Coordinated School Health programs. CDC expects to fund 23 state education agencies to establish a partnership with their state health agency to focus on reducing tobacco use, poor nutrition, and physical inactivity and 49 state education agencies and 18 local education agencies to support HIV prevention activities in schools.
- \$42,174,000 for Safe Motherhood/Infant Health, a decrease of \$173,000 below the FY 2008 Enacted level to continue to fund 39 Pregnancy Risk Assessment Monitoring System (PRAMS) projects in states to improve the health of mothers and infants. CDC will also continue to fund 12 teen pregnancy prevention programs through national organizations and state teen pregnancy prevention coalitions and conduct research projects to promote reproductive and infant health.
- \$12,371,000 for Oral Health, a decrease of \$51,000 below the FY 2008 Enacted level to fund 13 states to support capacity-building for oral health prevention programs to expand

coverage of community water fluoridation, increase the number of children receiving dental sealants, and reduce levels of untreated tooth decay.

- \$29,012,000 for the Prevention Research Centers, a decrease of \$119,000 below the FY 2008 Enacted level to fund 33 Prevention Research Centers to conduct applied research and practice in chronic disease prevention and control, involving community members and local institutions.
- \$15,541,000 for Steps to a Healthier U.S., a decrease of \$9,617,000 below the FY 2008 Enacted level to support 50 Steps Community Grants.
- \$33,721,000 for Racial and Ethnic Approach to Community Health (REACH), a decrease of \$139,000 below the FY 2008 Enacted level to support ongoing dissemination of effective strategies for improving health in racial and ethnic minority communities through 40 Centers of Excellence in the Elimination of Health Disparities, and Action Communities.
- \$12,043,000 for Genomics, a decrease of \$50,000 below the FY 2008 Enacted level to continue work toward the translation of genomic discoveries into opportunities for public health and preventive medicine, which support the President's Healthier U.S. Initiative and the Secretary's Personalized Health Care Initiative.
- In FY 2009, CDC does not request funding for the Demonstration Project for Teen Pregnancy. CDC will continue its work with teen pregnancy prevention through other programmatic mechanisms.

These programs are among the Health Promotion programs subject to reauthorization

In 2006, CDC's Chronic Disease Prevention and Health Promotion program underwent a PART review. The program was rated as Moderately Effective and lauded for a clear and unique mission, effective surveillance systems, challenging but realistic quantifiable targets for long term and annual performance measures, commitments from partners, and for all aspects of program management.

Results can be found on ExpectMore.gov <http://www.whitehouse.gov/omb/expectmore/index.html>

EFFICIENCY MEASURE

						FY 2007				Out-Year Target
5.E.1	Number of financial actions that delay the implementation of grantee and partners' activities.	N/A	(Baseline) 466	N/A	N/A	443	12/2007	419	406	N/A

HEART DISEASE AND STROKE

				FY 2009 +/- FY 2008
BA	\$43,562,000	\$50,101,000	\$48,838,000	-\$1,263,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311

FY2009 Authorization..... Indefinite

Allocation Methods.....Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Heart disease and stroke are respectively the nation's first and third leading causes of death for both women and men, and account for about 35 percent of all deaths. More than 80 million Americans currently live with a cardiovascular disease. For example, coronary heart disease is a leading cause of disability in the U.S. workforce. Stroke alone accounts for disability in more than one million Americans. More than six million hospitalizations each year are because of cardiovascular diseases. In 2008, the national cost of cardiovascular disease is estimated to be over \$448 billion, including health care expenditures and lost productivity.

In 1998, CDC began providing states with financial and programmatic assistance to develop, implement, and evaluate cardiovascular disease prevention and control programs. CDC supports achievement of the Healthy People 2010 goal for heart disease and stroke prevention in its four distinct but complementary parts 1) prevention of risk factors, 2) detection and treatment of risk factors, 3) early identification of heart attacks and strokes, and 4) prevention of recurrent cardiovascular events. To reach this goal, CDC's heart disease and stroke prevention efforts have expanded over the years to include the implementation of science-based public health programs; research and surveillance activities, the development and application of evaluation procedures; the development of tools to be used by states and communities; expanding partnership initiatives; and addressing health disparities.

Heart disease and stroke prevention activities focus on adults and older adults, with special attention given to higher-risk populations. The program also carries out the Mississippi Delta Health Initiative and is continuing a partnership with the Indian Health Service to address heart disease and stroke prevention among rural American Indians/Alaska Natives.

Heart disease and stroke prevention activities include:

State Heart Disease and Stroke Prevention Programs, funded since 1998 through cooperative agreements awarded competitively.

In FY 2007, thirteen states received funding for Basic Implementation programs. Activities for these programs include implementing population-based interventions that address priority populations and settings; examples of interventions include promoting heart healthy and stroke-free work site policies and promoting emergency medical services training and protocols related to heart attacks and stroke.

- The 13 Basic Implementation states include: Arkansas, Florida, Georgia, Massachusetts, Maine, Missouri, Montana, New York, North Carolina, South Carolina, Utah, Virginia, and Washington State.

In FY 2007, 20 states and the District of Columbia received funding for Capacity Building programs, which prepares these states for program implementation through such activities as identifying priority populations and developing a comprehensive state plan. Capacity Building funding helps state health departments develop the human and technical capacity to properly address heart disease and stroke.

- The 21 Capacity Building programs include: Alabama, Alaska, Arizona, California, Colorado, the District of Columbia, Illinois, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Nebraska, Ohio, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, and Wisconsin.

The Heart Disease and Stroke Prevention Program has identified high-impact points of intervention to stem the tide of cardiovascular disease. Examples include:

Controlling high blood pressure:

- Almost 90 percent of middle-age Americans will develop high blood pressure in their lifetime. Controlling high blood pressure is very important, as a 12 to 13 point drop in high blood pressure can reduce cardiovascular disease deaths by 25 percent. Control of high blood pressure appears to be improving, with 36 percent of all hypertensive American adults controlling their blood pressure in 2003-2004, up from 32 percent at the turn of the century. However, this indicates that in the most recent comprehensive figures, nearly 65 percent of those with high blood pressure still did not have it under control.
- Wisconsin's Heart Disease and Stroke Prevention Program worked with 20 health plans to collect and report measures related to cardiovascular disease management. Based on these data, health plans instituted quality improvement initiatives to impact blood pressure control. Among participating health plans, the percentage of patients who had their high blood pressure controlled increased from 52 percent in 2000 to 62 percent within two years.

Addressing cholesterol:

In an era of increasing obesity, CDC hopes to keep high cholesterol prevalence from increasing. In the last several years, the prevalence of high cholesterol among U.S. adults has remained at approximately 17 percent to 18 percent.

- In 2005-2006, CDC funded three states (Arkansas, Kansas, and Washington) to conduct statewide surveys of cholesterol and blood pressure measurements. In addition to increasing scientific capacity, the data collected can now be used to provide these states guidance for developing more effective cholesterol control strategies. More recently, CDC has funded Oklahoma to begin this same process.

Addressing heart disease and stroke mortality:

Because of continuing public health and clinical efforts, age-adjusted death rates continue to drop for both ischemic heart disease and stroke.

- For example, in 2000, 187 of every 100,000 people died of heart disease and 61 of every 100,000 people died of stroke; but by 2004 those numbers dropped to 150 deaths per 100,000 people for ischemic heart disease and 50 deaths per 100,000 people for stroke.
- Washington State's Heart Disease and Stroke Prevention Program collaborated with the state's Emergency Cardiac and Stroke Workgroup to develop recommendations addressing prevention and care in pre-hospital, emergency department, hospital, and rehabilitation settings. These recommendations, which will improve quality of care and therefore reduce mortality and long-term morbidity, are now being implemented.

The Paul Coverdell National Acute Stroke Registry;

This registry was funded since 2001, competitively funds states through cooperative agreements to measure, track, and improve the quality and delivery of stroke care. From 2004-2007, four states (Georgia, Illinois, Massachusetts, and North Carolina) were funded and were able to collect and track over 49,000 patient cases from 176 participating hospitals.

- All states funded by the Coverdell Registry during FY 2003-2006 have initiated or adopted statewide stroke care legislation to reduce mortality and otherwise improve patient outcomes.
- In Massachusetts, data collected through the Paul Coverdell National Acute Stroke Registry indicated a great need for improvement in quality of stroke care. As a result, participating hospitals began to modify their standards of care, and the state saw an increase in use of tissue-type plasminogen activator (tPA) from seven percent to 30 percent over a one-year period. Therapy with tPA can mean the difference between recovery and long-term disability from ischemic stroke.
- The Coverdell Registry was expanded to six funded states in FY 2007: Georgia, Massachusetts, Michigan, Minnesota, North Carolina, and Ohio.

Other CDC heart disease and stroke prevention-related activities include surveillance and epidemiologic studies, applied research, and evaluation projects:

Monitoring and Surveillance:

CDC helps states and communities track trends in heart disease and stroke and their risk factors. By analyzing and publicizing this data, public health strategies can be better developed and implemented according to recognized health needs. For the first time ever, in 2007 CDC was able to report the state-by-state prevalence rates of both heart disease and stroke.

Translating the science into practice: CDC engages in applied research and research translation to support sound, evidence-based practice in heart disease and stroke prevention. From its research, CDC develops and disseminates many products and tools that cardiovascular disease prevention programs can use and apply in various public health settings. Many tools and resources are available on the web. Two examples released in 2007 are *CDCynergy: Heart Disease and Stroke Prevention Edition version 2.1*, an online interactive tool that helps systematically build health communication strategies, and *Heart Health and Stroke Free: A Social Environment Handbook*, which helps professionals promote heart healthy and stroke free environments at the community level.

Evaluation:

CDC not only provides technical assistance to help states evaluate their programs, it also works at the cutting edge of evaluation research in heart disease and stroke prevention.

With increased funding received in FY 2008, CDC will increase the number of states receiving funding for state heart disease and stroke prevention programs. An estimated seven additional states will receive funding for Capacity Building and an estimated one additional state will receive Basic Implementation funding. CDC may also elevate one Capacity Building program to Basic Implementation. Additionally, with increased funding received in FY 2008, CDC will increase the number of WISEWOMAN programs by providing funding for an estimated six additional states/territories.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$41,628,000
FY 2005	\$44,618,000
FY 2006	\$44,237,000
FY 2007	\$43,562,000
FY 2008	\$50,101,000

BUDGET REQUEST

The CDC FY 2009 request includes \$48,838,000 for Heart Disease and Stroke prevention, a decrease of \$1,263,000 below the FY 2008 Enacted level, which includes a \$199,000 Individual Learning Account (ILA) and administrative reduction.

CDC will continue its heart disease and stroke prevention activities in conjunction with state health departments, as well as with other governmental and non-governmental organizations. Some key heart disease and stroke prevention activities and priorities in FY 2009 will include the following:

CDC will fund an estimated 42 State Heart Disease and Stroke Prevention Programs, including 41 states and the District of Columbia, for approximately \$35 million.

Priorities for all states include:

- Increase control of high blood pressure
- Increase control of high cholesterol
- Increase in the public's knowledge of signs and symptoms of heart attack and stroke and the importance of calling 9-1-1
- Improvement in emergency response
- Improvement in quality of heart disease and stroke care
- Elimination of health disparities in heart disease and stroke

One important activity for CDC in addressing the priorities listed above is providing continuing technical assistance to states in heart disease and stroke prevention. In addition to providing technical assistance to funded states, in FY 2009 the 17 non-funded states will also be able to receive technical assistance from CDC. In FY 2010, CDC's goal is to increase the age-adjusted proportion of persons age 18+ with high blood pressure who have it controlled (<140/90) to 59 percent as compared to 50 percent in 2008.

In FY 2009, CDC will also fund four multi-state Stroke Networks in areas of higher stroke burden (such as the Southeast). These Networks will focus on increasing stroke awareness and improving the impact of public health interventions across state lines.

CDC will spend approximately \$4.4 million on the Paul Coverdell National Acute Stroke Registry, which now funds six states: GA, MA, MI, MN, NC, and OH. An important activity will be addressing the gaps between clinical practice and clinical guidelines and promoting growth of quality improvement in stroke care in hospitals and emergency medical services.

Other Heart Disease and stroke activities and priorities for FY 2009:

- CDC intends to develop more surveillance capacity. Current heart disease and stroke prevention efforts are limited by the available health tracking systems (surveillance). Surveillance efforts have not been able to adequately track progress towards the national

Healthy People 2010 heart disease and stroke prevention goals in a comprehensive and systematic manner. Likewise, not all heart disease and stroke prevention program priorities (such as improvement in emergency response) can currently be tracked systematically. Additionally, having a more complete set of data would allow CDC to better tailor its program efforts to achieve maximum public health impact.

- CDC plans to standardize and improve the evaluation of policy and systems change. Being able to better evaluate efforts is of great importance because a great portion of heart disease and stroke prevention programs attempt to change policies and environments in settings such as the workplace and health care systems.
- CDC will continue to embark in a wide range of other activities, including the development and continuation of heart disease-based registries such as the Cardiac Arrest Registry and Enhance Survival Program to improve the quality of care for heart disease.

Beyond the heart disease and stroke prevention program described, there are many other CDC programs which impact cardiovascular disease. Some of these are diabetes, nutrition and physical activity, school health, tobacco, WISEWOMAN, and community health programs such as Steps to a Healthier U.S.

OUTCOME TABLE

						FY 20				Out-Year Target
Long Term Objective 4: Reduce death and disability due to heart disease and stroke.										
5.4.1	Reduce the age-adjusted annual rate per 100,000 population of coronary heart-disease and stroke-related deaths. [O] ¹	CHD: 150 Stroke: 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CHD: 166 Stroke: 50
5.4.2	Increase the age-adjusted proportion of persons age 18+ with high blood pressure who have it controlled (<140/90). [O] ²	36%	N/A	41%	12/2008	N/A	N/A	50%	N/A	59%
5.4.3	Maintain the age-adjusted proportion of persons age 20+ with high total cholesterol (≥240mg/dL) at no higher than its current rate. [O] ²	18%)	N/A	17%	12/2008	N/A	N/A	17%	N/A	17%

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A	States funded for capacity-building CVD prevention programs (includes DC)	21	19	19	19	21	21	28	28
5.B	States funded for basic implementation CVD prevention programs	12	14	14	14	14	13	14	14
5.C	Surveillance and research studies describing the CVD burden and developing effective intervention strategies	21	21	26	26	31	31	31	31
5.D	State health departments funded for ongoing state stroke registries to assess stroke treatment and improve the quality of care for acute stroke patients	4	4	4	4	6	6	6	6
Appropriated Amount (\$ Million) ¹		\$41.6	\$44.6	\$44.2		\$43.6		\$50.1	\$48.8

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

DIABETES

				FY 2009 +/- FY 2008
BA	\$61,831,000	\$62,711,000	\$62,454,000	-\$257,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311

FY 2009 Authorization..... Indefinite

Allocation Methods.....Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

In 1975, the Congressionally appointed National Commission on Diabetes recommended CDC establish a program for diabetes education and control. In 1977, this recommendation resulted in the establishment of the National Diabetes Prevention and Control Program. The mission of the CDC's Diabetes program is to eliminate the preventable burden of diabetes through leadership, research, programs, and policies that translate science into practice. CDC's diabetes activities are based on the prevailing science for diabetes prevention and control which demonstrates that many of the serious diabetes-related complications, such as blindness, kidney failure, and lower-limb amputations, may be prevented.

CDC's primary functions related to diabetes include:

- Define the diabetes burden through the use of public health surveillance
- Conduct applied translational research
- Develop and maintain state-based diabetes and prevention programs
- Support the National Diabetes Education Program

State Based Diabetes Prevention and Control Programs

Through this national program, CDC provides financial support and technical assistance to Diabetes Prevention and Control Programs (DPCPs) in all 50 states, the District of Columbia, seven U.S. territories (America Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands), and one former U.S. territory (Palau). The program supports DPCPs in providing leadership within the state diabetes public health system to bring about community and health system changes that: (1) increase quality of life for persons with and at risk for diabetes; and (2) eliminate diabetes-related health disparities in high risk racial and ethnic populations.

In FY 2008, CDC funded 59 state-based diabetes prevention and control programs, 22 states and the District of Columbia at a capacity-building program level, and 36 states and territories for basic implementation programs. Capacity-building states establish a diabetes presence in the state health department; support basic programmatic and surveillance functions; and develop and evaluate small scaled diabetes projects. Basic implementation programs develop and promote diabetes care standards for adoption in health care delivery settings; help state Medicaid programs develop and monitor quality outcome measures for diabetes care; launch public and physician education campaigns to promote improved understanding and regular use of tests to determine average blood sugar levels; and involve communities in diabetes control activities, such as walking programs.

To measure the program's impact in reducing diabetes-related complications, CDC established several national program objectives focused on critical preventive care practices people with diabetes should receive to deter the progression of complications. These intermediate outcome measures include increasing the percentage of people with diabetes who receive the recommended foot and eye exams, pneumococcal and influenza immunizations and A1c test. The A1c blood test is used to measure a person's average blood sugar level over the past two to three months.

- In 2005, 60.6 percent of adults, age 18 and older, with diabetes in 42 states reported receiving a dilated-eye examination within the last year. 61.5 percent reported self-monitoring their blood glucose at least once per day; 66 percent reported receiving a foot examination within the last year; 87.7 percent reported seeing a doctor in the last year for their diabetes; 64.6 percent reported examining their feet on a daily basis; 64.3 percent reported having their A1c tested at least twice in the past year; 54.3 percent reported ever having attended a diabetes self-management class; 39.4 percent reported receiving an influenza vaccination within the last year; and 37.4 percent reported ever receiving a pneumococcal vaccine.

Specific state accomplishment examples include:

- The Utah DPCP has provided seed money to health plans to implement programs to measure diabetes complication testing, better identify patients with diabetes, and provide people with diabetes with reminders to obtain clinical exams. Since implementing the partnership in 1999, diabetes patient care has improved. Eye exam rates have improved more than the national rates, suggesting the partnership had direct impact. In addition to the eye exam intervention, participating plans, with support from the Utah DPCP, have worked successfully to improve measures related to A1C, lipid, and hypertension in patients with diabetes.
- The New Mexico DPCP and the Tobacco Use prevention program collaborated on increasing access to tobacco cessation resources, such as the Quitline, for people with diabetes. As a result, New Mexico residents have easier access to free Nicotine Replacement Therapy (NRT). From December 2006 to June 2007, 341 people with diabetes registered with the Quitline. Almost 52 percent (176) received free NRT (the majority requested the patch).

Diabetes Primary Prevention Initiative

Initiated in 2005, the Diabetes Primary Prevention Initiative (DPPI) is a collaboration of CDC, state grantees, and contractors for the purpose of cooperatively creating a plan of action and a pilot to ultimately make recommendations for federal, state and local public health implementation of diabetes primary prevention. In FY 2008, CDC funded five states – California, Massachusetts, Michigan, Minnesota and Washington – for the primary prevention pilot program. Pilot interventions are ongoing in all five of the funded states. For example, the Minnesota DPCP is integrating health systems and policy change by working with regional providers on regional clinical practice guidelines. In California, partnerships are being developed with a local health system/employer for linking diabetes prevention with worksite wellness.

SEARCH for Diabetes in Youth (Childhood Diabetes Surveillance Systems)

Reporting of increasing frequency of both type 1 and type 2 diabetes in youth has been among the most concerning aspects of the evolving diabetes epidemic. Unfortunately, reliable data on changes over time in the U.S., or how many children in the U.S. had type 1 or type 2 diabetes were lacking. In FY 2000, CDC and NIH funded the first phase of a multi center study to examine the status of diabetes among U.S. children and adolescents. In FY 2008, CDC is continuing to support SEARCH by funding six research centers.

The study goals of SEARCH are to: (1) identify the number of children and youth under age 20 who have diabetes; (2) study how type 1 diabetes and type 2 diabetes differ, including how they differ by age and race/ethnicity; (3) learn more about the complications of diabetes in children and youth; (4) investigate the different types of care and medical treatment that these children and youth receive; and (5) learn more about how diabetes affects the everyday lives of children and youth who have diabetes.

Health Education Programs Targeting Minority Populations

In FY 2008, CDC will fund 16 grantees for health education programs targeting minority populations through the Native Diabetes Wellness Program and the National Diabetes Education Program.

The Native Diabetes Wellness Program works with community and national partners to eliminate the gaps in health equity that are so starkly revealed by diabetes in American Indian and Alaska Native (AI/AN) communities. Holding a vision of Healthy Communities—Healthy Nations, Indian Country Free of Diabetes, and social justice as its founding principles, the Wellness Program strives to find, adapt, share, and evaluate what works specific to diabetes wellness in AI/AN communities. In 2005, CDC awarded three year cooperative agreements to eight grantees including two urban Indian populations (Tulsa Indian Health, Oklahoma; United American Indian Involvement, Los Angeles), one tribal college (Salish Kootenai, Montana), and five rural reservation tribes: Lummi (Washington), Southern Ute (Colorado), Hopi (Arizona), Ho-Chunk Nation (Nebraska), and Stockbridge-Munsee Community (Wisconsin). Grantees seek to establish simple, practical environmental prevention interventions for diabetes. The projects are designed by the grantee communities, based on their identification of indicators that reflect policy, behavioral, or practice adaptations, in collaboration with existing local diabetes program and other community organizations. In FY 2008, CDC will issue a new funding announcement and award eight grantees from tribal or urban community programs to continue diabetes wellness programs in AI/AN communities.

The National Diabetes Education Program (NDEP) is the leading federal government public education program that promotes diabetes prevention and control. Launched in 1997, the NDEP is a joint initiative of CDC and NIH, with the goal of reducing illness and deaths associated with diabetes and its complications. As part of this outreach, NDEP has awarded funding to eight national organizations to cover a project period of five years: the Association of American Indian Physicians, Black Women's Health Imperative, Khmer Health Advocates, National Alliance for Hispanic Health, National Association of School Nurses, National Latina Health Network, National Medical Association, and Papa Ola Lokahi. These national minority organizations (NMOs) offer access to high-risk populations through a community-based approach and trusted delivery system channels. All of the NMOs work to establish coalitions and partnerships with ongoing diabetes education programs to improve the capacity of local health care providers to provide competent, appropriate diabetes information and to develop evaluation plans to monitor and measure accomplishments.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$59,957,000
FY 2005	\$63,457,000
FY 2006	\$62,763,000
FY 2007	\$61,831,000
FY 2008	\$62,711,000

BUDGET REQUEST

The FY 2009 request includes \$62,454,000 for diabetes programs, a decrease of \$257,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. State and territorial health departments use CDC funding to provide leadership within the state and territorial diabetes public health system to create community and health systems changes that will increase quality of life for people with diabetes as well as eliminate diabetes-related health disparities in high-risk racial and ethnic populations.

An open competition for CDC support to state and territorial based diabetes prevention and control programs (DPCPs) will be held in FY 2009. CDC continues to engage in internal discussions about the overall breadth of the new funding opportunity announcement. CDC is exploring ways to incorporate lessons learned from the Diabetes Primary Prevention Initiative into all state programs.

Blood-glucose control is critical for managing diabetes and preventing diabetes-related complications such as cardiovascular disease, retinopathy, nephropathy, and neuropathy. By FY 2009, CDC aims to increase the age-adjusted percentage of persons with diabetes age 18 and older who receive an A1c test at least two times per year to 74 percent.

End Stage Renal Disease (ESRD) is a complicated and disabling condition and one of the most expensive conditions for which the federal government provides financial coverage. Diabetes mellitus is presently the most common cause of ESRD in the U.S., accounting for approximately 45 percent of all cases of ESRD. For decades, ESRD incidence was increasing. Since the late 1990's, the rates have declined. As those with diabetes live longer, the incidence of ESRD is likely to increase. Therefore, CDC aims to maintain the rate of incidence of ESRD per 100,000 diabetic populations at no higher than its current rate.

In FY 2009, CDC also will continue to fund:

- Fifty-nine Diabetes Prevention and Control Programs
- Six childhood diabetes surveillance systems
- Five to 12 state based pilot projects for the primary prevention of diabetes
- Sixteen health education programs targeting minority populations

State and territorial diabetes prevention and control programs are faced with several key challenges including:

- Prevalence and incidence of diabetes has increased rapidly since the 1990s. Part of the projected growth is due to aging and survival alone. However, continued increases in prevalence of diabetes itself or obesity will of course exacerbate this trend. The growth in diabetes is apparent in all age groups, both sexes, all racial/ethnic groups, and across the adult populations of all states.
- Despite improvements, diabetes care remains suboptimal, risk factors for complications are too prevalent, rates of complications and death are too high, and disadvantaged populations are disproportionately affected.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTCOME TABLE

						FY 20				Out-Year Target
Long Term Objective5.3: Prevent diabetes and its complications.										
5.3.1	Maintain the age-adjusted rate of incidence of End-Stage Renal Disease (ESRD) per 100,000 diabetic population at no higher than its current rate. [O]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	231.7
5.3.2	Increase the age-adjusted percentage of persons with diabetes age 18+ who receive an A1C test at least two times per year. [O]	68.8%	64%	N/A	68%	72%	12/2008	73%	74%	N/A

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.E	Number of state-based Diabetes Prevention & Control Programs: Capacity-building (including DC)	27	27	23	23	23	23	23	23
5.F	Number of state-based Diabetes Control Programs: Basic Implementation	24	24	28	28	28	28	28	28
5.G	Number of territories/jurisdiction funded for capacity-building Diabetes Control Programs	8	8	8	8	8	8	8	8
5.H	Number of state based Diabetes Prevention and Control Programs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	59
5.I	Health education programs/ community interventions targeting minority populations	8	16	16	16	16	16	16	16
5.J	Number of childhood diabetes surveillance systems	6	6	6	6	6	6	6	6
5.K	Number of state-based pilot projects for the primary prevention of diabetes	0	0	5	5	5	5	5-12	5-12
Appropriated Amount (\$ Million) ¹		\$60.0	\$63.5	\$62.8		\$61.8		\$62.7	\$62.5

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS STATE BASED DIABETES PREVENTION AND CONTROL PROGRAMS	
	FY 2007 Actual
Systems-Based Diabetes Prevention and Control	
Alabama	\$270,785
Alaska	\$477,405
Arizona	\$222,482
Arkansas	\$500,316
California	\$1,175,579
Colorado	\$530,451
Connecticut	\$242,690
Delaware	\$424,204
District of Columbia	\$273,837
Florida	\$666,596
Georgia	\$329,585
Hawaii	\$363,268
Idaho	\$362,682
Illinois	\$888,849
Indiana	\$272,290
Iowa	\$193,617
Kansas	\$748,667
Kentucky	\$582,193
Louisiana	\$167,940
Maine	\$363,438
Maryland	\$306,130
Massachusetts	\$1,060,063
Michigan	\$1,037,448
Minnesota	\$1,103,533
Mississippi	\$311,181
Missouri	\$475,948
Montana	\$652,936
Nebraska	\$315,279
Nevada	\$313,766
New Hampshire	\$261,302

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION	
FY 2009 DISCRETIONARY STATE/FORMULA GRANTS	
STATE BASED DIABETES PREVENTION AND CONTROL PROGRAMS	
	FY 2007 Actual
New Jersey	\$500,312
New Mexico	\$477,243
New York	\$954,170
North Carolina	\$775,708
North Dakota	\$277,585
Ohio	\$706,433
Oklahoma	\$233,634
Oregon	\$822,353
Pennsylvania	\$433,752
Rhode Island	\$822,597
South Carolina	\$683,312
South Dakota	\$291,260
Tennessee	\$291,265
Texas	\$809,649
Utah	\$873,381
Vermont	\$272,336
Virginia	\$371,242
Washington	\$1,029,792
West Virginia	\$912,235
Wisconsin	\$891,759
Wyoming	\$291,746
American Samoa	\$46,254
Guam	\$132,019
Marshall Islands	\$86,301
Micronesia	\$140,924
Northern Mariana Islands	\$72,478
Palau	\$72,185
Puerto Rico	\$244,870
Virgin Islands	\$140,848

CANCER PREVENTION AND CONTROL

				FY 2009 +/- FY 2008
Breast and Cervical Cancer	\$198,353,000	\$200,832,000	\$200,004,000	-\$828,000
Cancer Registries	\$47,190,000	\$46,366,000	\$46,176,000	-\$190,000
Colorectal Cancer	\$14,222,000	\$13,974,000	\$13,917,000	-\$57,000
Comprehensive Cancer	\$16,639,000	\$16,348,000	\$16,281,000	-\$67,000
Johanna's Law	\$0	\$6,466,000	\$0	-\$6,466,000
Ovarian Cancer	\$4,439,000	\$5,269,000	\$5,247,000	-\$22,000
Prostate Cancer	\$13,481,000	\$13,245,000	\$13,191,000	-\$54,000
Skin Cancer	\$1,909,000	\$1,876,000	\$1,868,000	-\$8,000
Geraldine Ferraro Cancer Education Program	\$4,408,000	\$4,331,000	\$4,313,000	-\$18,000
Cancer Survivorship Resource Center	\$793,000	\$779,000	\$776,000	-\$3,000
Total	\$301,434,000	\$309,486,000	\$301,773,000	-\$7,713,000

AUTHORIZING LEGISLATION

FY 2009 Authorization Indefinite
Allocation Methods.....Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC's Cancer Prevention and Control program provides national leadership in developing and implementing a comprehensive approach to cancer control, from primary prevention to end-of-life palliative care. The program's cancer prevention and control initiatives are centered on risk reduction, early detection, treatment, survivorship, and reducing or eliminating health disparities. CDC works with partners, including state, tribal, and territorial health agencies, voluntary and professional organizations, academia, other federal agencies, and the private sector to conduct a wide range of activities in public health oncology.

BREAST AND CERVICAL CANCER

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

In 1991, the NBCCEDP was established in response to the Breast and Cervical Cancer Mortality Prevention Act of 1990 (Public Law 101-354). The NBCCEDP provides free or low-cost breast and cervical cancer screening and diagnosis to low-income, uninsured, and underinsured women. The NBCCEDP provides clinical breast examinations, mammograms, pelvic examinations, and Pap tests, as well as diagnostic follow-up for women with abnormal screening results. Individuals diagnosed with cancer are referred to treatment and other resources by the state Medicaid program. Within its 68 funded programs (states, tribes/tribal organizations and U.S. territories), the NBCCEDP provides free or low-cost breast and cervical cancer screening and diagnosis to low-income, uninsured, and underinsured women, with special attention to women 50-64 years of age, women who have not been screened within the last five years or more and certain racial and ethnic minority groups.

In FY 2007, CDC funded 50 states, the District of Columbia, five U.S. territories, and 12 American Indian/Alaska Native tribes or tribal organizations, to provide clinical screening and diagnostic services to medically underserved women.

- Sixty percent of the funds are used for clinical services and the remaining 40 percent for public health infrastructure to support the screening program.
- CDC works with an array of partners, including the American Cancer Society, Avon Foundation and Susan. G. Komen for the Cure, to increase cancer awareness and access to breast and cervical cancer early detection and treatment services.
- Since its inception in 1991, the NBCCEDP has served over three million women and provided screening examinations for over 7.2 million women. Nearly 31,000 breast cancers have been diagnosed, more than 100,000 precancerous cervical lesions have been detected, and nearly 2,000 cases of invasive cervical cancer have been diagnosed through the national screening program. In collaboration with NBCCEDP and its partners, CDC is moving closer to its goal of increasing the percentage of women age 40 and older who have had a mammogram within the previous two years and reducing the age-adjusted rate of breast cancer mortality per 100,000 population.

In 2006, the NBCCEDP:

- Screened 380,719 women for breast cancers
- Detected 4,013 breast cancers
- Provided breast cancer screening to an estimated 14.7 percent of all American women eligible to receive breast cancer screening in the NBCCEDP
- Screened 367,200 women for cervical cancer using the Pap test
- Found 5,162 high-grade and invasive cervical lesions
- Screened an estimated 6.7 percent of all American women eligible to participate in the NBCCEDP for cervical cancer

The national screening program has contributed to the notable decline in recent years in breast and cervical cancer deaths by providing access to screening services, increasing breast and cervical cancer awareness and education, and inherently changing health-seeking behaviors in women for whom screening services are not otherwise available or accessible.

CDC estimates that approximately 15 percent of eligible women are served by the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).

WISEWOMAN

The Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) program grew out of the same legislation that created the NBCCEDP. WISEWOMAN provides low-income, under-insured or uninsured 40 to 64 year old women with the knowledge, skills, and opportunities to improve diet, physical activity, and other lifestyle behaviors to prevent, delay, and control cardiovascular and other chronic diseases. In 1995, CDC launched WISEWOMAN demonstration projects in three states, Massachusetts, North Carolina, and Arizona. These projects demonstrated that offering screening tests for chronic disease risk factors to women was feasible and well-accepted by health care providers and participants. Thereafter, the WISEWOMAN program gradually expanded to fund 15 projects in 14 states.

CDC funds 15 WISEWOMAN programs in 13 states and two tribal organizations to provide health screenings and lifestyle interventions to prevent heart disease and stroke as well as other chronic diseases. Health screenings include assessments for high blood pressure, cholesterol, tobacco use, and other chronic disease risk factors.

- Since the year 2000, WISEWOMAN has screened over 70,000 women, identifying over 7,000 cases of previously undiagnosed hypertension, 7,500 cases of undiagnosed high cholesterol, and more than 1,000 cases of undiagnosed diabetes. These women would have been unaware of their risk factors if not for WISEWOMAN. WISEWOMAN has also provided more than 170,000 lifestyle interventions since 2000.
- With the right tools and information, women who participate in WISEWOMAN are more likely to quit smoking and make other healthy lifestyle choices. Tobacco quitline referrals and smoking cessation interventions offered through WISEWOMAN have contributed to an average eight percent quit rate among smokers after one year. Also, within a year after the first screening of participants, average blood pressure and cholesterol levels have decreased significantly, while the five year risk for developing a cardiovascular disease has fallen by an average of eight percent.
- Due to its success in reducing risk for chronic diseases, WISEWOMAN was found very cost-effective in a study conducted in 2006. In the study, WISEWOMAN extended women's lives at a cost of \$4,400 per estimated year of life saved, as opposed to a much higher bypass surgery expense of \$26,000 per estimated year of life saved.

The FY 2009 request for Breast and Cervical Cancer includes \$200,004,000.

Cancer Registries

Established in 1992, CDC's National Program of Cancer Registries (NPCR) improves health agencies' ability to report on cancer trends, assess program impact, participate in research, and respond to reports of suspected increases in cancer occurrence. NPCR supports 48 population-based central cancer registries with funding, technical assistance, standards for data collection and use, and training.

In FY 2007, CDC supported registries in 45 States and the District of Columbia, representing 96 percent of the U.S. population. CDC also supports registries in several U.S. territories. Additionally, the U.S. Pacific Island Nations received first-time funding for the planning of a Pacific Regional Central Cancer Registry (PRCCR), in FY 2007. Member nations of the proposed PRCCR are American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

NPCR also provides support for establishing computerized reporting and data-processing systems. The registries submit state cancer data to CDC annually, enabling CDC to assist state cancer registries in improving the quality and usefulness of their data. The availability of regional and national data facilitates studies of rare cancers, cancer in children, the quality of cancer care, and the burden of cancer among the underserved populations, and specific racial/ethnic minority populations.

Program accomplishments include:

- The CDC-sponsored Florida Cancer Registry program utilized a multi-disciplinary team to identify geographic areas in Florida with higher burdens of tobacco-associated cancers. Through the use of cancer registry data, tobacco associated cancer clusters were identified for communities that require focused attention of the public health community.
- Since 2002, CDC, in collaboration with the National Cancer Institute (NCI) and North American Association of Central Cancer Registries, Inc (NAACCR), publishes *U.S. Cancer Statistics*, a series of annual reports based on high-quality NPCR and SEER cancer incidence data and CDC's National Vital Statistics System (NVSS) cancer mortality data.

- The most recent report (to be released in late 2007) contains federal government cancer statistics for more than 1.2 million invasive cancer cases diagnosed during 2004, covering 96 percent of the U.S. population for incidence and 100 percent of the population for mortality statistics.
- CDC, NCI, NAACCR and ACS collaborate to produce the *Annual Report to the Nation on the Status of Cancer*, a seminal publication which includes an update of cancer death rates, incidence rates, and trends in the U.S. The most recent *Annual Report to the Nation on the Status of Cancer, 1975-2004, Featuring Cancer in American Indians and Alaska Natives* was published online in October 2007 and in the November 15, 2007 issue of *Cancer*.
 - According to the *Annual Report to the Nation*, overall cancer death rates decreased by 2.1 percent per year from 2002 through 2004, nearly twice the annual decrease of 1.1 percent per year from 1993 through 2002. Among men and women, death rates declined for most cancers. Among women, lung cancer incidence rates were no longer increasing and death rates, although still increasing slightly, were increasing at a much slower rate than in the past.

The FY 2009 request for Cancer Registries includes \$46,176,000.

Colorectal Cancer

Colorectal cancer is the second leading cause of cancer-related death in the nation. In 2003, CDC found that 55,783 people in the U.S. died of colorectal cancer, according to the *U.S. Cancer Statistics: 2003 Incidence and Mortality* report, which includes incidence data for approximately 93 percent of the U.S. population and mortality data for the entire country. Further, in 2003, 143,945 people in the U.S. were diagnosed with colorectal cancer.

CDC promotes and supports colorectal cancer prevention initiatives nationally by building partnerships, encouraging screening, supporting education and training, and conducting surveillance and research. CDC provides funding to 17 state programs (Arkansas, California, Colorado, Connecticut, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, New York, North Carolina, Ohio, Oregon, South Carolina and Utah) to implement specific colorectal cancer strategies identified in their statewide cancer control plans through the National Comprehensive Cancer Control Program. Each state receives an average funding award of \$161,000 per program.

Additionally in FY 2005, CDC funded five community-based pilot programs to initiate prevention research designed to reach persons 50 years or older who have low incomes and inadequate or no health insurance coverage for colorectal cancer screening services and diagnostic follow-up. In 2007, the pilot program continued, with an average funding award of \$520,000 per project site. Preliminary findings from the colorectal cancer demonstration program are being used to inform strategic planning efforts toward a possible future national screening program.

- Since the inception of the Colorectal Cancer Screening Demonstration Program in 2005, the pilot has screened over 2,300 uninsured men and women ages 50 to 64, 272 polyps have been identified and removed, and seven individuals have been diagnosed with cancer and received treatment.
- The CDC-funded Alaska Native Tribal Health Consortium Comprehensive Cancer Control Program (ANTHC CCCP), in collaboration with the Alaska Native Epidemiology Center, has undertaken several initiatives to increase colorectal screening rates among Alaska Natives by providing training to physicians and mid-level practitioners to perform flexible sigmoidoscopy in rural regions of Alaska (Fecal Occult Blood Testing is not recommended for Alaska Natives) to improve provider capacity and access to CRC screening services.

The FY 2009 request for Colorectal Cancer includes \$13,917,000.

Comprehensive Cancer

National Comprehensive Cancer Control Program (NCCCP)

The NCCCP supports the establishment of 65 broad-based Comprehensive Cancer Control (CCC) coalitions in collaboration with public health agencies in all states, the District of Columbia, tribe/tribal organizations and U.S. territories. Support includes funding, technical assistance, and training.

In FY 2007, CDC supported CCC programs in all 50 states, the District of Columbia, seven American Indian/Native Alaskan tribes/tribal organizations, and six U.S. territories and Puerto Rico. This represents an increase of seven newly funded programs in FY 2007.

All 50 states, the District of Columbia and six tribes and tribal organizations are currently in implementation status. The funding level for an implementation program ranges from \$150,000 to \$200,000. One tribal organization and one U.S. territory are in planning status. The funding level for a planning program ranges from \$100,000 to \$200,000. Overall, grantees have formally launched 56 CCC plans which serve as a guide to assist organizations in implementation of CCC strategies for the next three to five years.

CDC's CCC program accomplishes its purpose by establishing broad-based CCC coalitions, assessing the burden of cancer, determining priorities for cancer prevention and control, and developing and implementing comprehensive cancer control plans in collaboration with public health agencies. Program accomplishments include:

- As a result of CCC efforts, Texas and Colorado have each passed referendums which provide significant funding for cancer control activities over the next 10 years.
- In Delaware, Screening for Life, the Division of Public Health's breast, cervical, and colorectal cancer screening program, now offers coverage for prostate cancer screenings for eligible Delaware residents. The Delaware Cancer Consortium uses funding from the Delaware Health Fund and recommended adding PSA screening to the Screen for Life Program.
 - The program screened 1,412 uninsured or underinsured Delawareans and removed colorectal polyps from 823 patients. In addition, the Delaware Treatment Program served more than 221 patients.
- In 2007 two CCC Programs received national recognition from C-Change for exemplary implementation of CCC plans (Iowa and Pennsylvania) and three CCC programs were recognized for leadership in CCC efforts of state elected officials (Hawaii, Washington DC and Connecticut).

The FY 2009 request for Comprehensive Cancer includes \$16,281,000.

Gynecologic Cancer

In FY 2006, CDC received funding to develop a national gynecologic cancer campaign to raise awareness of consumers, providers, and program planners about health issues and concerns related to gynecologic cancers.

CDC, in collaboration with HHS' Office of Women's Health, is developing a national campaign to increase awareness of gynecologic cancers by:

- Providing information about five gynecologic cancers: cervical, ovarian, vulvar, uterine, and vaginal.

- Developing materials that convey the messages that many cancers are curable if detected early and treated appropriately.
- Educating women and health care professionals about the signs and symptoms of specific gynecologic cancers, screening tests (if available), risk factors and prevention strategies.

CDC convened a panel of experts in March 2007 to provide recommendations for campaign messages and development strategies. With feedback from the meeting, CDC established a general framework for development of the awareness campaign. CDC is developing messages intended for specific audience segments. Initial messages are targeted to women between the ages of 40 to 60.

CDC is developing consumer-oriented materials that include:

- A campaign identity/logo that provides the opportunity for tailoring/adaptation for each of the individual gynecologic cancers.
- Design and creation of a Gynecologic Cancers on CDC's website.
- Creation and dissemination of consumer/patient fact sheets on ovarian, cervical, uterine, and vaginal/vulvar cancers to be posted on CDC's website.

The FY 2009 request for Gynecologic Cancer includes \$96,000 to continue activities for the educational awareness campaign.

Ovarian Cancer

Since 2000, CDC has developed public health activities aimed at reducing ovarian cancer morbidity and mortality. CDC currently supports seven cancer projects in California, Florida, Michigan, New York, Pennsylvania, Texas and West Virginia through the NCCCP and Ovarian Cancer funds. The average award for ovarian projects funded through NCCCP is \$100,000.

With approximately \$450,000, the CDC supports specific ovarian cancer research activities at the CDC-funded Prevention Research Centers. The primary objective of these studies is to identify factors that distinguish women in whom ovarian cancer is diagnosed at stages one and two from those diagnosed at a later stage. Another objective is to examine the barriers to ovarian cancer diagnosis and treatment. Data collection and analysis are ongoing at Prevention Research Centers.

CDC has initiated a number of projects, including: studies of ways in which women decide to seek medical care for nonspecific symptoms; risk perception and use of ovarian cancer screening among women at different levels of risk; clinical practice in the follow-up of ovarian masses; and, ovarian cancer treatment patterns and outcomes. Additionally, CDC funds education programs in Alabama, Colorado and West Virginia.

In 2006, CDC partnered with the Gynecologic Cancer Foundation to sponsor ovarian courses to ascertain unmet public health needs, resulting in a CDC convened workshop "Identifying Public Health Opportunities to Reduce the Burden of Ovarian Cancer." Attendees included leaders from state health departments and ovarian cancer advocacy groups, as well as physicians and scientists from federal agencies, medical centers and cancer treatment programs. Information developed at this workshop is being used to guide several CDC ovarian cancer research and health communication activities.

The FY 2009 request for Ovarian Cancer includes \$5,247,000.

Prostate Cancer

Since 2000, CDC has developed public health activities aimed at reducing prostate cancer morbidity and mortality. CDC currently supports 10 cancer projects in Alabama, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, and Washington through the NCCCP and Prostate Cancer funding. The average award for prostate projects funded through NCCCP is \$187,000.

Currently, CDC is working to enhance prostate cancer data in cancer registries, especially information on stage of disease at the time of diagnosis, quality of care, and race and ethnicity of men diagnosed with prostate cancer. This information is used to advance research on delivery of appropriate public health approaches.

In addition, CDC is conducting research to determine whether screening for prostate cancer reduces mortality and to explore knowledge and awareness regarding prostate cancer screening among men and health providers.

Program accomplishments are:

- CDC developed key awareness materials that include: Prostate Cancer Screening: A Decision Guide, which presents a balanced approach to the pros and cons of prostate cancer screening and allows men, their families, and physicians to make a decision that is right for them; a version of the decision guide adapted for African American males; and a Web-based slide presentation, Screening for Prostate Cancer: Sharing the Decision, to inform primary care physicians about potential benefits and risks of prostate cancer screening and how clinicians can help each man make the best choice.
- Since 2003, CDC has funded Us TOO, International, a prostate cancer screening advocacy group, as a national partner. During this time, Us TOO has begun to work more closely with 10 state CCC programs and collaborating to integrate their work into state cancer control plans. As a result of these efforts, 351 facilitators have been trained to conduct education and awareness sessions around prostate cancer, resulting in approximately 115,520 encounters. In addition, Us TOO has worked with Tribal CCC Programs to revise a prostate cancer brochure for American Indian/Alaska Native men.

The FY 2009 request for prostate Cancer includes \$13,191,000.

Skin Cancer

Since 1994, CDC has provided leadership for nationwide efforts to reduce illness and death caused by skin cancer, the most common form of cancer in the U.S. The message of CDC's Skin Cancer Primary Prevention and Education Initiative is: "When in the sun, seek shade, cover up, get a hat, wear sunglasses, and use sunscreen."

CDC currently supports nine cancer projects in California, Florida, Idaho, Maine, Nebraska, New Jersey, New York and Washington through the NCCCP and Skin Cancer funding. The average award for skin projects funded through NCCCP is \$52,000.

CDC also provides a total of approximately \$650,000 through the CDC's Division of Adolescent and School Health to three state education agencies working in collaboration with their departments of public health to conduct demonstration projects implementing the Guidelines for School Programs to Prevent Skin Cancer.

CDC continues to work with other federal agencies and the independent Task Force on Community Preventive Services to review studies of community-based interventions targeting skin cancer prevention. Recommended interventions are published in the Guide to Community Preventive

Services. This publication describes proven strategies that communities can use as they plan and implement programs to prevent skin cancer.

- CDC promotes and disseminates “Shade Planning for America’s Schools,” a manual to help schools create and maintain a physical environment that supports sun safety by ensuring that school grounds have adequate shade.
- CDC works with many national organizations and other federal agencies on skin cancer prevention and control. CDC is an active member of the National Council on Skin Cancer Prevention as well as a member of the Federal Council on Skin Cancer Prevention, which promotes sun-protection behaviors among federal employees, their families, and agency constituents.

The FY 2009 request for Skin Cancer includes \$1,868,000.

Geraldine Ferraro Cancer Education Program

Since 2000, CDC has worked to raise awareness among the public and health care providers, to improve the quality of blood cancer data, and implement programs to educate the public about leukemia, lymphoma, and multiple myeloma. In May 2002, the Hematological Cancer Research Investment and Education Act was signed into law, which included the Geraldine Ferraro Cancer Education Program. The program was implemented in FY 2004 and funded blood cancer information and education activities for patients and the public.

CDC funds public and private, nonprofit and for-profit national organizations to increase awareness of, and education about, hematologic cancers. This program is designed to provide information to patients, their family members, friends, caregivers, and health care providers. Nine cooperative agreements are funded through this program: 1) Patient Advocate Foundation; 2) the Leukemia and Lymphoma Society; 3) National Marrow Donor Program; 4) Multiple Myeloma Research Foundation; 5) the Lymphoma Research Foundation; 6) the Education Network to Advance Cancer Clinical Trials; 7) Sibling Survivors Education and Information; 8) Oregon Health and Science University; and 9) the National Coalition for Cancer Survivorship.

Through a competitive process, CDC awarded funding to the University of Colorado at Denver-Health Science Center to design a Web site about hematologic cancers. The site offers free professional training courses to nurses, pharmacists, primary care physicians, hematologists, and oncologists, concerning the diagnosis and treatment of hematologic cancers; and provides clinical consultation services online.

CDC continues to conduct research on quality of data reported to the NPCR and to collaborate with the NCI’s Office of Cancer Survivorship (OCS) to support research into survivorship of hematologic malignancies.

Program accomplishments include:

- The nine hematologic grantees collaborate to promote and disseminate new resources and materials for each other. These partnerships and efforts allow grantees to reach hematologic cancer patients, family members, friends, caregivers, and providers.
- The Leukemia and Lymphoma Society (LLS) created and developed several educational outreach programs for underserved patients and their families. Two low-literacy educational booklets were developed, one on AML and the other, “Coping with Survivorship”. Additionally, LLS Desert Mountain States Chapter-Utah Branch joined the Utah Cancer Action Network, Utah’s CCC Coalition, as a partner and has been an active participant in increasing awareness around clinical trials. LLS has also has secured funding from the Lance Armstrong Foundation to implement the “Welcome Back” program to address the

The FY 2009 request for Geraldine Ferraro Cancer Education Program Cancer includes \$4,313,000.

Cancer Survivorship Resource Center

Cancer is the second leading cause of death in the U.S., causing one of every four deaths each year. Due to advances in the early detection and treatment of cancer, an increasing number of people are living many years after diagnosis. Today, approximately 65 percent of people diagnosed with cancer are expected to live at least five years after diagnosis.

In 2004, CDC and the Lance Armstrong Foundation (LAF), along with nearly 100 experts in cancer survivorship and public health, released *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*. This collaboration blended goals, activities, and resources to address issues facing the growing number of American cancer survivors. CDC has joined forces with many national organizations, states, tribes, and territories to address several cancer survivorship “priority needs” cited in the Action Plan. This work includes efforts to increase survivorship in underserved populations, and initiatives to improve end-of-life support for cancer patients, their families, friends, and caregivers.

CDC’s survivorship partners include:

- The Patient Advocate Foundation, which works with cancer patients to ensure that their finances, employment, and medical treatments are not interrupted by poor or slow insurance reimbursement or employment status;
- Community Media Productions, which produces and distributes educational media and productions; and
- States, tribes/tribal organizations and territories, which conduct CCC Leadership Institute seminars designed to help cancer control leaders complete and implement comprehensive cancer control plans in states, tribes/tribal organizations, and territories.

CDC funds the National Organization Strategies for Prevention, Early Detection or Survivorship of Cancer in Underserved Populations. Eight organizations are funded through a five-year agreement from 2007 through 2012, to develop health programs and cancer prevention and control infrastructure enhancement to deliver cancer education and awareness activities for individuals who may be underserved, uninsured or underinsured, at risk, or are members of racial/ethnic minorities.

CDC assists these established programs in developing and disseminating national, state, and community-based comprehensive information on cancer prevention, early detection, or survivorship: Academy for Educational Development, Washington, D.C., Asian & Pacific Islander American Health Forum, California, Cancer Research and Prevention Foundation, Alexandria, Virginia, Lance Armstrong Foundation, Texas, Mautner Project for Lesbians with Cancer, Washington, D.C., Men Against Breast Cancer, Inc., Maryland, Patient Advocate Foundation, Virginia, U S TOO International, Illinois.

Program accomplishments include:

- CDC helped fund Community Media Productions, Inc.’s Emmy Award-winning film, “A Lion in the House”, a documentary on young adult cancer survivorship, which aired in June 2006 (Cancer Survivorship Awareness Month) on the Public Broadcasting Service (PBS). The film documents five families of diverse socioeconomic backgrounds affected by childhood hematological cancers and its rippling effects on family, community and professional caregivers.

- CDC helped fund and promote the Lance Armstrong Foundation's two addenda to the National Action Plan for Cancer Survivorship: 1) A National Action Plan for Cancer Survivorship: African American Priorities; and 2) A National Action Plan for Cancer Survivorship: Native American Priorities.

The FY 2009 request for the Cancer Survivorship Research Center includes \$776,000.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$293,825,000
FY 2005	\$309,704,000
FY 2006	\$306,197,000
FY 2007	\$301,434,000
FY 2008	\$309,486,000

BUDGET REQUEST

The FY 2009 request includes \$301,773,000 for Cancer Prevention and Control, a decrease of \$7,713,000 below the FY 2008 Enacted level, which includes \$6,466,000 for Johanna's Law and \$1,241,000 Individual Learning Account (ILA) and administrative reduction.

Breast and Cervical Cancer

National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

Approximately \$200,004,000 is requested for supporting breast and cervical cancer control in FY 2009, a decrease of \$828,000 from FY 2008 Enacted level.

CDC will continue to support the 68 programs funded through the National Breast and Cervical Cancer Early Detection Program. CDC is required to award 80 percent of the appropriations to grantees, resulting in approximately \$160,000,000 awarded to states to support screening programs. Additionally, NBCCEDP appropriations support the WISEWOMAN program providing \$18,521,000 in funding support, a \$77,000 decrease from the FY 2008 Enacted level.

CDC has concentrated a significant amount of time and effort to streamline ever-rising program costs. These efforts include utilizing performance-based decision-making to appropriately award program funds to ensure that all programs sustain and maintain capacity and capability to enroll new women, improve screening and re-screening rates, and reach, as efficiently and effectively as possible, women who have never or rarely been screened. CDC estimates that approximately 15 percent of eligible women are served by the NBCCEDP.

Mammography screening every two years extends life for women aged 65 or older at a cost of about \$36,924 per year of life saved. Cervical cancer screening every three years extends life at a cost of about \$5,392 per year of life saved. Increased screening significantly reduces breast and cervical cancer mortality.

The national screening program has contributed to the notable decline, in recent years, in breast and cervical cancer deaths by providing access to screening services, increasing breast and cervical awareness and education, and inherently changing health seeking behaviors in women for whom screening services are otherwise available or accessible.

During 2007, an extensive review of the data collected by the NBCCEDP was completed, resulting in new reporting requirements. The NBCCEDP tracking system, MDE's (Minimum Data Elements), collect data on every woman screened. These changes will align the MDE's with current program policy and clinical practice, improve the translation of the medical record to a clinical dataset, and

allow better monitoring of program outcomes, quality, and cost. New requirements for data linkages with central cancer registries are likely improve the quality of data on cancer cases in both systems.

WISEWOMAN

The FY 2009 request includes \$18,521,000 for WISEWOMAN, a decrease of \$77,000 from FY 2008 Enacted level. With increased funding received in FY 2008, CDC will increase the number of WISEWOMAN programs by providing funding for an estimated six additional states/territories.

National Program of Cancer Registries

Approximately \$46,176,000 is requested for supporting central cancer registries in FY 2009, a decrease of \$190,000 from the FY 2008 Enacted level.

CDC will continue support for the NPCR–Cancer Surveillance System (NPCR–CSS), implemented to improve the quality of state cancer registries' data and provide a resource for national and state cancer incidence information. During FY 2007, DCPC published its fifth annual report on cancer incidence and mortality compiled from data submitted by NPCR and SEER program registries. This report, "U.S. Cancer Statistics: 2003 Incidence and Mortality" was released in December 2006. Plans include preparation and publication of the U.S. Cancer Statistics: 2004 Incidence and Mortality report.

Other projects include additional evaluation of specific cancer registry data items, such as race and ethnicity, stage-at-diagnosis, and treatment data, as well as special studies focusing on patterns of care for cancer patients; production of a special monograph on colorectal cancer, designed to guide cancer control and prevention activities addressing the second leading cause of cancer-related deaths in the U.S.; a demonstration project to develop a model for transferring cancer incidence data from the hospital cancer registry to the state NPCR central cancer registry in a standards-based electronic format; and additional information technology (IT) projects to enhance registry operations.

CDC also will continue special data linkages with the Indian Health Service Patient Database to help registries more accurately describe the burden of cancer among Native Americans.

At each level of investment, CDC will pursue implementation of electronic data reporting to the fullest extent possible.

Colorectal Cancer

Approximately \$13,917,000 is for colorectal cancer efforts in FY 2009 to reduce the colorectal cancer death rate among adults aged 50 and older.

CDC will promote colorectal cancer screening nationwide by working directly with public and private partners to educate health care providers and the public to promote the benefits of screening and current screening guidelines.

Approximately \$950,000 is projected for the Screen for Life campaign to inform the public about the importance of screening for men and women of all racial and ethnic groups who are aged 50 years or older. Campaign materials include fact sheets, brochures as well as print and broadcast public service announcements.

Approximately \$2,600,000 is projected to support the Colorectal Cancer Screening Demonstration Program. The Colorectal Cancer Screening Demonstration Program will continue to provide funding for five demonstration sites which focus on screening low income men and women who have inadequate or no health insurance coverage for colorectal cancer screening. CDC will continue educating the public, policy makers, and state legislators about the importance of regular

screening, beginning at age 50 and educate health care providers about the benefits of screening and early detection, screening procedures and guidelines.

National Comprehensive Cancer Control Program (NCCCP)

Approximately \$16,281,000 is requested for supporting comprehensive approaches to cancer control in FY 2009. The NCCCP has formally launched 56 comprehensive cancer control plans. The plans serve as a guide to assist organizations in implementation of comprehensive cancer control strategies for the next three to five years. According to the Capacity assessment survey in 2006, average total expenditures for CCC, for 2002 to 2006 (as reported by 44 programs) have increased from an average of \$387,000 to \$962,000 in FY 2006. Nine programs in 2005 and 2006 reported expenditures of over \$1,000,000.

CDC will continue to offer ongoing technical assistance to programs developing and implementing CCC plans; to provide support to help initiate and enhance CCC program activities; support partnerships that strengthen the national framework for CCC; broaden awareness of the CCC concept and its benefits; and conduct research and surveillance activities that will develop and evaluate comprehensive approaches to cancer prevention and control. Collectively, these activities will improve the health of people in every stage of life, one of CDC's health protection goals.

By 2009, through coordinated actions of CCC Programs and Coalitions, it is expected that: 1) 10 states will be successful in receiving funds in addition to CDC funding to implement CCC in their state; 2) five states will have received 501c3 status; 3) 12 states will have received significant involvement of state leadership; and 4) 10 states will have identified policy changes supporting cancer control. In addition, six states will report decreases in tobacco related behaviors of their population.

Johanna's Law (Gynecologic Cancer Awareness Campaign)

The FY 2009 request eliminates funding for Johanna's Law, a decrease of \$6,466,000 below the FY 2008 Enacted level.

CDC will continue activities focused on Gynecologic Cancer through the national education awareness campaign.

Ovarian Cancer

Approximately \$5,247,000 is requested for ovarian cancer activities in FY 2009. CDC will continue its support of ovarian cancer research activities in the Prevention Research Centers. CDC also will develop health communication messages to provide appropriate education and information about ovarian cancer to physicians and health care providers.

Prostate Cancer

Approximately \$13,191,000 is requested to support prostate cancer research and education and awareness activities in FY 2009. In FY 2009, CDC will continue to support intramural and extramural awareness and research efforts by expanding research about prostate cancer screening and treatment options, enhancing prostate cancer data in cancer registries, developing materials that explore how best to communicate about and promote informed decision making related to prostate cancer, and disseminating CDC's informed decision-making materials nationwide.

Skin Cancer

Approximately \$1,868,000 is requested for the Skin Cancer program in FY 2009. Skin cancer can be prevented and treated if detected early. CDC will continue to support epidemiologic, behavioral science, and surveillance research efforts designed to expand knowledge about skin cancer prevention and control, including the collection of information on sun-protection behaviors and

attitudes and its developing monitoring systems to track national trends on this data. Findings will be used to better target and evaluate skin cancer prevention efforts.

CDC will continue to work with national organizations and other federal agencies to enhance prevention research on skin cancer prevention and control.

CDC's Skin Cancer Prevention activities will include:

- Nationwide promotion and dissemination of the "Guidelines for School Programs to Prevent Skin Cancer" in collaboration with states' departments of health.
- Promoting and disseminating "Shade Planning for America's Schools", a manual to help schools create and maintain a physical environment that supports sun safety by ensuring that school grounds have adequate shade.

Geraldine Ferraro Cancer Education Program

Approximately \$4,313,000 is requested for supporting hematologic cancer education efforts in FY 2009. CDC will continue to fund public and private, nonprofit and for profit national organizations to increase the awareness and education of hematologic cancers, as well as create and deliver educational outreach programs for underserved patients and families with blood cancers. CDC will work to improve the quality of hematologic cancer data, and will implement programs to educate the general public about leukemia lymphoma, and multiple myeloma.

CDC will continue to support hematologic grantees efforts to increase blood cancer awareness, support blood cancer research to improve the quality of data, and implement programs to educate the general public about leukemia, lymphoma, and multiple myeloma.

Cancer Survivorship Resource Center

Approximately \$776,000 is requested for supporting cancer survivorship activities in FY 2009.

As a first step toward expanding activities and research in the area of cancer survivorship, CDC is analyzing public health activities related to cancer survivorship, both within and external to the agency. This analysis will identify gaps in public health functions and services related to cancer survivorship, and will serve as a tool for strategic planning in the cancer survivorship community.

CDC's goal is to support partnership, collaboration, information sharing and expanding dissemination channels. National Organization grantees will work to align their activities with the National Action Plan for Cancer Survivorship.

CDC will continue to conduct survivorship town hall sessions to educate bone marrow and stem cell transplant survivors on their unique health needs through the National Marrow Donor Program and to develop a series of educational and outreach materials to improve knowledge, attitudes and behaviors regarding cancer survivorship among African Americans, American Indians and Native Alaskans, Spanish speaking and rural Americans through the Lance Armstrong Foundation.

CDC will continue to fund eight organizations working on survivorship issues:

- Academy for Educational Development
- Asian and Pacific Islander Health Forum
- Cancer Research and Prevention Foundation
- Lance Armstrong Foundation
- Mautner Project
- Men Against Breast Cancer
- Patient Advocate Foundation
- Us TOO

OUTCOME TABLE

						FY 20				Out-Year Target
5.1 Long Term Objective 1: Reduce death and disability due to cancer.										
5.1.1	Reduce the age-adjusted annual rate of breast cancer mortality per 100,000 female population. [O]	24.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.3 (FY 2015)
5.1.2	Increase the percentage of women age 40+ who have had a mammogram within the previous two years. [O] ¹	74.6%	N/A	N/A	N/A	N/A	N/A	77%	N/A	78% (FY 2010)
5.1.3	Decrease the age-adjusted rate of invasive cervical cancer per 100,000 women ages 20+ screened through the NBCCEDP (excludes invasive cervical cancer diagnosed on the initial program screen). [O]	17 (Baseline)	15	N/A	N/A	14	2/2009	14	14	N/A

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 20			FY 2009 Target
5.L	Programs funded for Comprehensive Cancer Control (includes 7 tribes and tribal organizations, the District of Columbia and 6 U.S. Associated Pacific Islands/territories & Puerto Rico)	55	55	55	55	65	65	65	65
5.M	Cancer Registry states/territories with capacity-building programs	3	3	2	2	1	1	1	1
5.N	Cancer Registry states/territories with basic implementation programs	45	45	46	46	47	47	47	47
5.O	Cancer Registry Programs submitting data to the NPCR Cancer Surveillance System	47	48	48	48	48	48	48	48
5.P	Education campaign to promote colorectal cancer screening	1	1	1	1	1	1	1	1
5.Q	Number of breast and cervical cancer screening programs	68	68	68	68	68	68	68	68
5.R	Number of states, territories, AI/AN tribes provided consultation and scientific expertise to support screening programs	68	68	68	68	68	68	68	68
5.S	Number of cooperative agreements to national partners and professional societies to promote cancer prevention	17	17	17	17	17	17	17	17
5.T	WISEWOMAN programs funded to support early detection of chronic diseases and their associated risk factors	15	15	15	15	15	15	21	21
Appropriated Amount (\$ Million) ¹		\$293.8	\$309.7	\$306.2		\$301.4		\$309.5	\$301.8

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS BREAST AND CERVICAL CANCER	
	FY 2007 Actual
Alabama	\$3,040,000
Alaska	\$2,577,743
Arizona	\$2,236,262
Arkansas	\$2,613,989
California	\$5,749,828
Colorado	\$4,152,003
Connecticut	\$1,368,894
Delaware	\$1,143,982
District of Columbia	\$561,203
Florida	\$4,530,026
Georgia	\$4,115,137
Hawaii	\$1,176,054
Idaho	\$1,791,835
Illinois	\$5,611,948
Indiana	\$2,050,000
Iowa	\$2,771,720
Kansas	\$2,358,323
Kentucky	\$2,329,409
Louisiana	\$1,326,106
Maine	\$1,811,194
Maryland	\$4,472,788
Massachusetts	\$3,262,100
Michigan	\$8,910,324
Minnesota	\$4,607,500
Mississippi	\$1,826,213
Missouri	\$2,987,889
Montana	\$2,209,628
Nebraska	\$2,956,766
Nevada	\$2,529,397
New Hampshire	\$1,576,252
New Jersey	\$2,970,748
New Mexico	\$3,379,120

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS BREAST AND CERVICAL CANCER	
	FY 2007 Actual
New York	\$7,473,530
North Carolina	\$3,400,000
North Dakota	\$1,313,000
Ohio	\$4,327,387
Oklahoma	\$1,652,112
Oregon	\$2,260,000
Pennsylvania	\$2,376,000
Rhode Island	\$1,553,736
South Carolina	\$3,267,000
South Dakota	\$804,072
Tennessee	\$1,157,757
Texas	\$6,286,794
Utah	\$2,078,503
Vermont	\$1,102,825
Virginia	\$2,436,731
Washington	\$4,333,665
West Virginia	\$4,150,118
Wisconsin	\$3,357,722
Wyoming	\$658,380
Indian Tribes	\$7,343,841
American Samoa	\$212,908
Guam	\$323,253
Marshall Islands	\$0
Micronesia	\$0
Northern Mariana Islands	\$490,654
Palau	\$570,693
Puerto Rico	\$0
University of Puerto Rico Medical Science	\$150,525
Virgin Islands	\$0
	\$158,085,587

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS NATIONAL COMPREHENSIVE CANCER CONTROL PROGRAM	
	FY 2007 Actual
Alabama	\$255,000
Alaska	\$255,000
Arizona	\$250,000
Arkansas	\$250,000
California	\$0
Public Health Institute	\$225,000
Colorado	\$255,000
Connecticut	\$225,000
Delaware	\$255,000
District of Columbia	\$250,000
Florida	\$225,000
Georgia	\$250,000
Hawaii	\$255,000
Idaho	\$255,000
Illinois	\$225,000
Indiana	\$255,000
Iowa	\$255,000
Kansas	\$255,000
Kentucky	\$255,000
University of Kentucky	\$255,000
Louisiana	\$255,000
Maine	\$255,000
Maryland	\$255,000
Massachusetts	\$250,000
Michigan	\$250,000
Minnesota	\$255,000
Mississippi	\$225,000
Missouri	\$255,000
Montana	\$250,000
Nebraska	\$255,000
Nevada	\$250,000
New Hampshire	\$250,000
New Jersey	\$250,000

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS NATIONAL COMPREHENSIVE CANCER CONTROL PROGRAM	
New Mexico	\$255,000
New York	\$255,000
North Carolina	\$255,000
North Dakota	\$250,000
Ohio	\$255,000
Oklahoma	\$250,000
Oregon	\$250,000
Pennsylvania	\$255,000
Rhode Island	\$225,000
South Carolina	\$255,000
South Dakota	\$200,000
Tennessee	\$250,000
Texas	\$255,000
Utah	\$250,000
Vermont	\$255,000
Virginia	\$255,000
Washington	\$255,000
West Virginia	\$250,000
Wisconsin	\$250,000
Wyoming	\$255,000
Indian Tribes	\$1,590,484
American Samoa	\$200,000
Guam	\$200,000
Marshall Islands	\$200,000
Micronesia	\$458,998
Northern Mariana Islands	\$200,000
Palau	\$200,000
Puerto Rico	\$105,000
Virgin Islands	\$0
	\$15,839,482

ARTHRITIS, RHEUMATIC, AND OTHER CONDITIONS

				FY 2009 +/- FY 2008
Arthritis	\$13,269,000	\$13,037,000	\$12,984,000	-\$53,000
Epilepsy	\$7,475,000	\$7,766,000	\$7,734,000	-\$32,000
National Lupus Patient Registry	\$917,000	\$3,112,000	\$3,099,000	-\$13,000
Total	\$21,661,000	\$23,915,000	\$23,817,000	-\$98,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 310, 311, and 317

FY 2009 Authorization.....Indefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Arthritis

The long term goal of the CDC Arthritis Program is to reduce pain and disability and improve quality of life among people affected by arthritis. The national program seeks to accomplish this through improving the science base, measuring the burden of arthritis, reaching the public with interventions and health information, making policy and systems changes, and building state arthritis programs. CDC's Arthritis Program was established in 1999.

About 46 million U.S. adults have arthritis (21 percent of the U.S. population) with 18.9 million Americans suffering activity limitations because of arthritis. In the working age population (18-64) work limitations attributable to arthritis affect about one in 20 working-age adults and nearly one third of all people with arthritis. Arthritis results in \$128 billion in costs each year: \$81 billion in medical costs, and \$47 billion in lost productivity.

CDC currently funds 36 state health departments (ranging from \$140,000 to \$240,000) to conduct public health activities for arthritis. States educate the public about arthritis, work with partners to implement activities from their state action plans, conduct surveillance activities to monitor the burden of the disease, and implement evidence-based interventions in selected populations. States apply for funds through a competitive process. States are currently in the fifth year of a five year project period. There will be a new competition for funding in FY 2008. This competition will continue to emphasize expansion of evidence-based programs, expand the number of interventions available, and support broader public health efforts by funding each state program at a higher level, with fewer states participating. These changes maintain CDC's investment in state programs, while focusing our efforts to maximize the public health impact.

Funded states have established state arthritis action plans and begun implementing evidence-based interventions. All states have provided access to physical activity and/or self-management programs to priority populations of people with arthritis, and many have implemented the CDC-developed health communication campaign to encourage physical activity.

Examples of performance accomplishments include:

- Evaluation of the health communications campaign—*Physical Activity: The Arthritis Pain Reliever*—showed significant changes even six months after the campaign. A 2004 study showed that knowledge about arthritis and exercise improved. Participation in moderate physical activity increased by 10 percent, from 74 percent to 84 percent.

- In Minnesota, program activities led to a 229 percent increase in the number of new participants in the evidence-based Arthritis Foundation Self Help Program.
- In Texas state efforts have brought evidenced-based interventions to approximately 8,500 people with arthritis, as reported at the 2007 grantee meeting.

Other CDC funded arthritis activities include: a cooperative agreement with the Arthritis Foundation to increase the amount and quality of information available for people affected by arthritis and to expand the reach of evidence-based programs; extramural research projects; and health education campaigns for people with arthritis.

CDC's extramural intervention research has contributed to the development of new evidence-based interventions, as well as evaluations of existing interventions for effects on arthritis-related outcomes, such as pain and function. For example:

- The Arthritis Self-help Course has improved quality of life for people with arthritis, and more widespread use of the course can save money and reduce the burden of arthritis. The course, disseminated by the Arthritis Foundation, teaches people how to manage arthritis and lessen its effects and has been shown to reduce pain by 20 percent and physician visits by 40 percent.

Intramural activities: CDC continues to document the burden of arthritis and provide data for targeting programs to those most affected through continued data collection in major national surveys and analyses that are published in peer reviewed journals. For example:

- *Arthritis Conditions Health Effects Survey (ACHES)*. Arthritis Conditions Health Effects (ACHES), a random digit dial telephone survey about arthritis was conducted between June 2005 and March 2006 and surveyed 2,238 people with arthritis or chronic joint symptoms aged 45 years or older about symptoms, limitations, levels of physical functioning, effects of arthritis on work, knowledge and attitudes about arthritis, self management of arthritis, physical activity, anxiety and depression, and demographics. Preliminary analyses of data have begun, with publications expected in 2008.
- *Estimating the prevalence of childhood arthritis*. Considerable disagreement exists among experts about what constitutes a clinical case of childhood arthritis and how many cases there are. In December 2007, the first-ever data-based estimate of the prevalence of childhood arthritis and synthetic estimates for each state were published in a peer review journal, finding 294,000 or one in every 250 children nationwide with arthritis, resulting in an estimated 827,000 doctor visits each year.
- *Estimating the impact of arthritis on work*. CDC published data showing that approximately one in 20 working age U.S. adults (18-64 years), or nearly seven million Americans, report being limited in some aspect of work for pay (amount, type or ability to work) because of arthritis. State-based estimates were also published with estimates as high as one in seven workers with limitations in some states.

Epilepsy

Epilepsy is a chronic neurological condition affecting about 2.7 million people in the U.S. CDC has built a program to address public health issues related to epilepsy which focuses on improving care; self-management for individuals and families; improving communication and combating stigma; and establishing data to track epilepsy-related incidence and prevalence, health disparities, and burden of illness.

CDC is also conducting prevention research to develop and improve public health response and providing training for schools and first-responders to seizures; and increasing public awareness and

knowledge about epilepsy. CDC collaborates with partners to improve public awareness and promote education and communication at local and national levels. Each year, a national epilepsy awareness media campaign focuses on youth and racial/ethnic populations.

- The 2006-2007 National Epilepsy Awareness Campaign targeted Hispanic communities. Messages were aired on Spanish-language radio stations and distributed to Spanish-language newspapers, reaching as many as 25 million people.

Lupus

The goal of CDC's Lupus Registries is to estimate the prevalence and incidence of diagnosed lupus in selected geographic areas in order to inform national estimates. CDC currently funds lupus registries in Georgia and Michigan. CDC-supported lupus registries are developing the first reliable epidemiologic data on the prevalence and incidence of diagnosed lupus in the US.

The registries will provide important information about the impact of lupus, which disproportionately affects minorities and women, with national implications for monitoring the incidence and prevalence of the disease and better characterizing individuals with this severe condition. This information is vital so that public health practitioners can target interventions to those most in need.

In FY 2008, CDC will increase funding to these two sites, enabling them to complete their analyses. Both pilot registries are in localities with large African American populations, a group disproportionately impacted by lupus. CDC will also provide planning grants to two new sites to address epidemiological gaps among Hispanics/Latinos, Asian Americans, and Native Americans and explore geographic differences. Based on experience to date, CDC and the scientific community believe that four total sites, plus work with federal data sources, will provide reliable prevalence estimates for all subgroups of interest.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$22,022,000
FY 2005	\$22,487,000
FY 2006	\$21,995,000
FY 2007	\$21,661,000
FY 2008	\$23,915,000

BUDGET REQUEST

The CDC FY 2009 request includes \$23,817,000 for Arthritis, Rheumatic, and Other Conditions, a decrease of \$98,000 below the FY 2008 Enacted level for Individual Learning Accounts (ILA) and administrative reduction. Over the past five years, state health departments have successfully used CDC funding to build arthritis capabilities in state health departments, including collaboration with partners, increasing public awareness, improving their ability to monitor the burden of arthritis, and delivering evidence-based interventions on a limited scale.

Arthritis

The CDC FY 2009 request includes \$12,984,000 for the Arthritis program.

In Spring 2007, CDC convened national experts to advise on future program directions. The panel made several important consensus recommendations:

- Fund state programs at higher levels to address arthritis through broader public health efforts.

- Continue to emphasize expansion of evidence-based interventions, and expand the number of evidence-based interventions available for state programs serving people with arthritis.
- Create and expand innovative partnerships at the local, state, and national level.
- Consider national campaigns, health communications and marketing, and policy interventions.

An open competition for CDC support for state-based arthritis programs is being held in FY 2008. Consensus recommendations from the expert panel have been incorporated into planning this open competition, which maintains CDC's investment in state programs while maximizing state-wide impact of funded programs. CDC plans to fund state programs at high levels, per the recommendations. With FY 2009 budget request of overall level funding, CDC will support more robust programs in fewer states.

By FY 2012, CDC aims to increase the number of adults with doctor-diagnosed arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition by 300,000 individuals through its state arthritis program.

Epilepsy

The FY 2009 CDC request includes \$7,734,000 for the Epilepsy program.

CDC's Epilepsy Program will use state surveillance data to expand its study on the prevalence of self-reported epilepsy in selected state populations. The program will also continue intramural and extramural research activities to better understand the epidemiology of epilepsy, specifically the incidence and prevalence of epilepsy in diverse populations in the U.S., including potentially underserved communities; risk factors and severity of epilepsy in these communities; health disparities and factors contributing to health disparities among people with epilepsy; and process and outcome measures that may be used to define optimum care in epilepsy.

The Epilepsy Program will continue to collaborate with the national Epilepsy Foundation to provide education and awareness programs for diverse racial and ethnic communities, students and staff of middle schools and high schools, parents of teens with epilepsy, police and emergency responders, and older adults with epilepsy and their care givers.

Lupus

In FY 2009, CDC requests \$3,099,000 for the Lupus registries, to support the ongoing work of the two state lupus registries which are developing the first reliable epidemiologic data on the prevalence and incidence of diagnosed lupus in the U.S.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.U	States funded for capacity building arthritis programs	36	36	36	36	36	36	10-18	10-18
5.V	Number of population-based registries to define and monitor the incidence and prevalence of lupus	2	2	2	2	2	2	4	4
Appropriated Amount (\$ Million) ¹		\$22.0	\$22.5	\$22.0		\$21.7		\$23.9	\$23.8

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

TOBACCO

				FY 2009 +/- FY 2008
Tobacco	\$102,016,000	\$104,164,000	\$103,737,000	-\$427,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, Comprehensive Smoking Education Act of 1984, Comprehensive Smokeless Tobacco Health Education Act of 1986

FY 2009 Authorization Indefinite

Allocation Methods.....Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Originally created in 1964 by the Public Health Service as the National Clearinghouse on Tobacco, the Office on Smoking and Health (CDC) was officially established within the Office of the Assistant Secretary of Health in 1978. The Comprehensive Smoking Education Act of 1984 established many of the current roles and responsibilities of CDC. In addition, CDC has several congressional mandates such as maintaining the information clearinghouse on tobacco, managing and supporting the Interagency Committee on Smoking and Health, maintaining the confidential cigarette and smokeless ingredient lists, and producing Surgeon General's Reports on the health consequences of tobacco. The office's authority was transferred to CDC in 1986.

The mission of CDC's tobacco program is to develop, conduct, and support strategic efforts to protect the public's health from the harmful effects of tobacco use. Goals are to:

- Prevent tobacco use among youth and young adults
- Promote tobacco use cessation among adults and youth
- Eliminate exposure to secondhand smoke
- Identify and eliminate tobacco-related health disparities

To accomplish these goals, CDC works in close partnership with local, state, national, and international leaders to:

- Expand the science base of effective tobacco control
- Build sustainable capacity and infrastructure for comprehensive tobacco control programs
- Communicate timely, relevant information to constituents, policy makers, and the public
- Coordinate policy, partnerships, and other strategic initiatives to support tobacco control priorities
- Foster global tobacco control through surveillance, capacity building, and information exchange

CDC funding is used to prevent smoking initiation among youth, promote cessation among adults and youth, reduce exposure to second hand smoke, eliminate tobacco related disparities among population groups, promote sustainable funding for science based comprehensive tobacco control programs, promote global tobacco prevention and control, and conduct tobacco product research and information dissemination.

Comprehensive state programs, including school-based programs and local outreach efforts, have been shown to be effective in reducing the prevalence of tobacco use. Through the National Tobacco Control Program (NTCP), CDC funds all 50 states, seven territories, and the District of Columbia through cooperative agreements. The purpose of the NTCP is to build and maintain tobacco control programs within state and territorial health departments for a coordinated national program to reduce the health and economic burden of tobacco use. The NTCP has four goals: 1) preventing initiation of tobacco use among young people, 2) promoting cessation of tobacco use among youth and adults, 3) protecting the public from exposure to secondhand smoke, and 4) identifying and eliminating disparities in tobacco use among populations groups.

CDC's cooperative agreements also fund national networks to reduce tobacco use among priority populations including African Americans, American Indians/Alaska Natives, Asian Americans/Pacific Islanders, Hispanics/Latinos, lesbian/gay/bisexual/transgender individuals, persons with low socioeconomic status, women, and young adults. CDC also provides grants to 23 states for coordinated school health programs to help prevent tobacco use. CDC also supports state capacity and access to cessation services by funding states to establish or enhance existing state based quitlines to help smokers quit.

In support of the PART, the program developed the following three evaluation measures related to consumption, cotinine (cotinine is the primary proximate metabolite of nicotine and the most specific and preferred biomarker of exposure to secondhand smoke), and lung cancer in 2006:

Consumption

CDC aims to reduce per capita cigarette consumption in the U.S. per adult age 18+. Since 1964, the U.S. Surgeon General's reports on smoking and health have concluded that smoking is a primary cause of lung cancer. National trends in per capita cigarette consumption are strongly correlated with national trends in lung cancer mortality rates and consumption trends are recommended as a primary surveillance indicator for lung cancer control efforts. In 2005, annual per capita cigarette consumption among adults age 18 and over was 1716, a more than five percent decrease from 2004.

Program Activities

- CDC supports the National Network of Tobacco Use Cessation Quitlines. CDC continues its support of the National Network of Tobacco Use Cessation Quitlines, a collaborative effort between CDC, the National Cancer Institute's (NCI) Cancer Information Service (CIS), the North American Quitline Consortium (NAQC), and state tobacco control programs. In 2006, 317,570 total calls were routed by the national quitline portal number, 1-800-QUIT-NOW - and from January through October 31, 2007, 1-800-QUIT-NOW received 395,835 calls.
- CDC provides technical assistance and training to help states plan, establish and evaluate their tobacco control programs.

Cotinine

CDC aims to reduce the proportion of children aged three to 11 who are exposed to secondhand smoke from 55 percent to 45 percent.

Secondhand smoke has been determined to be a known human carcinogen. Since 1986, the U.S. Surgeon General's reports have concluded that exposure to secondhand smoke causes lung cancer in nonsmokers. Cotinine is the primary proximate metabolite of nicotine and the most specific and preferred biomarker of exposure to secondhand smoke.

More than 126 million nonsmoking Americans, including both children and adults, are still exposed to secondhand smoke in their homes and workplaces. Children are more heavily exposed to

secondhand smoke than adults. Almost 60 percent of U.S. children aged three to 11 years—or almost 22 million children—are exposed to secondhand smoke. About 25 percent of children in this age group live with at least one smoker, as compared to only about seven percent of nonsmoking adults.

In addition to its goal of eliminating exposure to secondhand smoke, the NTCP also develops health communication campaigns aimed at informing the public about the health risks associated with secondhand smoke and reducing disparities in these exposures.

- On September 18, 2007, CDC, working closely with the Office of the Surgeon General, launched two major collaborative national initiatives to protect children from exposure to secondhand smoke. These initiatives were announced at a media event at a Washington, DC-area Head Start facility. During the event, Acting Surgeon General Kenneth Moritsugu released an excerpt summarizing key scientific evidence on the serious health risks that secondhand smoke poses to children.
 - The publication, *Children and Secondhand Smoke Exposure*, is excerpted from the 2006 Surgeon General's Report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*. In addition, the Acting Surgeon General announced a new partnership with the American Academy of Pediatrics that will mobilize pediatricians and other primary care clinicians to help parents reduce their children's exposure to secondhand smoke.
- CDC is currently working with EPA and Administration for Children and Family (ACF) Office of Head Start to support the implementation of the "Care for Their Air" initiative.

CDC continues to extend and maximize the impact of the 2006 Surgeon General's Report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke* by collaborating with its partners to publish and present studies expanding the science base on secondhand smoke, to work with the news media to keep secondhand smoke in the news, to provide technical assistance to states as they implement and evaluate smoke-free laws, and to disseminate information on the report and ancillary materials to a wide range of partners and stakeholders.

Lung Cancer

CDC aims to reduce the age-adjusted annual rate of trachea, bronchus, and lung cancer mortality per 100,000 population.

Cancer is the second leading cause of death among all Americans, and lung, trachea, and bronchus cancers account for 13 percent of all cancer diagnoses and 29 percent of all cancer deaths. Since 1964, the U.S. Surgeon General's reports on smoking and health have concluded that smoking is a primary cause of lung cancer, and since 1986 have concluded that exposure to secondhand smoke causes lung cancer in nonsmokers.

- Research shows that the more states spend on comprehensive tobacco control programs, the greater the reductions in smoking—and the longer states invest in state programs, the greater and faster the impact. To this end, CDC prepared *Best Practices for Comprehensive Tobacco Control Programs—2007*. This guidance document, which updates the 1999 original, describes an integrated budget structure for implementing interventions proven to be effective and includes recommended levels of annual state investment required to prevent tobacco use initiation among youth and young adults, promote cessation among adults and young people, eliminate exposure to secondhand smoke, and identify and eliminate tobacco-related disparities.
- CDC advances the science base of tobacco control by conducting and coordinating research, surveillance, and evaluation activities related to tobacco and its impact on health.

CDC synthesizes and translates research into practice; disseminates scientific findings; and provides technical assistance to states, territories, national networks, tribal support centers, and the general public.

- CDC links science and practice and provides leadership to build and sustain tobacco control capacity. CDC is responsible for directing and managing the National Tobacco Control Program and other extramural activities to address tobacco use. CDC also is responsible for providing and supporting training and technical assistance to all 50 states, the District of Columbia, territories, national networks, and tribal support centers.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$90,239,000
FY 2005	\$104,345,000
FY 2006	\$104,169,000
FY 2007	\$102,016,000
FY 2008	\$104,164,000

BUDGET REQUEST

The CDC FY 2009 request includes \$103,737,000 for Tobacco, a decrease of \$427,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and administrative reduction.

CDC will continue its Tobacco prevention and control activities in conjunction with state and local health departments. Key activities, objectives and targets that will guide activities in FY 2009 include:

Through the National Tobacco Prevention and Control (NTCP) program, CDC will continue to support state, local and territorial health department efforts to prevent initiation of tobacco use among youth and young adults, promote tobacco use cessation among adults and youth, eliminate exposure to secondhand smoke, and identify and eliminate tobacco-related disparities.

- CDC will provide technical assistance and training to help states plan, establish, and evaluate their own tobacco control programs.
- A substantial body of research demonstrates that comprehensive state tobacco control programs reduce smoking-attributable mortality, smoking prevalence, smoking initiation, and cigarette consumption.

CDC's aim to reduce per capita cigarette consumption in the U.S. per adult age 18+.

- CDC will continue to support the National Network of Tobacco Use Cessation Quitlines, a collaborative effort between CDC, the National Cancer Institute's (NCI) Cancer Information Service (CIS), the North American Quitline Consortium (NAQC), and state tobacco control programs through 1-800-QUIT-NOW.
- CDC will continue to provide technical assistance and training to help states plan, establish, and evaluate their own tobacco control programs.

CDC's aim to reduce the proportion of children aged three to 11 who are exposed to secondhand smoke. In 2002, 55 percent of children in this age group were exposed.

- CDC continues to support its goal of eliminating exposure to secondhand smoke, the NTCP will continue to develop health communication campaigns aimed at informing the public about the health risks associated with secondhand smoke and reducing disparities in these exposures.

- CDC continues to extend and maximize the impact of the 2006 Surgeon General's Report on *The Health Consequences of Involuntary Exposure to Tobacco Smoke* by collaborating with its partners to publish and present studies expanding the science base on secondhand smoke, to work with the news media to keep secondhand smoke in the news, to provide technical assistance to states as they implement and evaluate smoke-free laws, and to disseminate information on the report and ancillary materials to a wide range of partners and stakeholders.

CDC's aim to reduce the age-adjusted annual rate of trachea, bronchus, and lung cancer mortality per 100,000 population.

- CDC will actively develop, disseminate, and evaluate training and information programs and products based on the updated and newly released (*Best Practices for Comprehensive Tobacco Control Programs—2007*).
- CDC will publish and disseminate the Surgeon General's Report on the mechanisms of disease that provides the scientific framework for product research and potential harm-reduction approaches.
- CDC will continue to advance the science base of tobacco control by conducting and coordinating research, surveillance, and evaluation activities related to tobacco and its impact on health. CDC synthesizes and translates research into practice; disseminates scientific findings; and provides technical assistance to states, territories, national networks, tribal support centers, and the general public.
- CDC will continue to links science and practice and provides leadership to build and sustain tobacco control capacity. CDC is responsible for directing and managing the National Tobacco Control Program and other extramural activities to address tobacco use. CDC also is responsible for providing and supporting training and technical assistance to all 50 states, the District of Columbia, territories, national networks, and tribal support centers.

OUTCOME TABLE

						FY 20				Out- Year Target
Long Term Objective 5.2: Reduce death and disability among adults due to tobacco use.										
5.2.1	Reduce the age-adjusted annual rate of trachea, bronchus, and lung cancer mortality per 100,000 population. [O]	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	43.3
5.2.2	Reduce per capita cigarette consumption in the U.S. per adult age 18+. [O] ¹	1,814 (Baseline)	1,716	N/A	N/A	1,656	6/2009	1,606	1,558	N/A
5.6.3	Reduce the proportion of children aged 3 to 11 who are exposed to second-hand smoke.	55% (2001- 2002 Baseline)	N/A	N/A	N/A	N/A	N/A	45%	N/A	45% (2009- 2010)

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 2007			FY 2009 Estimate
5.W	Number of state tobacco prevention and control programs (includes DC)	51	51	51	51	51	51	51	51
5.X	Tobacco Cessation Quitlines – States/ Territories/ Tribes funded to maintain and enhance existing quitlines	36	36	36	36	36	36	36	36
5.Y	Number of cooperative agreements for tobacco prevention with key organizations with access to diverse population	15	15	16	16	15	15	15	15
5.Z	Scientific, technical, and public inquiry response on tobacco use	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
5.A.A	Total state health departments and other organizations (e.g., local health departments) requesting advertising campaign materials through the Media Campaign Resource Center	250	250	250	250	250	250	250	250
Appropriated Amount (\$ Million) ¹		\$90.3	\$104.3	\$104.2		\$102.0		\$104.2	\$103.7

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS CHRONIC DISEASE PREV. & HEALTH PROMOTION PROGRAMS: TOBACCO	
	FY 2007 Actual*
Alabama	\$1,458,150
Alaska	\$1,269,882
Arizona	\$463,203
Arkansas	\$1,382,174
California	\$545,374
Colorado	\$1,457,486
Connecticut	\$1,185,790
Delaware	\$735,794
District of Columbia	\$584,344
Florida	\$941,153
Georgia	\$1,202,723
Hawaii	\$1,018,083
Idaho	\$1,254,328
Illinois	\$1,297,303
Indiana	\$1,140,165
Iowa	\$1,111,681
Kansas	\$1,368,571
Kentucky	\$1,252,085
Louisiana	\$1,878,031
Maine	\$1,059,957
Maryland	\$1,532,052
Massachusetts	\$1,849,048
Michigan	\$1,833,000
Minnesota	\$1,318,234
Mississippi	\$594,101
Missouri	\$1,271,089
Montana	\$1,058,500
Nebraska	\$1,363,673
Nevada	\$942,762
New Hampshire	\$1,144,746
New Jersey	\$1,400,915
New Mexico	\$1,254,089
New York	\$2,059,294
North Carolina	\$1,837,670
North Dakota	\$1,270,130

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS CHRONIC DISEASE PREV. & HEALTH PROMOTION PROGRAMS: TOBACCO	
	FY 2007 Actual*
Ohio	\$1,560,442
Oklahoma	\$1,458,066
Oregon	\$1,202,573
Pennsylvania	\$1,417,245
Rhode Island	\$1,401,074
South Carolina	\$1,338,253
South Dakota	\$1,058,302
Tennessee	\$1,408,130
Texas	\$1,068,977
Utah	\$1,335,784
Vermont	\$1,252,996
Virginia	\$1,172,776
Washington	\$1,550,973
West Virginia	\$1,303,471
Wisconsin	\$1,308,942
Wyoming	\$1,139,998
American Samoa	\$153,082
Guam	\$227,000
Marshall Islands	\$0
Micronesia	\$232,311
Northern Mariana Islands	\$179,708
Palau	\$144,472
Puerto Rico	\$453,614
Virgin Islands	\$172,516
	\$65,876,285

NUTRITION, PHYSICAL ACTIVITY AND OBESITY

				FY 2009 +/- FY 2008
Micronutrient Malnutrition	\$4,185,000	\$6,422,000	\$6,396,000	-\$26,000
All Other Nutrition/PA/Obesity	\$36,405,000	\$35,769,000	\$35,622,000	-\$147,000
Total	\$40,590,000	\$42,191,000	\$42,018,000	-\$173,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317C, 317D, 317H, 317K, 317K(a), 317K(b), 317L, 317M, 330E, 399B-399D, 399F, 399H-399L, 399W-399Z, 1102, 1501-1510, 1509, 1701, 1702, 1703, 1704, 1706

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural and Competitive Grants/Cooperative Agreements

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC's Nutrition, Physical Activity, and Obesity program was established to prevent and control obesity and other chronic diseases by supporting state health departments in developing and implementing nutrition and physical activity interventions. Nutrition and physical activity are critical components of a healthy lifestyle, maintenance of a healthy weight, and the prevention of chronic diseases. Improving lifestyle behaviors requires change at multiple levels of the socio-ecological model. Activities of the Nutrition, Physical Activity and Obesity program include: 1) translation of research to practice, 2) intervention development, 3) communication, 4) social marketing, 5) evaluation, and 6) partnerships to support implementation of population based interventions.

CDC's Nutrition, Physical Activity, and Obesity Program has the following impact objectives:

- Increase the number, reach, and quality of policies and standards set in place to support healthful eating and physical activity in various settings.
- Increase access to and use of environments to support healthful eating and physical activity in various settings.
- Increase the number, reach, and quality of social and behavioral approaches that complement policy and environmental strategies to promote healthful eating and physical activity.

Poor nutrition, physical inactivity, and unhealthy weight not only increase the risk of many diseases and health conditions; they also have a major economic impact. In 2000 alone, the cost of obesity in the U.S. exceeded \$100 billion. States promote strategies to address behavioral targets, including physical activity, consumption of fruits and vegetables, TV-viewing time, breastfeeding, sugar sweetened beverages, and energy density.

CDC funding is used by states via a cooperative agreements to hire staff with expertise in public health nutrition and physical activity, build broad-based coalitions, plan statewide nutrition and physical activity programs and conduct small-scale interventions, particularly through population-based strategies such as policy-level change, environmental change, and social marketing. Currently funded capacity-building states are developing plans to address state priority populations, establish critical partnerships to achieve program goals, and establish and evaluate programs for the state's priority populations. A requirement of this cooperative agreement is completion of the

Progress Monitoring Report (PMR) every six months. Once states have accomplished this, funds are used to:

- Implement statewide plans; expand partnerships;
- Develop new or apply existing interventions and evaluate their effectiveness; develop resources and training materials;
- Train health care providers and public health professionals;
- Provide grants to communities for local obesity prevention initiatives;
- Identify, assess, or develop data sources to further define and monitor the burden of obesity; and
- Evaluate progress and impact of the state plan and intervention projects.

A successful example of an environmental change implemented in 2007 as part of the Nutrition, Physical Activity, and Obesity Program is the Missouri Healthier Vending Machine Project. The Missouri Department of Health and Senior Services (DHSS) initiated a healthier vending project at their office buildings where approximately 800 state employees work. DHSS marketed and supported the healthier foods for a limited time period to provide the vending operator the experience of providing healthier options without the risk of losing profit. DHSS offered to reimburse the vendor for the amount of the loss of monthly profit based on gross monthly sales for the previous year.

In addition, DHSS provided promotion through a kick-off event, signage on the machines and throughout the buildings, and promotional email messages that included contests with prizes. The healthier vending items were determined by an employee survey of preferred items and based on the Missouri Eat Smart Guidelines.

In FY 2008 a new funding opportunity announcement (FOA) will be issued to all states for the Nutrition and physical activity to prevent obesity and other chronic disease program. It is expected that between 20 and 30 states will be funded to accomplish the program goals, with a total funding amount of approximately \$17.6 million.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$39,289,000
FY 2005	\$41,930,000
FY 2006	\$41,280,000
FY 2007	\$40,590,000
FY 2008	\$42,191,000

BUDGET REQUEST

The CDC FY 2009 request includes \$42,018,000 for Nutrition, Physical Activity, and Obesity, a decrease of \$173,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

CDC has a long-term objective to reduce the rate of growth of obesity through nutrition and physical activity interventions. CDC has gathered baseline data for measures relating to obesity rates and physical activity.

- In FY 2004, CDC reported that the estimated average age adjusted annual rate of increase in obesity rates among adults age 18+ was 0.64. In FY 2014, CDC's aims to reach 0.16.

- In FY 2004, CDC reported that 24.36% of adults age 18+ engage in no leisure-time physical activity. In FY 2014, CDC aims to report 21.5%.

Promoting regular physical activity and healthy eating by creating policies and an environment that support these behaviors are essential to reducing the epidemic of obesity. The National Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases is the mechanism by which states are supported in accomplishing these tasks to slow the progression of obesity and other chronic diseases.

CDC's impact objectives will continue to be accomplished by promoting and helping states with the following policy and environmental strategies which will increase the number of nutrition and physical activity interventions that are implemented and evaluated in funded states:

- Food Availability
- Food Advertisement/Promotion
- Food and Physical Activity Incentives/Disincentives
- Recreation
- Transportation
- Land Use/Design
- Safety (as a barrier to physical activity)

OUTCOME TABLE

						FY 20				Out- Year Target
Long Term Objective 5.5: Reduce the rate of growth of obesity through nutrition and physical activity interventions.										
5.5.1	Reduce the age-adjusted percentage of adults age 18+ who engage in no leisure-time physical activity. [O]	24.36%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.5% (2014)
5.5.2	Slow the estimated average age-adjusted annual rate of increase in obesity rates among adults age 18+. [O]	+0.64 average increase per year	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+0.16 average increase per year (2014)

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

							FY 2007			FY 2009 Target
5.A.B	Number of states implementing intervention programs for nutrition/PA/obesity	28	28	28	28	28	28	28	20-30	20-30
Appropriated Amount (\$ Million) ¹		\$39.3	\$41.9		\$41.3		\$40.6		\$42.2	\$42.0

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

				FY 2009 +/- FY 2008
BRFSS - Non-HIV/AIDS	\$6,418,000	\$6,306,000	\$6,280,000	-\$26,000
BRFSS - HIV/AIDS	\$1,011,000	\$993,000	\$989,000	-\$4,000
Total	\$7,429,000	\$7,299,000	\$7,269,000	-\$30,000

AUTHORIZING LEGISLATION

Public Health Service Act §§ 301, 304, 310, 311, and 317

FY 2009 Authorization.....Indefinite

Allocation Method.....Direct

Federal/Intramural; Competitive Cooperative Agreements; Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The Behavioral Risk Factor Surveillance System (BRFSS) is a coordinated system used by CDC and state health departments to track data related to all of CDC's state-based Chronic Disease Prevention and Health Promotion programs and used to track state, local, and national trends in chronic disease prevention and health promotion. The BRFSS, established in 1984, is CDC's system for measuring and tracking state- and local-level data on chronic disease, health promotion, and other critical health problems and health-related behaviors in the non-institutionalized U.S. adult population, 18 years and older, as well as a selected set of variables on children under age 18 in many states.

BRFSS is funded in all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam. Extramural cooperative agreement funds are awarded to conduct surveillance activities at the state level. It is the largest continuously conducted telephone-based surveillance system in the world, with more than 350,000 interviews annually. States are funded to collect ongoing information on behaviors that place health at risk, medical conditions, access to health care, and use of healthcare services, as well as a number of special projects such as the asthma callback survey, a panel survey designed to gain additional information from respondents with diagnosed asthma and/or other restrictive airway diseases.

BRFSS data are used to identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs. Examples of data collected from the system include:

Obesity Epidemic: In 1991, four states reported obesity prevalence rates of 15 to 19 percent, and no state reported rates higher than 19 percent. In 2006, only four states had a prevalence of obesity less than 20 percent. Twenty-two states had obesity prevalence rates equal or greater than 25 percent, including two states with obesity rates higher than 30 percent.

- BRFSS trend data detected a state-by-state epidemic by identifying those areas of the country most quickly facing a critical obesity problem faster than any national data set.

Flu Vaccine Monitoring: BRFSS data guided developers of national and state public awareness messages about the shortage of influenza vaccine during the 2004-2005 flu season and aided in prioritizing distribution of limited vaccine supplies.

- By the end of the flu season, BRFSS data showed coverage among adults in priority groups nearly reached that of previous years, whereas coverage among adults in non-priority groups was approximately half of the 2003-2004 flu season.

BRFSS in-depth analyses provides vital information to public health officials including:

- Small area analysis - metropolitan/micropolitan areas (a core area containing a substantial population nucleus, together with adjacent communities and all having a high degree of economic and social integration) and county data in SMART BRFSS and other small-area analysis.
- Analysis by age group for services such as estimates for older Americans for the recent Healthy Aging Report Card and for analysis done for AARP, mammography coverage among women of appropriate age, folic acid consumption among women of childbearing age, flu vaccine coverage among priority groups, etc.
- Disparities analysis by ethnic group for planning and evaluation in states and CDC.

Safety Belt Laws: In the past, BRFSS data showed that the states where safety belt laws had been passed saw a sharp increase in their use. Today, BRFSS continues to help improve safety belt laws.

- A 2004 CDC analysis of BRFSS data demonstrated that the prevalence of safety belt use was much higher among states with primary laws (85.3 percent), which allow police to stop a motorist and issue a citation solely for failure to use a safety belt, than among state with secondary laws (74.4 percent).

Mammogram Coverage: Early BRFSS data showed that many women were not getting mammograms. In 1981, only one state required insurance companies to pay for the screening. As more states required the coverage, more women got mammograms.

- By 2006, 49 states and the District of Columbia required coverage and the national median percentage of women aged 50 or older who had received a mammogram within the past two years increased to 79.9 percent.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$7,207,000
FY 2005	\$7,641,000
FY 2006	\$7,529,000
FY 2007	\$7,429,000
FY 2008	\$7,299,000

BUDGET REQUEST

The CDC FY 2009 request includes \$7,269,000, a decrease of \$30,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and administrative reduction. The request will support ongoing surveillance of critical health problems and health-related behaviors at the state and local level.

In FY 2009, CDC will continue to fund 50 states, the District of Columbia, Puerto Rico, the Virgin Islands and Guam to collect behavioral risk factor data. CDC projects that there will be 350,000 interviews conducted through the BRFSS.

States and local areas will use BRFSS data to identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs. For many risk factors and conditions, BRFSS is the only source of state-level data. A wide range of public health officials, researchers, and key decision makers at all levels rely on the ongoing availability of

BRFSS data. It is the only source of data for many important disease and risk factor conditions at the state level.

A key challenge for BRFSS is managing an increasingly complex surveillance system that serves the needs of multiple programs while adapting to changes in communications technology, societal behaviors, and population diversity. To address these challenges, CDC maintains an ongoing program of improvement and adaptation that involves designing and conducting innovative pilot studies to advance the current BRFSS methodology and provide a foundation for the implementation of future methodologies, (i.e. use of cell phone and address-based sampling).

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.C	States and territories funded for conducting surveillance	54	54	54	54	54	54	54	54
Appropriated Amount (\$ Million) ¹		\$7.2	\$7.6	\$7.5		\$7.4		\$7.3	\$7.3

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM	
	FY 2007 Actual
Alabama	\$269,555
Alaska	\$318,818
Arizona	\$183,652
Arkansas	\$184,815
California	\$0
Colorado	\$364,028
Connecticut	\$265,794
Delaware	\$132,759
District of Columbia	\$265,561
Florida	\$274,654
Georgia	\$239,188
Hawaii	\$252,700
Idaho	\$273,771
Illinois	\$250,184
Indiana	\$168,919
Iowa	\$310,823
Kansas	\$244,131
Kentucky	\$205,050
Louisiana	\$222,119
Maine	\$255,441
Maryland	\$179,924
Massachusetts	\$318,843
Michigan	\$224,360
Minnesota	\$278,687
Mississippi	\$254,560
Missouri	\$253,000
Montana	\$296,676
Nebraska	\$214,329
Nevada	\$275,028
New Hampshire	\$269,264
New Jersey	\$240,885
New Mexico	\$318,533

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM	
New York	\$208,088
North Carolina	\$279,192
North Dakota	\$151,798
Ohio	\$263,750
Oklahoma	\$224,331
Oregon	\$357,488
Pennsylvania	\$139,297
Rhode Island	\$284,092
South Carolina	\$281,885
South Dakota	\$198,354
Tennessee	\$151,668
Texas	\$297,258
Utah	\$256,139
Vermont	\$222,143
Virginia	\$253,055
Washington	\$346,831
West Virginia	\$106,305
Wisconsin	\$255,666
Wyoming	\$267,655
Public Health Institute, CA	\$274,099
American Samoa	\$0
Guam	\$38,985
Marshall Islands	\$0
Micronesia	\$0
Northern Mariana Islands	\$0
Palau	\$0
Puerto Rico	\$216,585
Virgin Islands	\$246,924
	\$13,127,639

EMERGING ISSUES IN CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION

				FY 2009 +/- FY 2008
BA	\$28,820,000	28,977,000	24,210,000	-\$4,767,000

*Behavior Risk Factor Surveillance System and information is discussed in its own, separate narrative

AUTHORIZING LEGISLATION

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural; Contracts; Competitive Cooperative Agreements.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

In order to keep pace with emerging issues in chronic disease prevention and health promotion and to use the most advanced science in new public health approaches and new analytic methods, CDC undertakes early scientific and programmatic work in emerging and cross-cutting chronic disease and health promotion issues. CDC defines the extent and public health impact of emerging issues, develops the scientific basis for public health solutions, and establishes effective interventions and public health responses.

Areas addressed include leading causes of death, for which new public health approaches are becoming available, areas where new information about how public health can reduce disease burden are now available, and emerging, cutting-edge analytic approaches that will shape how public health responds to chronic disease problems in the future.

Alzheimer's disease is our nation's 7th leading cause of death. Maintaining cognitive health and Alzheimer's disease rises to the top among issues of aging which are of high public concern. This concern will continue to grow as the U.S. population ages. CDC has begun to formulate and act on a public health response to Alzheimer's disease with the long term goal of maintaining and improving the cognitive performance and function of adults. In FY 2007, CDC created *The Healthy Brain Initiative: A National Public Health Roadmap to Maintaining Cognitive Health*. The Roadmap identifies and prioritizes recommendations concerning education and communication at local and national levels, as well as strategies to address the burden of cognitive impairment through surveillance, prevention research, and policy needs and capabilities.

CDC is preparing for the aging of the U.S. population by examining the health needs of older adults. CDC's **Healthy Aging** program monitors trends in the health of the older American population, in order to guide program planning throughout public health; provides high-quality health information to public health and aging professionals and links the public health and aging services networks at the national, state, and local levels.

The program also partners with the health care system to enhance communication and promote the broader use of clinical preventive services in older adults; and, works to translate and disseminate effective prevention research findings into communities.

- Examples of recent accomplishments include the release of the second State of Aging and Health in America report; SENIOR grants to effectively implement health promotion and chronic disease prevention programs for older adults through joint efforts of the public health and aging services networks; and, a systematic review to identify interventions with evidence of high effectiveness that can now be disseminated widely.

Chronic kidney disease (CKD) is our nation's 9th leading cause of death and is a serious and growing problem. CDC works closely with grantees and other partners to develop capacity for a

kidney disease surveillance, epidemiology, health economics, and health outcomes research program. In collaboration with partners, CDC is examining the natural history of the disease; assessing its economic burden; examining the feasibility of establishing a national surveillance system; and facilitating the advancement of public health research in chronic kidney disease. In addition, CDC is working with partners to develop a state-based screening and demonstration project for detecting people with high risk of developing chronic kidney disease. In 2007, CDC held an expert panel to discuss comprehensive public health strategies for preventing the development and progression of chronic kidney disease. The proceedings and a journal supplement are being prepared for publication in peer review journals.

Blindness and vision impairment are major public health problems causing a substantial human and economic toll on individuals and society. More than 3.4 million Americans 40 years and older are either blind or are visually impaired and millions more are at risk for developing vision impairment and blindness. CDC, through its Vision Health Initiative (VHI), is working closely with grantees and other partners to develop a coordinated public health approach to improve the nation's vision and eye health by: assessing the burden by improving and strengthening public health surveillance for vision loss and eye diseases, vision disability, and quality of life; conducting applied public health research to translate science into programs, services, and policies for partners in the public, private, and voluntary sectors; providing technical assistance on vision and eye health to national, state, and local organizations; and working with partners to develop a state-based integrative model for reaching populations at high risk of developing vision loss and eye diseases.

- CDC published *Improving the Nation's Vision Health: A Coordinated Public Health Approach*, which highlights a national public health framework to prevent vision impairment and blindness and coordinate prevention and rehabilitation efforts between all sectors.

Other Chronic disease activities:

To better understand the natural history of **inflammatory bowel disease (IBD)** and factors that predict the course of the disease, CDC epidemiologists are working in conjunction with the Crohn's & Colitis Foundation of America and a large health maintenance. Findings from this study are expected to add to the understanding of the prevalence and incidence of IBD in the U.S.; the impact of the disease on the health of affected persons; the practice variations in the management of IBD; and the impact of various clinical practices on outcome of the disease.

CDC funds a five year cooperative agreement with the **Interstitial Cystitis** Association (ICA), a voluntary non-profit IC patient and health care provider national organization, to develop, implement, and evaluate a national health promotion and education campaign to increase the general public and health care provider awareness and education of IC. Market analysis has identified strategies for developing specific health promotion messages for the general public and health care providers on IC.

Emerging Approaches to Health Promotion includes innovative scientific research on emerging and cross-cutting chronic disease issues and approaches. The activities define the extent and public health impact of emerging issues and develop the scientific basis for new approaches to public health solutions for issues such as excessive alcohol consumption, sleep, and syndemics, a new science for understanding the mutually reinforcing connections that exist among afflictions (for example, diabetes, obesity, and asthma). The activities also include the development of new public health tools such as community health indicators for chronic disease and health promotion.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$13,413,000
FY 2005	\$15,580,000
FY 2006	\$15,175,000
FY 2007	\$14,881,000
FY 2008	\$15,440,000

BUDGET REQUEST

The CDC FY 2009 request includes \$24,210,000 for Emerging Chronic Disease and Health Promotion, a decrease of \$4,767,000 below the FY 2008 Enacted level, which includes \$100,000 for an Individual Learning Account (ILA) and administrative reduction.

CDC will continue to advance science and effective public health response in emerging areas of chronic disease prevention and health promotion, define the burden of emerging conditions, identify high-impact opportunities for public health intervention, develop and disseminate effective interventions and public health responses, and assess trends the impact of trends (such as the aging of the U.S. population) and future threats in chronic disease and health promotion so that CDC and the public health community can prepare for the chronic disease issues of the future. Examples of planned activities are included below.

Alzheimer's Disease

The FY 2009 CDC request includes \$1,570,000 for Alzheimer's Disease.

CDC's Healthy Aging Program will take a comprehensive approach to develop a set of questions for use in a population-based surveillance system that assesses and monitors the public's beliefs about the burden of cognitive decline. These data will lay the groundwork for advancing public health's understanding about the perceived burden of cognitive decline among American adults.

The program will conduct an evaluation of "The National Public Health Road Map to Maintaining Cognitive Health" to monitor and assess the impact of the Road Map, track the progress made towards anticipated outcomes, and identify how the Road Map has been referenced and disseminated.

Pioneering Healthier Communities (YMCA)

The FY 2009 request includes no funding for the PHC program. CDC will continue to support community health programs through other funding mechanisms.

Chronic Kidney Disease (CKD)

The CDC FY 2009 request includes \$1,957,000 for Chronic Kidney Disease. In FY 2009, CDC will continue to fund a cooperative agreement with university partners to develop a national surveillance system for CKD. In addition, CDC will continue funding a cooperative agreement with the National Kidney Foundation to test a screening program for identifying people at high risk of developing CKD and follow-up to examine how their care can be improved over time to prevent progression to kidney failure. CDC anticipates funding demonstration programs in four states to look at detection of individuals at highest risk of developing CKD.

Blindness and vision impairment

The CDC FY 2009 request includes \$2,379,000 for visual screening education.

CDC's Vision Health Initiative (VHI) is designed to promote vision health and quality of life for all populations, throughout all life stages, by preventing and controlling eye disease, eye injury, and vision loss resulting in disability. In FY 2003, CDC awarded a five year competitive cooperative agreement to Prevent Blindness America to develop, deliver and evaluate a comprehensive vision screening program. The five year cooperative agreement funding is being re-competed in FY 2008. A major challenge facing the VHI is that prevalence of vision loss and eye diseases resulting in disability is expected to increase in the future due to the aging of the population and to the increase in chronic diseases affecting vision and eye health like diabetes. In addition, eye care remains suboptimal especially among high risk population.

Mind, Body Research program

The FY 2009 request includes elimination of the Mind, Body Research program a reduction of \$1,719,000 below the FY 2008 Enacted level.

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.D	Cooperative agreements with national health organizations to address emerging and cross-cutting issues in chronic disease prevention and health promotion.	8	8	8	8	8	8	8	8
Appropriated Amount (\$ Million) ¹		\$13.4	\$15.6	\$15.2		\$14.9		\$15.4	\$13.7

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

SCHOOL HEALTH

				FY 2009 +/- FY 2008
HIV/AIDS	\$40,938,000	\$40,223,000	\$40,059,000	-\$164,000
Non-HIV/AIDS	\$13,851,000	\$13,609,000	\$13,553,000	-\$56,000
Food Allergies	\$0	\$491,000	\$0	-\$491,000
Total	\$54,789,000	\$54,323,000	\$53,612,000	-\$771,000

AUTHORIZING LEGISLATION

General Authority: PHSA §§ 301, 307, 310, 311, 317, 317K, 327, 340D, 352, 391, 1102, 1501-1510, 1706

FY 2009 Authorization Indefinite

Allocation Methods.....Direct
Federal/Intramural; Grants/Cooperative Agreements; Contracts; and Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

In response to the rising tide of human immunodeficiency virus (HIV) infection in the United States, CDC launched a federal initiative to assist schools across the nation in providing effective education to prevent the spread of acquired immune deficiency syndrome (AIDS). In 1987, CDC funded 15 state education agencies (SEAs) and 12 local education agencies (LEAs) to coordinate activities to prevent the spread of HIV among adolescents. Since 1987, CDC's school health efforts have expanded to provide more focus on physical activity, nutrition, and tobacco use prevention and other priority health risk behaviors.

The prevalence of overweight among children aged six to eleven has more than doubled in the past 20 years, increasing from seven percent in 1980 to 18.8 percent in 2004. Children and adolescents who are overweight are more likely to be overweight or obese as adults. Overweight adults are at increased risk for heart disease, high blood pressure, stroke, diabetes, some types of cancer, and gallbladder disease.

Type two (2) diabetes, formerly known as adult onset diabetes, has become increasingly prevalent among children and adolescents as rates of overweight and obesity rise. A CDC study estimated that one in three American children born in 2000 will develop diabetes in their lifetime.

School health programs play a unique and important role in the lives of young people by improving their health knowledge, attitudes and skills, health behaviors and outcomes, educational outcomes, and social outcomes. Each school day is an opportunity for the nation's 54 million students to learn about health and practice the skills that promote healthy behaviors. CDC emphasizes a coordinated, comprehensive, and collaborative approach to school health. It focuses on strengthening the health infrastructure of state and local education agencies and schools to address critical health issues including obesity, asthma, and HIV, STD, and teen pregnancy prevention, by building the capacity of funded partners to support science-based, cost-effective health programming. The program's overarching long-term goal is to reduce the rates of chronic diseases, and HIV, other sexually transmitted diseases, and teen pregnancy. This goal is accomplished by:

- Monitoring priority health risk behaviors and school health programs and policies through systems such as the Youth Risk Behavior Surveillance System, the School Health Policies and Programs Study, and School Health Profiles;

- Analyzing research findings to develop guidelines for addressing priority health risk behaviors among students and developing tools such as the School Health Index: A Self-Assessment and Planning Guide, to help schools implement these guidelines;
- Enabling states, cities, and national organizations to develop, implement, and evaluate their own school health programs to improve the health, education, and well-being of young people;
- Evaluating the impact of interventions to improve programs; and
- Implementing Healthy Passages, a longitudinal study designed to provide a scientific basis for the development of policies and interventions to help keep children and adolescents healthy. This study will characterize the relative contribution of important factors that influence behaviors and outcomes over time.

State Programs

CDC currently funds 23 state education agencies to establish a partnership with their state health agency to focus on reducing chronic disease risk factors such as tobacco use, poor nutrition, and physical inactivity. Funded states include the following: Arkansas, California, Colorado, Florida, Hawaii, Indiana, Kansas, Kentucky, Maine, Massachusetts, Michigan, New York, North Carolina, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Washington, West Virginia, Wisconsin. (In FY 2008, CDC intends to fund up to 23 states and up to two tribal governments in support of these school health programs.)

- **Wisconsin:** From 2001–2005, approximately 400 schools serving more than 105,000 students significantly improved their school tobacco programs through implementation of CDC's Guidelines for School Health Programs to Prevent Tobacco Use and Addiction. The smoking rate among high school students decreased from 38.1 percent in 1999 to 22.8 percent in 2005—a decline of 40 percent.
- **California:** The California Department of Education/School Health Connections collaborated with the state Department of Health Services to conduct state- and local-level leadership institutes modeled after the American Cancer Society's National School Health Leadership Institutes. Since 2005, institutes have been conducted in Sacramento, Los Angeles, the San Francisco Bay Area, and in Ventura County. District team accomplishments following their participation in the institute underscore the effectiveness of these school health leadership trainings.
- **Hawaii:** Hawaii's school health accomplishments include opening fitness centers at schools for community use, adding milk and juice to vending machines, increasing salad offerings during lunch, providing additional PE electives, placing health tips in parent newsletters, offering aerobics and yoga classes to teachers, creating walking paths, and offering health screenings to staff.

Capacity Building through National Non-Governmental Organizations (NGOs)

CDC funds 29 national non-governmental organizations (NGOs) to build the capacity of societal institutions that influence youth. These organizations implement activities that are directed toward building the capacity of CDC funded state, territorial, and large local school district programs, youth serving organizations, and other NGOs. The activities involve intensive training, follow-up support and technical assistance, and evaluation to fully integrate and sustain programs that promote healthy behaviors for the nation's youth.

- **National Association of State Boards of Education (NASBE):** In 2004 the U.S. Congress passed the Child Nutrition and Women, Infants, and Children Reauthorization Act [Public

Law 108-265], which included a new provision: all local education agencies (LEAs) participating in programs authorized by the National School Lunch Program or the Child Nutrition Act were to have established local wellness policies by the start of the 2006-2007 school year.

- Section 1.01 NASBE/Center for Safe and Healthy Schools has compiled state strategies for supporting local wellness policies, documenting that at least 48 states have adopted new laws, regulations, or policies, or have developed guidance materials that specifically address the requirements of the wellness policies.

Monitoring Activities

CDC monitors priority health risk behaviors and school health programs and policies through the following systems:

- The [Youth Risk Behavior Surveillance System](#) (YRBSS) provides national, state, and local level data on the prevalence of six categories of priority health risk behaviors which include: tobacco use; unhealthy dietary behaviors; inadequate physical activity; sexual behaviors that may result in HIV infection, other sexually transmitted diseases, and teen pregnancies; alcohol and other drug use; and behaviors that contribute to unintentional injury and violence. The YRBSS provides CDC, states, and others with vital information to more effectively target and evaluate programs. State and local education agencies use data from YRBSS to inform policymakers about the need for interventions in their jurisdictions to help young people avoid risk behaviors.
- The [School Health Profiles](#) helps state and local education and health agencies monitor the current status of school health education; school health policies related to HIV/AIDS, tobacco use prevention, unintentional injuries and violence, physical activity, and food service; physical education; asthma management activities; and family and community involvement in school health programs. State and local education and health agencies conduct the survey biennially at the middle/junior high school and senior high school levels in their states or districts, respectively.
- The [School Health Policies and Programs Study](#) (SHPPS) is a national survey periodically conducted to assess school health policies and programs at the state, district, school, and classroom levels. SHPPS is used to monitor the status of the nation's school health policies and programs; describe the professional background of the personnel who deliver each component of the school health program; describe relationships between state and district policies and school health programs and practices; and identify factors that facilitate or impede delivery of effective school health programs.

According to the CDC's SHPPS 2006, only four percent of elementary schools, eight percent of middle schools and two percent of high schools provide daily physical education for all grades for the entire school year. Overall, 22 percent of schools did not require students to take any physical education.

Other findings include:

- The percentage of schools that offered deep-fried potatoes to students decreased from 40 percent in 2000 to 18.8 percent in 2006.
- The percentage of school in which students could purchase bottled water increased from 29.7 percent in 2000 to 46.2 percent in 2006.
- The percentage of districts that required elementary schools to teach physical education increased from 82.6 percent in 2000 to 93.3 percent in 2006.

- The percentage of states that required elementary schools to provide students with regularly scheduled recess increased from four percent in 2000 to 12 percent in 2006, and the percentage of districts with this requirement increased from 46 percent to 57 percent.
- Policies that prohibit all tobacco use in all school locations, including off-campus school-sponsored events increased from 46 percent in 2000 to 64 percent in 2006.
- The proportion of fully tobacco free secondary schools increased from 37 percent in 1994 to 46 percent in 2000. School health policies and programs have contributed to recent decreases in health risk behaviors among high school students, including the decline in cigarette smoking rates from 36 percent in 1997 to 23 percent in 2005.

Guidelines and Tools for Schools

CDC synthesizes research findings to identify policies and practices that are most likely to be effective in promoting healthy behaviors among young people. Research-based recommendations for school health programs are featured in a series of publications called the CDC guidelines for school health programs. To date, these guidelines have addressed [tobacco-use prevention](#), [promotion of healthy eating](#) and [physical activity](#), [prevention of unintentional injuries and violence](#), [skin cancer prevention](#), and [AIDS education](#).

The school health program model was used in the Lifestyle Education for Activity Program (LEAP) intervention. Schools implemented the intervention in physical education, health education, health services, family and community involvement, school environment, and health promotion for staff. After one academic year, participation in regular vigorous physical activity was higher among girls enrolled in the intervention schools than in the control schools.

- A tobacco use prevention program reduced by about 26 percent the number of students who started smoking cigarettes during grades seven to nine.
- Inner-city children who participated in a school breakfast program increased nutrient intake and were more likely to improve their academic and psychosocial functioning than those who did not participate in the program.

HIV/AIDS

CDC currently funds 48 state education agencies (average award \$248,000); 18 local education agencies, including the District of Columbia (average award \$269,000); and seven territorial education agencies to implement HIV prevention activities in secondary schools, post-secondary institutions, and settings that serve youth in high-risk situations. (Utah and Ohio did not apply for funding.) In FY 2008, CDC intends to fund 49 states (Utah did not apply); 18 local education agencies, including the District of Columbia; up to seven territorial education agencies; and up to two tribal governments to support HIV prevention activities in schools.

Each year there are approximately 19 million new STD infections in the U.S. and almost half of them are among youth ages 15 to 24. Thirty-four percent of young women – approximately 820,000 each year – become pregnant at least once before the age of 20.

STDs (including HIV) among youth result in substantial economic burden to our society. The total estimated burden of the nine million new cases of STDs that occurred among 15 to 24-year-olds in 2000 was \$6,500,000,000 (in year 2000 dollars).

Data from the 2005 Youth Risk Behavior Survey (YRBS) show that 47 percent of high school students had had sexual intercourse, 14 percent of high school students had four or more sex partners during their lifetime, and 37 percent of sexually active high school students did not use a condom during last intercourse.

Examples of activities and accomplishments from CDC funded programs include:

- **Florida:** In Florida, Broward County Public Schools partnered with the local American Red Cross chapter to develop and implement the Project BEAT (Bridging Education and Attitudes in Teens) curriculum, an HIV/AIDS prevention education program for secondary students. Emphasizing student safety and decision making, Project BEAT blends the existing curricula with American Red Cross standards and objectives, including peer and parental education components. During the 2004–2005 academic year, more than 25,000 middle and high school students received science-based HIV/AIDS information through Red Cross-certified instructors and peer educators.
- **New York City:** In an effort to deliver a high quality and up-to-date HIV/AIDS prevention education program, the New York City Department of Education spearheaded a major initiative to update its HIV/AIDS Curriculum originally published in the mid-1990s. The revised curriculum is science-based, skills-driven, standards-based, and integrated into the overall educational program. During 2006–2007, the NYC Department of Education's Office of Health and Family Living created an HIV/AIDS cadre of trainers and provided professional development to more than 2,000 teachers, administrators, and parents to ensure that the revised curriculum was being effectively delivered to students in more than 1,400 schools. In addition, the curriculum was adapted for students with special needs and 77 special education teachers were trained.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$57,232,000
FY 2005	\$56,746,000
FY 2006	\$55,854,000
FY 2007	\$54,789,000
FY 2008	\$54,323,000

BUDGET REQUEST

The CDC FY 2009 request includes \$53,612,000 for Adolescent and School Health, a decrease of \$711,000 below the FY 2008 Enacted level, which includes \$490,000 for Food Allergies and \$220,000 for an Individual Learning Accounts (ILA) and administrative reduction. CDC will continue to support national, state, and local programs to prevent priority risk behaviors among youth.

School Health

One of the greatest challenges faced by CDC and schools in providing quality school health programs is the difficulty in adding more expectations to the many demands already placed on schools. CDC is working to educate communities, educators, and families on the relationship of health risk behaviors and outcomes to academic success.

School health programs can be cost-effective as demonstrated by the following CDC studies:

- An economic evaluation of school programs to prevent cigarette use among middle and high school students showed that for every dollar invested in school tobacco prevention programs, almost \$20 in medical care costs would be saved.
- An economic analysis of a school-based obesity prevention program found that at an intervention cost of \$33,677, or \$14 per student per year, the program would prevent an estimated 1.9 percent of the female students from becoming overweight adults. As a result,

society could expect to save an estimated \$15,887 in medical costs and \$25,104 in loss of productivity costs.

CDC will continue to support state school health programs. States are currently competing for CDC support. Awards will be made in March 2008. The new announcement includes greater expectations for accountability. CDC will work with partners on data-driven decision making and documentation of the health impact of programs. Funded partners will be asked to identify school level impact measures to assess the extent to which critical school health policies and practices are being implemented.

CDC expects to fund up to 23 states and up to two tribal governments with the following target:

Increase the percentage of youth (grades nine to 12) who were active for at least 60 minutes per day for at least five of the preceding seven days to 40 percent.

HIV/AIDS

A cost effectiveness study revealed that for every dollar invested in school HIV, STD, and pregnancy prevention efforts, \$2.65 in medical and social costs were saved.

In FY 2009, CDC expects to fund 49 state education agencies; 18 local education agencies, including the District of Columbia; up to seven territorial education agencies; and up to two tribal governments with the following targets:

- Increase the proportion of adolescents (grades nine to 12) who abstain from sexual intercourse or use condoms if currently sexually active to 89 percent.
- Achieve and maintain the percentage of high school students who are taught about HIV/AIDS prevention in school at 90 percent or greater.

OUTCOME TABLE

						FY 20				Out-Year Target
Long Term Objective 5.6: Improve youth and adolescent health by helping communities create and environment that fosters a culture of wellness and encourages healthy choices.										
5.6.1	Achieve and maintain the percentage of high school students who are taught about HIV/AIDS prevention in school at 90% or greater. [O] ¹	N/A	87.9% (Baseline)	N/A	N/A	90%	6/2008	N/A	90%	N/A
5.6.2	Increase the proportion of adolescents (grades 9-12) who abstain from sexual intercourse or use condoms if currently sexually active. [O] ²	N/A	87.5% (Baseline)	N/A	N/A	89%	6/2008	N/A	89%	N/A
5.6.3	Reduce the proportion of children aged 3 to 11 who are exposed to second-hand smoke. [O] ³	N/A	N/A	N/A	N/A	N/A	N/A	45%	N/A	45% (2010)
5.6.4	Percentage of youth (grades 9-12) who were active for at least 60 minutes per day for at least five of the preceding seven days. [O]	N/A	35.8%	N/A	N/A	35.8%	6/2008	N/A	35.8%	N/A

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

							FY 20			FY 2009 Target
5.A.D	State education agencies working with state health departments to integrate prevention activities targeting tobacco use, sedentary lifestyles, poor eating habits into school health programs.	23	23	23	23	23	23	23	23	23
5.A.E	National Non-Governmental Organization providing capacity building assistance to education and health agencies, community organizations, and agencies serving youth at highest risk.	29	29	29	29	29	29	29	29	29
5.A.F	State, territory, and city education agencies working with state health departments to implement HIV education prevention in schools.	73	73	73	73	73	73	73	75	75
5.A.G	State and local education agencies that conduct the Youth Risk Behavior Surveillance System (YRBSS) to collect information on six priority health-risk behaviors.	61	61	61	61	61	61	61	61	61
5.A.H	Guidelines, tools, and resources to assist education agencies, health departments, and community organizations in the implementation of school health programs.	8	9	9	10	10	13	13	15	16
Appropriated Amount (\$ Million) ¹		\$57.2	\$56.7		\$55.9		\$54.8		\$54.3	\$53.6

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS IMPROVING THE HEALTH, EDUCATION, AND WELL-BEING OF YOUNG PEOPLE/HIV SCHOOL HEALTH	
	FY 2007 Actual
Alabama	\$222,402
Alaska	\$195,750
Arizona	\$202,495
Arkansas	\$222,710
California	\$325,000
Colorado	\$217,449
Connecticut	\$217,500
Delaware	\$195,367
District of Columbia	\$225,000
Florida	\$278,399
Georgia	\$225,000
Hawaii	\$195,000
Idaho	\$195,560
Illinois	\$250,000
Indiana	\$189,911
Iowa	\$208,500
Kansas	\$195,000
Kentucky	\$217,500
Louisiana	\$214,412
Maine	\$195,360
Maryland	\$217,500
Massachusetts	\$216,299
Michigan	\$278,400
Minnesota	\$254,206
Mississippi	\$189,999
Missouri	\$178,678
Montana	\$207,572
Nebraska	\$186,792
Nevada	\$193,978
New Hampshire	\$195,750
New Jersey	\$217,331

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS IMPROVING THE HEALTH, EDUCATION, AND WELL-BEING OF YOUNG PEOPLE/HIV SCHOOL HEALTH	
	FY 2007 Actual
New Mexico	\$218,783
New York	\$282,750
North Carolina	\$217,474
North Dakota	\$200,751
Ohio	\$0
Oklahoma	\$216,223
Oregon	\$217,227
Pennsylvania	\$278,400
Rhode Island	\$195,311
South Carolina	\$191,454
South Dakota	\$200,747
Tennessee	\$249,462
Texas	\$277,941
Utah	\$0
Vermont	\$198,269
Virginia	\$217,500
Washington	\$217,328
West Virginia	\$200,738
Wisconsin	\$294,086
Wyoming	\$200,750
Baltimore City	\$247,500
Broward County, Fla.	\$266,935
Chicago	\$290,497
Dallas	\$240,389
Hillsborough County, Fla.	\$246,658
Houston	\$0
Los Angeles	\$334,161
Memphis City	\$227,169
Miami-Dade County, Fla.	\$289,395
Milwaukee Public Schools	\$224,707
New York City	\$313,884
Orange County, Fla.	\$247,493
Palm Beach County, Fla.	\$239,918
Philadelphia	\$263,328
San Bernardino City	\$225,000

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS IMPROVING THE HEALTH, EDUCATION, AND WELL-BEING OF YOUNG PEOPLE/HIV SCHOOL HEALTH	
	FY 2007 Actual
San Diego	\$262,901
San Francisco	\$226,699
Seattle Public Schools	\$224,253
American Samoa	\$0
Guam	\$141,300
Marshall Islands	\$83,000
Micronesia	\$87,000
Northern Mariana Islands	\$86,850
Palau	\$86,690
Puerto Rico	\$194,394
Virgin Islands	\$119,981
	\$15,970,116

SAFE MOTHERHOOD AND INFANT HEALTH

				FY 2009 +/- FY 2008
Infant Health/Safe Motherhood - Non-HIV/AIDS	\$39,722,000	\$39,028,000	\$38,869,000	-\$159,000
Prevention of Teen Pregnancies	\$11,017,000	\$10,825,000	\$10,781,000	-\$44,000
Safe Motherhood - HIV/AIDS	\$3,378,000	\$3,319,000	\$3,305,000	-\$14,000
Sudden Infant Death Syndrome	\$211,000	\$207,000	\$206,000	-\$1,000
Total	\$43,100,000	\$42,347,000	\$42,174,000	-\$173,000

AUTHORIZING LEGISLATION

This program is authorized under Sections 301, 307, 310, 311, 317K, and Public Law No: 109-450(Preemie Act)

FY 2009 Authorization Indefinite

Allocation method.....Competitive
cooperative agreements, contracts, and direct federal/intramural.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

For over 40 years, CDC has promoted optimal reproductive and infant health and quality of life by influencing public policy, health care practice, community practices, and individual behaviors through scientific and programmatic expertise, leadership, and support. The purpose of CDC's Safe Motherhood and Infant Health program is to promote safe motherhood before, during and after pregnancy to include the physical, mental, cultural and socioeconomic aspects that move beyond absence of disease to the well-being of the childbearing woman and her family. CDC works with partners throughout the nation and internationally to:

- Conduct epidemiologic, behavioral, demographic, and health services research
- Support national and state-based surveillance systems to monitor trends and investigate health issues
- Support development of research and programmatic activities within states and other jurisdictions
- Provide technical assistance, consultation, and training worldwide
- Translate research findings into health care practice, public health policy, and health promotion strategies

Priority areas are: infant health, maternal health, women's reproductive health and unintended and teen pregnancy prevention, and global reproductive health.

Safe Motherhood begins before conception with proper nutrition and a healthy lifestyle. It continues with appropriate prenatal care, the prevention of complications when possible, and the early and effective treatment of any complications. The ideal results are pregnancy at term, without unnecessary postpartum complications, in a positive environment that supports the physical and emotional needs of the woman, infant, and family. A special emphasis is placed on serving populations with large disparities.

CDC's efforts to promote safe motherhood and Infant health are achieved through the following activities:

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS was initiated in 1987 because infant mortality rates were no longer declining as rapidly as they had in prior years. In addition, the incidence of low birth weight infants had changed little in the previous 20 years. PRAMS provides data for state health officials to use to improve the health of mothers and infants. PRAMS allows CDC and states to monitor changes in maternal and child health indicators (e.g., unintended pregnancy, prenatal care, breast-feeding, smoking, drinking, infant health). PRAMS enhances information from birth certificates used to plan and review state maternal and infant health programs.

- In 2000 and 2001, Utah ranked 49th in the nation in adequacy of prenatal care. PRAMS data showed that 61 percent of Utah women with inadequate prenatal care were unaware of the recommendations for prenatal care. As a result, Utah implemented a health media campaign to improve maternal and infant health outcomes. Data from the Utah PRAMS program resulted in problem identification and the basis for planning and evaluating interventions.
- In North Carolina, PRAMS data was used to evaluate disparities in universal prenatal screening for Group B streptococcus (GBS), the leading cause of neonatal morbidity and mortality in the United States. GBS screening has been identified as one indicator for success in achieving the HHS Healthy People 2010 objectives for the nation. North Carolina, through the use of PRAMS data, was able to understand that GBS was not declining in certain segments of the population and effectively target public health interventions.
- In FY 2008, CDC is funding 37 states, New York City and the South Dakota Tribal-State collaborative project to conduct PRAMS, representing 75 percent of the live births in the U.S. The average award for the cooperative agreements is \$130,000.

Research on Preterm Birth

Prevention of infant mortality due to preterm birth and racial disparities have been identified as priority objectives of the Healthy People 2010 Objectives, CDC's Infant Life Stage Goal, a DHHS national public awareness campaign, and a 2006 Institute of Medicine report. Preterm birth rates have increased 28 percent over the past twenty years. CDC works to curb the growing problem of preterm delivery through a comprehensive prevention research agenda to identify women at risk and opportunities for prevention. This scope of work is implemented through a broad coalition of partnerships, focusing on both the social and biological factors causing preterm birth and racial disparities. CDC conducts surveillance, research, and programs that focus on identifying social, clinical, and biological factors that cause preterm birth; identifying women at risk early in their pregnancy; translating new research discoveries to public health prevention; and expanding community-based prevention programs among minority women.

- Identified preterm birth as the leading cause of infant mortality: CDC published a landmark scientific investigation that demonstrated that preterm birth is the leading cause of infant death, accounting for over 36 percent of all infant deaths in the United States and 46 percent of deaths among infants of black mothers. Moreover, two thirds of all infant deaths due to preterm birth were among infants less than 26 weeks gestation, underscoring the need for strengthened early prevention. New methods to monitor the burden of preterm birth on the U.S. infant mortality rate were implemented.

- Developed new epidemiologic techniques to monitor trends in preterm birth: CDC developed methods and published a series of manuscripts in a special journal supplement to evaluate and improve national epidemiologic studies of gestational age data using vital records.
- Implemented a \$2 million annual preterm birth prevention agenda that includes:
 - Section 1.01 Collaborative project with the state of California and the California Birth Defects Monitoring Program to expand capacity and research using a state-based biobank of mothers and infants to investigate genomic and other biomarkers, linked with information on social risk factors, to identify women at risk for preterm birth and potential factors associated with racial disparities in preterm birth.
 - Section 1.02 Cooperative agreement with Michigan State University to expand a prospective cohort study of mother-child pairs to evaluate genomic and other biomarkers associated with risk of preterm birth.
 - Section 1.03 Cooperative agreement with the University of Cincinnati, Ohio to identify barriers to the expanded use of 17-alpha hydroxyprogesterone caproate for the prevention of preterm birth, and medicine that was recently found to be associated with a significant reduction of preterm birth among women with a history of prior preterm birth.
 - Section 1.04 Cooperative agreement with the University of Kansas, in partnership with the University of Tennessee, to evaluate clinical and biological factors associated with increased risk of preterm birth in black women.
 - Section 1.05 Longstanding support to strengthen community-based programs to prevent preterm birth in Los Angeles among women of color with the Healthy African-American Families and Drew University.

Maternal and Child Health Epidemiology Program

CDC assigns ten CDC maternal and child health epidemiologists to state health departments and tribal organizations.

- The epidemiologists work to build maternal and child health epidemiology and data collection capacity at the state, local, and tribal levels. States request assignees and provide partial funding for them, using either state appropriated funds or maternal and child health block grant funds.

Prevention Programs

CDC supports the use of science-based principals on teen pregnancy prevention through national organizations and state teen pregnancy prevention coalitions. CDC also supports efforts to promote reproductive health, including abstinence, and the prevention of sexually transmitted diseases (STDs) and human immunodeficiency virus (HIV) infection. The following programs are in the third year of a five year project period covering 9/30/2005 – 9/29/2010; they include:

- The Arizona Coalition on Adolescent Pregnancy and Parenting, Massachusetts Alliance on Teen Pregnancy, Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting, Adolescent Pregnancy Prevention Coalition of North Carolina, South Carolina Campaign to Prevent Teen Pregnancy, National Campaign to Prevent Teen Pregnancy, Advocates for Youth, and National Organization on Adolescent Pregnancy, Parenting and Prevention, Incorporated. The final three organizations are located in Washington, D.C., and have a nationwide mandate. In FY 2007 the nine states above were awarded a total of \$1,888,155 with the three National Organizations being awarded a total of \$1,613,676.

- Recent data show the number of teen pregnancies of all race and age groups in South Carolina has decreased. In 2005, the South Carolina Department of Health and Environmental Control reported 9,147 girls ages 10-19 became pregnant. This represents a decrease of 4.1 percent (396 pregnancies).
- The SC Campaign has implemented a statewide system of educational programs and technical assistance targeting direct service providers in over 60 teen pregnancy and STD/HIV prevention organizations, leading to successful implementation of science-based programs in many of these organizations.

Sudden Unexplained Infant Deaths (SUID) Guidelines

Infant deaths due to SIDS have declined in the past decade at least in part due to a decline in prone sleep placement; in response to the “Back to Sleep” campaign. However, SIDS is still the third leading cause of infant death in the United States. A recent CDC study identified that the decline in SIDs rates from 1999 to 2001 was offset by increasing rates of other Sudden, Unexplained Infant Deaths (SUID) and unknown cause-of-death on the death cases. This finding suggests that death scene investigators, and those certifying cause-of-death on the death certificate, have changed the way they have been investigating and reporting infant deaths in recent years. CDC developed and implemented a national initiative to standardize and improve data collection at infant death scene investigations and promote consistent diagnosis and reporting of cause-of death on death certificates. CDC, through national partnerships, completed a revision of a standardized death scene investigation form and developed training materials on how to conduct an infant death scene investigation. A national academy for “training-the-trainers” continued during FY 2007. To date 10,000 professionals have been trained exceeding our target goal of 1,250 U.S. professionals in the first year.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$45,121,000
FY 2005	\$44,738,000
FY 2006	\$44,044,000
FY 2007	\$43,100,000
FY 2008	\$42,347,000

BUDGET REQUEST

The budget request for CDC’s Safe Motherhood and Infant Health program is \$42,174,000 which is a decrease of \$173,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

The FY 2009 budget request will allow CDC to continue to assist states with identifying and addressing reproductive and infant health issues through on going Safe Motherhood programs. In FY 2009, CDC will continue to fund 39 PRAMS projects and continue SUID trainings and the assignment of ten Maternal and Child Health Epidemiologist in states. CDC will continue to fund nine states and three national organizations to use science-based approaches and programs to prevent teen pregnancy and promote adolescent reproductive, including abstinence, and STD/HIV prevention. CDC will continue to conduct approximately 94 public health research projects to promote reproductive and infant health that will translate science and technology into strategies and interventions that promote reproductive health.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.I	Projects (states, entities, and city) funded for PRAMS	30	30	39	39	39	39	39	39
5.A.J	MCH Assignees in States	8	7	7	7	10	10	10	10
5.A.K	Teen Pregnancy Prevention (states and national partners funded for science based approaches)	8	12	12	12	12	12	12	12
5.A.L	Maternal and Child Health Research Projects	90	88	88)	92	92	94	94	94
Appropriated Amount (\$ Million) ¹		\$45.1	\$44.7	\$44.0		\$43.1		\$42.3	N/A

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

ORAL HEALTH

				FY 2009 +/- FY 2008
Non-HIV/AIDS	\$11,014,000	\$11,988,000	\$11,939,000	-\$49,000
HIV/AIDS	\$442,000	\$434,000	\$432,000	-\$2,000
Total	\$11,456,000	\$12,422,000	\$12,371,000	-\$51,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 310, 311 and 317M of the Public Health Service Act

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grants/Cooperative Agreements; Contracts; and Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC supports achievement of Healthy People 2010 oral health objectives nationwide, monitors oral health status and behaviors, provides guidance on safe dental office infection control practices, fosters applied research to document the effectiveness of community-based programs, and provides tools that are useful for improving state and community oral disease prevention programs.

Since 2001, CDC has funded 12 states and one territory to build capacity to strengthening their oral health programs and reduce inequalities in the oral health of their residents. Among other things, these programs are implementing two proven disease prevention strategies: community water fluoridation and school-based or -linked dental sealant programs.

CDC's program is a direct response to findings from a study conducted by the Association of State and Territorial Dental Directors indicating that state oral health programs lacked the infrastructure and capacity to assure that effective disease prevention programs were fully implemented. As a result, tooth decay remains the most common chronic disease of childhood, affecting more than one-fourth of U.S. children aged two to five, and half of older children. Low-income children are hardest hit; about one-third have untreated decay. Tooth decay remains a substantial problem throughout life - about one-fourth of adult Americans have untreated tooth decay, a major cause of tooth loss.

Oral diseases afflict Americans across the entire lifespan and although effective preventive measures exist, they do not reach all who could benefit. Low income persons and children and adults of some racial and ethnic groups face a greater burden of untreated tooth decay, and thus are more likely to suffer pain, dysfunction, and absence from school or work. Evidence-based effective public health interventions to prevent tooth decay have not been extended to all Americans. More than 100 million do not have access to the proven benefits of fluoridated water. Dental sealants applied to children's teeth can prevent tooth decay, yet only one-third of children – even lower in certain low-income and minority groups – have had sealants.

CDC assists states and communities to extend community water fluoridation, which benefits people of all ages, and reaches children at high risk for oral disease with proven and effective prevention services, such as dental sealants. Recently CDC implemented pilot projects to maintain oral health of older adults. While they have retained more teeth than previous generations, many are now vulnerable to tooth decay and periodontal disease.

With CDC's support state oral health programs are building effective prevention programs to improve health and reduce disparities among disadvantaged populations. CDC works with all states to:

- Develop programs to reach children at high risk for oral disease with proven and effective prevention services, such as dental sealants.
- Expand the fluoridation of community water systems and operate a fluoridation training and quality assurance program.
- Track oral diseases and provide health information to assess the effectiveness of disease prevention programs and guide programs to be able to focus on persons at greatest risk.

In FY 2008, an open competition for CDC support for state-based oral disease prevention programs will be held. Grantees will be selected through a competitive process that is open to all states and territories, based on objective review of factors related to building infrastructure and capacity of state oral health programs. It is anticipated that 13 states will receive cooperative agreements to build capacity for strong state oral health programs that promote oral health, monitor oral health behaviors and problems, and conduct and evaluate prevention programs, such as water fluoridation and school-based dental sealant programs.

CDC also provides funding to national partners that provide technical assistance and help support state oral health program development – the Association of State and Territorial Dental Directors, Oral Health America, and the Children's Dental Health Project.

Examples of program accomplishments include:

- Alaska has enhanced their water fluoridation program management system, improved the tracking of fluoridation results, conducted a statewide assessment of equipment needs, improved technical assistance to communities, and provided training for rural water operators on fluoridation techniques and benefits. The state is developing its first state-wide oral disease burden document using data from the first statewide oral survey of schoolchildren.
- Arkansas has developed a well-established statewide coalition that is promoting water fluoridation, healthy snacks in schools, and more efficient methods for conducting oral health screenings. Arkansas has developed a document describing the state burden of oral disease, implemented a state oral health plan, and continues to enhance their statewide oral disease monitoring system.
- Colorado, as part of their oral disease monitoring system, has partnered with the state obesity program to collect body mass index data as part of the 2006 oral health survey of schoolchildren. The state continues to implement a preventive oral health program targeting high-risk children and adults.
- Texas has developed its first-ever statewide, stakeholder-developed oral health plan, improved the state oral disease monitoring system, established a statewide oral health coalition, and published its first comprehensive oral disease burden document.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$10,643,000
FY 2005	\$11,204,000
FY 2006	\$11,621,000
FY 2007	\$11,456,000
FY 2008	\$12,422,000

BUDGET REQUEST

The CDC FY 2009 request includes \$12,371,000 for Oral Health, a decrease of \$51,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and administrative reduction. All other activities are funded at the FY 2008 Enacted level. CDC will continue to strengthen state oral health program capacity to extend effective preventive interventions to more people.

In FY 2009, CDC will continue to fund 12 states and one territory to support for capacity-building oral health prevention programs that were awarded five-year cooperative agreements in 2008. State progress in expanding coverage of community water fluoridation, increasing in the number of children receiving dental sealants, and reducing levels of untreated tooth decay will be measured by state-based surveys. CDC evaluation efforts will identify the intermediate steps that link established capacity-building performance measures with long-range health impacts. Lessons learned from the funded states, and tools and other resources that are developed by CDC in collaboration with the funded states, will be aggressively shared with all states. CDC will continue to provide technical assistance to all states for oral health surveillance, community water fluoridation, and dental sealant programs.

In addition, CDC research will enhance the effectiveness of interventions to prevent oral diseases by reviewing scientific evidence, studying the cost-effectiveness of interventions, identifying the most efficient ways to deliver them through programs, and demonstrating their impact in terms of disease prevention and control. CDC will also help health departments collect, interpret and share oral health data, for use in targeting limited resources to people with the greatest needs and monitoring progress in meeting state and national Healthy People objectives.

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.M	States/territories receiving support for capacity-building oral health prevention programs (e.g., fluoridation, sealants)	13	13	13	13	13	13	13	13
Appropriated Amount (\$ Million)¹		\$10.6	\$11.2	\$11.6		\$11.5		\$12.4	\$12.4

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PREVENTION RESEARCH CENTERS

				FY 2009 +/- FY 2008
BA	\$29,149,000	\$29,131,000	\$29,012,000	-\$119,000

AUTHORIZING LEGISLATION

PHSA §§ 1706

FY 2009 AuthorizationIndefinite

Allocation Methods.....Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; Contracts; and Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The Prevention Research Centers (PRC) program was authorized by Congress in 1984 to create a network of academic health centers to conduct applied public health research. CDC was selected to administer the PRC program and to provide leadership, technical assistance, and oversight. The PRC program is a national network of academic research centers, each at either a school of public health or a medical school that has a preventive medicine residency program. These centers have rich capacity for the community-based, participatory prevention research needed to drive major community changes that can prevent and control chronic diseases.

The Prevention Research Centers program is a unique model of research that bridges the gap between scientific findings and the translation of these into public health practice. Through the establishment of a consortium that includes academic centers, public health agencies and community partners, PRCs use collaboration to directly apply public health research in communities nationwide. This collaboration ensures research projects and their findings reach communities and are implemented in real and meaningful ways that can be sustained over time.

The PRC program addresses issues such as nutrition and physical activity to prevent obesity, diabetes, and heart disease; healthy aging; healthy youth development, including prevention of violence and substance abuse, strengthens family and community relationships to support healthy lifestyles; and controls cancer risk and other health disparities. CDC currently funds 33 PRCs in 26 states: University of Alabama at Birmingham; University of Arizona; Boston University; University of California at Berkeley; University of California at Los Angeles; University of Colorado; Columbia University; Emory University; Harvard University; University of Illinois at Chicago; University of Iowa; Johns Hopkins University; University of Kentucky; University of Michigan; University of Minnesota; Morehouse School of Medicine; University of New Mexico; University of North Carolina at Chapel Hill; University of Oklahoma; Oregon Health & Science University; University of Pittsburgh; University of Rochester; Saint Louis University; San Diego State University and University of California at San Diego; University of South Carolina; University of South Florida; State University of New York at Albany; Texas A&M University; University of Texas Health Science Center at Houston; Tulane University; University of Washington; West Virginia University; Yale University.

Prevention Research Center's interventions have several interventions now fully developed, tested, and evaluated that are being disseminated and used throughout the public health system. Examples include:

In 1993, the University of Washington Health Promotion Research Center collaborated with the Group Health Cooperative of Puget Sound and Senior Services of Seattle/King County to develop a physical activity program for seniors to promote healthy aging.

- The program emphasized activities to increase endurance, strength, balance, and flexibility. The pilot study showed that participants improved significantly in almost every tested area, from physical and social functioning to levels of pain and depression. The exercise program, formerly called the Lifetime Fitness Program, is now packaged as Enhance Fitness and delivered as part of Project Enhance, which includes a health and wellness program for older adults.
- An economic analysis of Medicare enrollees showed that those participating in the Lifetime Fitness Program at least once per week had significantly fewer hospitalizations (by 7.9 percent), and lower healthcare costs (by \$1057) than non-participants.
- The program progressed from implementation at one site to operation at 158 sites in 17 states. There are now 3,000 seniors in nine states enrolled. It is proving to be feasible and well-attended when offered in senior centers and other community-based settings.

The Harvard University PRC developed an interdisciplinary curriculum, Planet Health, for public middle schools that focused on increasing consumption of fruits and vegetables, decreasing consumption of high-fat foods, decreasing television viewing, and increasing physical activity.

- Results yielded a significant reduction in television watching for both girls and boys, and a significant decrease in the prevalence of obesity among girls.
- The Planet Health curriculum has been adopted by hundreds of middle schools in the Boston area, and Blue Cross Blue Shield of Massachusetts adopted the program in 2004 as part of an overall school wellness program. In addition, more than 2,000 copies of the curriculum have been purchased by interested parties in 48 states and 20 countries.
- An independent economic analysis found that every dollar spent on the program in middle schools translated to a savings of \$1.20 in medical costs and lost wages when the children reach middle age.

The PRC at West Virginia University developed Not-On-Tobacco (NOT), a smoking cessation program for 14-19 year olds. NOT was rigorously evaluated in six studies conducted in West Virginia, Florida, and North Carolina between 1997 and 2002.

- A review compared data from 44 schools that offered NOT with data from 44 schools that offered brief advice to quit smoking. The quit rate was 15 percent for NOT enrollees versus eight percent for those in the comparison group. Other less rigorous evaluations of field-based NOT programs have found an overall reported quit rate of 26 percent among NOT participants.
- The American Lung Association has adopted NOT as a national best practice model and is disseminating it widely. Nearly 33,000 teens in 47 states participated in NOT from 1999 to 2003. Given the demonstrated effectiveness, about one of every six participants, or 5,000 teens, quit smoking as a result.
- NOT has been recognized as an effective program by the National Registry of Effective Programs (NREP). The program is included in the NREP's repository of science-based programs, listed on the Substance Abuse and Mental Health Services Administration's Model Programs Web site, and considered a Model Program, all of which could increase support for its dissemination nationwide.

CDC's two long term goals related to the PRCs are: 1) increase the evidence base for public health practice and 2) enhancing competency in the knowledge and skills required for research and public health practice. In FY 2006, the target for goal one (1), measured by the number of research projects in the PRCs, was 260. The actual reported number was 275. For goal two (2), CDC aimed

to include 150 scientific presentations at public health conferences in FY 2006. This goal also exceeded its target with 160 presentations at public health conferences.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$24,944,000
FY 2005	\$29,690,000
FY 2006	\$29,536,000
FY 2007	\$29,149,000
FY 2008	\$29,131,000

BUDGET REQUEST

CDC requests \$29,012,000 for Prevention Research Centers in FY 2009, a decrease of \$119,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and other administrative reductions. FY 2009 budget request will support the ongoing work of conducting applied research and practice in chronic disease prevention and control, in collaboration with community members and local institutions.

In FY 2009, the PRC program will begin a new five-year funding cycle. The program will continue to fund 33 sites, selected through a competitive process. Funded sites will need to demonstrate formal collaborative relationships with state and local health agencies. During this new funding period, tested interventions will be added to an Internet listing that organizes the interventions by stage of development and makes the information available to potential users and partners in the public health sector. CDC projects that there will be 275 PRC related research projects taking place, as well as 375 peer-reviewed publications. In terms of enhancing competency in the knowledge and skills required for research and public health practice, CDC projects that there will be 175 PRC related scientific presentations at public health conferences in FY 2009.

In FY 2009, CDC will support the dissemination of the fully tested, evidence-based interventions from the previous period. The examples of tested interventions from the PRC Program's past illustrate that quality research has produced interventions for wide dissemination. For example, CDC's Epilepsy Program promotes use of a PRC-developed intervention by its grantees and is working with the PRC's Healthy Aging Network to develop and test home-based technologies for treating depression in people with epilepsy. CDC will support the further development of thematic research networks that focus on identifying and advocating for concrete changes in environment, policy, and practices that can have a direct impact on the nation's health.

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.N	Prevention Research Centers with formal collaborative relationships with state and local agencies	33	33	33	33	33	33	33	33
Appropriated Amount (\$ Million) ¹		\$24.9	\$29.7	\$29.5		\$29.1		\$29.1	\$29.0

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

COMMUNITY HEALTH (REACH U.S. (RACIAL AND ETHNIC APPROACHES TO COMMUNITY HEALTH), STEPS TO A HEALTHIER U.S.)

				FY 2009 +/- FY 2008
STEPS to a HealthierUS	\$42,904,000	\$25,158,000	\$15,541,000	-\$9,617,000
Racial and Ethnic Approach to Community Health (REACH)	\$33,639,000	\$33,860,000	\$33,721,000	-\$139,000
Total	\$76,543,000	\$59,018,000	\$49,262,000	-\$9,756,000

AUTHORIZING LEGISLATION

PHSA Sections 301, 304, 307, 310, 311 and 317

FY 2009 Authorization..... Indefinite

Allocation Methods.....Direct

Federal/Intramural; Grants/Cooperative Agreements; Contracts; and Other

PROGRAM DESCRIPTION

The U.S. faces serious national problems in chronic disease burden that will be compounded by the obesity epidemic and the aging of the U.S. population. The impact of chronic disease is far-reaching, extending beyond individuals and families, to national economic issues, such as lost productivity and escalating health care costs. Risk factors for chronic disease such as, obesity, lack of physical activity, poor nutrition, and inadequate blood pressure and blood sugar control have remained relatively consistent, or, in the case of obesity, are on the rise.

In addition, significant health disparities continue to exist. Targeted health promotion and chronic disease prevention efforts represent one of our nation's most significant opportunities to reduce health disparities and increase health and quality of life in racial and ethnic minority communities.

To improve the health of all Americans will require broad community-based change in the places where people live, work, and play. The decisions and actions needed to make change often rest in the hands of local decision-makers. By providing them with innovative strategies that reach the most hard-to-impact populations, and quickly mobilize local-level change, the overwhelming burden of chronic diseases nationwide can be reduced.

CDC sponsors innovative community-based strategies for chronic disease prevention and disparities-reduction. These innovative approaches disseminate widely, and are designed to promote local-level changes that in turn accelerate state and national efforts to impact chronic diseases. As of FY 2008, over 200 communities have been directly impacted by CDC's community health programs, and countless others have benefited from the widespread dissemination of these effective strategies.

Steps Program

The Steps Program is an integral part of CDC's response to the epidemics of obesity and chronic disease. Through the Steps Program, local communities are implementing evidence-based interventions in community-based settings including schools, workplaces, and health care settings, to achieve the critical local changes necessary to prevent chronic diseases and their risk factors. Special focus has been directed toward populations with disproportionate burden of disease and lack of preventive services.

The Steps Program was funded for the first time in FY 2003 to assist communities, cities, and tribal entities in implementing community action plans to address the growing problems of obesity and other chronic diseases. In 2006, CDC conducted an assessment of the program to inform future directions. This assessment found a continued need for CDC to provide local communities with ongoing direction, training, tools, and technical assistance to develop and implement effective community-based strategies that address obesity and chronic diseases, as well as the need to expand the reach of STEPS to more communities.

Based on these results, CDC awarded cooperative agreements with states (each state funded and coordinated an average of four rural or small city areas), urban cities and counties, and tribal entities to supported implementation of community action plans in 45 communities. These communities in turn serve as effective local models for action and intervention that other communities can follow. In FY 2008, CDC support will be reduced to 21 communities, supported through cooperative agreements with three states, five local urban health departments, and two tribal organizations.

Steps communities have produced positive results, including: reducing obesity through community-based interventions; reducing chronic disease risk factors and health care costs in workplaces; creating healthier school environments; implementing clean indoor air ordinances; and reducing blood sugar levels among diabetes patients. Specific examples of accomplishments include:

- Steps to a Healthier New York's Broome County initiative is reaching families in rural areas by implementing an innovative walking program which has enrolled over 50,000 participants and has seen an increase in the percentage of residents that meet the recommended levels of physical activity. They have also improved the food offered in local schools. Fifteen school districts created a consolidated bid to purchase healthy foods at lower cost, and make them affordable to schools. The county reports that fresh fruits and vegetable consumption has increased by 14 percent.
- The Broome County Steps initiative has also impacted obesity. In collaboration with the Office for Aging and the local YMCA, Steps expanded the county's nationally recognized Mission Meltaway program to reach more than 2,500 people. In general, more than half of the participants lost weight. In one representative Mission Meltaway program, 91 of the 100 participants lost weight after only four weeks, 65 percent increased their physical activity levels, and 100 percent improved their knowledge of proper nutrition and exercise.
- Steps to a Healthier Austin in Texas established a work-site wellness program in Capital Metro, the Austin transit authority. Employees received customized health assessments and action plans for creating healthier lifestyles. Employee absences dropped more than 44 percent during 2004-2006; health care costs rolled back to a nine percent annual increase as opposed to 27 percent annual increase previously; and the use of "healthy choice" options in the employee cafeteria increased by 172 percent.
- The Steps Program in the River Region of Alabama has trained Diabetes Wellness Advocates who help people with diabetes set health and wellness goals and manage their condition. Emergency room visits among participants decreased by over 50 percent.
- Steps to a Healthier Cherokee Nation in Oklahoma made important changes to the school environment in 19 schools, including developing wellness policies, offering healthier choices in vending machines and cafeterias, and providing lighting and access to exercise facilities after school. Nine schools developed and implemented 24/7 tobacco-free school policies.

REACH U.S. (Racial and Ethnic Approaches to Community Health)

Despite great improvements in the overall health of the nation, health disparities remain widespread among members of racial and ethnic minority populations. Based on this need, CDC initiated the REACH U.S. Program (Racial and Ethnic Approaches to Community Health) in 1999 to promote the ongoing development and dissemination of innovative and effective strategies that respond to the unique needs of diverse communities. These strategies aim to bridge the gaps between the health care system and minority communities; respond to unique social, economic, and cultural circumstances; and, change the conditions and risk factors in local communities that have kept racial and ethnic minority groups from achieving improvements in health. REACH fully engages local community members in informing the development, implementation, and evaluation of REACH strategies and interventions. REACH U.S. target populations include African-Americans, American Indians, Hispanic-Americans, Asian-Americans, Pacific Islanders, and Alaska Natives.

In FY 2007, REACH U.S. began a new five-year funding cycle. Through an open competition, communities were allowed to apply to be a REACH U.S. Centers of Excellence in the Elimination of Health Disparities or an Action Community. Centers of Excellence have expertise in working with specific ethnic groups and will train new communities and disseminate effective strategies widely. Action Communities will apply effective strategies through innovative and non-traditional partnerships at the community level. Health focus areas for the FY 2007 cycle included: breast and cervical cancer, cardiovascular disease, diabetes, infant mortality, adult/older adult immunizations, hepatitis B, and asthma.

Ongoing successes of REACH U.S. are being leveraged to influence the practices of programs throughout the public health system. In addition, a new mechanism to impact communities directly will spread effective strategies from REACH U.S. to growing numbers of communities. This will be accomplished by funding at least 36 “legacy communities,” which will be awarded as sub-recipients of the REACH U.S. Centers of Excellence, and will receive mentoring and support from these Centers.

Outcomes from REACH U.S. are striking, and challenge the conventional notion that health disparities are intractable. Based on data from the REACH risk factor survey between 2002 and 2006, the program has demonstrated community-level improvements in health outcomes. For example, in communities that are focusing on cardiovascular disease and/or diabetes:

- African Americans who were screened for cholesterol went from below the U.S. average to exceeding it at 84 percent, while the U.S. and African Americans nationally stayed essentially unchanged.
- Asian American men experienced a dramatic decrease in smoking, actually closing the disparity gap and reaching a level (19.4 percent) below that of the U.S. population (24.4 percent).
- Hispanics who had their cholesterol checked went from 54.6 percent, well below the U.S. average, to 69.8 percent, surpassing Hispanics nationally and significantly closing the disparity gap with the nation.
- The proportion of American Indians in REACH communities who are taking medication for high blood pressure increased from 67 percent in 2001 to 74 percent in 2004.

Individual REACH communities have also produced positive results. For example:

- In South Carolina, the REACH Charleston and Georgetown Diabetes Coalition focused on diabetes care and control for more than 12,000 African Americans with diabetes. In Georgetown County, the percentage of amputations among African American men with diabetes has dropped by 44 percent since the beginning of REACH, and in Charleston

County the percentage decrease is nearly 36 percent. A 21 percent gap in annual blood sugar testing between African Americans and whites has been virtually eliminated.

- In Lawrence, Massachusetts, culturally-tailored interventions to control diabetes in the Latino community yielded positive results. Participants showed dramatic improvements in control of high blood sugar and high blood pressure, which are risk factors for diabetes-related complications. Blood sugar measures below 7.0 improved by 8.7 percent, systolic blood pressure below 130 mm Hg improved by 17.5 percent and diastolic blood pressure below 80 mm Hg improved by 14.4 percent. Health care practices for this population also improved. For example, the proportion of participants who were referred for eye exams improved by 26.5 percent.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$76,061,000
FY 2005	\$80,268,000
FY 2006	\$79,119,000
FY 2007	\$77,954,000
FY 2008	\$61,966,000

BUDGET REQUEST

REACH U.S.

The CDC FY 2009 request includes \$33,721,000 for Racial and Ethnic Approach to Community Health (REACH), a decrease of \$139,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

The FY 2009 request will support ongoing dissemination of effective strategies for improving health in racial and ethnic minority communities through Centers of Excellence in the Elimination of Health Disparities, and Action Communities. Because each Center of Excellence supports two new “legacy communities” each year, the FY 2009 request will allow for 36 new communities to be impacted through Centers of Excellence in FY 2009. All other activities are funded at the FY 2008 Enacted level. Centers of Excellence and Action Communities will continue to show improvements in key health indicators as a result of the implementation of innovative strategies that meet the unique social, economic, and cultural circumstances of diverse communities. Effective approaches will be disseminated widely so they impact the practices of programs throughout the public health system.

Steps Program

The CDC FY 2009 request includes \$15,541,000 for Steps to a Healthier U.S., a decrease of \$9,617,000 below the FY 2008 Enacted level, which includes \$64,000 for an ILA and administrative reduction.

In FY 2009, the Steps program will be changing the grant structure to fund 50 Steps Community Grants. Communities will receive funds to spark local-level action, change community conditions to reduce risk factors, establish and sustain state-of-the-art programs, test new models of intervention, create models for replication, and help train and mentor additional communities. Tools, resources, and training will be provided to community leaders and public health professionals to equip these entities to effectively confront the urgent realities of the growing national crisis in obesity and other chronic diseases in their communities.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
CHRONIC DISEASE PREVENTION, HEALTH PROMOTION, AND GENOMICS

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.O	REACH Community Grants (grant cycle ended in FY 2006)	40	40	40	40	0	0	0	0
5.A.P	REACH Centers of Excellence	0	0	0	0	18	18	18	18
5.A.Q	REACH Action Communities	0	0	0	0	22	22	22	22
5.A.R	REACH Legacy Communities	0	0	0	0	36	36	36	36
5.A.S	Steps Community Grants	0	0	0	0	0	0	0	50
5.A.T	Steps Number of local health depts. to fund large city and urban communities	12	12	12	12	12	12	5	0
5.A.U	Steps - Number of state health depts. to fund state- coordinated small city and rural communities (each state funds an average of 4 communities)	7	7	7	7	7	7	3	0
5.A.V	Steps Number of tribal organizations	3	3	3	3	3	3	2	0
5.A.W	Steps National Organizations	1	1	1	1	3	3	3	2
Appropriated Amount (\$ Million)¹		\$76.1	\$80.3	\$79.1		\$78.0		\$62.0	\$49.3

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

GENOMICS

				FY 2009 +/- FY 2008
Primary Immune Deficiency Syndrome - Base	\$2,468,000	\$2,913,000	\$2,901,000	-\$12,000
Public Health Genomics	\$9,343,000	\$9,180,000	\$9,142,000	-\$38,000
Total	\$11,811,000	\$12,093,000	\$12,043,000	-\$50,000

AUTHORIZING LEGISLATION

Public Health Service Act §§ 301, 304, 307, 310, 311, and 317

FY 2009 Authorization.....Indefinite

Allocation Method.....Competitive
cooperative agreements/grants, contracts, and direct federal/intramural.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC's National Office of Public Health Genomics (NOPHG), established in 1997 as the Office of Genetics and Disease Prevention, provides national and international leadership in partnership with other federal agencies, public health organizations, professional groups, and the private sector, to realize the potential of genomics discoveries to improve the lives and health of all people.

Genomics plays a part in nine of the ten leading causes of death in the United States, including heart disease, cancer, stroke, chronic lower respiratory diseases, diabetes, and Alzheimer's disease, among others. All human beings are 99.95 percent identical in genetic makeup, but differences in the remaining 0.05 percent may hold important clues about the causes of disease. The study of genomics can help us learn why some people get sick from certain infections, environmental factors and behaviors, while others do not. Better understanding of the interactions between genes and the environment will help us find better ways to improve health and prevent disease.

NOPHG addresses the Healthy People 2010 focus area of increasing quality and years of healthy life through its investment in translation research, surveillance, and program activities to move human genome discoveries into clinical and public health practice in a manner that maximizes health benefits and minimizes harm to individuals and populations. NOPHG's mission to integrate genomics into public health research, policy and programs is achieved through the following activities:

- Advancing knowledge about the validity and use of genetic tests and family history for improving health and preventing disease.
- Developing a sustainable process for assessing the clinical usefulness of genetic tests for practice and prevention.
- Assessing human genetic variation in the United States using the National Health and Nutrition Examination Survey (NHANES).
- Integrating genomics into public health investigations.
- Assessing and building laboratory, epidemiology, and programmatic capacity to support the application of genomics in public health.

The activities of the National Office of Public Health Genomics focus primarily on adults and older adults.

In 2004, NOPHG initiated the Evaluation of Genomic Applications in Practice and Prevention (EGAPP) project to facilitate the appropriate integration of emerging genetic tests with the potential for broad public health impact into clinical and public health practice. The project's main goal is to establish and test a systematic, evidence-based process for evaluating the validity and utility of genetic tests that are in transition from research to practice.

- In FY 2007, two evidence reports funded by CDC's EGAPP project on specific genetic tests were released by Agency for Healthcare Research and Quality (AHRQ) Evidence-based Practice Centers (EPC), and a third AHRQ EPC report was released in collaboration with CDC's Division of Cancer Prevention and Control. Two new evidence reports are scheduled for release in FY 2008, as well as four evidence-based recommendation statements from the independent, non-federal EGAPP Working Group.

In 2002, NOPHG initiated the Family History Public Health Initiative to increase awareness of family history as an important risk factor for common chronic diseases, and to contribute to the evidence base regarding the clinical utility of family history assessment for improving health outcomes.

- In early FY 2008, three NOPHG-funded research centers completed the data collection phase of a clinical trial of CDC's Family Healthware™ to measure whether family history risk assessment and personal prevention messages influence health behaviors and use of medical services; the completion of data analysis and the publication of the results are anticipated in late FY 2008. CDC's Family Healthware™, a web-based tool that collects information about health behaviors, screening tests, and family histories for six disease: coronary heart disease; stroke; diabetes; and colorectal, breast, and ovarian cancer, has also been used as the basis of the U.S. Surgeon General's Family Health Portrait - a successful collaboration among the Surgeon General's Office, NIH, CDC and other HHS agencies

In FY 2008, CDC is funding the following projects:

- Two projects in policy, surveillance, or education of genetic tests and other genomic interventions, such as family history, with the goal of improving health and preventing disease in large, well-defined populations or practice setting in the U.S.
- Two extramural research projects that will advance knowledge about the validity, utility, utilization and population health impact of genomic applications for improving health and preventing disease in large, well-defined populations or practice settings in the U.S.
- Five CDC projects that integrate genomics into public health research and programs, such as projects focused on infectious disease, chronic disease, birth defects, pharmacogenomics, and environmental exposures.
- Three new systematic evidence reviews of genetic tests and other genomic applications for the EGAPP project; staff and meeting support for the non-federal, independent EGAPP Working Group in their development of four evidence-based recommendation statements for genetic tests; staff and meeting support for the newly formed EGAPP Stakeholders Group; and a survey of stakeholders to assess the value and impact of the EGAPP processes and products.
- The continued funding of two Centers for Genomics and Public Health within the schools of public health at the Universities of Michigan and Washington to provide expertise in translating genomic information into useable public health knowledge.
- The continued updating and enhancement of the Human Genome Epidemiology (HuGE) Published Literature Database, a web-based resource which includes information on

population prevalence of genetic variants, gene-disease associations, gene-gene and gene-environment interactions, and evaluation of genetic tests.

- Continued funding of the Jeffrey Modell Foundation to support awareness campaigns related to primary immune deficiency syndrome.

Examples of additional program accomplishments include:

- In 2006, NOPHG provided seed funding for 11 innovative CDC projects that integrate genomics into public health investigations and programs, including those involving chronic disease, asthma, and birth defects; nine of these projects received a second year of funding in 2007, and five new projects will be funded in 2008.
- In 2007, the NHANES Collaborative Genomics Project, a CDC-led collaboration with National Cancer Institute (NCI) initiated in 2002, provided a foundation for understanding how genetic variation contributes to human disease by measuring the U.S. population variation in 90 genetic variants of public health significance using samples collected in the third National Health and Nutrition Examination Survey (NHANES III). The publication of these data is anticipated in FY 2008.
- As of November 2007, the HuGE Published Literature Database contains more than 30,000 abstracts, 62 HuGE Reviews and 598 meta-analyses, which can be searched by gene, disease, and environmental factors. In 2007, NOPHG launched the HuGE Navigator, a suite of on-line applications that mine PubMed to populate the HuGE Published Literature Database, identify candidate genes, search for investigators with a particular research focus, and produce knowledge summaries.
- In 2007, NOPHG published the results from two national surveys funded in 2006—HealthStyles and DocStyles—on U.S. consumer awareness and use of direct-to-consumer nutrigenomic tests, and on the knowledge of and experiences with these tests among U.S. physicians. NOPHG found that 14 percent of consumers were aware of nutrigenomic tests, and 0.6 percent reported using them. Forty four percent of physicians were aware of these tests, and of those, 74 percent had never discussed the results of such a test with a patient. These data provide national baseline information that could be tracked longitudinally to assess the impact of policies, efforts at public and provider education, and the evolution of the demand for such tests.
- In 2007, the University of Michigan's Center for Public Health and Community Genomics led the development of the new Genomics Forum of the American Public Health Association to promote workforce competency in genomics; to increase awareness and knowledge of genetic services; and to participate in policy development, advocacy, and networking. Also, in 2007, the University of Washington's Center for Genomics and Public Health launched their Spotlight newsletter, disseminated through libraries and medical clinics throughout Washington state, to educate and update public health practitioners, physicians, and the public about topics in genomics.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$4,530,000
FY 2005	\$6,987,000
FY 2006	\$6,914,000
FY 2007	\$11,811,000
FY 2008	\$12,093,000

BUDGET REQUEST

The CDC FY 2009 request includes \$9,142,000 for Genomics, a decrease of \$38,000 below the FY 2008 Enacted level for an Individual Learning Accounts (ILA) and administrative reduction. In addition, the request includes \$2,901,000 for Primary Immune Deficiency Syndrome, a decrease of \$12,000 below the 2008 Enacted level for an ILA and administrative reduction.

CDC will continue to work toward the translation of genomic discoveries into opportunities for public health and preventive medicine in support of the President's Healthier U.S. Initiative and the Secretary's Personalized Health Care Initiative.

In FY 2009, CDC plans to continue to provide funding for the following:

- Genomics translation research projects initiated in FY 2008 to fill gaps in the evidence base for genetic tests and other genomic applications, including family history, that hold promise for clinical and public health practice. In this way, NOPHG is focusing scarce research dollars to address critical gaps in the evidence that have been identified through evidence-based processes such as EGAPP, to facilitate the appropriate integration of emerging genetic tests into practice.
- Projects initiated in FY 2008 in the areas of policy, surveillance, or education of genetic tests and other genomic interventions, such as family history, to support the integration of genomics knowledge and interventions into public health practice. These projects build on NOPHG's previously-funded efforts to establish programmatic capacity in genomics by funding state health departments and academic centers.
- CDC research projects initiated in FY 2008 to further integrate genomics into CDC's public health investigations and programs, in an effort to enhance our understanding of variations in disease outcomes, characterize environmental exposures more accurately, and refine public health interventions.

In addition, in FY 2009, CDC will continue the support and coordination of the following activities:

- Support EGAPP project to assess the validity and utility of the increasing number of emerging genetic tests. EGAPP activities will include new evidence reviews of genetic tests, support of the EGAPP Working Group in their preparation of new recommendation statements for clinical practice, support for the recently-formed EGAPP Stakeholders Group, the completion of the stakeholder evaluation to assess the value and impact of the EGAPP project, and the development of a sustainable process for genetic test evaluation.
- Coordinate second phase of the CDC-NCI NHANES Collaborative Genomics Project to identify associations between the first 90 genetic variants of public health significance examined in NHANES III and disease outcomes, such as cardiovascular disease, obesity, and cancer; and continued planning of the Beyond Gene Discovery (BGD) initiative, a proposed public-private partnership that will assess the prevalence of about one million genetic variants in NHANES surveys to provide the first population-based assessment of

genomic variation in the U.S. The addition of these genomic data to the rich NHANES database, which contains about 10,000 health-related and environmental variables, will provide a foundation for understanding how genetic variation contributes to health status in the U.S. population, and a basis for estimating the number of people in the U.S. who may benefit from particular genomic interventions.

- Update and enhance the Human Genome Epidemiology (HuGE) Published Literature Database to advance the synthesis, interpretation, and dissemination of population-based data on human genetic variation in health and disease.

OUTPUT TABLE

						FY 2007			FY 2009 Target
5.A.X	Projects funded to conduct genomics translation research	N/A	N/A	N/A	N/A	N/A	N/A	2	4
5.A.Y	Projects funded to conduct genomics surveillance, education, or policy	N/A	N/A	N/A	N/A	N/A	N/A	2	2
5.A.Z	CDC public health investigations that integrate genomics	N/A	N/A	New output	11	New output	9	5	5
5.A.A.A	EGAPP-sponsored evidence reviews or recommendations on statements published	N/A	N/A	N/A	N/A	New output	2	6	6
5.A.A.B	Number of abstracts added to the HuGE published literature database	4278	5023	New output	5338	New output	6186	6800	7500
Appropriated Amount (\$ Million) ¹		\$4.5	\$7.0	\$6.9		\$11.8		\$12.1	\$12.0

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, AND DISABILITY AND HEALTH

				FY 2009 +/- FY 2008
Birth Defects and Developmental Disabilities	\$37,741,000	\$37,580,000	\$37,398,000	-\$182,000
Human Development and Disability	\$64,718,000	\$70,349,000	\$70,010,000	-\$339,000
Hereditary Blood Disorders	\$19,783,000	\$19,437,000	\$19,344,000	-\$93,000
Total	\$122,242,000	\$127,366,000	\$126,752,000	-\$614,000

SUMMARY OF THE REQUEST

CDC promotes positive birth outcomes of babies, helps children reach their full potential, and ensures people with disabilities of all ages lead productive, healthy lives. CDC accomplishes this work by identifying the causes of and addressing birth defects and developmental disabilities, promoting the early detection and timely follow-up of developmental disorders, conducting research to increase our understanding of disabilities and their impact on the nation's health, and developing prevention and intervention programs that promote healthy living for all people with disabilities and other disabling conditions.

The FY 2009 CDC request includes \$126,752,000 for Birth Defects, Developmental Disabilities, and Disability and Health, a decrease of \$614,000 below the FY 2008 Enacted level for an Individual Learning Account and administrative reduction.

- \$37,398,000 for Birth Defects and Developmental Disabilities, a decrease of \$182,000 below the FY 2008 Enacted level to conduct surveillance and research to identify preventable causes of birth defects and developmental disabilities, and to support the development, implementation and evaluation of prevention strategies for birth defects with known causes, including folic-acid-preventable spina bifida and anencephaly, and fetal alcohol spectrum disorders.
- \$70,010,000 million for Human Development and Disability, a decrease of \$339,000 below the FY 2008 Enacted level. These funds are used to support early hearing diagnosis and intervention programs, autism surveillance and early intervention strategies, surveillance of single gene disorders, including muscular dystrophy, and research to identify successful models for transitional care for older adolescents with mental and physical disabilities.
- \$19,344,000 for Blood Disorders, a decrease of \$93,000 below the FY 2008 Enacted level. These funds are necessary to continue CDC's work in the areas of sickle cell, bleeding and clotting disorders, and primary bone marrow failure disorders.

BIRTH DEFECTS AND DEVELOPMENTAL DISABILITIES

				FY 2009 +/- FY 2008
Birth Defects	\$17,098,000	\$17,241,000	\$17,158,000	-\$83,000
Fetal Alcohol Syndrome	\$10,291,000	\$10,112,000	\$10,063,000	-\$49,000
Folic Acid	\$2,204,000	\$2,221,000	\$2,210,000	-\$11,000
Infant Health	\$8,148,000	\$8,006,000	\$7,967,000	-\$39,000
Total	\$37,741,000	\$37,580,000	\$37,398,000	-\$182,000

AUTHORIZING LEGISLATION

Public Health Service Act §§ 301,307,310,311,317 , 317C, 317J, 327, 352, 399G, 399H, 399I, 399J, 399M,1102, 1108 PHSA Title IV, 42. U.S.C. Section 247b-4b, "Developmental disabilities surveillance and research programs"

FY 2009 Authorization Indefinite

Allocation Method.....Direct Federal/Intramural;
Competitive Grants and Cooperative Agreements and Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Birth Defects and Developmental Disabilities

CDC's Birth Defects and Developmental Disabilities program, identifies causes of birth defects, and implements prevention strategies for those defects with known causes. With the ultimate goal to prevent or reduce birth defects and developmental disabilities, the program engages in public health surveillance, research, and prevention activities.

Surveillance:

A cornerstone of CDC's birth defects surveillance activities is the Metropolitan Atlanta Congenital Defects Program. This program was created in 1967 and actively collects, analyzes, and interprets birth defects surveillance data by monitoring all major birth defects in the five metropolitan Atlanta counties. The program, which covers approximately 50,000 births, serves as a model for many state-based programs and as a resource for the development of uniform methods and approaches to birth defects surveillance. Information collected has been used to identify risk factors for birth defects, such as smoking and alcohol use, to investigate causes of birth defects and to identify factors associate with survival among children with birth defects.

CDC also supports state-based birth defects surveillance programs that are vital to tracking and detecting trends in birth defects, providing the basis for studies of causes, planning and evaluating the effect of prevention efforts, and ensuring that children with birth defects receive appropriate services. CDC provides direct financial support to 14 states through a competitive cooperative agreement. In addition, CDC offers technical assistance and facilitates the exchange of information between states and territories by supporting the National Birth Defects Prevention Network (NBDPN), a network of state-based birth defects surveillance programs established in response to the congressional mandate under the Birth Defects Prevention Act of 1998. Currently, NBDPN has more than 250 members representing 50 states, Washington D.C., Puerto Rico, and several other countries.

These CDC-supported surveillance activities provide valuable information about birth defects to CDC, state programs, policy makers, researchers, and community service agencies. In July 2004, NBDPN released Guidelines for Conducting Birth Defects Surveillance, a technical guide covering

developing, planning, implementing and conducting birth defects surveillance and using the resulting data. In addition, CDC, through NBDPN, publishes the now annual “Congenital Malformations Surveillance Report: A Report from the National Birth Defects Prevention Network” that includes scientific articles, a directory of all birth defects surveillance programs, and birth defects data from 35 population-based programs.

CDC also supports surveillance for developmental disabilities through its Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP). MADDSP is an ongoing system for monitoring the occurrence of selected developmental disabilities such as autism, cerebral palsy, hearing loss, mental retardation, and vision impairment in five metropolitan Atlanta counties. This system is one of a few programs in the world that conducts active monitoring of children affected by developmental disabilities in a large, racially diverse metropolitan area.

Prevention Research:

With nearly 70% of birth defects having unknown causes, CDC continues to look for answers as to whether environmental pollutants, genetic and dietary factors, medications and personal behaviors contribute to the occurrence of birth defects. Using clues provided by surveillance system data, CDC supporting research studies to investigate potential causes and risk factors for birth defects.

In 1996, Congress mandated CDC to establish the Centers for Birth Research and Prevention (CBDRP) to collaborate on a study to identify factors that cause or contribute to the occurrence of specific birth defects. This collaborative study, the National Birth Defects Prevention Study (NBDPS) is one of the largest case-control studies of birth defects ever conducted. Currently, CDC eight centers in Arkansas, California, Iowa Massachusetts, New York, North Carolina, Texas, and Utah. CDC serves as the ninth site, covering the Atlanta metropolitan area. Since the study began in 2007, NBDPS has collected information on more than 15,000 potential participants, completed more than 19,000 maternal interviews, obtained 8,000 infant DNA samples, and planned more than 100 investigational projects.

With data collection reaching a critical mass, CDC and its partners are beginning to answer critical questions about the causes of birth defects. Specifically, study collaborators have made significant progress towards achieving its goal to: identify and evaluate the role of at least five new risk factors for birth defects and developmental disabilities by analyzing data and publishing findings on:

- Nutritional factors like B vitamins and the causes of certain birth defects.
- Chronic conditions like thyroid disease and diabetes and increased birth defects risk.
- Medications commonly used to treat depression and birth defects risk.
- The relationship between risk factors such as smoking and obesity to certain birth defects.

Prevention Programs:

When the cause of birth defects and developmental disabilities are known, CDC has been dedicating resources to identify effective intervention strategies to prevent their occurrence. Working with partners at the national, state, and local levels, CDC is implementing media campaigns, education health care providers and promoting community outreach to at-risk populations to health ensure all babies are born healthy. Prevention activities include:

Fetal Alcohol Syndrome

Fetal Alcohol Syndrome (FAS) is one of the leading preventable causes of mental retardation and birth defects. The program has developed proven strategies for FAS prevention in high-risk populations, and is working with obstetricians and gynecologists to widely implant the strategy—called brief counseling and intervention—for women at risk for a pregnancy affected by alcohol

consumption. In addition, the program maintains cooperative agreements with health agencies and academic institutions to monitor surveillance and the impact of prevention activities at the individual and population level—including seven model state-based surveillance and prevention programs. CDC's program also develops, implements, and evaluates educational materials on Fetal Alcohol Spectrum Disorders (FASD) for parents and health care professionals, in addition to developing curricula and guidelines for the diagnosis of FAS for practitioners. The program is currently working to establish baseline rates of screening and intervention practices among key healthcare providers.

By developing and disseminating screening and intervention tools for health care providers serving women of child-bearing age and by assessing the screening and intervention practices of nationally representative samples of provider groups, CDC is on track to meet a key program goal—to increase the percentage of health providers who screen women of child-bearing age for risk of an alcohol-exposed pregnancy and provide appropriate evidence-based interventions (e.g. brief counseling and intervention) for those at risk.

Folic Acid

Building upon the research finding that folic acid consumption prevents many cases of spina bifida and anencephaly, the CDC engages in several different activities to encourage its use. In addition, CDC monitors the effects of folic acid fortification of the food supply, and seeks strategies to address the disparate rate of decline among Hispanics in the U.S. Specifically, the program:

- Conducts research on women of child-bearing age, in particular communications research on subgroups of women to understand motivators focusing on disparity.
- Provides educational materials designed to increase consumption of folic acid to prevent spina bifida and anencephaly to programs in states, managed care organizations and community-based organizations.
- Works with public and private sector partners on exploring the feasibility of additional systems-level changes, such as working with manufacturers to increase availability of corn flour products fortified with folic acid. The program has been working on making connections with the various partners and providing technical assistance, and is developing the research needed to support additional food fortification strategies in the prevention of neural tube defects.

By pursuing additional food fortification strategies intended to benefit the Hispanic population, the program is making important progress towards achieving its goal of reducing health disparities in the occurrence of folic-acid preventable spina bifida and anencephaly by reducing the birth prevalence of these conditions among Hispanics. The program tracks the birth prevalence of neural tube defects, and is in the process of evaluating data for 2005. Since the folic-acid fortification of the food supply in 1998, CDC has documented a 27 percent decline in the occurrence of neural tube defects. Efforts are underway to encourage additional benefits from folic acid use, such as targeted efforts to address disparities among Hispanics.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$36,175,000
FY 2005	\$39,239,000
FY 2006	\$38,458,000
FY 2007	\$37,741,000
FY 2008	\$37,580,000

BUDGET REQUEST

The CDC FY 2009 request includes \$37,398,000 for Birth Defects and Developmental Disabilities, a decrease of \$182,000 below the FY 2008 Enacted level for an ILA and administrative reduction. All other activities are funded at the FY 2008 Enacted level.

The budget request will allow CDC to continue its activities in birth defects research, surveillance, and intervention—with a particular focus on intervening in folic acid preventable spina bifida, anencephaly and fetal alcohol spectrum disorders. In FY 2009, the program expects to continue enhancements to CDC's birth defects surveillance program and will continue providing support to state-based birth defects surveillance efforts nationally.

Birth Defects

The FY 2009 CDC request includes \$17,158,000 for birth defects, which will continue to support CDC's efforts in identifying and addressing the causes of birth defects through surveillance, research and prevention strategies. Specifically, CDC will continue to fund 14 state-based surveillance programs, six Centers for Birth Defects Research and Prevention, and its other surveillance and research efforts. These investments in surveillance and research have increase the understanding into the occurrence of these conditions and have lead to new prevention opportunities. The Centers have published several findings on the potential causes of birth defects including the role of nutrition, smoking, and certain medications. The program has exceeded its target for its long-term goal of evaluating the role of at least five new factors for birth defects and developmental disabilities.

Fetal Alcohol Syndrome

The CDC FY 2009 request includes \$10,063,000 for Fetal Alcohol Syndrome.

CDC will continue collaborative efforts with national partner organizations and health care providers to implement proven strategies in the prevention of alcohol exposed pregnancies. Specifically, the program expects to continue the current partnership with Fetal Alcohol Spectrum Disorders regional training centers to provide education and training to medical and allied health students on the identification of alcohol-exposed pregnancies and the prevention of them. The program will continue to assess prevention and identification practices among key healthcare providers and evaluate efforts to encourage and improve the uptake of evidence-based prevention activities.

Folic Acid

The CDC FY 2009 request includes \$2,210,000 for Folic Acid.

The program will continue efforts to reduce the disparate decline in spina bifida and anencephaly. Currently, the agency is looking to long-range strategies such as supporting additional, targeted food fortification. Such strategies hold great promise for addressing disparities but make take several years to fully implement and evaluate. In addition, the program will launch new efforts to encourage folic acid use among Hispanic women across the U.S. The campaign will have a

national focus, but will also target large Hispanic media markets public service announcements as well as other communication strategies.

Infant Health

The FY 2009 request includes \$7,967,000 for Infant Health.

The Infant Health funds will continue to support CDC's model surveillance and research activities. These projects make active contributions to the overall research and surveillance efforts for birth defects and developmental disabilities. In addition, these sites represent models for other participating state and university programs, and facilitate the implementation of quality improvement measures. Specific projects include birth defects surveillance (the Metropolitan Atlanta Congenital Defects Program), birth defects research (the Atlanta Center for Birth Defects Research and Prevention), developmental disabilities surveillance (the Metropolitan Atlanta Developmental Disabilities Surveillance Program), and the CDC study site for the Study to Explore Child Development.

OUTCOME TABLE

						FY 2007				Out year Target
Long-Term Objective 6.1: Prevent birth defects, and developmental disabilities										
6.1.1	Increase the sensitivity of birth defects and developmental disabilities monitoring data	N/A	Developmental Disabilities- Initiate validation study (Met)	Developmental Disabilities enroll 40-50% of eligible sample	Met	Birth Defects-establish baselineDevelopmental Disabilities- enroll remain-ing eligible sample	Met	Birth Defects-improve by 1%/ Developmental Disabilities- data analysis & preliminary results 12/2008	Birth Defects- 91%/ Developmental Disabilities-establish baseline sensitivity percentage	92%
6.1.2	Identify and evaluate the role of at least five new factors for birth defects and developmental disabilities	Develop a sample for research	Establish a sample for research Complete	Finalize research agenda	Complete	Publish findings on alcohol, caffeine use, and nutrition	Met	Publish findings on maternal medication use 12/2008	Publish findings on occupational exposures 12/2009	Translate into prevention strategies

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, AND DISABILITY AND HEALTH

						FY 2007				Out year Target
6.1.3	Reduce health disparities in the occurrence of folic-acid preventable spina bifida and anencephaly by reducing the birth prevalence of these conditions among Hispanics	5.3 per 100,000 2/2008	5.1 per 100,000 12/2008	5.0 per 100,000	12/2009	4.9 per 100,000	12/2010	4.8 per 100,000 (reported 12/2011)	4.7 per 100,000 (reported 12/2012)	4.5 per 100,000
6.1.4	Increase the % of health providers who screen women of childbearing age for risk of an alcohol-exposed pregnancy and provide appropriate, evidence-based interventions for those at risk	Publish targeted recommendations for provider based screening and intervention (Met)	Complete	Develop and disseminate tools for health care providers serving target population	Complete	Assess screening and intervention practices of nationally representative samples	Met	Implement ongoing provider education programs and establish baseline rates of provider-based intervention and screening	Increase screening rates by 1%	Increase screening and brief intervention for alcohol exposed pregnancy

OUTPUT TABLE

						FY 2007			FY 2009 Target
6.A	Number of cooperative agreements to states in support of state-based birth defects surveillance	22	22	14	14	14	14	14	14
6.B	Number of Centers for Birth Defects Research and Prevention	8	8	8	8	8	8	6	6
6.C	Number of model state-based FASD surveillance prevention projects	7	7	7	7	7	7	7	7
Appropriated Amount (\$ Million) ¹		\$36.2	\$39.2	\$38.5		\$37.7		\$37.6	\$37.4

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

HUMAN DEVELOPMENT AND DISABILITY

				FY 2009 +/- FY 2008
Disability and Health	\$10,452,000	\$10,270,000	\$10,221,000	-\$49,000
Limb Loss	\$2,907,000	\$2,856,000	\$2,842,000	-\$14,000
Child Development Studies	\$3,361,000	\$3,302,000	\$3,286,000	-\$16,000
Tourette Syndrome	\$1,749,000	\$1,718,000	\$1,710,000	-\$8,000
Early Hearing Detection and Intervention	\$6,317,000	\$9,871,000	\$9,823,000	-\$48,000
Muscular Dystrophy	\$6,287,000	\$6,177,000	\$6,147,000	-\$30,000
Special Olympics Healthy Athletes	\$5,534,000	\$5,437,000	\$5,411,000	-\$26,000
Paralysis Resource Center (Christopher Reeve)	\$5,829,000	\$5,727,000	\$5,699,000	-\$28,000
Attention Deficit/Hyperactivity Disorder	\$1,687,000	\$1,746,000	\$1,738,000	-\$8,000
Fragile X	\$860,000	\$1,828,000	\$1,819,000	-\$9,000
Spina Bifida	\$4,934,000	\$5,205,000	\$5,180,000	-\$25,000
Autism	\$14,801,000	\$16,212,000	\$16,134,000	-\$78,000
Total	\$64,718,000	\$70,349,000	\$70,010,000	-\$339,000

AUTHORIZING LEGISLATION

PHSA §§ 301,307,310,311,317 , 317C, 317J, 327, 352, 399G, 399H, 399I, 399J, 399M,1102, 1108; PHSA Title IV, 42. U.S.C. Section 247b-4b, "Developmental disabilities surveillance and research programs"

FY 2009 Authorization Indefinite

Allocation Methods.....Federal/Direct Intramural;
Competitive Grants and Cooperative agreements; Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC's Human Development and Disability program, in collaboration with national, state and local partners, addresses the public health issues related to human development and promotes the health and well-being among all people with disabilities.

CDC promotes optimal development among children at risk for poor outcomes and health for people with disabilities. Activities include: 1) early identification and interventions for children at high risk for developmental problems; 2) the use of newborn screening to identify children with hearing loss and selected metabolic and genetic disorders to prevent secondary conditions; 3) research on risk factors and measures of health, functioning, and disability in children and adults; and 4) work with state health department programs to develop infrastructure and support health promotion for individuals with a disability.

As a population-based public health promotion program, CDC's efforts related to human development benefit the public by optimizing the health, well-being, independence, productivity and full societal participation of all people. It is estimated that CDC's efforts specifically impact 40 percent of the US population that make up these target populations.

Funds are currently distributed to program partners through 29 cooperative agreements and 28 contracts.

Disability and Health

Individuals with disabilities make up about 20 percent (50 million) of the U.S. adult, non-institutionalized population. Of Americans with disabilities, approximately nine million have a mobility and/or physical impairment, and 22 million have a sensory impairment. CDC has been

involved with disability and health activities since 1989. CDC sponsors programs supporting the health, well-being, independence, productivity, and full societal participation of people with disabilities. Programs support research on risk factors for poor health and well-being; research on measures of health, functioning, and disability; data collection on the prevalence of disabilities and the health status of people with disabilities; health promotion interventions; and the implementation of public health policies related to disability and health. Two noteworthy projects include:

- Living Well with a Disability. This project helps both long-term and newly disabled persons learn life skills to cope with and thrive with their disability. Skills include everything from maintaining a healthy lifestyle to learning how to live independently.
- Institute of Medicine Report on Disability in America. The program funded this activity and worked with IOM to update this report on how disability is currently addressed in the United States. Additionally, this report gives a roadmap for an improved approach to disability by all relevant federal agencies.

CDC conducts seven projects intended to develop community-based interventions that improve the health and quality of life for persons with disabilities. These include 16 state disability projects; projects with the Amputee Coalition (on Limb loss), Christopher Reeve foundation, and Special Olympics; projects on spina bifida; and research projects on caregiving and improving the health of disabled persons.

Funding for 16 state disability and health programs support the programs infrastructure, specific health promotion activities and surveillance of health disparities for persons with disabilities

Limb Loss

There are approximately 1.8 million amputees in the United States, with more than 185,000 new amputation surgeries each year. In FY 1997, CDC began funding Limb Loss activities designed to provide information and resources to persons with limb loss or limb difference, their families, caretakers, and health professionals; and to provide research and support to determine the rate and impact of limb loss and limb difference. By the year 2020, the number of people with limb loss is expected to increase to over 2 million, with half of these people under 65 years of age.

Program activities include a hotline for amputees and their healthcare providers run by the Amputee Coalition of America, a life skills program by Johns Hopkins School of Public Health for new amputees, a program to reduce secondary conditions from Limb loss run by the University of Chicago, and programs for military personnel through the National Limb Loss Information Center..

CDC's National Limb Loss Information Center is an important resource for individuals experiencing limb loss. The program is a primary source of information on limb loss for military personnel injured in recent conflicts abroad.

CDC funds the Johns Hopkins School of Public Health through a \$324,909.00 five year cooperative agreement (FY 2007-2012) that supports research on the epidemiology and consequences of limb loss. CDC also funds the National Center on Physical Activity and Disability (NCPAD), at the University of Illinois at Chicago, to serve as an online health promotion resource center whose mission is to reduce the incidence of secondary conditions and improve the overall quality of life for persons with disabilities through promotion of beneficial levels of physical activity and healthy, active lifestyles. In addition, CDC funds the Amputee Coalition of America to develop and operate the National Limb Loss Information Center (NLLIC). It includes a national hotline, a website, referral services, educational curricula, youth programs, a national peer network, consumer publications, fact sheets and a library catalog. Accomplishments include:

- As of 1/31/07, 90 people have been certified as Amputee Coalition of America peer visitors at Walter Reed Army Medical Center (WRAMC) and Brooke Army Medical Center, also have 717 civilian peer visitors
- In April, 2005 five individuals with extensive peer visitation experience were certified as the first peer visitor trainers at WRAMC. No new trainers have been certified since April 2005; however, a train the trainer session will be held at Brooke Army Medical Center and at Balboa Naval Center during 2007, which will certify a minimum of 12 new trainers

Child Development Studies

Based on a 2003 National Survey of Children's Health, which included an estimated 72 million children and adolescents (age 0-17 yrs), 52 million parents had concerns about their children's development and health. Furthermore, 8.2 million children required more medical care, mental health, or educational services than usual for most children of the same age.

Investments in promoting optimal child development, especially in low-income families, can reduce social costs; such as special education, foster care, welfare, medical care, law enforcement, social security and social services.

CDC is conducting a longitudinal randomized controlled trial, Legacy for Children™, to test a parenting intervention to improve child developmental health in low-income families. The intervention works with low-income mothers and focuses on increasing their beliefs that they can have a positive impact on their child's development; building a sense of community through peer groups supporting positive parenting behavior; and increasing the amount of time and energy these women invest in their child's development to ensure improved short and long term outcomes. In FY 1998, two sites were selected (at the University of Miami and the University of California at Los Angeles) to plan for and implement the Legacy for Children™ study.

Legacy includes pilot and main study components and a comprehensive outcome and process evaluation protocol. Recruitment for the Pilot study started in FY 2000, and for the Main study in FY2002. The pilot study is completed at both sites and results are forthcoming.

- Over 600 families have participated in annual assessments which assess factors associated with health disparities in low-income families. 6.5 percent of main study one-year-olds were identified with mild to significant developmental delays and were referred for further developmental testing.
- Of a sub-sample of screened children, approximately 40 percent were referred for low hemoglobin and approximately 2 percent were referred for high blood lead levels.

Tourette Syndrome

CDC began receiving funding for Tourette Syndrome in FY 2004. It is estimated that 100,000 Americans have Tourette Syndrome (TS), and that perhaps as many as 1 in 200 show a partial expression of the disorder, such as chronic or transient tics in childhood. TS affects 3 to 5 in every 10,000 individuals, and about 10 in every 10,000 school-age children. CDC funds research and projects involving surveillance, educational and informational services, and training related to TS for healthcare and other providers. The focus is on improving the health and quality of life for persons living with the condition.

CDC is funding and partnering with the Tourette Syndrome Association (TSA) to provide health education and training of professionals on the standard diagnostic and treatment practices for TS and related disorders, especially targeting practitioners working with underserved and minority populations.

- TSA-funded activities have resulted in training for 5562 professionals on the standard diagnostic and treatment practices for TS and related disorders. As a result, over 90 percent of professionals expect to have better skills to improve diagnosis and treatment of TS and related conditions.
- In FY 2007 CDC participated in the Technical Expert Panel for the National Survey of Children's Health, resulting in inclusion of all of the top five children's mental health conditions, as well as TS, in the nationally representative survey. This will enable, for the first time, generation of national prevalence and severity estimates of TS and tic disorders among youth ages 4-17.

Early Hearing Detection and Intervention

The Early Hearing Detection and Intervention (EHDI) program began at CDC and HRSA in the mid-1990s when technology made it possible to test newborns for early hearing loss. Each year in the United States more than 12,000 babies are born with a hearing loss, making it the most frequently occurring birth defect. EHDI provides support and technical assistance on data collection and management to ensure quality monitoring of infant hearing loss screening, evaluation, and enrollment in intervention. EHDI collaborates with federal, national, and state agencies and organizations and provides financial support and technical assistance to state/territory public health departments and universities for the development and implementation of state/territory EHDI programs and surveillance systems. In addition, EHDI supports data sharing/integration with other child health information systems for the purposes of identifying previously unknown causes of hearing loss, ensuring timely delivery of complete, accurate information, and improving children's health and healthcare.

CDC's EHDI program funds cooperative agreements in 30 states/territories to develop or enhance a sustainable state-based EHDI tracking and surveillance system and integrate the EHDI system with other State/territorial screening, tracking, and surveillance programs that identify children with special health care needs.

Muscular Dystrophy

There are over 6,000 Single Gene Disorders (SGDs). Although individually rare, SGDs together affect about 1 in 300 births and cause 13 percent of pediatric in-patients and five percent of pediatric deaths. Duchenne muscular dystrophy (DMD) is a common SGD. About 1 in 3,500 boys is born with DMD which causes progressive muscle weakness leading to death. About 1 in 3,500 girls is a carrier of DMD. DMD is usually very mild in females, but female carriers are at increased risk of heart problems. A milder form of the disease, Becker muscular dystrophy, is caused by mutations in the same gene. The combined spectrum is referred to as Duchenne and Becker Muscular Dystrophy (DBMD).

Muscular Dystrophy funding is used for surveillance and family needs assessment activities. Beginning in FY 2002, CDC began receiving funds for Muscular Dystrophy (MD). CDC is working to increase the mean lifespan of patients with DBMD and carriers by 10 percent as measured by the Muscular Dystrophy Surveillance Tracking and Research Network (MDSTARnet). Information gathered through MD STARnet is used to characterize incidence and prevalence of DBMD, types of care offered to patients and the needs of individuals who have DBMD. States that participate in MDSTARnet are Iowa, Western New York, Colorado and Arizona through competitive funding (2002-2006). Georgia was added as a fifth participating state in 2005 through a contract mechanism.

Special Olympics Healthy Athletes

Beginning in FY 2002, CDC began receiving funds for the Special Olympics Healthy Athletes Program. An estimated 2 to 4 million people experience an intellectual or developmental disability. The U.S. Department of Education reported that approximately 9 of every 1,000 U.S. school children received special education for intellectual disabilities during the 2002-2004 school year. CDC Partners with Special Olympics to address health challenges and disparities faced by Special Olympics athletes and other people with intellectual disabilities by expanding the Healthy Athletes program. The program helps address the broader problem of health disparities faced by people with disabilities. Through the partnership, CDC supports the national and international efforts of Special Olympics to provide health screenings to athletes with intellectual disabilities.

- During 2007 there were 37 Med Fest screening events, These comprehensive screenings facilitate the required standard sports physical examination for current and prospective Special Olympics athletes. More than 19,000 athletes were screened in 2007, including U.S. urban areas, Africa, Latin America, and Asia Pacific regions. It is estimated that the Med Fest accounted for 28,000 new athletes enrolled in Special Olympics world-wide.

Paralysis Resource Center (Christopher Reeve)

Beginning in FY 2001, CDC began receiving funds for Paralysis. In conjunction with ongoing curative research being conducted outside of CDC for spinal cord injury, CDC has recently begun addressing the impact of paralysis including quality of life issues, peer support, educational information for people experiencing paralysis, and the prevention of secondary conditions in conjunction with the Christopher and Dana Reeve Paralysis Research Center and the University of Chicago.

CDC has established collaborative relationships with rehabilitation facilities, hospitals, and disability advocacy and voluntary support organizations to address the health needs of people with paralysis. CDC provides leadership in facilitating health promotion activities (improving physical activity, exercise and nutrition, confronting depression/isolation issues, managing weight, and quitting tobacco use) among people with paralysis to enhance physical and emotional health.

- The PRC is the first and only federally-funded national information resource clearinghouse for paralysis. In FY 2006, comprehensive information, resources, and referral services were provided to over 310,000 persons with paralysis, their families, their caretakers, and healthcare professionals. The demand for information and resources continues to increase.

Attention Deficit/Hyperactivities Disorder

Attention-Deficit/Hyperactivity Disorder (ADHD) is a common condition affecting about 3-7 percent of school age children with recent estimates suggesting prevalence over 7 percent in some socio-demographic groups. CDC began receiving funds for ADHD in FY 2002. CDC estimates that roughly 2.5 million children are currently taking medications to treat ADHD and has noted substantial disparities in rates of parent-reported diagnosis and treatment across the U.S.

CDC conducts community-based research on ADHD, including population-based studies of prevalence, risk factors, coexisting conditions and community treatment and supports the National Resource Center on ADHD. CDC's cooperative agreement with the University of Oklahoma Health Sciences Center and University of South Carolina (funded originally in FY 2007) allows the conduct of an epidemiological study of ADHD, Project to Learn about ADHD in Youth (PLAY), which strengthens CDC's surveillance activities by screening approximately 10,500 children between the ages of 5 and 10 years of age. Study findings will enhance CDC's understanding of ADHD in children and will also increase the agency's ability to make the most informed decisions and recommendations concerning potential public health prevention and intervention strategies.

Fragile X

Fragile X Syndrome (FXS) is the most common known cause of mental retardation and developmental disability that can be inherited. The exact number of people who have FXS is not known, but it is estimated that approximately 1 in 4,000 males and 1 in 6,000 to 8,000 females have the disorder. CDC began receiving funds for FXS in FY 2005.

CDC is working to improve the health and quality of life of those living with FXS. Three activities are currently taking place. First, a contract has been issued to the Genetic Alliance to provide information on the affected population and their health care providers. Second, the Research Triangle Institute is contracted to conduct a national survey of fragile-X affected families to assess their needs for services. And third, Emory University has been recently contracted to test the feasibility of a novel DNA-based technology to test for Fragile X on anonymous dried bloodspot cards. This project aims to find the prevalence of Fragile X syndrome from 70,000-100,000 newborn blood spots.

Spina Bifida

Spina Bifida (SB) is the most common permanent disabling birth defect in the U.S., affecting nearly 70,000 men, women, adolescents, and children across the nation. The goal of CDC's spina bifida activities are to reduce and prevent spina bifida incidence and morbidity, and to improve the quality of life for those living with the condition. CDC began receiving funds for Spina Bifida, in FY 1991 which directed CDC to continue research in China regarding folic acid.

There are several ongoing activities on spina bifida. They include the Prevention, Resources, and Quality of Life Initiative (Spina Bifida Association) to help patients as they grow into adults. Additionally, the Spina Bifida Association is funded to create a national registry system of persons who receive care in Spina Bifida Clinics is under development for the purpose of improving care and conducting clinical research. The Care Coordination and Transition Programs in Spina Bifida Clinics are working to determine what programs are effective in facilitating care access and the transition to adult life. AUCD is funded to oversee the conduct of two continence studies at Kennedy Krieger Institute (MD) and Children's Hospital, Los Angeles (CA). Purpose of these studies is to identify effective interventions that both improve bowel and bladder continence and protect the health and function of the urinary tract. CDC is collaborating with the Department of Veterans Affairs (VA) to explore an administrative database on beneficiaries of the VA's Spina Bifida health care program. And finally, a study is being conducted of the natural history of Spina Bifida by prospectively studying children who were born with this birth defect.

Autism

CDC has been tracking the prevalence of several developmental disabilities since the 1980s and autism since 1996. The activities conducted include operation of the Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP). MADDSP was established in 1991 to monitor the occurrence of certain developmental disabilities in children, and autism was added to the system in 1996. Additional surveillance programs specific to autism include the Autism and Developmental Disabilities Monitoring Network (ADDM), which was initiated in 2000 to determine the prevalence and characteristics of children with Autism Spectrum Disorders (ASDs). During the first phase of the project, 16 sites (including CDC) participated in the ADDM Network. CDC currently provides funding to 10 ADDM network sites and also operates a site internally in Georgia. Data from multiple communities (ADDM network) in the United States show that autism affects an average of 1 in 150 children. CDC's leadership in the area of autism is focused primarily on understanding rates and trends, advancing public health research into risk and protective factors, and improving early detection and diagnosis.

CDC operates a model tracking and research program to determine the prevalence of autism and other common developmental disabilities (including mental retardation, cerebral palsy, vision impairment, and hearing loss) and to conduct research on the causes of these conditions. In addition, CDC supports autism monitoring and research in other parts of the country. Including CDC's program, a total of 10 states are now tracking rates of autism and other developmental disabilities in children, with six of these programs also conducting public health research on autism.

Since 2005, the CDC has received funds in support of Learn the Signs. Act Early.—an awareness campaign designed to reach parents, child care providers, and physicians and other healthcare professionals.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$57,971,000
FY 2005	\$65,111,000
FY 2006	\$65,898,000
FY 2007	\$64,718,000
FY 2008	\$70,349,000

BUDGET REQUEST

The CDC FY 2009 request includes \$70,010,000 for Human Development and Disability, a decrease of \$339,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. All other activities are funded at the FY 2008 Enacted level.

The budget request will allow CDC to continue activities in data collection on the prevalence of physical and mental disabilities and the health of people with these disabilities, research on risk factors for poor health outcomes associated with these disabilities, and development of health promotion programs designed for people with physical and mental disabilities.

Specific activities in the request include:

- The FY 2009 request for Disability and Health includes \$10,221,000.
- In The FY 2009 request for Limb Loss, includes \$2,842,000. Funding will enable CDC to continue its work with the Amputee Coalition among other partners, to address those persons who have just experienced limb loss. Activities in FY 2009 include conducting surveillance of veterans with disabilities once they reenter their communities.
- The FY 2009 request for Child Development Studies, includes \$3,286,000. Funding will allow CDC will continue its work with the Legacy for Children™ program and other partners to conduct research and surveillance on developmental disabilities in children, including ADHD, Tourette syndrome and other disabling conditions.
 - The FY 2009 request for Attention Deficit Hyperactivity Disorder, includes \$1,738,000.
 - The FY 2009 request for Tourette Syndrome, includes \$1,710,000.
- The FY 2009 request for Early Hearing Detection and Intervention, includes \$9,823,000. The program will provide funding to conduct research related to newborn and infant hearing screening, evaluation and intervention programs including the identification of the causes and risk factors for congenital hearing loss; and the costs and effectiveness of newborn and infant hearing screening, audiologic and medical evaluations and intervention programs and systems.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION

BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITY AND HEALTH

- The FY 2009 request for Muscular Dystrophy, includes \$6,147,000. Funding will allow for continued work in outreach to patients, parents and providers of patients with muscular Dystrophy, as well as growth on MD Star net to further define successful strategies of care for this population.
- The FY 2009 request for Special Olympics Healthy Athletes, includes \$5,411,000 to continue funding “Healthy Athletes” and Special Olympic events.
- The FY 2009 request for Paralysis Resource Center (Christopher Reeve), includes \$5,699,000 to continue to provide information and fund and research through the Christopher and Dana Reeve Paralysis project.
- The FY 2009 request for Fragile X, includes \$1,819,000. Activities will include continuation of support of a resource center for parents and providers of patients with fragile X, surveillance studies on prevalence of the condition, and further work on promising areas (such as newborn screening/blood spot analysis) to develop surveillance on fragile x syndrome.
- The FY 2009 request for Spina Bifida, includes \$5,180,000. CDC is conducting a pilot longitudinal study of children with spina bifida. After the results of the pilot are examined, the it may be expanded to an older age group (up to age 12) and/or replicated in another setting, such as a state or metropolitan area. This will allow continuous follow-up for children from birth into school age and monitor for onset of developmental and health problems.
- The FY 2009 request for Autism, includes \$16,134,000 to continue current activities on surveillance and the Autism Awareness Campaign.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITY AND HEALTH

OUTCOME TABLE

							FY 2007			Out year Target
Long-Term Objective 6.2: Improve the health and quality of life of Americans with Disabilities										
6.2.2	Identify an effective public health intervention to ameliorate the effects of poverty on the health and well-being of children.	Collected data	Data collection and analysis for age 6 months (Met)	Data collection and analysis for age 1 year	Met	Data collection and analysis for age 2 year	Met.	Data collection and analysis for age 3 year	Data collection and analysis for age 4 year	N/A
6.2.3	Ensure that 95% of all infants are screened for hearing loss by 1 month of age.	92%	Pending	91%	Pending	92%	12/2009	93% 12/2010	94% 12/2011	N/A
6.2.4	Increase the mean lifespan of patients with DBMD and carriers by 10% as measured by the Muscular dystrophy Surveillance Tracking and Research network (MDSTARnet)	Established a health surveillance system for DBMD in 4 states	Analyze preliminary mortality data associated with DBMD from MD STARnet (Met)	Conduct analysis; add additional state	Met	Identify and report on (1) the incidence and prevalence of DBMD in the United States based on MD STARnet data (2) early signs and symptoms of DBMD based on MD STARnet and (3) cost of health care of people with DBMD.	2/2008	Report on the impact of clinic use on morbidity and mortality in DBMD using MD STARnet data 12/2008	Identify and report on (1) the trends on incidence and prevalence of secondary complications related to DBMD annually based on MDSTARnet data and (2) the trends of service utilization by people with DBMD and their families based on MD STARnet data. 12/2009	N/A

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITY AND HEALTH

OUTPUT TABLE

						FY 2007			FY 2009 Target
6.D	Number of states participating in research/monitoring for Autism and other Developmental Disabilities	N/A	N/A	N/A	16	16	16	16	16
6.E	#Disability Research/State Capacity/Information Centers Grants	N/A	N/A	N/A	26	27	27	27	27
6.F	National Spina Bifida Program Research Projects	N/A	N/A	2	2	4	4	3	3
6.G	@State Tracking/Research projects on Early Hearing Detection and Intervention	N/A	N/A	34	34	33	33	33	33
6.H	%State Surveillance/Research on DBMD	N/A	N/A	7	7	7	7	10	10
6.I	ADHD Projects	N/A	N/A	3	3	3	3	3	3
Appropriated Amount (\$ Million) ¹		\$58.0	\$65.1	\$65.9		\$64.7		\$70.3	\$70.0

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

BLOOD DISORDERS

				FY 2009 +/- FY 2008
HIV/AIDS - Hemophilia	\$17,033,000	\$16,735,000	\$16,655,000	-\$80,000
Thalassemia	\$1,893,000	\$1,860,000	\$1,851,000	-\$9,000
Diamond Blackfan Anemia	\$525,000	\$516,000	\$514,000	-\$2,000
Hemachromatosis	\$332,000	\$326,000	\$324,000	-\$2,000
Total	\$19,783,000	\$19,437,000	\$19,344,000	-\$93,000

AUTHORIZING LEGISLATION

PHSA §§ 301,307,310,311,317 , 317C, 317J, 327, 352, 399G, 399H, 399I, 399J, 399M,1102, 1108; PHSA Title IV, 42. U.S.C. Section 247b-4b, "Developmental disabilities surveillance and research programs

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural, Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The purpose of CDC's blood disorders program is to promote the health of populations at risk of or affected by blood disorders, and to prevent and reduce the concordant complications caused by blood disorders. CDC also focuses on blood disorders that are unique to women.

During the past 20 years, CDC's program in blood disorders has grown from a hemophilia-specific program to a comprehensive health treatment, management, monitoring and research program for individuals with bleeding disorders. In the 1980s, the agency was directed to work on HIV prevention strategies for people with hemophilia. Since then, CDC's work has expanded into the development of a national network of 135 treatment centers focusing primarily on hemophilia care and treatment. The centers use a multi-disciplinary model of care that has been shown to reduce death and disability by 40 percent among those who make regular visits. In recent years, several treatment centers have begun addressing other priority disorders such as thrombophilia—a condition that causes blood clots.

Target populations include persons at risk of or affected by bleeding disorders, clotting disorders, red cell disorders, hemoglobinopathies, and iron disorders. Blood disorders can range from mild to severe, affect any person, and cause serious health problems including disability and death. Some blood disorders are present at birth and are passed through families (inherited), while others can develop during certain illnesses or treatments.

Funds are distributed to CDC partners through cooperative agreements (research and non-research) and contracts with a regional network of 140 hemophilia treatment centers and eight hemostasis and thrombosis centers throughout the U.S. and its territories (Average award -- \$567,000). CDC's hemophilia treatment center program is the only far-reaching public health program for blood disorders. No comprehensive public health programs currently exist for conditions such as sickle cell disease and thrombosis, which are projected to have a large public health burden. Transforming Hemophilia Treatment Centers (HTCs) into Hematology Treatment Centers that work across program areas is one key strategy to address the growing public health concern related to blood disorders.

CDC employs a Universal Data Collection (UDC) system to monitor blood safety through blood sample testing of individuals seen at a network of Hemophilia Treatment Centers (HTCs) across the

country. Blood samples are tested for HIV, Hepatitis A, B and C and other emerging infectious agents as needed. These samples provide a national repository for the testing of emerging infectious diseases to quickly identify blood-borne infections contaminating blood products used to treat bleeding disorders and prevent transmission of infectious diseases. Given that the hemophilia population utilizes more blood products than any other group, the UDC acts as an early warning network for the identification and prevention of transmission of blood borne agents. The UDC also provides information on joint mobility and function, bleeding occurrences, treatment and vaccinations.

- Although treatment and outcomes vary, most primary blood disorders can be managed. The HTCs have had much success, demonstrating that patients using the specialized care experience 40 percent less death and disability due to bleeding complications. Data from these centers has also shown that prophylactic treatment can help in preventing joint disease in young boys with hemophilia.
- As West Nile Virus emerged as a health concern, CDC researchers were able to analyze stored blood samples from HTC patients and determine that the virus is not passed through commercial blood products.

Education and outreach is underway for other blood disorders including Hemochromatosis (iron overload), Diamond-Blackfan Anemia, and hemoglobinopathies such as sickle cell disease and thalassemia.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$19,750,000
FY 2005	\$20,226,000
FY 2006	\$20,095,000
FY 2007	\$19,783,000
FY 2008	\$19,437,000

BUDGET REQUEST

The CDC FY 2009 request includes \$19,334,000 for blood disorders, a decrease of \$93,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. All other activities are funded at the FY 2009 Enacted level. CDC will support treatment center research networks as well as health promotion and outreach programs in the following programmatic areas:

- Bleeding Disorders and Hemoglobinopathies - 140 Hemophilia and Thalassemia Treatment Centers
- Clotting Disorders - 5 Thrombophilia Pilot Sites
- Red Cell Disorders - 4 Diamond Blackfan Anemia Resource Centers
- Iron Disorders – health provider curricula and health promotion program

In FY 2009 CDC plans to include the evaluation the multi-disciplinary model of care for additional blood disorders. In addition, CDC will continue to work towards increasing the number of people with blood disorders who participate in the monitoring system (i.e., the UDC). The FY 2009 target is 19,306. By collecting data on as many hemophilia patients as possible, CDC can ensure better population-based estimates for risk factors and secondary conditions associated with hemophilia.

NARRATIVE BY ACTIVITY
HEALTH PROMOTION
BIRTH DEFECTS, DEVELOPMENTAL DISABILITIES, DISABILITY AND HEALTH

OUTCOME TABLE

						FY 2007				Out year Target
Long-Term Objective 6.2. Improve the health and quality of life of Americans with Disabilities										
6.2.1	Increase the number of people with blood disorders who participate in the monitoring system by 10%.	N/A	17,874	18,232	19,889 (Exceeded)	18,590	21,760	18,948 12/2008	19,306 12/2009	N/A

OUTPUT TABLE

						FY 2007			FY 2009 Target
6.J	Hemophilia/ Thalassemia Treatment Centers	N/A	N/A	N/A	140	140	140	140	140
Appropriated Amount (\$ Million)¹		\$19.8	\$20.2	\$20.1		\$19.8		\$19.4	\$19.3

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

HEALTH INFORMATION AND SERVICE

				FY 2009 +/- FY 2008
Budget Authority	\$136,247,000	\$89,868,000	\$132,970,000	+\$43,102,000
PHS Evaluation Transfers	\$133,826,000	\$186,910,000	\$151,385,000	-\$35,525,000
Total	\$270,073,000	\$276,778,000	\$284,355,000	+\$7,577,000
FTE	790	816	804	-12

SUMMARY OF THE REQUEST

Leaders, health professionals, and the public look to CDC for specific, credible, and detailed health information on which to base decisions that will determine the way in which they address health and safety. An increasingly connected public—with the need for instant access to trustworthy information—relies on CDC for knowledge to better manage, control, and improve their health. CDC's ability to provide meaningful, trustworthy information instantly and consistently, "24-7-365," may be the determining factor in saving one life or many lives, and the expenditure of millions, if not billions, of dollars. The Health Information and Service budget activity is responsible for assuring that CDC provides this timely, high-quality, and accessible health and safety information. The program provides leadership and promotes innovation in the areas of public health informatics, health statistics, health marketing, and scientific communications.

The CDC FY 2009 request includes \$284,355,000 for the Coordinating Center for Health Information and Service, an increase of \$7,577,000 over the FY 2008 Enacted level, which includes a \$1,348,000 Individual Learning Account (ILA) and administrative reduction.

- \$124,701,000 for the Health Statistics program, an increase of \$11,065,000 over the FY 2008 Enacted level, to support programs designed to obtain and use health statistics to support decision-making and research on health. As the nation's principal health statistics agency, the National Center for Health Statistics (NCHS) collects data from birth and death records, medical records, household health interview surveys, and through direct physical exams and laboratory testing.
- \$70,075,000 for the Public Health Informatics program, a decrease of \$415,000 below the FY 2008 Enacted level, to support standardization, integration, and sharing of health information, data, and systems among public and private organizations. This integration will enable public and private organizations to quickly and accurately share and analyze information from a wide range of sources to support better informed and effective health interventions, preparedness and response, and policy decisions.
- \$89,579,000 for the Health Marketing program, a decrease of \$3,073,000 below the FY 2008 Enacted level, to ensure people have and use accessible, accurate, relevant, and timely health information and interventions to protect and promote health. The National Center for Health Marketing (NCHM) conducts activities both nationally and internationally to better understand how to meet people's health information needs and preferences; develops and maintains CDC's communications systems, tools, and products; creates and delivers health information and interventions using customer-centered and science-based strategies; and develops, coordinates, and enhances CDC's partnerships with public and private organizations.

HEALTH STATISTICS

				FY 2009 +/- FY 2008
Health Statistics (PHS)	\$107,142,000	\$113,636,000	\$124,701,000	+\$11,065,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 306, 307, 308; 1% Evaluation: PHSA § 241 (non-add); (Superseded in the FY 2002 Labor HHS Appropriations Act - Section 206)

FY 2009 Authorization.....Indefinite

Allocation MethodDirect/Federal Intramural,
Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

As the nation's principal health statistics agency, CDC's National Center for Health Statistics (NCHS) provides data to identify and address health issues. CDC compiles statistical information to help guide public health and health policy decisions. As authorized by law, CDC is charged with conducting and supporting statistical and epidemiological activities to improve the effectiveness, efficiency and quality of health services in the U.S. These health statistics allow CDC to: document the health status of the U.S. population and selected subgroups; identify disparities in health status and use of health care by age, gender, race/ethnicity, socio-economic status, region, and other population characteristics; monitor trends in health status and health care delivery; identify health behaviors and associated risk factors; support biomedical and health services research; provide data to support public policies and programs; and evaluate the impact and effectiveness of health policies and programs.

The initial basis for NCHS surveys was the National Health Survey Act enacted in 1956. NCHS was administratively established as an organizational entity in the Public Health Service in 1960 and was established in law in 1974.

CDC's health data collection systems support the needs of the health community for high quality and reliable data. The primary data users include Congress and other policymakers, epidemiologists, biomedical and health services researchers, businesses, public health professionals, individual physicians, media and advocacy groups, actuaries, and government agencies. Specific data from all NCHS surveys can be accessed at www.CDC.gov/nchs.

The goals of the Health Statistics program are accomplished by:

- Providing a broad range of high quality data to the nation's health decision makers in a timely fashion.
- Coordinating data collection strategies and efforts through the HHS Data Council, the National Committee on Vital and Health Statistics, and the Interagency Council on Statistical Policy to address specific interests, problems, or needs.
- Collaborating extensively with representatives from states, data users in the public and private sectors, and other federal agencies on the following topics: data collection; defining data needs; addressing issues in methodology, survey design, data quality, confidentiality, and data standards; data analysis and policy development; data dissemination with regard to facilitating access and use; and developing the public health workforce of the future.

- Disseminating data to partners and stakeholders through: published reports (print and website); website only releases; pre-tabulated tables with national and state-level data on issues such as births and deaths; and interactive data warehouses including “VitalStats,” “Health Data for All Ages,” and the Research Data Center, allowing secure access to detailed data.

Health Statistics’ success in accomplishing its purpose has been demonstrated by meeting various performance measures. For example:

- Providing timely, accurate data is critical to the nation’s health decision makers. In FY 2003, the number of months for release of data as measured by the time from end of data collection to date of release on the internet was 14.5 months. This was reduced to 13.8 months in FY 2004. The target result for FY 2005 will be reported in June 2008. The delay is the result of CDC not receiving the files from the states.
- Measuring the continuous improvement and innovation in the scope and detail of information in Health, United States increases the scope of data produced and made available. CDC’s goal is to produce 15 new detailed trend tables and charts on a yearly basis. From FY 2004 through FY 2006 this goal was met. In FY 2007 the target was met with the release of five new detailed trend tables and 21 new charts.
- Producing data on the internet in easily accessible forms improves the speed and efficiency with which people access the information. CDC has met its goal of developing at least five new tools, technologies, or web enhancements per year and documenting a 15 percent increase in the number of visits to the NCHS website from FY 2003 through FY 2007.

National Health and Nutrition Examination Survey (NHANES)

The NHANES is the only national source of objectively measured health data capable of providing accurate estimates of both diagnosed and undiagnosed medical conditions in the population. Through a combination of personal interviews, standardized physical examinations, diagnostic procedures, and lab tests, NHANES assesses the health status of a representative sample of U.S. adults and children. Mobile Examination Centers travel throughout the country to 15 sites annually to collect data on conditions such as diabetes, high cholesterol, undiagnosed sexually transmitted diseases, and obesity; and provide critical information about the relationship between health behaviors, genetics, and the environment.

- The release and publication of obesity prevalence data in children, adolescents and adults resulted in the DHHS Secretary and CDC Director bringing public attention to the rise in obesity and discussing positive steps for the public to take, including exercise and making better food choices. The data led to legislative initiatives and changes in messaging and food choices by the food industry, for example, the implementation of food fortification and education efforts to increase folate consumption to prevent neural tube defects. The data are useful in national nutrition program planning efforts and in the development and evaluation of nutrition policies, such as food fortification recommendations.
- Data provide national estimates on the prevalence of HPV infection in the U.S. These data were used to inform the Advisory Committee on Immunization Practices about the epidemiology of the virus and its subtypes as they developed their recommendation for use of the quadrivalent HPV vaccine.

Funds allocated to NHANES are distributed through an estimated 16 competitive contract awards and eight sole-source contract awards with multiple vendors which include both universities and corporate entities. Funds are also distributed through 25 inter-agency agreements with partners such as NIH, USDA, FDA, and other Centers, Offices, and Institutes within CDC.

National Health Care Surveys

National Health Care Surveys are a family of provider-based surveys designed to meet the need for objective, reliable information about the organizations and providers that supply health care, the services rendered, and the patients they serve. Policy-makers and planners use these data to profile changes in the use of health care resources, monitor changing patterns of disease, and measure the impact of new technologies and policies. Researchers use data on the characteristics of providers, facilities, and patients to study shifts in the delivery of care across the health care system, variations in treatment patterns and patient outcomes; and other factors that impact cost, access to and quality of care in the U.S.

- Data used to track the nation's adoption and use of electronic medical records and other health information technologies indicate that 29.2 percent of office-based physicians reported using full or partial electronic medical record systems in 2006, a 22 percent increase since 2005, and a 60 percent increase since 2001. DHHS's Office of the National Coordinator on Health Information Technology has begun to use the National Ambulatory Medical Care Survey to monitor physicians' adoption of electronic medical records and other health information technologies across the nation.
- Data are used to document the extent of overcrowding and ambulance diversion in emergency departments. The Institute of Medicine recently released a series of reports describing the crisis in emergency medicine, and used National Hospital Ambulatory Medical Care Survey data as the backbone of its report.

Funds allocated for National Health Care Surveys are distributed through a competitive contract and six inter-agency agreements with partners including DHHS and the Census Bureau.

National Health Interview Survey (NHIS)

The NHIS is the core of DHHS data collection, and is the nation's largest household health survey providing data for analysis of broad health trends, as well as the ability to characterize persons with various health problems, determine barriers to care, and compare functional health status, health related behaviors, and risk factors across racial and ethnic populations. The NHIS provides information through confidential interviews conducted in households.

- Data are used by public health officials to gain a more complete understanding of the uninsured population, those with less access to care and those less likely to be receiving preventive services; by policy makers to show the proportion of the population that lack coverage; and to understand the shifts in coverage from private to public sources (such as SCHIP and Medicaid).

Funds allocated to the NHIS are distributed through three competitive contracts with commercial vendors and an inter-agency agreement with the Census Bureau.

National Vital Statistics System (NVSS)

The NVSS provides the nation's official vital statistics data based on the collection and registration of birth and death events at the state and local level. The NVSS provides the most complete and continuous data available to public health officials at the national, state and local levels, and in the private sector. Data are used by the U.S. Census Bureau to calculate post-censal population estimates. Birth and death data are used to set and track virtually all of CDC's life stage goals, and will help ensure that program interventions achieve the greatest health impact.

- Preliminary data for 2005 show life expectancy in the U.S. at birth was 77.9 years for all races, 78.3 years for whites, and 73.2 years for blacks. The infant mortality rate increased from 6.79 infant deaths per 1,000 live births in 2004 to 6.89 in 2005; however, this increase is

not considered significant. These data are crucial for public health officials at the national, state and local level to monitor progress toward achieving health goals related to infant mortality, and monitoring health disparities.

- Developed a national consensus document of best practices for how electronic birth and death certificate systems will operate in partnership with the Social Security Administration and the National Association for Public Health Statistics and Information Systems (NAPHSIS). The document is being used by NAPHSIS in working with states to develop an electronic death registration (EDR) system. There are currently 39 states either operating an EDR system or working toward system development.

Funds allocated to the NVSS are distributed through a competitive contract with a commercial vendor, as well as through two task orders on contracts maintained by other Centers within CDC. Funds are also distributed through two inter-agency agreements.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$90,055,000
FY 2005	\$109,021,000
FY 2006	\$109,021,000
FY 2007	\$107,142,000
FY 2008	\$113,636,000

BUDGET REQUEST

For FY 2009, CDC requests \$124,701,000 for Health Statistics, an increase of \$11,065,000 above the FY 2008 Enacted level.

The \$11,065,000 increase will allow the program to continue providing timely, accurate estimates of high priority health measures. CDC will maintain and enhance a variety of surveys and statistical programs that are critical not only to CDC, but throughout government at the federal, state and local level. With the increase, CDC will ensure full 12 month reporting of birth and death data from the states; maintain full field operations of the NHANES; enhance mechanisms for data access and use through the NHANES tutorial and web-based data access tools; enable the NHIS to return to its designed sample size of 100,000, providing improved estimates for smaller population sizes; maintain and redesign systems of the National Health Care Surveys in response to changing patterns of health care delivery and public health; and transition from ICD-9-CM to ICD-10-CM code sets to improve comparability between mortality and morbidity data in the U.S. and internationally.

The overall FY 2009 request will enable the program to achieve its purpose by:

Maintaining data collection systems in the field

- Maintaining continuous field operations through NHANES on a nationally representative sample of 5,000 individuals at 15 U.S. sites.
- Collecting 12 months of birth and death data to provide the nation's official vital statistics data based on the collection and registration of events at the state and local level.
- Designing and implementing a new sample for the NHIS in the field to ensure it accurately reflects the shifting U.S. population demographics identified in the decennial census and refocus surveys on population groups that are growing.
- Conducting nationally representative surveys of health care providers in the following settings: physician offices and community health centers, hospital outpatient and emergency

departments, hospital inpatient departments, ambulatory surgery facilities, nursing homes, home and hospice agencies, and residential care (assisted living) facilities.

- Collaborating with other federal agencies to address specific research and program-driven needs on areas such as oral health, body composition, food activity, lower extremity disease, mental health, vision, diabetes, diet, and nutrition, and balance these program-specific needs with broad health topics of continuing importance.

Improving data access and dissemination

- Providing data to monitor key national indicators, including reductions in teen pregnancies, low birth weight and preterm birth, prevalence of chronic and infectious disease (e.g., diabetes, hypertension, anemia, MRSA), functional status, insurance and access to care, and utilization of health care.
- Ensuring data are available in more easily accessible forms through the internet.
- Publishing NHIS data on a quarterly basis on the lack of health insurance coverage to reflect different policy relevant perspectives on persons with access to care. Also publishing data on selected health measures of health status and disability, access to care, use of health services, immunizations, health behaviors, ability to perform daily activities, and child mental health.
- Providing information annually on the health status of the U.S. civilian, non-institutionalized population through confidential household interviews conducted by NHIS in 40,000 households versus 35,000 households previously.

Improving Methodology

- Continuing activities to re-design the National Hospital Discharge Survey for the first time in 40 years. Anticipated improvements include details of clinical care, health care costs, and race/ethnicity data.
- Working with states on the implementation of a Web-based system for collection of statistics including implementation of content revisions of the U.S. Standard Certificates of Live Birth, Death and Fetal Death.
- Monitoring the adoption of electronic health records by health providers. Estimates of EHR adoption are used by the DHHS to track the progress of the President's goal of universal electronic health records by 2014.
- Measuring the impact and implications of cell phone use on telephone surveys and identifying differences between wireless only households (or with no telephone service) and other households.
- Assisting states in the development of systems specifications for their new registration systems based on the use case models developed by the Social Security Administration, the National Association of Public Health Statistics and Information Systems and CDC.

The FY 2009 request will enable the achievement of several key outcomes and outputs, including:

- Continued improvements in timeliness of data releases as measured by the time from end of data collection to the date of release on the internet. The goal is to achieve a 25 percent reduction from FY 2003 to FY 2010, from 14.5 months to 10.9 months.
- Continued work on the creation and use of new data access tools and tutorials to ensure data are available in easily accessible forms and to improve the speed and efficiency with which people access the data by a) development of data input statements/programs that allow

people quick access to data files; b) development of masked variance files that allow researchers to access data quicker; c) development of *Fast Stats* and *Quick Stats* to quickly access data files; and d) use of *Beyond 20/20* software making it more likely that systems will be found and used, thereby increasing the use of data already collected. Success will be documented through the number of web-site visits.

- Transition from International Classification of Diseases (ICD)-9-CM to ICD-10-CM code sets to improve comparability between mortality and morbidity data in the U.S. and internationally.
- Its estimated that \$90,000 may be expended in FY 2009 in support of the E-Vital initiative, the E-Government initiative addressing the use of electronic birth and death certificates. Benefits from HHS' contribution to this initiative are long-term, and not yet estimated.

In order to accomplish its goals, CDC is developing ways to integrate data collection to maximize linkage with administrative data and building on technical advances in data collection, access and dissemination.

The program faces several key challenges as it moves forward, including:

- Demands to enhance the scope and quality of data to meet the needs of a variety of data users for estimates of smaller population groups among a variety of dimensions.
- Increasing costs of data collection and the need for upgrades in the technology and design of surveys.
- Building and reengineering electronic systems to improve the speed and quality of data collection.
- Maintaining response rates due to an increasing mobile population and an increase in the number of households with only wireless telephones.
- Ensuring confidentiality of survey participants.

OUTCOME TABLE

						FY 20				Out-Year Target
Efficiency Measure:										
7.E.1	The number of months for release of data as measured by the time from end of data collection to data release on internet.	13.8	12/2008	12.9	12/2009	12.4	12/2010	11.9	11.4	10.9
Long-Term Objective 7.1: Monitor trends in the nation's health through high-quality data systems and deliver timely data to the nation's health decision-makers.										
7.1.1	Percentage of key data users and policy makers, including reimbursable collaborators, that are satisfied with data quality and relevance. [O]	N/A	N/A	N/A	N/A	Establish baseline	12/2008	Report results of Power users - goal to maintain results	5 percent increase in Excellent Category for Data User Conference attendees	Conduct surveys of Reimbursable Users, Data User Conference attendees and focus group members
7.1.2	The number of new or revised charts and tables and methodological changes in Health, United States, as a proxy for continuous improvement and innovation in the scope and detail of information.	21	36	15	5 new detailed trend tables and 19 new charts (met)	15	5 new detailed trend tables and 21 new charts (Met)	15	15	N/A
7.1.3	The number of improved user tools and technologies and web visits as a proxy for the use of NCHS data.	7/3.775M	5/5.608M	5/6.450M	5/6. 8M	5/6.9M	5/6.9M (Met)	5/7.1	5/7.5	N/A

OUTPUT TABLE

						FY 2007			FY 2009 Target
7.A	Number of key elements of the health care system for which data are collected.	3	3	3	3	3	3	3	3
7.B	Number of communities visited by mobile examination centers from the National Health and Nutrition Examination Survey.	15	51	15	15	15	15	15	15
7.C	Data systems for which significant efforts will be underway for redesign, reengineering, or transformation.	3	3	3	3	2	2	2	2
7.D	Number of households interviewed in the National Health Interview Survey.	40,000	40,000	40,000	40,000	35,000	35,000	35,000	40,000
Appropriated Amount (\$ Million) ¹		\$90.1	\$109.0	\$109.0		\$107.1		\$113.6	\$124.7

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PUBLIC HEALTH INFORMATICS

PHIN	\$4,800,000	\$4,716,000	\$4,673,000	-\$43,000
NEDSS (PHS)	\$24,751,000	\$24,751,000	\$24,751,000	\$0
Public Health Informatics	\$42,050,000	\$41,023,000	\$40,651,000	-\$372,000
Total	\$71,601,000	\$70,490,000	\$70,075,000	-\$415,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 306, 308, 307, 310, 311, 317, 318, 319, 319A, 319B, 319C, 327, 352, 391, 1102, 2315, 2341, Clinical Laboratory Improvement Amendments of 1988, § 4

FY 2009 AuthorizationIndefinite

Allocation MethodsDirect Federal/Intramural;
Competitive Grants and Cooperative Agreements; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Created in 2005, CDC's National Center for Public Health Informatics (NCPHI) improves public health by advancing the science of informatics, which is the discipline of efficiently employing information and computer science and technology in public health practice, research, and learning. CDC's public health informatics activities inform and support an extensive range of public health officials, Congress, policy makers and other federal agencies.

The escalating need for public health informatics arises from new pressures for the public health and clinical care delivery systems to quickly share and analyze accurate and authoritative information from a wide range of sources in order to support better informed and effective intervention, preparedness and policy decisions. The challenge is that each organization uses information systems which are often incompatible with those of other organizations. When data can be successfully transmitted from one organization to another, substantial time and effort is required to reconcile the data.

CDC advances the use of public health informatics by collaboratively working with its key stakeholders to research and develop consistent ways of effectively sharing information and knowledge between systems through a variety of methods, such as:

- Fostering innovative approaches to seamlessly connect people, processes, and systems for improving public health and reducing costs through enhanced preparation, planning and decision-making
- Providing for more efficient dissemination of information and utilization of resources by connecting public health and clinical care information systems and resources
- Monitoring the health of the population and of the health care system
- Enhancing decision support and knowledge management
- Improving preparedness and response capabilities

CDC's Public Health Informatics budget is divided into three major activities, Public Health Information Network (PHIN), National Electronic Disease Surveillance System (NEDSS), and Public Health Informatics. The activities of the program are described under these three

categories as well as certain activities that are outside these areas but are essential for the program to accomplish its goals.

Public Health Information Network (PHIN)

The Public Health Information Network (PHIN) is a national initiative to improve the capacity of public health to use and exchange information electronically across organizational and jurisdictional boundaries to facilitate early detection and more efficient and effective response to health events. When realized, PHIN will allow information on nationally notifiable diseases (NND), public health threats and alerts, laboratory orders and results, and countermeasure tracking to be shared across all levels of public health. Although state and local public health agencies are implementing interoperable electronic information systems, albeit at different rates, some still collect and maintain data through paper-based processes. In order for PHIN to be fully realized, State and local infrastructure needs to be dramatically upgraded to allow for the adoption of electronic systems.

CDC supports the PHIN goal of exchanging critical health information between all levels of public health and healthcare by:

- Collaboratively developing and promulgating requirements, standards, specifications, and an overall architecture to ensure all public health agencies adhere to a common set of national standards that allows information to be exchanged regardless of the type of system and infrastructure each jurisdiction has in place.
- Supporting 62 state and local public health agencies through CDC's Public Health Emergency Preparedness cooperative agreement funded by the Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) to monitor progress in implementation of interoperable systems and to provide guidance and technical support for PHIN objectives and requirements.
- Assisting state and local public health agencies to achieve interoperability by enhancing existing resources including tools to assist with reporting NND to CDC (i.e., NEDSS), message exchange, outbreak management, countermeasure and response administration, architecture, and vocabulary services. Released in June 2007, PHIN Version 2.0 Requirements will help state and local agencies focus efforts on data exchange across jurisdictional and organizational boundaries.
- Facilitating communication and information sharing within the PHIN community. In FY 2007, CDC published a list of applications currently in use by each jurisdiction to facilitate the exchange of lessons learned.

Funds allocated to PHIN are distributed to provide operations and project management support through a competitive contract. PHIN distributes funds for technical support such as message specification and data brokering through an interagency agreement with the General Services Administration (GSA).

National Electronic Disease Surveillance System (NEDSS)

The National Electronic Disease Surveillance System (NEDSS) is an Internet-based infrastructure for public health surveillance data exchange that uses specific PHIN and NEDSS data standards. NEDSS also relies heavily on industry standards [e.g., standard vocabulary code sets such as Logical Observation Identifiers Names and Codes (LOINC), Systematized Nomenclature of Medicine (SNOMED), and Health Level 7 (HL7)], and policy-level agreements on data access and the protection of confidentiality. NEDSS is a system of interoperable subsystems, components and systems modules that include software applications developed

and implemented by CDC and its partners, state and local health departments and those created by commercial services and vendors.

The primary goal of NEDSS is the ongoing, automatic capture and analysis of data that is already available electronically, such as laboratory results data, now routinely available from national clinical laboratories. NEDSS is the only electronic system for receiving surveillance data at CDC and it is utilized by every major surveillance program at CDC.

Goals of the program are accomplished by:

- Providing the NEDSS Base System (NBS) to 16 states free of charge. In addition, 34 states are developing or have deployed NEDSS compatible systems. Now that these states have the HL7 version of NEDSS, they will be able to report diseases more rapidly and demonstrate that new electronic data standards will permit data analysis never before possible with paper reporting.
- Collaborating with the Council of State and Territorial Epidemiologists (CSTE) to create an up-to-date standardized list for electronic disease reports to CDC of NND.
- Significantly improving disease reporting times, now on a daily rather than weekly basis, from multiple sources. In 2004, the NEDSS system received over 24,000 NND case reports, over 89,000 in 2005, and over 173,000 in 2006.
- Initiating the NEDSS Messaging Solution (NMS) in 2007, which supports public health's needs to utilize electronic messages in any format and convert these data into usable formats. The goal of this project is to establish a new self-sustaining network of stakeholders and public health partners that will provide NEDSS Message Subscription Service (software), training and technical support, collaboration via user group meetings and an online portal, and templates and other MSS technical artifacts shared between users. NMS provides funding to states via the CDC ELC cooperative agreement.

Funds allocated to NEDSS are distributed through contract awards with multiple commercial vendors. Funds are also distributed through multiple inter-agency agreements, and through multiple grants/cooperative agreements with state public health offices.

Public Health Informatics

In addition to conducting the PHIN and NEDSS programs, CDC conducts a number of other activities to foster connection of information systems and integration and sharing of data and other information; improve preparedness and response capacity and systems; improve analysis and presentation of information for various uses; and advance application of public health informatics through development of standards, tools, guidance, and methodologies. Some examples of these activities and their accomplishments are the following:

Preparedness and Response

- Laboratory data are critical to the decision-making processes during a public health response and labs must be able to electronically share standard test orders and results in real time. More than nine important new public health data feeds were added in 2007.
- CDC developed enterprise-wide data standards, implementation guides and applications to enable the timely electronic exchange of laboratory results among public health partners including:
 - Laboratory Response Network Results Messenger (LRN RM) - enables electronic data exchange for the LRN and provides results to CDC BioSense and Homeland Security's Biological Warning and Incident Characterization system.

- Laboratory Unified Network Application (LUNA) - provides a complete, user-friendly solution to connect various and widely dispersed public health laboratory systems with the CDC.
- Partner Communications and Alerting (PCA) capabilities include rapid distribution of health alerts; collaborative communications among public health professionals; broad sharing of information with the public; and will provide real-time access to information, establish alerting protocols, and ensure information remains constantly available.

Connecting Systems, Networks and Resources

- Completed implementation of the Public Health Directory system that consolidates information on people, organizations, and public health roles from multiple sources; integrates with and serves as a central information repository for critical CDC systems; and automatically exchanges directory information with parallel systems of partner organizations.
- There are now more than 400 installations of PHIN Messaging Systems (PHIN-MS) at public health organizations in the U.S. simplifying the transport of sensitive public health data to/from the CDC and within states, including New York, Oklahoma, California, Nebraska, Georgia and Wisconsin.
- CDC works closely with HHS to represent public health needs in the implementation of the National Health Information Technology Agenda through activities such as:
 - Collaborating with the Federal Health Architecture (FHA) to advance standards for harmonization through the Healthcare Information Technology Standards Panel (HITSP) and its technical committees.
 - Participating in CDC's Electronic Personal Health Record (ePHR) Initiative, using CDC's trusted health data to support enhanced decision making for individual citizens (e.g., health benchmarking, tailored guidelines and recommendations, and risk assessments) and researching ePHRs potential in augmenting current health survey and surveillance approaches.

Health Monitoring and Surveillance

- Published the annual "Summary of Notifiable Diseases, United States," which highlights public health surveillance findings from 50 states, two autonomous reporting jurisdictions (New York City and Washington, D.C.), and five U.S. Territories.
- Worked with global organization partners to implement the revised International Health Regulations (IHR) approved by the World Health Assembly in 2005 and entered into force in the U.S. on July 17, 2007. As part of the IHR implementation process, novel influenza A virus infections were added to the list of nationally notifiable infectious diseases reportable to the NNDSS.
- Supported the Kenyan Ministry of Livestock during the Rift Valley Fever outbreak in Kenya with Geographical Information Systems (GIS) assistance and training.

Funds allocated for Public Health Informatics are distributed through numerous contract awards with multiple commercial vendors, inter-agency agreements, and cooperative agreements.

ADDITIONAL PROGRAM DESCRIPTIONS AND ACCOMPLISHMENTS

NCPHI manages the BioSense program, which receives its funding from the Coordinating Center for Terrorism, Preparedness and Emergency Response (COTPER). Please refer to the COTPER narrative for BioSense program description and budget request.

The following program also resides within NCPHI, and is funded by COTPER:

Countermeasure and Response Administration (CRA)

The purpose of the CRA Program is to enable the coordination and management of pharmaceutical and/or non-pharmaceutical responses and track the administration of treatments, prophylaxes, vaccinations, isolation, and quarantine to contain an outbreak, respond to a public health event, and support the allocation of limited supply pharmaceuticals to ensure coverage of high-risk population groups. SPARx (now known as the CRA Countermeasure Inventory Tracking or CIT), has been incorporated into the current CRA program.

CRA CIT assists public health officials in locating critical countermeasures within the commercial supply chain. This functionality is being migrated to a commercial off-the-shelf product that is shared with CDC's Vaccine Ordering and Distribution System (VODS) application to allow a consolidated view of both non-vaccine and vaccine supplies. During a public health emergency, decision-makers will be able to monitor the available inventory and location of medical countermeasures within the supply chain, and current distribution to affected areas, to ensure that appropriate countermeasures reach vulnerable populations.

Significant accomplishments and impact of CRA include:

- Capability of reporting weekly to CDC, the doses of vaccine administered and other indicators, in order to enable national monitoring of influenza vaccination program progress and the appropriate use of a scarce vaccine.
- Work is currently underway to track critical pharmaceuticals and medical materials in the commercial supply chain to provide HHS, CDC, and other agencies with a complete view of critical supplies for priority planning scenarios, including planning related to Category A agents and pandemic influenza.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$73,544,000
FY 2005	\$76,002,000
FY 2006	\$70,241,000
FY 2007	\$71,601,000
FY 2008	\$70,490,000

BUDGET REQUEST

The FY 2009 CDC request includes \$70,075,000 for Public Health Informatics, a decrease of \$415,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. All other activities are funded at the FY 2008 Enacted level. The request includes:

- \$4,673,000 for the Public Health Information Network (PHIN)
- \$24,751,000 for the National Electronic Disease Surveillance System (NEDSS)

- \$40,651,000 for Public Health Informatics

The FY 2009 funding level is expected to maintain existing programs and will achieve the program's purpose by:

- Working with key stakeholders and national standards development organizations to define, evaluate and address rapidly expanding national, state and local public health informatics needs and decision-making.
- Collaboratively building a national network of connected public health and clinical care information systems by promoting standards development and adoption and by advancing best practices and processes for the development and implementation of information technology.
- Developing systems that enhance public health capabilities and capacities in health monitoring (surveillance), disease and outbreak detection; analysis and interpretation; information and knowledge exchange and management; communications; and all-hazards preparedness and response.

Key objectives and outputs that will guide the programs activities include:

- Open source development of PHIN-compliant tools that ensure interoperability at all levels of public health (collaborative development).
- Dissemination of promising practices and lessons learned in the implementation of interoperable systems and Health Information Exchanges to accelerate nationwide adoption.
- Significant adoption of PHIN-certified standards based on electronic messaging from States to CDC, in particular, messaging of case notifications.

As the program works to achieve its goals, it faces several key challenges moving forward:

- Each public health and clinical care organization uses information systems which identify, code, store, and transmit data in ways that are often incompatible those of other organizations (and subunits within the same organization), requiring substantial time and effort to reconcile the data.
- The sharing of cross-jurisdictional data is often prohibited, and when permitted, reconciliation of the data is labor intensive due to the slow pace of adopting standards.
- State and local public health infrastructure is antiquated and currently does not support the electronic exchange of data. In fact, in many jurisdictions, public health information is not collected, stored, or shared electronically.

The program is exploring and implementing new strategies that will enhance its ability to accomplish its goals. These strategies include:

- Integrated Systems - CDC is exploring innovative approaches to integrating biosurveillance with traditional disease detection, health monitoring and surveillance systems to create powerful and cost effective solutions that empower local, state and federal officials to protect the health of their citizens by providing the tools and information they need to develop effective interventions and make timely and informed decisions.
- Federated Systems - CDC is investigating a federated approach to routinely sharing cross-jurisdictional analyses rather than data. This will provide health officials at all levels with information about health threats occurring in neighboring jurisdictions that

could potentially impact their communities while minimizing the privacy and security risks since the data itself remains in the originating jurisdiction.

- Health Information Exchanges (HIEs) – HIEs are multi-stakeholder organizations that enable the movement of health-related data within state, regional or non-jurisdictional participant groups. CDC is working to accelerate the adoption of HIEs and regional health information organizations (RHIOs) by funding innovative approaches to this work.

In late FY 2007, CDC initiated an effort to work with HIEs through cooperative agreements, with work beginning in March 2008. The primary goal of this five-year effort is to work with established and emerging HIEs to identify and explore the most promising methods for integrating public health data accessibility and reporting needs used to support biosurveillance, outbreak detection and response to emerging or imminent threats to the public health. This collaboration will potentially provide federal, state and local public health authorities with new sources of information necessary to respond rapidly to prevent or contain an event and thereby diminish morbidity, mortality and downstream health care costs.

- Centers of Excellence – CDC conducts research to foster innovative ways of using healthcare information to improve the capability and capacity for detecting emerging public health threats earlier and more efficiently. It does this in part through grants to academic Centers of Excellence in Public Health Informatics. Existing grantees include the New York City Department of Health and Hygiene, Johns Hopkins University, and the Harvard School of Public Health. Current research focuses on public health aspects of 1) Electronic Health Record (EHR) systems; 2) Personally Controlled Health Records (PHR); 3) knowledge management, health promotion and decision support systems; and 4) new technologies for electronic medical surveillance to improve the timeliness and accuracy of public health in detecting and investigating public health threats.
- Public Health Grid (PH Grid) – Grid computing is a paradigm that proposes aggregating geographically-distributed, heterogeneously computed, storage and network resources to provide unified, secure and pervasive access to their combined capabilities. The public health grid leverages this paradigm to achieve an innovative solution for public health.

The purpose of the PH Grid is ultimately to provide public health with a low-cost, highly flexible, and scalable environment facilitating robust collaboration, seamless and timely exchange of health-related data, information, and knowledge, and the transparent sharing of computational and application resources. A national public health grid would interconnect Public Health Departments, RHIOs, health care providers, as well as local, state and federal agencies.

OUTPUT TABLE

						FY 2007			FY 2009 Target
8.A	States actively engaged in ongoing NEDSS/PHIN-compatible systems integration	21	21	21	21	27	37	37	45
8.B	States developing NEDSS-compatible systems, in deployment, or live with the NEDSS Base System	36	36	36	36	40	50	50	50
Appropriated Amount (\$ Million) ¹		\$73.5	\$76.0	\$70.2		\$71.6		\$70.5	\$70.1

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

HEALTH MARKETING

Health Marketing	\$91,330,000	\$92,652,000	\$89,579,000	-\$3,073,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 308, 310, 311, 317, 318, 319, 319A, 319B, 319C, 327, 352, 391, 1102, 2315, 2341, 2521

FY 2009 AuthorizationIndefinite

Allocation Methods.....Direct Federal/Intramural,
Competitive Grants and Cooperative agreements; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC created the National Center for Health Marketing (NCHM) in 2004, reflecting its commitment to directly engage and serve the people whose health CDC works to improve and protect. Health Marketing involves creating, communicating, and delivering health information and interventions using customer-centered and science-based strategies to protect and promote the health of diverse populations. Health Marketing uses commercial, non-profit, and public service marketing and communication science practices to better understand people's health-related needs and preferences; motivate changes in individuals and organizations to protect and improve health; and develop and enhance CDC's partnerships with public and private organizations to more effectively accomplish CDC's health protection goals.

As applied at CDC, Health Marketing serves a variety of functions:

- Scientific function: grounded in theory and practice from a number of academic disciplines, operating from an evidence base of effectiveness, and evaluating and improving itself by seeking customer input and feedback.
- Creative function: developing and delivering health messages and programs which get people's attention and resonate emotionally to position health as a means of achieving what people really value, such as having energy, staying independent, performing satisfying work and fulfilling emotional and spiritual needs.
- Program management function: strategically coordinating and leveraging all science-based communication and marketing activities within CDC to maximize its health impact and reduce the gap between research and practice.

The most important tool for the program's primary audiences (health practitioners, health policy-makers, academia and the general public) is current, "just-in-time" information and knowledge. Health information must be continuously updated, translated, and communicated to meet changing conditions and threats.

Health Communication and Science

Health Marketing is responsible for the coordination and guidance of health communication and marketing in each CDC National Center. The program leads the strategic planning for communication and marketing of scientific programs to: integrate health messages into cohesive marketing campaigns targeted to defined audiences; ensure the use of scientifically sound research; develop relationships with internal and external partners; lead identification and

implementation of information and dissemination channels, and collaborate on CDC brand management activities.

Goals of the program are accomplished through:

- Branding – CDC rebranded the 15-year-old “5 A Day for Better Health” program to make the brand consistent with the 2005 Dietary Guidelines for Americans. This was part of an overall strategy to boost U.S. fruit and vegetable consumption, which had virtually plateaued over the past decade.
- Information Dissemination – CDC led the communications globally for the inaugural World Rabies Day held on September 8, 2007. Events included comprehensive dog vaccinations (provided by the public and private sector to include veterinary associations, academic institutions and NGOs), education to school children, outreach via media, and education to veterinarians and clinicians.
- Partner Relations – CDC provides regular updates to state and local partners on influenza vaccine supply and distribution, state-to-state disease activity, news of what other partners are doing to promote vaccination, and additional opportunities on how to reach their constituents.

Funding for Health Communication and Science is distributed through multiple contract awards with commercial vendors.

Global Communication

The Global Communication and Marketing Team's objectives are to support capacity building in health communication, risk communication, social marketing and other relevant health marketing activities among international Ministries of Health and global partners; and to test and research the implementation of innovative health marketing strategies in global settings.

Goals of the program are accomplished by activities such as:

- The development and execution of a message testing and communication surveillance system in Nigeria for the purposes of providing communication and social mobilization experts with information required to effectively reach and influence target populations with messages related to an Avian Influenza outbreak.
- Supporting the China Ministry of Health in developing a pandemic influenza risk communication plan and testing of risk communication principles with the public.

Funding for Global Communication and Marketing is distributed through multiple contract awards with commercial vendors, through inter-agency agreements with federal partners, and through grants/cooperative agreements with public health partner organizations.

Partnerships and Strategic Alliances

With a special focus on private and public partnerships, CDC engages businesses, health care organizations, educational institutions, other federal agencies, and faith-based and community organizations to more effectively support health promotion and disease prevention.

Goals of the program are accomplished by activities such as:

- Building and engaging a network of key organizations to work with CDC on health promotion and emergency preparedness. CDC developed pandemic influenza preparedness checklists to meet the needs of specific constituencies in areas such as businesses, education health care, child care, and faith-based and community organizations.

- Collaboratively producing "A Purchaser's Guide to Clinical Preventive Services", which provides information about the health effects as well as the costs and cost-savings that result from different choices businesses might make. It is considered a "national standard" by businesses, consultants, and clinical leaders.
- Managing CDC-wide cooperative agreements with CDC's twelve Core Public Health System partner organizations [e.g. American Public Health Association (APHA), Association of State and Territorial Health Officials (ASTHO), American Association of Medical Colleges (AAMC)]. Program staff promotes and monitors the numerous projects underway and planned between CDC and these essential public health partner organizations.

Funding for Partnerships and Strategic Alliances is distributed through multiple contract awards, as well as multiple inter-agency agreements with federal partners. Funds are also distributed through multiple grants/cooperative agreements with public health partner organizations, state and local public health offices, and universities.

Electronic Health Marketing

CDC launched its Electronic Health Marketing (E-Health) activity in April 2006 to manage and expand CDC's electronic marketing communication activities and capacity, using a series of web and interactive media initiatives to increase the impact of CDC's science through innovative electronic communications.

Goals of the program are accomplished by activities such as:

- Providing oversight, leadership, and coordination for CDC's web presence (www.CDC.gov), one of the primary channels through which CDC communicates regularly with professionals and the public, to ensure CDC can effectively utilize the web to communicate information to multiple audiences. In October 2007, the CDC's Spanish language Web site, CDC en Español, was re-launched.
- Providing CDC with ways to measure and analyze effectiveness of web efforts and ways to continuously improve CDC's web presence and audience access to CDC materials. Improvements include: a 70 percent increase in user satisfaction, a 25 percent increase in users' ability to successfully complete tasks on the site, and positive feedback from CDC.gov users.
- Providing web-accessible, high-resolution medical, scientific and historical imagery free of charge with no restrictions on use through the Public Health Image Library (PHIL). PHIL images are routinely and increasingly used by a varied audience for bioterrorism agent identification and are included in public health-related publications, scientific text books, peer-reviewed journals, other websites, and television broadcasts.

Funding for Electronic Health Marketing is distributed through multiple competitive and sole-source contract awards with commercial vendors.

Creative Services

CDC's Creative Services activity provides mechanisms and expertise with which to better execute agency communication strategy across print, broadcast, web and other electronic channels. These resources underpin all communication efforts within the Agency to translate into action scientific findings that drive public health impact of CDC.

Goals of the program are accomplished by activities such as:

- Providing graphic design leadership on seminal public health resources such as *Health US*. A signature product of the National Center for Health Statistics, *Health US* is a critical resource for public health policy makers, researchers, and leaders.
- Producing broadcast programming that enables CDC leadership and subject matter experts to share timely and informative information through national network broadcast channels (NBC, CBS, ABC, etc.) and programming on such topics as Pandemic flu, Methicillin-resistant *Staphylococcus Aureus* (MRSA) and Multi-Drug Resistant Tuberculosis (MDR TB).
- Hosting and maintaining the Web-based Public Health Training Network (PHTN) calendar of nationwide satellite and Web cast programs. The calendar is a well-known national clearinghouse for health-related distance learning programs including more than two dozen on terrorism-related topics such as anthrax, ricin, and smallpox, as well as epidemic threats such as SARS and West Nile virus.

Funding for Creative Services is distributed through multiple competitive and sole-source contract awards with commercial vendors, as well as a non-competitive cooperative agreement with the University of North Carolina.

Health Communication and Marketing

CDC's Health Communication and Marketing (HCM) activities use strategies and research to inform and influence individual and community decisions that enhance health. The program assists other areas of CDC in the effective application of health communication science and best practices to programs.

Goals of the program are accomplished by activities such as:

- Developing systematic reviews and evidence-based recommendations in the *Community Guide* that identify interventions and policies that will effectively attain critical public health objectives (e.g., CDC goals, Healthy People). For example, a *Guide* recommendation for sobriety checkpoints formed the basis of an intensive grassroots effort by Mothers Against Drunk Driving (MADD) to implement sobriety checkpoints across the country. Another recommendation (about laws requiring lower blood alcohol levels for drivers) contributed to Congressional incentives to states to pass these laws, resulting in new laws in 33 states and approximately 500 lives saved per year. In FY 2007, CDC provided six completed *Community Guide* findings.
- Developing and implementing agency-wide, emergency risk communication strategy and coordination for all public health emergencies using CDC's Emergency Communication System (ECS). In the past year the ECS has been activated for foodborne outbreaks, multi-drug resistant TB, wildfires in Southern California, three agency-wide pandemic influenza epidemic exercises, and an international multi-agency response exercise (TopOff 4).
- Providing a secure web-based communications solution, Epi-X, which gives public health officials a single source of up-to-the-minute alerts, reports, discussions, and comments on public health events. The network's primary goal is to inform health officials about important public health events, help them respond to public health emergencies, and encourage professional growth and exchange of information.
 - In FY 2006, posted 1,461 reports of outbreaks, Epi-Aids, and notification tests including reports on avian and pandemic influenza, anthrax, plague, imported mumps and measles, and Legionnaire's disease in the United States through Epi-X.

- Providing the *Morbidity and Mortality Weekly Report (MMWR)*, *MMWR Recommendations and Reports*, *MMWR Surveillance Summaries*, *MMWR Supplements*, and the *MMWR Summary of Notifiable Diseases*, which are the principal mechanisms for communicating public health information to state and local health agencies, health care providers and other health-related groups. In FY 2007, CDC produced 85 MMWR publications.

Funding allocated to HCM will be distributed through multiple competitive and sole-source contract awards with commercial vendors, through inter-agency agreements with federal partners, and through competitive and non-competitive grants/cooperative agreements with public health partner organizations.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$46,917,000
FY 2005	\$43,651,000
FY 2006	\$39,643,000
FY 2007	\$91,330,000
FY 2008	\$92,652,000

BUDGET REQUEST

The FY 2009 CDC request includes \$89,579,000 for Health Marketing, a decrease of \$3,073,000 below the FY 2008 Enacted level, which includes a decrease of \$933,000 for an Individual Learning Account (ILA) and administrative reduction. The FY 2009 funding decrease will affect CDC's ability to manage various programmatic activities within the Health Marketing program.

Some key activities, objectives and targets that will guide the program in FY 2009 are:

Health Communication and Science

- In August 2007, the inaugural National Conference on Health Communication, Marketing and Media brought together more than 400 scientists, professionals and practitioners from the US and several other countries to discuss how health communication, marketing and media can help address some of today's most critical public health challenges. CDC plans to hold a second conference in 2008.
- The CDC identity management project will elevate CDC's level of brand awareness to the general population, private and public partners, health care systems and other stakeholders. A collaborative technology platform will be utilized as the host and single source for all CDC identity information to enable CDC staff to effectively manage the agency's brand and identity.

Global Communication

- Supporting Ministries of Health in other countries to conduct risk communication assessment and planning activities and to research and pilot test innovative information and communication technology systems to support communications to the public and the public health workforce.
- In March 2007, the Information and Communication Technology (ICT) was pilot tested in China. Preliminary results show that of 613 questionnaires collected, the majority of participants preferred distance-based training over traditional face-to-face methods or liked them equally. There will be long-term evaluation of this project over the course of the next year.

Partnerships and Strategic Alliances

- Expanding the database, of over 300 public and private partner organizations that utilize the database to learn more about other organizations that are working with CDC to achieve public health impact. The data are presented in a directory format for resources inside and outside CDC to use as an information source.

Electronic Health Marketing

- Ensuring rapid dissemination of CDC's scientific information and to ensure broad adoption and application of that scientific research into practice.
- Working with CDC partners to integrate internal e-health activities with external technological advances in order to provide information to larger, more diverse audiences.

Creative Services

- Continuing to access and use a broad array of multi-media channels to quickly translate science into usable information accessible in many formats (e.g., public cable television, web casts, voice pod casts, etc) to be used by a variety of audiences.
- CDC will improve its multi-media broadcast capabilities and increase the number of multi-media broadcast outputs to provide science based health information to health care professionals, CDC partners and the American public.

Health Communication and Marketing

- Improving the usage of CDC's online public health emergency alert systems, training materials, and other electronic resources/tools will have immediate and lasting impact on CDC's ability to protect citizens from natural hazards and terrorism threats.
- Improving CDC's online learning tools to train first responders and public health officials involved in preparing for and responding to national emergencies. This will be particularly critical in preparing for a pandemic that may isolate individuals from social gatherings, work, medical facilities, etc.

OUTCOME TABLE

						FY 2007				Out-Year Target
Efficiency Measure:										
9.E.1	Provide “just-in-time” scientific information and education via multiple communication channels to thousands of health professionals, thereby reducing the cost and time of distributing the latest science based information.	Baseline 84,112 participants registered in distance learning activities	92,790 (9% increase) (Exceeded)	5% increase from previous year in number of participants registered in distance learning activities.	99,409 (7% increase) (Exceeded)	5% increase from previous year in number of participants registered in distance learning activities.	108,753 (9% increase) Exceeded	5% increase from previous year in number of participants registered in distance learning activities.	5% increase from previous year in number of participants registered in distance learning activities.	N/A
Long-Term Objective 9.1: CDC will maintain and improve its web site and electronic communications to provide science-based health information to health care professionals, CDC partners and the American public.										
9.1.1	Increase access and utilization of CDC.gov by public, partners, and other health care professionals.	N/A	N/A	N/A	N/A	Establish Baseline	450,000,000 page views	Baseline + 5%	Baseline +10%	N/A
Long-Term Objective 9.2: Increase the number of frontline public health workers at the state and local level that are competent and prepared to respond to bioterrorism, infectious disease outbreaks, and other public health threats and emergencies; AND prepare frontline state and local health departments and laboratories to respond to current and emerging public health threats.										
9.2.1	Increase the usage of CDC’s online public health emergency alert systems, training materials, and other electronic resources/tools designed to provide information, educational materials, and real-time alerts as measured by the number of subscribers to Epi-X, HAN and national public health radio networks.	N/A	N/A	Establish Baseline	Baseline 4,372 users	Increase by 5% above baseline	6170 users	Increase by 15% above baseline	Increase by 20% above baseline	N/A
Long-Term Objective 9.3: CDC will maintain and improve its multi-media broadcast capabilities (e.g. satellite television, webcasts, podcasts, video) to provide science based health information to health care professionals, CDC partners and the American public.										
9.3.1	Increase the number of multi-media broadcast outputs to partners and health professionals.	N/A	N/A	N/A	N/A	Establish Baseline	40	Baseline + 5%	Baseline +10%	N/A

OUTPUT TABLE

						FY 2007			FY 2009 Target
9.A	Number of MMWR Publications	90	76	76	85	90	90	90	90
9.B	Number of Completed <i>Community Guide</i> Findings annually	25	25	30	30	6	6	6	6
9.C	Number of monthly page views to CDC.gov Web site	11 million Visits	11.5 million Visits	12 million Visits	13 million Visits	37.5 million Page Views	37.5 million Page Views	37.5 million Page Views	39 million Page Views
9.D	Customer satisfaction with CDC Web site	74%	77%	80%	75%	76%	81%	82%	82%
9.E	Number of monthly calls to 800-CDC-INFO	N/A	Baseline	Baseline +20%	50,800	93,600	93,600	93,600	93,600
9.F	Customer satisfaction with 800-CDC-INFO	N/A	Baseline	Baseline +3%	68%	72%	72%	72%	72%
9.G	Programs produced for broadcast on PHTN and/or CDC-TV	N/A	26	52	27	30	30	30	30
9.H	Reports of outbreaks reported by Epi-X	1,300	1,400	1,450	1,475	1,500	1,500	1,500	1,500
9.I	Organizations included in CDC and External Organizations Networking Directory	4 (prototype)	60	100	100	250	250	300	300
9.J	CDC users of partnership coordination database	N/A	30	Baseline +25%	38	39	39	39	39
Appropriated Amount (\$ Million)²		\$43.8	\$46.5	\$39.6		\$91.3 ¹		\$92.7	\$89.6

¹The increase in FY 2007 and beyond is due to a re-programming of various activities across CDC to the Health Marketing program

²The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

ENVIRONMENTAL HEALTH AND INJURY PREVENTION

				FY 2009 +/- FY 2008
BA	\$282,752,000	\$289,323,000	\$270,872,000	-\$18,451,000
FTE	489	505	497	-8

SUMMARY OF THE REQUEST

The Environmental Health and Injury Prevention budget supports critical management and coordination functions for environmental health and injury prevention science, program, and policy, including public health programs in areas such as asthma control, lead poisoning prevention, refugee health, laboratory activities, child passenger safety, and violence prevention.

The CDC FY 2009 request includes \$270,872,000 for Environmental Health and Injury Prevention, a decrease of \$18,451,000 below the FY 2008 Enacted level, which includes a \$1,862,000 Individual Learning Account (ILA) and administrative reduction. This includes:

- \$134,266,000 for Injury Prevention and Control, a decrease of \$571,000 for an Individual Learning Account (ILA) and administrative reduction. Funds will be used to sustain and enhance Center priority areas of older adult fall prevention, residential fire prevention, teen driving safety, and traumatic brain injury as well as to sustain and enhance Center priority areas of child maltreatment prevention, youth violence prevention, domestic and sexual violence prevention, rape prevention and education, intimate partner violence, suicide prevention, and the National Violent Death Reporting System (NVDRS).
- \$136,606,000 for Environmental Health, a decrease of \$1,291,000 for an Individual Learning Account (ILA) and administrative reduction; and, a decrease of \$16,589,000 for the Environmental Health Laboratory and Environmental Health Activities. Funds will support continued efforts to: eliminate childhood lead poisoning; improve laboratory methods; increase laboratory and other environmental health capacity at state and local levels; develop and expand environmental public health tracking; develop and disseminate information on environmental health hazards and best practices on how to prevent or mitigate potential health effects; educate and train the environmental health workforce, partners, and the public on environmental health issues; and respond to local, state, national, and international environmental health emergencies and requests for technical assistance. In addition, CDC will continue to work closely with the Agency for Toxic Substances and Disease Registry to coordinate activities related to environmental issues.

ENVIRONMENTAL HEALTH

				FY 2009 +/- FY 2008
Environmental Health Laboratory	\$26,397,000	\$33,797,000	\$26,110,000	-\$7,687,000
Environmental Health Activities	\$53,693,000	\$55,308,000	\$45,727,000	-\$9,581,000
Asthma	\$31,307,000	\$30,760,000	\$30,472,000	-\$288,000
Childhood Lead Poisoning	\$35,237,000	\$34,621,000	\$34,297,000	-\$324,000
Total	\$146,634,000	\$154,486,000	\$136,606,000	-\$17,880,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 317A, 317B, 317I, 327, 352, 361, 399N, 1102; Housing and Community Development Act, 1021 (15 U.S.C. 2685); Title 50 – sections 1512 and 1521 of the Chemical Weapons Elimination Activities; Housing and Community Development (Lead Abatement) Act of 1992 (42 U.S.C. § 4851 et seq.)

FY 2009 Authorization Indefinite

Allocation Methods.....Direct Federal/Intramural;
Competitive Grant/Cooperative Agreements; Contracts; Other

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Established in 1980, CDC's environmental health activities focus on safeguarding people's health from environmental hazards. The program aims to protect people's health by preventing disability, disease, and death from environmental causes. Through a combination of science, service, and partnerships, CDC's environmental health work encompasses a broad range of activities, including:

- Investigating the effects of the environment on health through laboratory and field research;
- Tracking and evaluating environment-related health problems through surveillance systems;
- Developing and implementing interventions and prevention actions;
- Building local, state, and tribal public health environmental health capacity; and,
- Assisting domestic and international agencies and organizations to prepare for and respond to environmental emergencies.

While CDC's Environmental Health Programs engage in a broad range of activities, four activities – Environmental Public Health Laboratory (which conducts the National Biomonitoring Program), Environmental Public Health Tracking (one of many projects under CDC's Environmental Health Activities budget activity), Asthma, and Childhood Lead Program – account for approximately 80 percent of the total program's budget. In addition to these activities, CDC has identified Climate Change and the Built Environment as priority issues. CDC is working with partners to address the health effects of climate change, as well as environmental issues related to physical activity, nutrition, injury and prevention, community planning, and air pollution prevention.

CDC's Environmental Public Health Services program is implementing its "National Strategy to Revitalize Environmental Public Health Services" program to respond to a significant problem in the environmental public health arena—a declining and under-trained environmental health workforce. For example, CDC has trained more than 400 people in 20 states in addressing environmental health problems created by disasters, 115 people from 27 states in leadership of public health programs, and 600 people in the principles of healthy housing.

Environmental Public Health Laboratory's National Biomonitoring Program

The National Biomonitoring Program is an intramural program that specializes in the direct measurement of people's exposure to toxic substances in the environment by measuring the substances or their metabolites in human specimens, such as blood or urine. Biomonitoring measurements are the most health-relevant assessments of exposure because they indicate the amount of the chemical that actually enters people's bodies from all environmental sources (such as air, soil, water, dust, food) combined, rather than the amount that may get into them. CDC also operates the Rapid Toxic Screen, which analyzes human blood or urine for 150 chemical agents likely to be used in terrorist attacks. Results of these tests will identify which chemical agents were used, who was exposed to the chemicals and who was not, and how much of a particular chemical was absorbed in their bodies.

Since 2005, CDC has added 63 chemicals to the number of chemicals (including nutritional indicators) for which it assesses exposure levels in the U.S. population, bringing the total number up to 293, thereby exceeding the target of 250. The FY 2008 and 2009 targets for this measure have been increased in light of scientific advancements, such as increasing the number of chemicals that can be measured in a single sample and developing sophisticated new methods for analyzing chemicals that will increase the laboratory's exposure-assessment capabilities. The program also ensures the quality of several different tests in a large number of laboratories that voluntarily participate in quality assurance and standardization programs and is on track to meet its FY 2007 target of 1,001 laboratories. Although CDC makes every effort to encourage participation in these programs, it cannot compel laboratories to participate. The targets realistically reflect the fact that participation in these voluntary standardization programs fluctuates from year to year, depending on multiple factors, including CDC laboratory requirements and import restrictions of other nations.

Significant accomplishments for this program include:

- In FY 2006, CDC's Environmental Health Laboratory assisted in identifying the cause of more than 50 mysterious deaths in the Republic of Panama. Using advanced laboratory science and innovative techniques, CDC scientists found diethylene glycol (DEG), a toxic substance, in cough and anti-allergy syrups obtained from the patients' homes. As a result of CDC laboratory's work, the Panamanian health authorities quickly recalled 60,000 bottles of the contaminated medications, which potentially saved many lives.
- In FY 2006, scientists from CDC's Environmental Health Laboratory measured the U.S. population's exposure to perchlorate, a chemical compound used in solid rocket propellant, explosives, pyrotechnics, flares, among other products. Using a new laboratory method developed at CDC, scientists analyzed urine samples from participants in CDC's National Health and Nutrition Examination Survey (NHANES) for the years 2001-2002. Researchers found measurable levels of perchlorate in the urine of all 2,820 survey participants, indicating widespread human exposure to this chemical in the U.S.
- In FY 2007, CDC developed 16 new laboratory methods to measure human exposure to additional priority chemicals and nutritional indicators. Among these advances are methods for measuring polyunsaturated fatty acids in vitamin A in blood spots and serum, phthalates, and speciated metals, such as arsenic.
- CDC is working with public health laboratories in states, territories, cities, and counties to assist them in expanding their chemical laboratory capacity to prepare and respond to chemical terrorism incidents or other emergencies involving chemicals. With CDC funding, 62 partners – 50 states, eight territories, three cities, and one county – will be able to respond to chemical terrorism. CDC provides extensive training, technology transfer, and

testing for analytical proficiency for all participating laboratories. CDC also partners with the Association of Public Health Laboratories (APHL) to ensure support for public health laboratories involved in responding to chemical-exposure events from all sources, including those related to terrorism.

CDC's FY 2009 request includes \$26,110,000 for the Environmental Health Laboratory, a decrease of \$7,687,000 below the FY 2008 Enacted level. This includes a decrease of \$247,000 for an Individual Learning Account (ILA) and administrative reduction; and, a decrease of \$7,440,000 for the Newborn Screening Program.

Environmental Public Health Tracking

Established in FY 2002, CDC's National Environmental Public Health Tracking Program ("Tracking Program") is a multidisciplinary collaboration that involves the ongoing collection, integration, analysis, interpretation, and dissemination of data from environmental hazard monitoring, human exposure surveillance, and health effects surveillance. The cornerstone of the Tracking Program's efforts is the development of a web-based data and information system known as the National Environmental Public Health Tracking Network ("Tracking Network"). Using information from the Network, federal, state, and local agencies will be better prepared to develop and evaluate effective public health actions to prevent or control diseases that may be linked to hazards in the environment. Health care providers and agencies can utilize the data to target preventive services and the public can utilize information from the Network to better understand health trends and events in their communities.

The Tracking Network is scheduled to be launched in 2008. By its nature, the Network depends on the health and environmental data collection efforts of many agencies that must be leveraged and integrated to better understand environmental determinants that affect public health at a national level. Consequently, CDC funds state and local agencies, schools of public health, non-governmental organizations, and other federal efforts to improve capacity, data systems; analytic and communication methods and tools, and environmental health science. The Tracking Network is now in its implementation phase. Sixteen states and New York City, funded in FY 2006, are building statewide tracking networks that will be components of the National Tracking Network. Funding is also provided to four Schools of Public Health to develop methods and tools to utilize and link health and environmental data to drive public health action; to train the upcoming workforce in tracking principles; and, to conduct research on the impact of the environment on health. Additionally, the program funds national professional organizations and data partners to improve and standardize data, disseminate information, and build capacity. Extramural funding accounted for approximately 80 percent of the program's budget during the last fiscal year.

In FY 2007, seventeen public health actions were completed based on information obtained from tracking, exceeding the program target of 10 new public health actions. These include, but are not limited to identifying associations between maternal residential exposure to pesticides and autism in offspring; identifying populations at risk for heat-related illness; responding to widespread power outages and mitigating potential carbon monoxide poisonings; responding to community concerns of possible arsenic poisoning; and, identifying high mercury exposure among NYC adults, and targeting relevant risk communication to pregnant mothers.

Significant accomplishments for this program include:

- In FY 2007, the Tracking Program negotiated an inter-agency agreement with EPA to generate estimates of ozone and particulate matter < 2.5 micrometers concentrations throughout the U.S. These data are important to evaluate possible risks to sensitive populations.

- The Tracking Program completed a collaborative project with U.S. Geological Survey that summarizes ground water quality data in the 16 funded states and makes it available for users of the national network.
- Seventeen public actions were completed in FY 2007 to address environmental health issues and community concerns that utilized tracking data, resources, or expertise.

CDC's FY 2009 request includes \$23,608,000 for the Environmental Public Health Tracking Program, a decrease of \$223,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

Asthma

In 1999, CDC's National Asthma Control Program (NACP) was established to develop and build capacity in states to reduce the burden of asthma. The NACP aims to reduce the number of asthma-related deaths, hospitalizations, emergency department visits, school and workdays missed, and limitations on activity. To accomplish these objectives, the NACP provides funding to its grantees to support activities such as increasing the use of asthma management plans by persons with diagnosed asthma; providing education and trainings to increase the knowledge of asthma among providers, school personnel, and persons living with asthma; and supporting asthma case management activities. In FY 2007, through the "Addressing Asthma from a Public Health Perspective" cooperative agreements, the NACP provided support to 33 states, Washington, DC, and Puerto Rico. Funding to public health departments accounted for over 50 percent of the program's budget. Grantees target their activities to identify and track those most affected by asthma, build partnerships, and develop and implement science-based interventions for the nation's most vulnerable populations.

The program seeks to collect hospitalization data from its grantees to support its existing PART measure. Available data from a subset of funded states suggests that asthma hospitalizations declined eight percent from 2000 to 2004 and mortality decreased by 10 percent from 2002 to 2004. However, because of a number of challenges associated with collecting a consistent set of hospital data from funded states, the program is in the process of changing its PART measure to better reflect actual activities. In particular, the proposed measure aims to track the number of persons with current asthma that report having received self-management training for asthma (asthma management plans have been shown to reduce the number of asthma-related episodes in persons diagnosed with asthma).

These data are collected through CDC's Behavioral Risk-Factor Surveillance Survey and Asthma Callback Survey. In FY 2007, CDC expanded the Asthma Callback Survey to 37 participating states, up from 10 participating states in FY 2006. The Asthma Callback Survey adds depth to the existing body of asthma data, helps to address critical questions surrounding the health and experiences of persons with asthma, and provides detailed asthma surveillance data at the state and local level. Prior to funding the survey, these data were not available at the state level. State level data on asthma characteristics, such as symptom control, medical care, medication use, and educational efforts, are necessary to evaluate the impact of the state asthma control activities and interventions. Baseline data for the proposed measure will be available in FY 2008 and the intent is to replace the existing PART measure in FY 2010.

Significant accomplishments for this program include:

- In 2007, 80 percent of state grantees are conducting healthcare provider training, 70 percent are addressing environmental triggers, and 66 percent are supporting individualized asthma management plans.
- CDC produced specific guidance and educational materials aimed at protecting respiratory health following Hurricanes Katrina and Rita, particularly for populations at specific risk such as those with asthma. CDC developed, translated, and disseminated carbon monoxide (CO) poisoning prevention guidelines to 8 public health departments, completed a clinical training webcast for approximately 62 physicians and other emergency room personnel on CO poisoning diagnosis and prevention, and developed a series of fact sheets for mold and other environmental hazards.

CDC's FY 2009 request includes \$30,472,000 for Asthma, a decrease of \$288,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

Childhood Lead Poisoning Prevention Program

Authorized in 1998, the CDC Childhood Lead Poisoning Prevention Program (CLPP) uses funding received to develop programs and policies to prevent childhood lead poisoning; educate the public and health-care providers about childhood lead poisoning; fund state and local health departments to determine the extent of childhood lead poisoning by screening children for elevated blood lead levels; help to ensure that lead-poisoned infants and children receive medical and environmental follow-up; and develop neighborhood-based efforts to prevent childhood lead poisoning.

CDC's Lead Poisoning Prevention program provides over 80 percent of its budget to fund competitive cooperative agreements in 34 states and six localities for childhood lead poisoning prevention programs. Funded programs are chosen based on the thoroughness of the competitive application and evaluation by an objective review panel. CDC also gives funding preference to state and local programs that have significant estimated numbers of children with elevated blood lead levels, and those which direct federal funds to localities with high concentrations of children at risk for childhood lead poisoning. Funding for this five-year project period began in July 2006 and will continue through June 2010. Awards range from approximately \$78,000 to \$1,400,000. Additionally, CDC has partnered with the U.S. Department of Housing and Urban Development (HUD) and the EPA since 2004 to ensure safe and healthy communities by identifying housing units in which successive children have been lead poisoned. The partnership was piloted in one community in 2004 and has since expanded to six by the end of FY 2007.

While progress has been made in many communities, childhood lead poisoning stemming from lead-based paint in housing will remain a public health threat through the end of the decade, especially for certain vulnerable populations. CDC seeks to leverage program funds to address additional health hazards in the home as an important way to enhance CDC's efforts to protect the health of children. Due to the excellent progress in reducing the number of lead-poisoned children in our nation and the connection to the effort to make housing safer, CDC intends to begin to transition the Childhood Lead Poisoning Prevention program into a Healthy Housing program that will focus on reducing multiple health and safety hazards located in housing—including the hazard of lead.

CDC's Third National Report on Human Exposure to Environmental Chemicals quantified the effectiveness of national, state and local efforts to reduce blood lead levels (BLLs) in young children (aged one to five years). The percentage of young children with elevated BLLs, 10 micrograms per deciliter (µg/dl) or higher, decreased from an estimated 4.4 percent in NHANES III (1991–1994) to 1.2 percent for 2003–2004. This decline indicates that lead exposure among young children in the general population is continuing to decrease. While the latest NHANES estimate suggests that

approximately 240,000 children (1.2 percent) aged one to six years had elevated BLLs in 2004—an approximate 50 percent decline in the percentage of children with elevated BLL since 1991—this figure should be interpreted cautiously. The NHANES estimates are based on small numbers of children with BLLs $\geq 10\mu\text{g/dL}$, and there is limited experience comparing estimates intervals containing only two years of data instead of the four years preferred by CDC.

In FY 2007, the program modified its targets to reflect an upward revision in the estimated number of children with elevated BLLs based on the most recently available NHANES data. While the program is on track to meet its long-term goal of eliminating childhood lead poisoning as a public health issue, this may not be accomplished by 2010, the current target date. Factors that contribute to moving the target out-year include the upward revision in the number of young children with elevated blood lead levels, the extent to which needed resources are available, the inherent difficulties in reaching those most in need of screening, and the continued influx of children with high lead levels from other countries. The program's strategy for making progress toward meeting the target includes continuing to focus on a range of primary prevention activities to prevent exposures, provide training to local and state public health agencies, and work with strategic partners to leverage resources. In addition, CDC continues to maintain capacity for responding to acute mass exposures such as lead in toys, traditional medicines, and pottery.

A recent success for this program includes CDC's requirement that funded state and local lead programs design and implement jurisdiction-wide lead poisoning elimination plans. By the end of FY 2006, 100 percent of previously funded programs had designed elimination plans that involved stakeholders and local and state decision-makers.

CDC's FY 2009 request includes \$34,297,000 for the Childhood Lead Poisoning Prevention Program, a decrease of \$324,000 from the FY 2008 Enacted level for an Individual Learning Account ILA and administrative reduction.

Environmental Health Program Activities

Climate Change

CDC is leading efforts to address anticipated health effects of climate change, to assure that systems are in place to detect and track them and to take steps to prepare for, respond to, and manage associated risks. Building on existing programs and the Essential Public Health Services, a framework for describing public health activities developed under the National Public Health Performance Standards Program, CDC has identified priority health actions for climate change. These include collecting data; diagnosing and investigating health problems and health hazards in the community; communicating/provisioning of scientific information; planning for preparedness activities; mobilizing community partnerships and actions to identify and solve health problems; training/developing workforce; and, providing technical assistance.

In 2007, CDC adopted a Climate Change Policy based on information attained at a CDC-sponsored workshop, "Public Health Response to Global Climate Change." The participants included national and international experts from government agencies, academia, industry, faith-based organizations, professional interest organizations, state and local governments, as well as CDC experts from various Centers. Other CDC activities in this area include the joint publication of the Excessive Heat Events Guidebook with EPA, Federal Emergency Management Agency (FEMA), and National Oceanic and Atmospheric Administration (NOAA) in 2006. CDC is currently in the process of organizing a series of expert panel workshops on climate change, focusing on five topic areas: water, heat waves, health communication, vector-borne illness, and communities of color. Three of the five workshops have been held.

Built Environment/Healthy Communities

“Built environment” is used to describe the structural and spatial environment – in other words, the homes we live in, the offices we work in, the schools we learn in, the stores we shop in, and the communities we reside in. CDC is addressing various built environment issues related to physical activity, nutrition, injury prevention, community planning, and air pollution prevention. CDC has initiated research on the impact of the built environment on public health. Preliminary evidence suggests that the built environment may have a large effect on our health. For example, by locating housing, schools, and retail shopping districts in close proximity of one another and making them accessible via sidewalks, residents may walk more. This in turn should result in reduced incidence of diseases such as obesity, diabetes, and heart disease in these communities.

A recent success for this program is the Health Impact Assessment (HIA) tool that CDC developed to assist local public health officials and community planners in making decisions that promote health when designing communities. The HIA is an important tool that helps decision makers identify the likely health impact of planning, development, and policy decisions. In FY 2007, CDC supported research in this area as well as worked with partners to conduct three community-based HIA trainings.

Other Environmental Health Program Activities

CDC continues to provide national leadership in the development of environmental and emergency public health policy and prevention programs to improve public health practice nationwide. Additional programs within the Center support interventions that help domestic and international agencies and organizations prepare for and respond to natural, technologic, humanitarian, and terrorism-related environmental emergencies; provide technical support for public health activities during emergencies such as famines, disasters, and civil strife; and reinforce the important role environmental health and its workforce plays within public health.

Significant Accomplishments for this program include:

- Following Hurricane Katrina, CDC assisted state and local public health agencies in addressing a number of environmental public health threats. Threats addressed included: contaminated drinking water, non-functional sewers and septic systems, soils laden with toxic chemicals, mold in houses, and distressed food service establishments that required assistance to re-open safely. CDC experts continue to help the residents of the Katrina-affected area regarding the control of disease-spreading rodents and the proper disposal of waste generated by the storm.
- In FY 2007 CDC experts worked closely with the State of California and the Food and Drug Administration to identify the source of the E. coli contamination and to recommend actions to prevent further contamination of the spinach as well as mitigate consumers' exposure to the E. coli. At the request of FDA, CDC's Environmental Health Specialist Network (EHS-Net) is conducting an investigational study to identify the practices in retail food establishments that may result in contaminated leafy greens.

For FY 2009, CDC requests \$22,119,000 for the Environmental Health Activities (not including Environmental Health Tracking, described above), a decrease of \$9,358,000 from the FY 2008 Enacted level. This includes a decrease of \$209,000 for an ILA and administrative reduction; and, a decrease of \$7,199,000 for Safe Water and \$1,950,000 for Amyotrophic Lateral Sclerosis Registry (ALS).

Based on findings from its PART review, the program instituted a process to have key activities and core functions evaluated by an independent peer-review panel. Subsequent to putting this process in place, evaluations have been conducted on activities in each of the three Environmental Health

Program divisions and in one cross-functional area. In FY 2007, the following sub-activities underwent peer-review evaluations: Terrorism Preparedness and Emergency Response, the Biomonitoring Program, and the International Emergency and Refugee Health Branch. Specific actions taken or underway as a result of PART review findings include a revision of specific long-term and annual performance measures, and the design and implementation of a system to assist in linking budget requests to the accomplishment of annual and long-term goals.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$146,458,000
FY 2005	\$151,195,000
FY 2006	\$149,161,000
FY 2007	\$146,634,000
FY 2008	\$154,486,000

BUDGET REQUEST

CDC's FY 2009 Request includes \$136,606,000 for Environmental Health reflects a decrease of \$17,880,000 from the FY 2008 Enacted level.

In FY 2009, CDC will continue activities to address environmental health issues. Key activities, objectives, and targets include:

- \$26,110,000 will support the Environmental Health Laboratory, a decrease of \$7,440,000 below the FY 2008 Enacted level. This includes a decrease of \$247,000 for an Individual Learning Account (ILA) and administrative reduction; and, a decrease of \$7,440,000 for the Newborn Screening Program, consistent with the FY 2008 President's Budget. CDC will provide technical assistance to States in biomonitoring; add 43 chemicals, including nutritional indicators that are assessed for exposure in the U.S. population; certify 959 clinical laboratories (a slight reduction from the FY 2008 target) to conduct specific tests; and develop 16 new or improved methods for measuring environmental chemicals in people.
- \$23,608,000 will support the Environmental Health Tracking Program, a decrease of \$223,000 below the FY 2008 Enacted level for an ILA and administrative reduction. The Tracking Program provides support for state and local public health agencies, academic institutions, and other partners to engage in activities designed to help the program develop and integrate a national health and environmental data network so that links between environmental hazards and public health can be better understood. The program has set a FY 2009 target of 25 assessments being conducted to examine possible links between health and an environmental exposure and/or hazard using tracking data.
- \$34,297,000 will support the Lead Prevention Program, a decrease of \$324,000 from the FY 2008 Enacted level for an Individual Learning Account ILA and administrative reduction. The program will provide funding to 40 state and local lead programs to continue their efforts to eliminate elevated blood lead levels in affected infants and young children. Programs funded by CDC will engage in activities such as screening and ensuring treatment for at-risk and lead-poisoned infants and children respectively, and working with traditional and non-traditional partners to advance lead-poisoning prevention efforts. Funding will also support CDC's ability to maintain its capacity to respond to emergent acute mass exposures of lead. In FY 2009, CDC's target is to decrease by over 60,000 the number of infants and young children with blood lead levels above 10 micrograms from the previous year's value.

- \$30,472,000 will support the Asthma Program, a decrease of \$288,000 below the FY 2008 Enacted level for an ILA and administrative reduction. This will support the continued development and implementation of asthma control plans and increased use of asthma management plans in affected populations in 34 states, localities, and territories. The program will also support training, surveillance data collection, and the participation of funded states in the Asthma Callback Survey. The program has developed a new PART measure that will track the proportion of people with asthma that receive self-management plans that it proposes to begin using in FY 2010. First year trend data for the proposed measure will be collected in FY 2009. The program will continue to work with internal and state partners to develop, implement, and track program performance indicators, and to standardize the tracking and reporting of information on common interventions implemented at the state level.
- \$22,119,000 will support Environmental Health Activities (not including Environmental Health Tracking, described above), a decrease of \$9,358,000 from the FY 2008 Enacted level. This includes a decrease of \$209,000 for an ILA and administrative reduction; and, a decrease of \$7,199,000 for Safe Water activities and \$1,950,000 for Amyotrophic Lateral Sclerosis Registry (ALS). With the decrease, CDC will eliminate research, surveillance, and technical assistance activities associated with Safe Water issues.

CDC expects to continue making progress toward meeting its environmental health-related goals. However, in some cases, the program has set lower output targets compared to previous years to make them consistent with available resources, and to account for the inherent complexities that are associated with addressing specific public health issues.

OUTCOME TABLE

						FY 20				Out-year Target
Long-Term Objective 10.2: Prevent or Reduce Illnesses, Injury, and Death Related to Environmental Risk Factors										
10.2.1	Percentage reduction in asthma hospitalizations in states funded for partial and full implementation per 100,000 people.	119 (Part A)/ 147 (Part B)*	12/2008	6% (Part A) /12% (Part B)	12/2009	7% (Part A) /14% (Part B)	12/2010	8% (Part A) /15% (Part B)	9% (Part A) /16% (Part B)	N/A
10.2.2	Number of children under age 6 with elevated blood lead levels.	240,000	12/2007	190,829	12/2008	169,399	12/2009	107,363	12/2010	N/A

* Part A Enhanced 2002 Baseline Number/Part B 2002 Baseline Number

OUTPUT TABLE

						FY 2007				Out-Year Target
Efficiency Goal: Promote Effective and Efficient Management										
10.E.1	Number of Full Time Equivalent (FTE)'s providing program support through the Office of the Director per \$1 million in total program budget.	0.86 (2003 Baseline)	.067	0.66	0.55 (Exceeded)	0.65	10/2007	0.64	0.64	N/A
Long-Term Objective 10.1: Determine Human Health Effects Associated with Environmental Exposures										
10.1.1	Number of environmental chemicals, including nutritional indicators that are assessed for exposure of the U.S. population.	150 (Met)	230 (Exceeded)	180	274 (Exceeded)	250	293	280	323	N/A
10.1.2	Complete studies to determine the harmful health effects from environmental hazards.	27 (Exceeded)	44 (Exceeded)	25	34 (Exceeded)	25	36	25	25	N/A
10.1.3	Number of clinical laboratories certified for tests such as lipids; newborn screening; those predictive of type 1 diabetes; blood lead, cadmium, and mercury; and nutritional factors.	866	904 (Unmet)	990	987 (Unmet)	1,001	12/2007	967	959	N/A
Environmental Health Outputs										
10.A	New or improved methods developed for measuring environmental chemicals in people ²	16	18	16	16	16	16	16	14	N/A
10.B	Laboratory studies conducted to measure levels of environmental chemicals in exposed populations	55	58	50	50	50	52	52	52	N/A
10.C	Public health actions undertaken (using Environmental Health Tracking data) that prevent or control potential adverse health effects from environmental exposures	N/A	21	5	17	10	17	12	14	N/A
10.D	Funded state and local lead programs that develop and implement elimination plans	32	N/A	42	N/A	40	40*	N/A	N/A	N/A

NARRATIVE BY ACTIVITY
ENVIRONMENTAL HEALTH AND INJURY PREVENTION
ENVIRONMENTAL HEALTH

						FY 2007				Out- Year Target
10.E	State, local, and territorial programs funded to develop or implement asthma control plans	35	35	35	34	35	34	34	34	N/A
10.F	States assisted with screening newborns for preventable diseases	50	50	50	50	50	50	50	50	N/A
	Appropriated Amount (\$ Million)¹	\$146.5	\$151.2	\$149.2		\$146.6		\$154.5	\$136.6	

*The targets have been met; the output measure will be retired after FY 2007.

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

INJURY PREVENTION AND CONTROL

				FY 2009 +/- FY 2008
Intentional Injury	\$101,913,000	\$100,134,000	\$99,710,000	-\$424,000
Unintentional Injury	\$34,205,000	\$34,703,000	\$34,556,000	-\$147,000
Total	\$136,118,000	\$134,837,000	\$134,266,000	-\$571,000

SUMMARY OF THE REQUEST

CDC is leading our nation's efforts to reduce premature deaths, disability, human suffering, and the medical costs caused by injuries and violence. Working with state and local governments, nonprofit organizations, academic institutions, private entities, other federal agencies, and international organizations, CDC is documenting the numbers and identifying the causes of injuries and violence.

CDC requests \$134,266,000 for Injury Prevention and Control payment authorities, which reflects a decrease of \$571,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction:

- \$34,556,000 for Unintentional Injury Prevention and Control, a decrease of \$147,000 below the FY 2008 Enacted level for an ILA and administrative reduction. These funds are necessary to sustain and enhance Center priority areas of older adult fall prevention, residential fire prevention, teen driving safety, and traumatic brain injury.
- \$99,710,000 for Intentional Injury Prevention and Control, a decrease of \$424,000 below the FY 2008 Enacted level for an ILA and administrative reductions. These funds are necessary to sustain and enhance Center priority areas of child maltreatment prevention, youth violence prevention, domestic and sexual violence prevention, rape prevention and education, intimate partner violence, suicide prevention, and the National Violent Death Reporting System (NVDRS).

As a result of the Injury Prevention and Control Program's 2006 PART, CDC developed an efficiency measure reflecting the National Center's performance on improving timeliness of submitting funding packages to CDC's Procurement and Grants Office (PGO). In February 2006, PGO established four agency-wide key performance indicators (KPIs) and targets that outline the amount of time required to award a new grant or cooperative agreement. The KPIs are based on current PGO cycle times. The funding package cycle time, defined as the time from the conclusion of the review panel until the funding package, is sent to PGO.

CDC is required to summarize the reviews (primary and secondary) of each application for a particular funding opportunity and develop a funding package document to submit to PGO. PGO's target for this time frame is seven days. NCIPC's efficiency measure tracks the Injury Center's efforts to meet this overarching KPI. In FY 2006, NCIPC took an average of 52 days to submit the funding package to PGO. In FY 2007, NCIPC exceeded its target of 26 days by submitting its funding package document to PGO in 21 days.

NARRATIVE BY ACTIVITY
ENVIRONMENTAL HEALTH AND INJURY PREVENTION
INJURY PREVENTION AND CONTROL

						FY 2007				Out-Year Target
Efficiency Measure:										
11.E.1	Reduce the amount of time to submit funding packages for non-research funding opportunities to CDC's Procurement and Grants Office.	N/A	N/A	Establish Baseline	52 days (met)	26 days	21 days (exceeded)	13 days	7 days	N/A

These programs are among the Injury Prevention and Control programs subject to reauthorization.

The reassessment cited that NCIPC has a clear purpose, is able to establish annual and long-term performance measures and show progress toward achieving yearly targets, and has conducted independent evaluations that conclude the effectiveness of the program. As a result of the PART review, CDC is working to better tie budget requests to the accomplishment of annual and long-term goals, report on progress toward achieving goals, and conduct annual external scientific reviews to ensure program results.

INTENTIONAL INJURY PREVENTION AND CONTROL

				FY 2009 +/- FY 2008
Domestic Violence and Sexual Violence	\$27,527,000	\$27,046,000	\$26,931,000	-\$115,000
Youth Violence Prevention	\$23,681,000	\$23,268,000	\$23,169,000	-\$99,000
Suicide	\$2,472,000	\$2,429,000	\$2,419,000	-\$10,000
Domestic Violence Community Projects	\$5,110,000	\$5,021,000	\$5,000,000	-\$21,000
Rape Prevention	\$42,763,000	\$42,016,000	\$41,838,000	-\$178,000
All Other Intentional Injury	\$360,000	\$354,000	\$353,000	-\$1,000
Total	\$101,913,000	\$100,134,000	\$99,710,000	-\$424,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 319, 327, 352, 391-394A, 1252, Use of Allotments for Rape Prevention Education (393B), Section 4, P.L. 104-166 (expired), Sec 318 (42 USC Sec. 10418) of the Family Violence Prevention and Services Act of 2003

FY 2009 AuthorizationIndefinite

Allocation Method.....Direct
Federal Intramural; Competitive Cooperative Agreements/Grants, including Formula Grants; and Competitive Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The public health burden of violence in the U.S. is great. There are an estimated 50,000 deaths each year resulting from homicide and suicide in the U.S.

In 1979, violent behavior was identified by the U.S. Surgeon General in the Healthy People report: The Surgeon General's Report on Health Promotion and Disease Prevention as a key public health priority. Shortly thereafter, in 1980, CDC began studying patterns of violence. Since 1992, the CDC has been working to prevent injuries and deaths cause by violence. To prevent violence, CDC supports data collection to identify community risk and protective factors, evaluates prevention strategies, and encourages the wide spread use of prevention approaches based on the best available science.

CDC's violence prevention program serves people most at risk for violence-related injury within all age ranges, including infants, children, adolescents, adults, and older adults, as well as racial and ethnic populations. CDC focuses on utilizing the best public health data to determine who is at risk, where and at what times for what types of violence.

CDC's violence prevention activities support investigator-initiated, peer-reviewed extramural grant programs among academic research institutions across the country. CDC also provides funds to new investigators in the field of violence prevention and supports dissertation research. Cooperative agreements are used to fund a number of research and programmatic activities, such as the National Violent Death Reporting System (NVDRS). Interagency agreements (IAAs) and contracts are used to expand partnerships and provide technical assistance in program development. Funds provided for the Rape Prevention and Education Program are allocated by a population based-formula through cooperative agreements.

CDC supports the primary prevention of violence-related injuries and their consequences. CDC uses the public health approach to address the problem of violence at a population level. Programs are carefully tailored to monitor and track the problem, identify factors that put people at risk or

protect them from harm, develop and evaluate prevention strategies, and encourage the widespread adoption of effective programs and policies. Specific topics addressed by the program include: child maltreatment prevention, intimate partner violence and sexual violence prevention; youth violence prevention; the National Violent Death Reporting System; the Rape Prevention and Education Program; domestic violence community projects; and suicide prevention.

Violence is a multi-factorial and complex problem. The public health approach is a systematic way to address violence and prevent it from occurring, but factors such as economics and unemployment can play a role in the levels of violence a community experiences. Ensuring that strong violence prevention efforts are in place is key to achieving and maintaining safe and healthy communities.

The ultimate goal is to stop violence before it begins. Prevention requires understanding the factors that influence violence. New strategies that are being implemented by the violence prevention program include partnership building to expand outreach to stakeholders and improve dissemination efforts.

Domestic Violence and Sexual Violence Prevention

Each year, women experience about 4.8 million intimate partner related physical assaults and rapes. Men are the victims of about 2.9 million intimate partner related physical assaults. Interpersonal Violence (IPV) resulted in 1,544 deaths in 2004. Of these deaths, 25 percent were males and 75 percent were females.

One in 11 adolescents reports being hit, slapped or physically hurt by a dating partner each year. This and other recent research led to the development of a CDC initiative entitled Choose Respect to help adolescents, ages 11 to 14 years old, form healthy relationships. This national effort seeks to prevent dating violence before it ever starts and is designed to motivate adolescents to challenge harmful beliefs about dating abuse and take steps to form respectful relationships. The initiative also connects with parents, teachers, youth leaders and other caregivers who influence the lives of young teens.

Major accomplishments in the prevention of domestic violence and sexual violence include the following:

- CDC developed and disseminated the *Intimate Partner Violence (IPV) Victimization and Perpetration: A Compendium of Assessment Tools* to measure victimization and perpetration of IPV, including physical violence, sexual violence, psychological abuse, and stalking.
- CDC was honored with two FREDDIE Awards for its Choose Respect documentary video *Causing Pain: Real Stories of Dating Abuse and Violence*. This 30-minute video contains true stories of teens, parents, and professionals who have been in or witnessed abusive relationships. *Causing Pain* was selected from among all the winning entries in 34 award categories.
- CDC data collected on sexual violence prevalence shows that 11.1 percent of respondents reported experiencing a rape or attempted rape in their lifetime, females four times more likely than males. Prevalence of sexual violence also varied significantly between states. These data can be used to assist state decision makers by providing a foundation upon which to build prevention and interventions.

The FY 2009 Request includes \$26,931,000, which reflects a decrease of \$424,000 below the FY 2008 Enacted level for ILA and administrative costs.

Child Maltreatment Prevention

Child maltreatment includes all types of abuse and neglect that occur among children under the age of 18. More than one in seven children experience child maltreatment, including physical, sexual, and emotional abuse and neglect each year. Annual legal and health care costs associated with child maltreatment exceed \$24 billion. Children who experience maltreatment are at increased risk for adverse health effects and behaviors as adults, including smoking, alcoholism, drug abuse, eating disorders, severe obesity, depression, suicide, sexual promiscuity, and certain chronic diseases. CDC works to develop, evaluate, and disseminate evidence-based strategies that support and promote safe, stable, nurturing relationships with parents and other adults to prevent child maltreatment and achieve measurable and lasting positive impacts on health over the life course. Major accomplishments in child maltreatment prevention include:

- CDC developed and published *Preventing Child Sexual Abuse Within Youth-serving Organizations: Getting Started on Policies and Procedures* to assist youth-serving organizations as they begin to adopt prevention strategies for child sexual abuse. The guide includes prevention goals and critical strategies for each of six components.
- CDC supported the University of South Carolina to test Triple P, the Positive Parenting Program, in nine counties in South Carolina. This program, which promotes positive parenting, has demonstrated a significant reduction in substantiated cases of child maltreatment, out of home placements resulting from child maltreatment, and child injuries suspected to be caused by maltreatment.

The FY 2009 request includes \$7,056,000, which reflects \$30,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

Youth Violence Prevention

Homicide is the second leading cause of death for young people between the ages of 10 and 24. Among 10 to 24 year-olds, homicide is the leading cause of death for African Americans. Youth violence includes various behaviors. Some violent acts—such as bullying, slapping, or hitting—can cause more emotional harm than physical harm. Others, such as robbery, assault, or rape, can lead to serious injury or death. Violence can also affect the health of communities. It can increase health care costs, decrease property value, and disrupt social services. The cost of youth violence exceeds \$158 billion each year.

CDC's youth violence prevention research is intended to have practical implications and immediate relevance. CDC works to develop, evaluate, and disseminate evidence-based interventions that create communities in which youth are safe from violence to ensure the development of youth into healthy adults.

Major accomplishments in youth violence prevention include:

- Crime and violence tend to be high in communities with high concentration of poverty, crowded housing, and other factors associated with community socioeconomic disadvantage. CDC and Carnegie Mellon University are currently evaluating the impact of an initiative to depopulate public housing communities in Pittsburgh, PA, on community levels of youth violence as assessed by police records, 911 call, coroner reports, and emergency department data. Preliminary analyses indicate decreases of approximately 50% in incidents of violent crime in the depopulated community with no corresponding increases in violent crimes in surrounding communities in other communities who absorbed families moving from the public housing community.
- CDC assembled and convened a panel of experts to identify promotive and protective factors, including links between promotive and protective factors and interventions,

strategies for translating findings on these factors into policy, and next steps for research and practice.

The FY 2009 request includes \$23,169,000, which reflects a \$99,000 decrease below the FY 2008 Enacted level for an ILA and administrative reduction.

Academic Centers of Excellence in Youth Violence Prevention

The Academic Centers of Excellence Program began in 2000. CDC has funded eight National Academic Centers of Excellence on Youth Violence since 2005 and two Urban Partnership Academic Centers of Excellence since 2006 to foster joint efforts between university researchers and communities to address the problem of youth violence. The unique ability of Academic Centers to connect communities and researchers helps build infrastructure to support broader community development. This infrastructure helps communities create and sustain partnerships; increase resources and expertise needed to address pressing social needs and community concerns; build the capacity to respond quickly after a crisis or event (such as a school shooting); and in specific communities, help reduce interpersonal youth violence.

Major accomplishments from the Academic Centers include:

- The CDC funded Academic Center of Excellence at Columbia University worked with community partners to sponsor a child and family centered event in Highbridge Park called Hike the Heights. This effort works to combat violence by fostering a sense of community pride and entitlement to public spaces, thereby making the parks safer.
- The Harvard University Academic Center developed a comprehensive and easily accessible data system called the Boston Data Project. The system captures data from multiple sources that are relevant to children and youth. Data are being used by community groups and city leaders to make decisions about program development, funding, and service delivery.

The FY 2009 request includes \$7,418,000 which reflects a decrease of \$31,000 for an ILA and administrative reduction.

National Violence Death Reporting System (NVDRS)

Started in 2002, CDC currently funds 17 states to implement the NVDRS by gathering and sharing state-level data from State and local agencies, medical examiners, coroners, police, crime labs, and from death certificates that could answer questions about trends and patterns of violence. NVDRS brings this information together to form a more complete picture of the circumstances surrounding violent deaths. This information can then be used to develop, inform, and evaluate violence prevention programs that target the particular needs of communities.

Major accomplishments using NVDRS include:

- Data from NVDRS in Oregon were used to create a profile of elderly suicide victims. For example, NVDRS data found that 37 percent of older adult suicide victims made a visit to their physician within 30 days of their death. This important information was incorporated into Oregon's state level suicide prevention plan.
- Data from NVDRS in Massachusetts has provided the state with increased capacity to monitor homicides and suicides. Several small communities located near large metropolitan areas have been able to identify trends in violent deaths using NVDRS data. As the result of this research, communities are able to address, and work to prevent, specific types of crimes in their communities.

The FY 2009 request includes \$3,259,000, which reflects a decrease of \$14,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

Suicide Prevention

Suicide is the eleventh leading cause of death among Americans. In 2004, suicide was the third leading cause of death among youths and young adults aged 10 to 24 years in the U.S., accounting for 4,599 deaths. More than 425,000 people with self-inflicted injuries (suicide and suicidal behaviors) are treated in emergency rooms each year. The cost of self-inflicted injuries is \$33 billion annually. Suicide is a significant public health problem that devastates individuals, families, and their communities. CDC's violence prevention program works to develop, evaluate, and disseminate evidence-based interventions that promote individual, family, and community resilience and connectedness to prevent suicidal behavior.

Major accomplishments to prevent suicide include:

- In 2007, CDC documented an 8 percent increase in the suicide rate for persons aged 10-24 from 2003-2004. The study also found changes in the methods used in suicide among girls. Carefully monitoring potential trends in suicide informs improved program approaches to addressing suicide prevention in the United States.
- CDC drafted definitions for self-directed violence that will be recommended to the field of injury prevention. The draft definitions for fatal and nonfatal self-directed violence have already been utilized in a Department of Defense project to unify definitions used in the various branches of the military and Coast Guard. These definitions also informed a process for measuring suicidality in several Food and Drug Administration drug trials.

The FY 2009 request includes \$2,419,000, a decrease of \$10,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

Rape Prevention and Education (RPE) Program

The RPE program began in 1994 with initial funding provided under the Violence Against Women Act through the CDC Block Grant. RPE funding was shifted to the National Center for Injury Prevention and Control in 2002. Through the RPE program, CDC provides resources and technical assistance to every state, Washington, D.C., Puerto Rico, and six territories for rape prevention and education initiatives conducted by rape crisis centers, state sexual assault coalitions, and other public and private nonprofit entities. The RPE program strengthens sexual violence prevention efforts by supporting increased awareness, education, and training as well as the operation of hotlines. CDC also assists state and coalition staff through training opportunities and support for the National Sexual Violence Resource Center.

Major accomplishments from the RPE program include:

- The California Coalition Against Sexual Assault, in partnership with the California Department of Public Health, launched a statewide multimedia campaign that engages and motivates males aged 14-18 to take a more active role in preventing sexual violence.
- The Maui County Area Health Education Center and the Molokai Interagency Council on Sexual Assault through a contract with the Hawaii Department of Health produced a video entitled "Preventing Sexual Violence, Everybody's Kuleana," the Hawaiian word for "responsibility." Molokai, a rural island, has a strong native Hawaiian culture; over 50% of population is Native Hawaiian. This culturally relevant video has resulted in community trainings and efforts towards changing community norms related to sexual violence on Molokai and other neighbor islands.

- EMPOWER funded states convened diverse, multidisciplinary statewide prevention planning teams. More than just planning, these states have focused on building the capacity of the planning team members to engage in critical analysis of data and research to develop new directions for state sexual violence prevention efforts. The work of these teams is resulting in sexual violence prevention system changes and improved primary prevention practices at the state and local level. Noting the significant outcomes of their efforts, these states are now supporting their local RPE funded communities for similar work.

The FY 2009 request includes \$41,838,000, a decrease of \$178,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

Domestic Violence Community Projects

Since 2002, has addressed the problem of intimate partner violence by supporting the Domestic Violence Prevention Enhancement and Leadership through Alliances (DELTA) program, which supports state domestic violence coalitions to provide prevention-focused technical assistance, training, and funding to local communities. Local Coordinated Community Responses (CCRs) receive DELTA program funding to support the adoption of primary prevention principles and practices and to implement programs that will prevent first-time perpetration and victimization.

Major accomplishments of DELTA include:

- CDC funded the Michigan Coalition Against Domestic and Sexual Violence who sponsored a series of faith forums, providing tangible resources and information on preventing the first time occurrence of intimate partner violence to faith leaders. This resulted in an increased focus on healthy and respectful relationships in pre-marital counseling activities and at community and congregational events.
- As a result of their landmark efforts on gender-based violence prevention, the CDC-funded Alaska DELTA program was asked by two communities in Russia to spend two weeks helping them develop coordinated community responses to address IPV. DELTA and ANDVSA's revolutionary and transformative approach to IPV prevention is thus attracting communities, literally a world away, and helping them take steps to prevent IPV.

For each PART measure, targeted reductions were the result of best estimates based on trends derived from data available during the PART review. CDC continues to streamline efforts to achieve its targets in reducing incidences of unwanted sexual intercourse, dating violence, and physical fighting

The FY 2009 request includes \$5,000,000, a decrease of \$21,000 below the FY 2008 Enacted level for an ILA and administrative reduction.

FUNDING HISTORY TABLE

	Amount
FY 2004	\$101,733,000
FY 2005	\$103,138,000
FY 2006	\$103,492,000
FY 2007	\$101,913,000
FY 2008	\$100,134,000

BUDGET REQUEST

CDC requests \$99,710,000 for Injury Prevention and Control, a decrease of \$424,000 from the FY 2008 Enacted level which reflects an Individual Learning Account (ILA) and administrative reductions. This allocation includes the following activities:

- CDC requests \$7,056,000 for Child Maltreatment, a decrease of \$30,000 below the FY 2008 Enacted level for an ILA and administrative reduction. This includes support for research examining the effects of information and communication technology and training in home visitation programs to determine ways to maximize effectiveness in the prevention of child maltreatment. This also supports collaboration with national organizations to expand state, local, and/or regional affiliates' capacity to address the prevention of child maltreatment and implementation of state plans to prevent violence perpetrated toward or among child and adolescents. Funding for peer-reviewed extramural research examining the effectiveness of providing information to parents and caregivers that is designed to prevent abusive head trauma will also be maintained.
- CDC requests \$26,931,000 for Domestic Violence and Sexual Violence Prevention, which reflects a decrease of \$424,000 below the FY 2008 Enacted level for an ILA and administrative reduction to support domestic violence and sexual violence prevention activities. This will ensure continued support of projects to prevent sexual violence and intimate partner violence among racial and ethnic minority populations. It also provides support for projects working with men and boys in culturally appropriate ways to prevent sexual violence and intimate partner violence before it occurs. In addition, intervention and evaluation trial testing strategies to effectively prevent intimate partner violence will continue.
- CDC requests \$23,169,000 for Youth Violence Prevention, which reflects a \$99,000 decrease below the FY 2008 Enacted level for an ILA and administrative reduction to support youth violence prevention activities. This funding supports extramural peer-reviewed research to advance youth violence prevention, the National Youth Violence Prevention Resource Center, and a national consortium that is developing tools, strategies, and messages to prevent violence in urban settings. This funding also includes \$7,400,000 to support ten Academic Centers of Excellence in Youth Violence Prevention. In FY 2009, CDC will continue efforts to prevent youth violence and to decrease youth victimization rates by funding the aforementioned activities to identify effective strategies that reduce risk factors and increase promotive and protective factors at the individual, family, and community levels. These efforts will be evaluated and modified accordingly to achieve performance targets in reducing incidences of youth homicide and unwanted sexual intercourse, dating violence, and physical fighting.
- CDC requests \$3,259,000 for NVDRS, which reflects a decrease of \$14,000 below the FY 2008 Enacted level for an ILA and administrative reduction, to fund 17 states to participate in the NVDRS and collect data on violent deaths.
- CDC requests \$2,419,000 for Suicide Prevention, a decrease of \$10,000 below the FY 2008 Enacted level for an ILA and administrative reduction, to support suicide prevention activities. This includes research testing an intervention for abused, low-income, African American women with suicidal ideation to reduce the likelihood of their attempting suicide and a study to test the efficacy of a family therapy for adolescents presenting serious risk for suicide.
- CDC requests \$41,838,000 for Rape Prevention, a decrease of \$178,000 below the FY 2008 Enacted level for an ILA and administrative reduction, to provide formula-based funding to 50 states, the District of Columbia, Puerto Rico and six territories through the RPE Program and to support the National Sexual Violence Resource Center.
- CDC requests \$5,000,000 for Domestic Violence Community Projects, a decrease of \$21,000 below the FY 2008 Enacted level for an ILA and administrative reduction, to support Domestic Violence Community Projects in 14 states.

The program's activities are aimed at better understanding the problem of violence, evaluating strategies to inform prevention approaches, and supporting the dissemination and implementation of effective prevention. Supporting strategies for translating interventions into products to aid in replication, distinguishing the costs associated with successful prevention strategies, and evaluating how the characteristics and capacities of individuals, practice settings, organizations, and communities influence the implementation and dissemination of evidence-based strategies will move the field of violence prevention closer to its goal of primary prevention.

- Research will identify the factors necessary to support widespread replication and adoption of effective strategies. By refining and extending our understanding of how to implement prevention programs, appropriate and effective programs will be disseminated on a wider scale across the U.S. and can be tailored toward the individual needs of communities.
- Identifying trends and their causes will be vital to tailoring, translating, and disseminating interventions to communities at risk.
- Expanding programmatic output will be necessary to accomplish widespread adoption of effective interventions.

The violence prevention program will monitor the relationship of its activities to violence-related outcome trends.

The program anticipates that its activities will contribute to an increase in the dissemination of effective programs and enhanced partnerships that can lead to an integrated violence prevention approach. Such an approach is critical to reducing the burden of violence-related death and injury.

In FY 2009, CDC will sustain or enhance funding for violence prevention activities that have been effective in enhancing performance. Understanding risk factors and developing effective interventions are of little value unless these interventions are made available to those in need of them. The budget request is designed to ensure that research activities produce useful results. The request is also designed to ensure that results, once found to be useful, are translated and disseminated to those who can make them available to the public.

OUTCOME TABLE

						FY 2006						Out Year Target
Long Term Objective 11.1: Achieve reductions in the burden of injuries, disability, or death from intentional injuries for people at all life stages.												
11.1.1	Reduce youth homicide rate by 0.1 per 100,000		8.9/100,000	8/2007	N/A	N/A	N/A	8.8 per 100,000	8.8 per 100,000			N/A
11.1.2	Reduce victimization of youth enrolled in grades 9-12 as measured by a reduction in the lifetime prevalence of:											
	unwanted sexual intercourse	N/A	A) 7.2%	A) 7.5%	N/A		N/A			A) 6.7%		A) 6.7%
	the 12-month incidence of dating violence,	N/A	B) 8.8%	B) 9.2%	N/A		N/A			B) 8.1%		B) 8.1%
	the 12-month incidence of physical fighting	N/A	C) 31.3%	C) 35.9%	N/A		N/A			C) 29.3%		C) 29.3%

NARRATIVE BY ACTIVITY
ENVIRONMENTAL HEALTH AND INJURY PREVENTION
INJURY PREVENTION AND CONTROL

OUTPUT TABLE

						FY 2007			FY 2009 Target
11.A	Child Maltreatment Prevention Activities		14		13		12	12	12
11.B	Rape Prevention and Education Grants		59		59		58	58	58
11.C	Intimate Partner Violence Prevention Programs+		21		20		20	20	20
11.D	National Violent Death Reporting System		17		17		17	17	17
11.E	National Academic Centers of Excellence in Youth Violence Prevention		10		10		10	10	10
Appropriated Amount* (\$ Million)¹		\$101.7	\$103.1	\$103.5		\$101.9		\$100.1	\$99.7

*This includes the Domestic Violence Community Projects.

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS SEXUAL VIOLENCE PREVENTION AND EDUCATION	
	FY 2007 Actual
Alabama	\$616,593
Alaska	\$87,884
Arizona	\$711,008
Arkansas	\$373,470
California	\$4,681,150
Colorado	\$596,573
Connecticut	\$472,583
Delaware	\$110,483
District of Columbia	\$81,311
Florida	\$2,210,068
Georgia	\$1,133,207
Hawaii	\$169,715
Idaho	\$181,166
Illinois	\$1,717,858
Indiana	\$842,236
Iowa	\$406,639
Kansas	\$373,864
Kentucky	\$560,640
Louisiana	\$619,634
Maine	\$178,402
Maryland	\$733,990
Massachusetts	\$879,343
Michigan	\$1,375,166
Minnesota	\$681,856
Mississippi	\$395,227
Missouri	\$775,214
Montana	\$126,910
Nebraska	\$238,679
Nevada	\$278,344
New Hampshire	\$172,998
New Jersey	\$1,164,639

CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2009 DISCRETIONARY STATE/FORMULA GRANTS SEXUAL VIOLENCE PREVENTION AND EDUCATION	
	FY 2007 Actual
New Mexico	\$253,586
New York	\$2,623,663
North Carolina	\$1,114,206
North Dakota	\$91,000
Ohio	\$1,570,728
Oklahoma	\$478,955
Oregon	\$474,913
Pennsylvania	\$1,698,785
Rhode Island	\$147,100
South Carolina	\$556,691
South Dakota	\$106,574
Tennessee	\$788,206
Texas	\$2,882,720
Utah	\$310,771
Vermont	\$86,396
Virginia	\$980,115
Washington	\$816,518
West Virginia	\$252,243
Wisconsin	\$743,230
Wyoming	\$70,601
American Samoa	\$10,185
Guam	\$22,032
Marshall Islands	\$11,765
Micronesia	\$18,083
Northern Mariana Islands	14,134
Puerto Rico	\$527,470
Virgin Islands	\$18,991
	\$39,616,511

UNINTENTIONAL INJURY PREVENTION AND CONTROL

				FY 2009 +/- FY 2008
Traumatic Brain Injury (TBI)	\$5,195,000	\$5,709,000	\$5,685,000	-\$24,000
All Other Unintentional Injury	\$29,010,000	\$28,994,000	\$28,871,000	-\$123,000
Total	\$34,205,000	\$34,703,000	\$34,556,000	-\$147,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 310, 311, 317, 319, 327, 352, 391, 392, 393A, 393B, and 394A

FY 2009 Authorization.....Indefinite

Allocation Method..... Direct
Federal/Intramural; Competitive Grants/Cooperative Agreements; and Contracts.

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC began studying home and recreational injuries in the early 1970s. From these early activities grew a national program to reduce injury, disability, death, and costs associated with injuries outside the workplace. In June 1992, CDC established the National Center for Injury Prevention and Control (NCIPC). CDC monitors trends in unintentional injuries in the U.S., conducts research to better understand risk factors, and evaluates interventions to prevent these injuries. Research and prevention programs focus on three categories of unintentional injury: motor vehicle-related injuries, home and recreation related injuries, and injury response, including traumatic brain injury.

CDC's Unintentional Injury Prevention program serves people most at risk for injury within all age ranges, (infants, children, adolescents, adults, and older adults); racial and ethnic populations; and environments to create healthy homes, communities, and institutions.

CDC supports a highly successful investigator-initiated, peer-reviewed extramural grant program for academic research institutions across the country. CDC also provides funds to new investigators in the field of unintentional injury prevention and provides dissertation awards to graduate students to further develop the capacity of the injury research community. Small Business Innovation Research (SBIR) projects in injury prevention and control explore new technologies, such as ways to evacuate people in mass causality events and provide an alert for motor vehicle occupants exposed to dangerous carbon monoxide levels. Cooperative agreements are used to fund collaborative activities between programs and grant recipients, such as Evaluation of Community-based Approaches to Increasing Seat Belt Use Among Adolescent Drivers and their Passengers. Interagency agreements (IAAs) and contracts are used to expand partnerships and technical assistance in program building, such as an existing IAA between CDC and the Administration on Aging to support the Falls Free Coalition, an initiative designed to reduce the growing number of falls and fall-related injuries among older adults.

Unintentional injuries are a leading cause of death for Americans ages one to 44. CDC's efforts to reduce non-occupational injury in the United States are concentrated in the CDC. CDC is dedicated to reducing the number and severity of unintentional injuries through science-based, applied research and prevention programs. Specific topics

addressed by the program include (but are not limited to) residential fire safety and prevention, preventing falls among older adults, teen driver safety, and traumatic brain injury.

CDC funds the implementation and evaluation of multi-component community-based interventions to increase seat belt use among adolescent drivers and their passengers. This work is also obtaining process-related information regarding barriers to implementation of such interventions and the means to overcome them. This information will be used to inform future community-based interventions to increase seat belt use among adolescents

Residential Fire Safety and Prevention

Deaths from fires and burns are the fifth most common cause of unintentional injury deaths in the United States and the third leading cause of fatal home injury. The United States' mortality rate from fires ranks fourth among the 25 developed countries for which statistics are available. In 2006, on average, someone died in a fire every 162 minutes and someone was injured every 32 minutes on average in the U.S.

Each year, fires and burns result in \$7.5 billion in direct medical costs and future productivity losses. Fire departments responded to 412,500 home fires in the U.S. in 2006, which claimed the lives of 2,580 people and injured another 12,925 (not including firefighters). Approximately half of home fire deaths occur in homes without smoke alarms. Installation of smoke alarms, education, addressing risky behaviors, and technology development are keys to reducing the number of fire related deaths in the U.S.

CDC supports activities to identify behavioral factors in residential fires that are associated with injuries; to improve household smoke alarm function and evaluate the effectiveness of the various maintenance education approaches; to improve smoke alarm technology; and to conduct analysis of residential fires, including causes, risk factors and key prevention strategies.

Major accomplishments in residential fire prevention include the following,

- CDC-funded programs report that 1,589 lives potentially have been saved to date. Program staff have canvassed over 472,000 homes and installed more than 348,000 long-lasting or lithium-battery powered smoke alarms in high-risk homes.
- Fire safety activities and messages have reached individuals and populations in greatest need through venues such as local radio, television, newspapers, church bulletins, health clinics, and one-on-one education. Smoke alarms have been installed and education has occurred in each CDC program participant's home.
- Among the population groups most at-risk for fire-related injury and death are adults age 65 and older, the poorest Americans, and those residing in rural areas. Even at greater risk are older adults who are homebound due to health or other conditions. In November 2007, CDC began a partnership with the Meals on Wheels Association of America (MOWAA) to install smoke alarms and deliver injury prevention and control messages, with a particular focus on residential fire injury and death prevention, to homebound seniors. MOWAA is the oldest and largest national organization representing senior nutrition programs and is on the front line of interacting with these homebound populations on a daily basis.

Through this program, approximately 5,000 smoke alarms will be installed. Ultimately, this partnership holds the promise of reducing health disparities for the more than one million homebound individuals each year served by MOWAA.

The target for PART Performance Measure 2.1, among the states receiving funding from CDC, reduce deaths from residential fires to 1.02 per 100,000 population, has been exceeded for the past two reporting years.

Preventing Falls Among Older Adults

Among people 65 years and older, falls are the leading cause of injury deaths and the most common cause of nonfatal injuries and hospital admissions for trauma. More than one third of adults ages 65 years and older fall each year. Of those who fall, 20 to 30 percent suffer moderate to severe injuries, such as hip fractures or head traumas that reduce mobility and independence and increase the risk of premature death. Each year, falls result in more than 1.8 million older adults being treated in emergency departments for fall-related injuries, over 433,000 hospitalizations, and approximately 15,000 deaths. In 2000, the direct medical cost totaled \$19.2 billion for fatal and nonfatal fall injuries.

CDC supports research to develop and evaluate approaches to implementing and disseminating effective fall prevention programs in the community, especially programs involving multiple strategies. This includes research to identify the best formats and channels for delivering interventions to ensure that older adults adopt them.

Major accomplishments in older adult fall prevention include the following:

- CDC funded a Tai Chi-based fall prevention program in Oregon to translate their program into a user-friendly resource package for use with older adults. Exercise programs, such as Tai Chi, improve lower body strength and balance, thereby decreasing falls among older adults.
- CDC developed the Compendium of Effective Community-based Interventions. This will help public health practitioners address the problem of falls by describing interventions that have been scientifically proven to be effective at reducing falls among older adults.
- CDC has conducted a Fall Prevention Research Portfolio Review covering 20 years of research, identifying key accomplishments, impacts and outcomes from this investment, and identifying critical next steps in closing existing gaps in fall prevention research and dissemination.

Teen Driver Safety

In the U.S. during 2004, 4,767 teens ages 16 to 19 died of injuries caused by motor vehicle crashes. During 2005, nearly 400,000 motor vehicle occupants in this age group sustained nonfatal injuries severe enough to require treatment in an emergency department. The risk of motor vehicle crashes is higher among 16- to 19-year-olds than among any other age group. In fact, per mile driven, teen drivers ages 16 to 19 are four times more likely than older drivers to crash.

CDC supports activities to reduce these risks, including programs designed to address the high risks new drivers face by allowing them to get their initial driving experience under low-risk conditions and to implement community-based interventions to increase seat belt use among adolescent drivers and their passengers.

Major accomplishments in teen driver safety include:

- CDC and State Farm Insurance co-funded the University of North Carolina School of Public Health and the Highway Safety Research Center to study the effect of North Carolina's Graduated Driver Licensing (GDL) law on hospitalization rates and hospital costs for 16- and 17-year-old drivers. The North Carolina GDL program was associated with a marked decline in the rate of hospitalizations and hospital charges for 16-year-old drivers. Following the implementation of GDL, over \$650,000 in hospital charges have been averted each year for 16-year-old drivers. Analyses suggest these reductions were primarily the result of reduced exposure rather than an improvement in teen driving.

Traumatic Brain Injury

A traumatic brain injury (TBI) is defined as a blow or jolt to the head or a penetrating head injury that disrupts the function of the brain. The severity of such an injury may range from "mild," i.e., a brief change in mental status or consciousness to "severe," i.e., an extended period of unconsciousness or amnesia after the injury. Of the 1.4 million who sustain a TBI each year in the United States 50,000 die, 235,000 are hospitalized, and 1.1 million are treated and released from an emergency department.

CDC is engaged in a number of activities to improve prevention, diagnosis, and treatment for TBI, including surveillance activities designed to gather more in-depth information about the incidence of TBI.

Major accomplishments in addressing TBI include:

- A CDC cost-benefit analysis found that a substantial savings in annual medical costs (\$262 million), rehabilitation costs (\$43 million) and societal costs (\$3.84 billion) would be achieved and mortality would be reduced by 3,607 lives annually if treatment guidelines were adopted and applied by 80% of hospitals and physicians in the U.S.
- CDC launched the "Heads Up: Concussion in High School Sports" toolkit in 2005, disseminating over 35,000 copies. A one-year follow-up study found that: 38% of coaches reported making changes in how they deal with concussion, 50% of coaches reported viewing concussion more seriously; and 68% of coaches reported using the toolkit to educate others.

The FY 2009 request includes \$5,685,000, which reflects a decrease of \$24,000 below the FY 2008 Enacted level for an Individual Learning Account and administrative reduction.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$34,734,000
FY 2005	\$35,099,000
FY 2006	\$34,821,000
FY 2007	\$34,205,000
FY 2008	\$34,703,000

BUDGET REQUEST

The CDC FY 2009 request includes \$34,556,000 for Unintentional Injury Prevention, which reflects a decrease of \$147,000 below the FY 2008 Enacted level for an Individual Learning Account and administrative reduction, to carry out its unintentional injury prevention programs and activities for FY 2009. The Program's budget request is based on allocations focusing on the following activities:

- Residential Fire Safety and Prevention: CDC will continue to fund cooperative agreements totaling \$2.4 million to fund Smoke Alarm Installation and Fire Safety Education projects in 17 states. Additional activities will include conducting research, developing and evaluating interventions, and disseminating effective programs to save lives and reduce the number and severity of injuries caused by residential fires.
- Older Adult Fall Prevention: CDC funds totaling \$1,000,000 will be used for grant awards, contracts, and intramural activities to prevent falls. These activities will include research on dissemination in a U.S. Community Setting of a fall prevention intervention found effective in Australia; evaluations of prevention programs funded by the Administration on Aging; and marketing of the Compendium on Effective Fall Prevention Interventions.
- Teen Driver Safety: CDC is supporting a five-year project, at approximately \$300,000 per year, to evaluate community-based approaches to increasing seat belt use among adolescent drivers and their passengers. FY 2009 will be the third year of funding.
- TBI: \$5,685,000 will be used by CDC to support traumatic brain injury prevention surveillance and research and the production of materials about brain injury symptoms and tips for healing and resources to educate patients and the community about TBI-related risks and injury prevention. A special focus of CDC's funding for TBI-related activities is on research related to health outcomes of mild TBI in children and adolescents, the development of a tool for assessing and managing concussion, and the prevalence of a history of TBI in prisons and nursing homes. Support also goes to determining the prevalence and risk factors of TBI-related disability and other outcomes among children and youth. CDC will continue to support 30 states as part of the unintentional injury program's Public Health Injury Surveillance and Prevention Program.

Based on current trends and national data, CDC has determined that:

- The rate of residential fire deaths will continue to decrease;
- The fall fatality rates in older adults will continue to rise over the next decade and the number of individuals in this targeted population will increase greatly as baby boomers enter this age group in large numbers;
- There has been a decrease in the number of teenagers involved in fatal crashes—a promising trend, but teens still are over-represented in fatal crashes compared to the population as a whole; and
- With enhanced surveillance measures and data collection capabilities, the prevalence of TBIs can be better ascertained.

The program's activities are aimed at better understanding risk factors and evaluating interventions to prevent these injuries. Supporting strategies for translating research into practice and evaluating the implementation and dissemination of evidence-based strategies and information will move the field of unintentional injury prevention closer to its goal of reducing the enormous societal burden caused by these deaths and injuries.

The budget request will sustain or enhance funding for unintentional injury prevention activities that have been effective in enhancing performance. The request is designed to ensure that results, once found to be useful, are translated and disseminated to those who can make them available to the public. To ensure that communities and the public at large benefit from the knowledge and related products achieved as a result of the program's activities, the program must collaborate with stakeholders in order to get relevant and effective interventions out to at-risk populations; thus, expanding on existing and new partnerships can provide a more widespread outreach and risk awareness to those in need of such information.

Key challenges include:

- Preventing Falls Among Older Adults: Key challenges include understanding and addressing the increases in fall mortality rate (37% in 7 years (1998-2004)) after adjusting for the aging U.S. population.
- Residential Fire Safety and Prevention: Key challenges in this area include the need for timely high-quality national and local fire incidence surveillance data to understand emerging issues and to track progress in prevention programs, the difficulty in increasing prevention services in addition to response services, the need for better educational approaches to teach fire safety and prevention, and the need for systematic evaluation of ongoing programs to understand effectiveness.
- Teen Driver Safety: Key challenges in this area include cultural norms that teen crashes are inevitable "accidents," need for better understanding of the skill and practice necessary to become a proficient driver, consideration of critical periods in adolescent development that influence risk taking behavior and driving; and adequate enforcement of GDL Systems and their various components.
- TBI: There are three key challenges for TBI prevention. First, diagnosis of TBI, especially mild TBI is challenging for clinicians, leading to underdiagnosis even in those who seek care. Second, surveillance of changes in nonfatal TBI rates must include not only hospitalizations, but also visits to emergency departments and other outpatient care settings. Third, the aging of the U.S. population suggests that increased efforts to prevent injuries among older people, including nonfatal TBIs, are needed. An additional challenge exists specific to identification and access to quality care for returning veterans with TBI.

CDC is planning to increase its effectiveness in unintentional injury prevention by working with new and existing partners to disseminate research findings, implement effective programs, and better understand the burden and trends of unintentional injury problems across the United States. The Falls Free Coalition, jointly supported by CDC and the Administration on Aging, and Meals on Wheels Association of America are examples of new partners that are critical to efforts to disseminate best practices and approaches to a broad audience.

NARRATIVE BY ACTIVITY
ENVIRONMENTAL HEALTH AND INJURY PREVENTION
INJURY PREVENTION AND CONTROL

OUTCOME TABLE

						FY 20				Out- Year Target
Long-Term Objective 11.2: Achieve reductions in the burden of injuries, disability or death from unintentional injuries for people at all life stages.										
11.2.1	Among the states receiving funding from CDC, reduce deaths from residential fires by 0.01 per 100,000 population.	N/A	N/A	N/A	N/A	N/A	1.13/100,000	1.12/100,000	1.11/100,000	1.09/100,000
11.2.2	Achieve an age-adjusted fall fatality rate among persons age 65+ of no more than 69.6 per 100,000.	39.2/100,000	10/2007		39.0/100,000	10/2006	45.6/100,000	47.8/100,000	50.0/100,000	56.5/100,000
11.2.3	Decrease the estimated percent increase of age-adjusted fall fatality rates among persons age 65+ years.									

OUTPUT TABLE

										Out- Year Target
11.F	Older Adult Fall Prevention Activities	0		0		0		1	1	1
11.G	Residential Fire-Related Injury Prevention Programs	16		16		17		17	17	17
11.H	Teen Driving Safety	0		0		1		1	1	1
	Appropriated Amount (\$ Million) ¹	\$34.7	\$35.1	\$34.8	\$34.2		\$34.7		\$34.6	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

				FY 2009 +/- FY 2008
Budget Authority	\$227,620,000	\$286,985,000	\$183,573,000	-\$103,412,000
PHS Evaluation Transfers	\$87,480,000	\$94,969,000	\$87,480,000	-\$7,489,000
Total	\$315,100,000	\$381,954,000	\$271,053,000	-\$110,901,000
FTE	1,150	1,188	1,170	-18

SUMMARY OF THE REQUEST

CDC strives to reduce the burden of occupational injuries, illnesses and fatalities by conducting an integrated program that includes: conducting scientific research, translating findings into products and services, and promoting safe and healthy workplaces through interventions, recommendations and capacity building.

CDC accomplishes its mission by conducting and supporting quality science and employing intramural and extramural expertise. All projects supported by the agency, intramural and extramural, undergo a competitive peer-review process to ensure scientific and technical merit.

The National Institute of Occupational Safety and Health (NIOSH) is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. Created by the Occupational Safety and Health Act of 1970, NIOSH was established to help assure safe and healthful working conditions for all working men and women.

In addition to conducting and supporting research, NIOSH develops and certifies protective technologies, conducts on-site investigations to identify workplace hazards, and assists in the development and implementation of effective workplace solutions. NIOSH is also charged with providing policy, scientific, and technical support relating to cancer claims in Energy Employees Occupational Illness Compensation Program, as well as medical monitoring and treatment for those affected by the World Trade Center (WTC) attacks.

CDC requests \$271,053,000 for the National Institute for Occupational Safety and Health which includes:

- \$271,053,000 for Occupational Safety and Health Research reflects a decrease of \$110,901,000 below the FY 2008 Enacted level which includes \$4,378,000 for Individual Learning Accounts and administrative costs. These funds will support occupational safety and health research and development of recommendations for the prevention of work-related injury and illness.
 - Of these funds \$25,000,000 will be used for World Trade Center, which reflects a decrease of \$83,083,000 below the FY 2008 Enacted level. These funds will support screening and treatment for first response emergency services personnel affected by the WTC attacks of September 11, 2001.
- In addition CDC has requested \$55,358,000 in mandatory funding for the Energy Employee Occupational Illness Compensation Program to support the statutory requirements as outlined in EEOPCPA. These funds will support completion of dose reconstructions, Special Exposure Cohort (SEC) evaluations, program evaluations reports and provide administrative support for the Advisory Board on Radiation and Worker Health (ABRWH).

NIOSH underwent a PART review in 2004. As a result, the following efficiency measure was developed: CDC partners with the National Institutes of Health (NIH) Center for Scientific Review to process grant applications. In keeping with the effort to coordinate resources across HHS, CDC utilizes NIH's peer review and management system computer program (IMPAC II) for receipt and referral of grant applications. By doing so, CDC streamlines services for the extramural community, ensures uniformity of responses to applicants, and achieves cost efficiencies for CDC. The two-pronged approach to peer review is highly praised in the scientific community and is considered the "gold standard" for quality peer review. IMPAC II is a real-time system that can be monitored at any stage of the approval process. This review system is based on an eight to nine month timeline.

Recognizing the valuable contributions of extramural scientists and educators, CDC works diligently to process grant applications in a timely manner. These efforts have enabled the agency to improve efficiency and exceed performance targets from FY 2006 to present.

						FY 20				Out-Year Target
12.E.1	Percent of grant award/funding decisions made available to applicants within nine months of application receipt or deadline date, while maintaining a credible and efficient, two-level peer review system.	N/A	60%	66%	68% (Exceeded)	69%	70% (Exceeded)	72%	75%	N/A

OCCUPATIONAL SAFETY AND HEALTH RESEARCH

				FY 2009 +/- FY 2008
Education and Research Centers	\$19,824,000	\$21,425,000	\$19,234,000	-\$2,191,000
Personal Protective Technology	\$12,732,000	\$12,804,000	\$12,353,000	-\$451,000
National Occupational Research Agenda (NORA)	\$99,595,000	\$109,889,000	\$99,235,000	-\$10,654,000
Budget Authority	\$12,115,000	\$14,920,000	\$11,755,000	-\$3,165,000
PHS Evaluation Transfers	\$87,480,000	\$94,969,000	\$87,480,000	-\$7,489,000
Mining Research	\$51,200,000	\$49,126,000	\$37,064,000	-\$12,062,000
World Trade Center	\$50,000,000	\$51,583,000	\$25,000,000	-\$26,583,000
Other Occupational Safety and Health Research	\$81,749,000	\$80,627,000	\$78,167,000	-\$2,460,000
Total	\$315,100,000	\$381,954,000	\$271,053,000	-\$110,901,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 306, 307, 310, 311, 317, 317A, 317B, 327, Occupational Safety and Health Act of 1970 (P.L. 91-596), §§ 9, 20-22 (29 USC 657), Federal Mine Safety and Health Act of 1977, P.L. 91-173 as amended by P.L. 95-164, §§ 101, 102, 103, 202, 203, 204, 205, 206, 301, 501, 502, 508 and PL 95-239 § 19 (30 USC 904), Federal Fire Prevention and Control Act, § 209, (29U.S.C.671(a)), Radiation Exposure Compensation Act, §§ 6 and 12(42U.S.C.2210), Housing and Community Development Act of 1972 §1021 (15 U.S.C. 2685), Energy Employees Occupational Illness Compensation Program Act (2000) 42 U.S.C. 7384, et. Seq. (as amended), Floyd D. Spence National Defense Authorization Act §§ 3611, 3612, 3623, 3624, 3625, 3626 of P.L. 106-393, National Defense Authorization Act for Fiscal Year 2006, PL 109-163, Toxic Substances Control Act (15 USC 2682), Prohibition of Age Discrimination Act (29 USC 623), Mine Improvement and New Emergency Response Act of 2006 (MINER Act), P.L. 109-236 (29 U.S.C. 671, 30 U.S.C. 963 and 965) §§ 6, 11 and 13FY 2009

Authorization..... Indefinite

Allocation Methods.....Direct
Federal/Intramural; Competitive Grant/Cooperative Agreements; Contracts; Other

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

The National Institute for Occupational Safety and Health (NIOSH), established by the Occupational Safety and Health Act of 1970, is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. Despite improvements in workplace safety and health over several decades, on average, nearly 16 workers in the U.S. die each day from injuries sustained at work, and 134 die from work-related diseases. NIOSH works to prevent the burden of workplace injury and illness by providing research, information, education, and training in the field of occupational safety and health (OSH).

NIOSH is a professionally diverse organization with staff representing a wide range of disciplines including epidemiology, medicine, industrial hygiene, safety, psychology, engineering, chemistry, and statistics. NIOSH scientists work in multidisciplinary teams and carry out a focused program of intramural and extramural research to prevent or reduce work-related injury and illness. The NIOSH research program is aligned with the National Occupational Research Agenda – a research framework established in 1996 to guide the efforts of the occupational safety and health community. NORA addresses the key OSH challenges in today's workplace utilizing a sector-based approach. NORA aligns the efforts of NIOSH, and other government agencies, academia, labor and industry

to more effectively translate research findings, technologies, and information into prevention practices and products to be implemented in the workplace.

As a result of its 2004 PART review, CDC contracted with the National Academies (NA) to conduct a comprehensive review of its OSH research programs. Evaluation criteria were established by the NA Framework Committee in FY 2005. In FY 2006 and early FY 2007, NA Evaluation Committees reported favorably on the hearing loss and mining research programs. Currently in progress or soon to begin are reviews of the respiratory disease, agriculture, fishing and forestry, traumatic injury, health hazard evaluation, protective technology, and construction programs. Results of these reviews will provide insight into the overall relevancy of the programs and their impact on occupational safety and health.

The Institute continues to implement the use of performance information to improve program direction, allocate resources and develop annual budgets. CDC is also continuing to track and assess performance of specific programs, including increasing accessibility of respirators to firefighters and first responders and reducing overexposure to respirable coal dust and fatalities and injuries in roadway construction.

Education and Research Centers (ERCs) –CDC has established partnerships with 52 academic institutions that comprise the academic network responsible for the nation's OSH training infrastructure. CDC funds 17 University-based ERCs to train occupational safety and health specialists. The ERCs are located in 17 states, representing each HHS Region: AL, OH, CA (two ERCs), CO, MA, IL, MD, IA, MI, MN, NY and NJ, NC, FL, TX, UT, WA. The Centers provide academic and research training for core programs in occupational medicine, occupational health nursing, industrial hygiene, and occupational safety, as well as closely related fields such as agricultural safety and health, occupational epidemiology, occupational injury prevention, and occupational health services research. In addition to ERCs, CDC also funds 35 Training Project Grants (TPGs) in academic institutions across the country for single discipline graduate training in select OSH fields.

- Based on preliminary FY 2007 data, ERC and TPG grantees enrolled more than 1,300 full-time trainees in their academic programs and produced over 400 OSH specialty graduates to enhance the workforce and provide worker health protection.
- Through its ERCs and TPGs, CDC has funded over 1,300 continuing education courses (also based on preliminary FY2007 data). State-of-the-art knowledge to prevent injuries, illnesses, and fatalities in workplaces was delivered to over 30,000 practicing professionals participating in these courses.

The FY 2009 request includes \$19,234,000 for Education and Research Centers, which reflects a decrease of \$2,191,000 from the FY 2008 Enacted level which includes \$460,000 for ILA and administrative costs.

Personal Protective Technology/Respirator Certification – CDC continues to conduct a respirator certification program to ensure respiratory protective equipment conforms to established regulatory standards, processing 430 approvals in 2007. Among these were 15 respirators for occupational use by emergency responders against CBRN agents; including eight self-contained breathing apparatus (SCBA), three air-purifying respirators, and four air Powered Air Purifying CBRN respirators. CDC also coordinated with FPDA in supporting FDA's standards for a public use respirator for pandemic flue use. In addition, CDC installed a CBRN Laboratory Respirator Protection Level testing chamber to improve the timing and decrease the expense of CBRN testing.

National Occupational Research Agenda (NORA) - The Institute also accomplishes its mission by establishing goals through the National Occupational Research Agenda (NORA). Introduced in 1996 as the largest stakeholder-based research agenda in the U.S, NORA has been the research

framework guiding occupational safety and health (OSH) research for CDC and the nation for the past ten years. CDC has now entered the second decade of NORA (NORA II), and is building on past successes in designing research to address the 21st century workplace. CDC and its partners have formed eight Sector Research Councils and each is working to draft sector-based research goals and objectives to be shared for public comment in FY 2008. Following the release of the goals and objectives, the NORA Research Councils will develop action plans to provide guidance to the entire OSH community on moving research findings, technologies, and information into highly effective prevention practices and products that are adopted in the workplace.

The FY 2009 request includes \$99,235,000, a decrease of \$10,654,000 below the FY 2008 Enacted level, which includes \$280,000 for Individual Learning Account (ILA) and administrative costs.

Mining Research – CDC targets high-priority issues affecting mineworkers, as defined by stakeholder and surveillance data. The Mining Research Program is defined by a goal-driven strategic plan with performance measures, and addresses a range of safety and health issues in addition to disaster prevention and response. The Institute has developed research partnerships with industry, labor, and government organizations to solve significant mining safety and other health and safety problems, including disaster prevention, dust monitoring, noise control, diesel emissions control and ground control.

In FY 2006 and FY 2007 CDC received \$23,000,000 in supplemental funding to implement the mandates of the Mine Improvement and New Emergency Response Act (MINER Act). Currently, CDC has:

- Established a permanent Office of Mine Health and Safety within CDC, which has oversight and leadership for mining health and safety research within CDC;
- Established an interagency working group to provide a formal means of sharing non-classified technology that would apply to mine safety
- Conducting research and field tests concerning the utility, practicality, survivability, and cost of various refuge alternatives.
- Developed a mix of contracts to facilitate the rapid movement of new technologies for communications, tracking, and oxygen supply into underground coal mines.

As directed by the Federal Coal Mine Health and Safety Act, CDC conducts the Coal Workers' Surveillance Program to aid in the prevention of coal workers' pneumoconiosis (CWP) and other potentially fatal, dust-induced diseases. CDC provides free chest X-rays to underground miners and certifies physicians in the classification of chest X-rays to detect and assess the severity of CWP. In areas with reports of CWP among young or short tenure miners and/or rapidly progressive disease, CDC, in cooperation with MSHA, carries out an early detection and prevention program using a Mobile Occupational Safety and Health Unit. CDC also conducts studies to improve the technology used to screen coal miners for CWP, and identifies/develops strategies to prevent or reduce the incidence and progression of the disease. These activities are critical for preventing, tracking and responding to CWP and protecting the health and safety of miners.

Significant accomplishments in Mining Program include:

- Rock falls have accounted for almost 30 percent of the fatalities in coal mines over the past five years. CDC research has identified the use of welded wire screen as the single most effective surface control to prevent rock falls between bolts. In response to these findings, CDC initiated the rock fall prevention initiative in 2000 which included an intensive research and educational program aimed at informing the mining community of the magnitude of the rock fall problem and identifying and publicizing "best practices" for prevention – the use of

surface controls. Prior to 2000, the rock fall injury rate in U.S. underground coal mines had held relatively steady for at least 6 years. The rate has now fallen over the last four years to a level about 25 percent below its former plateau. The improvement can be attributed in part to an increased awareness of the rock fall problem and an increased use of surface control systems.

- Research that was initiated after the coal mine disaster in Alabama in 2001, where 13 miners lost their lives, included the development of a coal dust explosibility meter (CDEM). Research on the application of the meter for rapid and accurate assessment of potentially explosive mixtures of coal dust has been successful in laboratory experiments and a collaborative study with MSHA inspectors assessing the field worthiness of the meter has been completed successfully. The CDEM is currently undergoing testing for MSHA certification, and a manufacturer is prepared to produce commercial quantities after approval is obtained. This technology was awarded the prestigious Research and Development 100 award in 2006.

The FY 2009 request of \$37,064,000 for Mining Research reflects a decrease of \$12,062,000 from the FY 2008 Enacted level which includes \$884,000 for ILA and administrative costs.

World Trade Center –The World Trade Center (WTC) Monitoring and Treatment Program was established to serve WTC responders (workers and volunteers who provided rescue, recovery, clean-up and restoration of essential services), affected by the attacks on to the September 11, 2001. In addition to addressing the health needs of individuals, this program ensures that there will be scientific reporting to provide us with a better understanding of the physical and mental health effects arising from the WTC attack.

The WTC Monitoring and Treatment consists of six clinical centers (CC) and two data and coordination centers (DCC) that provide patient tracking, standardized clinical and mental health screening, treatment, and patient data management. The Fire Department of New York (FDNY) manages the DCC and CC that serve the firefighters and emergency medical service personnel. The Mount Sinai School of Medicine manages the other DCC and coordinates a five-clinic consortium in the New York City (NYC) metropolitan area to collect and analyze data on all other responders. Enrollees in the WTC Program who are not located in the NYC Metropolitan Area, receive monitoring and treatment via a national network of clinics managed by QTC, Inc. and the Association of Occupational and Environmental Clinics (AOEC), respectively.

As of November 1, 2007, approximately 49,000 responders have enrolled in the WTC Monitoring and Treatment Program. Of those enrolled, 37,570 responders have been screened, approximately 8,000 have received treatment for physical health conditions, and more than 5,000 have been treated for mental health conditions. Since October 2006, enrollment has increased at a rate of about 500 new enrollees per month. The total number of responders eligible for the program is unknown.

NIOSH supports the program's DCCs and CCs via grant funding. Grant awards are determined by the size of the cohort to be served and the services to be provided. In addition to supporting the DCCs and CCs, NIOSH has also awarded grants to the NYC Police Foundation's Project COPE and the Police Organization Providing Peer Assistance (POPPA), as mandated. These programs provide mental health services to the police responder population.

The WTC Monitoring and Treatment Program, Project COPE and POPPA address the immediate need to assess and treat WTC related conditions. The data collected and analyzed will help define the long term health care needs for the exposed population, and also provide important information on the consequences of air pollutants, physical stressors, emotional stress, musculoskeletal exertions, and other occupational and environmental measures.

The FY 2009 request includes \$25,000,000 reflects a decrease of \$83,083,000 from the FY 2008 Enacted level.

Other Occupational Safety and Health Research - Other key activities include:

Manufacturing – CDC is actively participating in a government-wide program to ensure that the U.S. remains a world leader in nanotechnology research and development. In 2005, CDC designated an additional \$0.5 million for the expansion of the Nanotechnology Health and Safety Program, under NORA. This initiative will study the toxicity and health impact of a range of nanomaterials.

- CDC is working with its national and international partners to develop a web-based Nanoparticle Information Library (NIL). This searchable database will help occupational health professionals, industrial users, worker groups, and researchers organize and share information on nanomaterials, including their health and safety-associated properties.
- CDC is developing a strategic plan to address immediate and long-term issues associated with nanotechnology and occupational health in partnership with other federal agencies, research centers and industry participating in the National Nanotechnology Initiative and the Nanoscale Science, Engineering and Technology subcommittee of the National Science and Technology Council Committee on Technology (NSET).

Transportation – Motor vehicle-related incidents are consistently the leading cause of work-related fatalities in the U.S. Although most work-related motor vehicle-related injuries and fatalities can be attributed to Transportation sector, these incidents frequently threaten the health and safety of workers across many sectors. In response, CDC initiated the multidisciplinary Occupational Motor Vehicle Safety and Health Research Program under NORA to address topics such as ambulance crash survivability, the influence of fatigue in truck drivers, and the risk factors for vehicle crashes among public employees. CDC also actively engages employers to promote motor vehicle safety by providing technical assistance and disseminating Hazard Alerts and Fact Sheets that present practical prevention strategies in both English and Spanish.

Agriculture – Agriculture ranks among the most hazardous industries. CDC conducts a national program in agricultural safety and health that includes both intramural and extramural components. Studies range from assessing pesticide exposure among farm families to developing technology designed to reduce injuries due to tractor rollovers. To further enhance these efforts in FY 2006, CDC funded ten Agricultural Safety and Health Centers that are located throughout the nation to be responsive to issues unique to the different regions.

Construction – In 2007, CDC continues to work with key construction safety and health partners to coordinate research, evaluate the effectiveness of interventions, and disseminate interventions that emerge as best practices. As part of its focus on the building and construction industry, CDC pursues both intramural and extramural research on construction fatalities.

Healthcare & Social Assistance – CDC has identified and addressed a number of hazards to workers in the healthcare and social assistance sector:

- In partnership with labor, industry, government and academia, CDC drafted guidelines to reduce hospital workers exposure to hazardous drugs, and successfully promoted for their adoption by CDC policy makers, Joint Commission for Accreditation of Healthcare Organizations (JCAHO) survey program, United States Pharmacopoeia (USP) regulatory chapter (797), Food and Drug Administration (FDA), and in clinical settings.
- In partnership with private sector and public sector U.S. hospitals, organized labor, private and public sector health and safety researchers, and international researchers, and with cooperation from manufacturers of footwear, flooring and floor wax, CDC developed and

tested a program of “best practices” that reduced slips, trips and falls by an estimated 25 percent in the five acute care hospitals studied.

- CDC conducted a nation-wide survey and an intervention study of the effects of extended work hours on physician intern health and safety. The findings showed a statistically significant increase of two to five times in the probability of an intern having a crash driving home after an extended shift and the probability of making a serious diagnostic error. These results have prompted a reassessment of shift durations during intern training.

Health Hazard Evaluation Program – Through the Health Hazard Evaluation (HHE) Program, CDC conducts studies of workplaces in response to requests from employers, employees and their representatives, and government agencies. The program allows CDC the opportunity to obtain information on occupational exposures where standards are lacking or do not protect all workers. Workplace exposures studied include chemicals, biological agents, work stress, noise, radiation, and ergonomic stressors. At no cost to the employer, NIOSH evaluates the workplace environment and the health of employees by reviewing records and/or conducting on-site testing and provide recommendations to address workplace health hazards. More than 12,000 HHEs have been completed since the inception of the program in 1971. Adoption of recommendations made by the HHE program have had a significant impact on worker safety and health, for example:

- The HHE Program received a request from the Occupational Safety and Health Bureau of a state’s Division of Labor to investigate reported health effects at a turkey processing plant. Employees in the evisceration department of the plant were experiencing symptoms such as eye and respiratory irritation. During the site visit, CDC HHE investigators observed work tasks and processes; evaluated air flow patterns; administered questionnaires regarding medical, job and personal history, and work-related symptoms; did lung function testing of workers; and sampled the air in the plant. The results suggested a link between chlorinated compounds and upper respiratory irritation. HHE investigators recommended improving the plant’s ventilation system. Recommended changes were made and, when HHE investigators returned to the plant, the prevalence of the various symptoms evaluated had decreased between 13 percent and 44 percent.

Research to Practice – In 2004, CDC established the Office of Science Policy and Technology Transfer to ensure that all OSH research funded by the agency (both intramural and extramural) is focused on the application of the research findings to prevent work-related illness or injury. This is accomplished by facilitating partnerships throughout the entire research process so that findings are amenable to implementation; bringing interventions to market; transferring knowledge and products to employers, workers and policy makers; and evaluating programs for their impact. Now, all new projects funded under NORA must be consistent with the research-to-practice principles. Recent results of our focus on translating research findings into practice include the following:

- CDC engineers have designed and developed a new noise dosimetry system to assess and evaluate exposure to impulsive noise. Currently, commercial noise dosimeters are not capable of measuring exposure to impulsive noise accurately. CDC has partnered with a leading instrument manufacturer to implement the new technology into their next generation of dosimeters that will enable OSH professionals to assess the potential hazard of impulsive noise.

On December 26, 2006, three CDC employees received U.S. Patent Number 7,152,919 for the “Wearable Kneel-Sit Support Device.” The device is a product of research on ergonomic interventions in the shipbuilding and repair industries.

The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) – EEOICPA provides compensation to employees or survivors of employees of Department of Energy (DOE) facilities and private contractors who have been diagnosed with a radiation-related cancer, beryllium-related disease or chronic silicosis as a result of their work in producing or testing nuclear weapons. CDC's NIOSH estimates occupational radiation exposure for certain cancer cases, considers and issues determinations on petitions for adding classes of workers to the Special Exposure Cohort (SEC), and provides administrative support to the Advisory Board on Radiation and Workers Health (ABRWH).

To assist the DOL in making compensation determinations, CDC estimates individuals' occupational exposure to radiation by conducting dose reconstructions. Secondly, CDC accepts petitions to add classes of employees to the SEC. The SEC allows eligible claims to be compensated without the completion of a radiation dose reconstruction or determination of the probability of causation.

CDC also provides administrative support to the ABRWH. To assist the ABRWH in carrying out its responsibilities under the Act, CDC has awarded a technical support contract. The contractor will be reviewing a sample of completed individual dose reconstructions to evaluate their scientific validity and quality, review completed site profiles, SEC evaluations, and ensure that CDC is following dose reconstruction procedures as outlined in the rule.

In addition, CDC has requested an additional \$55,358,000 in mandatory funding to support the statutory requirements as outlined in EEOICPA. Prior to FY2009, funding for CDC activities under EEOICPA was provided by the Department of Labor (DOL) through an interagency agreement

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$233,762,000
FY 2005	\$251,241,000
FY 2006	\$262,883,000
FY 2007	\$315,100,000
FY 2008	\$381,954,000

BUDGET REQUEST

The FY 2009 budget request for occupational safety and health is \$271,053,000 a decrease of \$110,901,000 below the FY 2008 Enacted which includes \$4,378,000 for Individual Learning Account and administrative costs. This request includes \$25,000,000 for World Trade Center. The funds appropriated will be used to conduct occupational safety and health research, develop recommendations for the prevention of work-related injury and illness, and provide medical monitoring and treatment for those affected by the WTC attack. These activities will support the Institute's overarching goal to reduce occupational injuries, illnesses and fatalities. NIOSH has received over \$125,000,000 in Emergency Supplemental Funding between FY 2006 and FY 2008 to accomplish these activities.

In addition, CDC has requested \$55,358,000 in mandatory funding to support the statutory requirements as outlined in EEOICPA.

Addressing workplace safety and health poses numerous challenges given changes in the way work is organized, the introduction of new chemicals and work processes, the wide variety of workplace settings with unique hazards and needs, and an increasingly diverse workforce. CDC is working diligently to address both new and historic threats to worker safety and health. The Institute is currently pursuing three key approaches that demonstrate great promise in reducing the burden of work-related injury, disease, and death in this country:

- The FY 2009 request of \$99,235,000 for the NORA reflects a decrease of \$10,654,000 from the FY 2008 Enacted level which includes \$280,000 for ILA's and administrative costs. NORA is pursuing an industry sector-based approach to move research results into workplace practice and to ensure the most direct connection possible with workers, business, and other partners.
- Second, the Research to Practice (r2p) initiative is focused on the transfer and translation of research findings, technologies, and information into highly effective prevention practices and products which can be adopted immediately into the workplace. The two basic tenets of r2p are involving partners or stakeholder throughout the research process – conceiving, planning, conducting, translating, and evaluating research – and conducting research projects that have the greatest potential for impact in the workplace.
- Third, the comprehensive NA review of CDC programs will assist the NIOSH in targeting new research to areas most relevant to future improvements in workplace protection. Key recommendations from each review will help guide the program's future research and transfer activities. NORA, r2p and the NA reviews will assist CDC in establishing priorities and making a greater impact on worker safety and health.

OUTCOME TABLE

				FY 2006						Out year Target	
Long-Term Objective 12.2: Promote Safe and Healthy Workplaces through interventions, recommendations and capacity building.											
12.2.3	Reduce occupational illness and injury as measured by: A) Percent reductions in respirable coal dust overexposure. B) Percent reduction in fatalities and injuries in roadway construction. C) Percent of firefighters and first responders' access to chemical, biological, radiological, and nuclear respirators. [O]	N/A, Long-Term PART Measure FY 2003 Baseline: A) >15% B) 154 fatalities C) 7%	N/A, Long-Term PART Measure	N/A	N/A, Long-Term PART Measure	N/A	N/A, Long-Term PART Measure	N/A, Long-Term PART Measure	N/A, Long-Term PART Measure	FY 2014: A) 50% reduction B) 40% reduction C) 75 % reduction	
12.2.4	Percentage of: A) Companies employing those with NIOSH training that rank the value added to the organization as good or excellent. B) Professionals with academic or continuing education training. [O]	N/A, Long-Term PART Measure FY2003 Baseline: A) 68% B) 1,405 full-time academic trainees; 31,508 continuing education trainees	N/A, Long-Term PART Measure	N/A	N/A, Long-Term PART Measure	N/A	N/A, Long-Term PART Measure	N/A, Long-Term PART Measure	A) 80% B) Increase of 15%	N/A	

OUTPUT TABLE

						FY 2007				FY 2009 Estimate
Long-Term Objective 12.1: Conduct research to reduce work-related illnesses and injuries.										
12.1.1	Progress in targeting new research to areas of occupational safety and health (OSH) most relevant to future improvements in workplace protection.	Finalized arrangements with NA for reviews	Evaluate first 1/5 of NIOSH projects with 80% rating - Met	Evaluate second 1/5 of NIOSH projects with 80% rating	Met	Evaluate third 1/5 of NIOSH projects with 80% rating (met)	12/2008	Evaluate fourth 1/5 of NIOSH projects with 80% rating	Evaluate final 1/5 of NIOSH projects with 80% rating	
12.2.3	Percentage of NIOSH programs that will have completed program-specific outcome measures and targets in conjunction with stakeholders and customers.	N/A	36%	50%	52%	50%	61%	70%	80%	
Long-Term Objective 12.2: Promote safe and healthy workplaces through interventions, recommendations and capacity building.										
12.2.1	Increase the percentage of CDC NIOSH-trained professionals who enter the field of occupational safety and health after graduation.	75%	80%	80%	80%	80%	85%	80%	80%	
12.2.2	Reduce the annual incidence of work injuries, illnesses, and fatalities, in targeted sectors. [O] ¹ A) Reduction of non-injuries among youth ages 15–17. B) Reduction of fatal injuries among youth 15–17.	A) 9.6% B) 35.7% C) 9.0%	A) 21% B) 23% C) 185%	A) 7% B) 9% C) 5%	A) 15% B) 9% C) 0%	A) 15% B) 30% C) 90% (revised)	A) 15% B) 43% C) 94%	A) 15% B) 30% C) 90% (revised)	A) 4.4/100 FTE B) 3.0/100,000 FTE C) 90% (revised)	
Other Occupational Safety and Health Outputs										
12.A	Safety and Health Patent Filings	6	5		5	5	5	5	5	
12.B	Certification Decisions Issued for Personal Protective Devices and Hygiene Instruments Evaluated for Certification	450	450		450	450	537	550	500	

NARRATIVE BY ACTIVITY
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

						FY 2007			FY 2009 Estimate
12. C	Estimated Academic Graduates	500	565		550	525	461	460	460
12. D	Health Hazard Evaluations/Fatality Assessment and Control Evaluations	535	585		585	450	489	500	450
12. E	Number of Research Articles Published in Peer-Review Publications	250	262		200	200	292	250	250
12. F	Agricultural Centers	10	10		10	9	8	9	9
12. G	Research Grants	170	182		180	180	155	170	155
12. H	Training Grants	55	55		55	53	51	51	50
12.I	Number of States Receiving Public Assistance	35	35		35	41	37	37	35
Appropriated Amount (\$ Million) ¹		\$233.8	\$251.2	\$262.9		\$315.1		\$382.0	\$271.1

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

GLOBAL HEALTH

BA	\$307,497,000	\$302,371,000	\$302,025,000	-\$346,000
FTE	91	94	93	-1

SUMMARY OF THE REQUEST

Since 1958, beginning with CDC's work in malaria control, following with a focus on cholera and smallpox outbreaks, the scope and nature of CDC's global engagements have changed dramatically. The agency's global health mandate has expanded to include other diseases and conditions, and also added the goal of protecting the U.S. and world population from emerging global threats.

CDC's Coordinating Office for Global Health (COGH) provides leadership and works with partners around the globe to increase life expectancy and years of quality of life, especially among those at highest risk for premature death, particularly vulnerable children and women; and, to increase global preparedness to prevent and control naturally occurring and man-made threats to health.

The CDC FY 2009 request includes \$302,025,000 for global health, a decrease of \$346,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. This includes:

- \$118,727,000 for Global Aids Program (GAP). GAP will use these funds to address the HIV/AIDS epidemic and conduct activities under the President's Emergency Plan for AIDS Relief (PEPFAR) in 15 focus countries for treatment of two million people.
- \$139,691,000 for Global Immunization Program. Funds will be used to purchase 220 million doses of oral polio vaccine (OPV) for use in mass immunization campaigns in Asia, Africa, and Europe as part of global polio eradication efforts, and to purchase 66 million doses of measles vaccine for use internationally to reduce global measles-related mortality.
- \$31,409,000 for Global Disease Detection (GDD). Funds will be used to protect the health of Americans and the global community by developing and strengthening global, regional, and local public health capacity to rapidly detect and effectively respond to infectious disease outbreaks and other emerging health threats.
- \$8,686,000 for Global Malaria Program. Funds will be used to support the prevention and control of malaria throughout the world by providing technical assistance in malaria control through the President's Malaria Initiative (PMI) in 15 countries, and by providing technical assistance for malaria research and control to 10 non-PMI countries.
- \$3,512,000 for Other Global Health Activities. These funds are used to support two programs: The Field Epidemiology (& Laboratory) Training Program (FE(L)TP) and the Sustainable Management Development Program (SMDP). Through these programs, foreign Ministries of Health (MOHs) acquire the means to build their own programs and capacity to improve public health on a local, regional, and national level, ultimately leading to improved health on a global scale.

GLOBAL AIDS PROGRAM

				FY 2009 +/- FY 2008
BA	\$120,985,000	\$118,863,000	\$118,727,000	-\$136,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341, Foreign Assistance Act of 1961 §§ 104, 627, 628, Federal Employee International Organization Service Act § 3, International Health Research Act of 1960 § 5, Agriculture Trade Development and Assistance Act of 1954 § 104, Economy Act, 22 U.S.C. 3968 Foreign Employees Compensation Program, 41 U.S.C. 253 International Competition Requirement Exception, P.L. 107-116 sec. 215, HR 5656 § 220 FY 2001 Appropriations Bill.

FY 2009 Authorization.....Indefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grants/Cooperative Agreements; Direct Contracts; Interagency Agreements

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

In 2000, CDC created the Global AIDS Program (GAP). Currently, the program supports national HIV/AIDS programs in more than 60 countries in Africa, Asia, Central and South America, and the Caribbean through its country and regional offices. GAP assists resource-constrained countries to prevent HIV infection; improve treatment, care and support for people living with HIV; and, build vital capacity and infrastructure to address the global HIV/AIDS epidemic. HIV/AIDS continues to be one of the most severe health challenges today. The latest UNAIDS report estimates more than 33 million infected people worldwide including approximately 2.5 million new infections in 2007.

In January 2003, President Bush announced the President's Emergency Plan for AIDS Relief (PEPFAR) and called on Congress to provide an unprecedented \$15 billion multi-faceted approach to combating the disease around the world. GAP plays a vital role in helping to meet the PEPFAR goals of preventing seven million new HIV infections, supporting treatment for two million HIV-infected persons, and supporting care for ten million individuals infected or impacted by HIV.

When PEPFAR was announced, only 50,000 patients received antiretroviral treatment (ART) in all of sub-Saharan Africa. As of December 2007, PEPFAR has supported life-saving ART for approximately 1.4 million men, women, and children through bilateral programs in countries in sub-Saharan Africa, Asia and the Caribbean. Aiming to build on this successful foundation, on May 30, 2007, President Bush announced his intention to work with Congress to reauthorize PEPFAR for an additional five years. The five-year, \$30 billion proposal would double the United States initial \$15 billion commitment made in 2003. The Administration plans to continue to support PEPFAR with funding requested in FY 2009. GAP will continue to provide critical support for this new five-year phase.

GAP works in partnership with other US Government agencies (USG), contributing unique scientific and technical expertise to PEPFAR, and serving as a link to other CDC global health programs, including global disease detection, public health training, and prevention and control of other infectious diseases such as malaria and tuberculosis.

GAP primarily provides direct scientific and technical support to Ministries of Health (MOH), partner organizations, and other USG agencies to strengthen national public health systems. GAP's highly trained physicians, epidemiologists, public health advisors, behavioral scientists, and laboratory scientists GAP staff contributes to cutting-edge science and research translation through their work in critical technical areas, including:

- Surveillance
- Program evaluation and other strategic information
- Laboratory capacity building and networks
- National policy and guidelines development
- HIV prevention; counseling and testing, and
- Facility-based care and treatment

Currently, GAP has over 100 direct hire staff and over 1,000 locally-hired staff implementing HIV/AIDS prevention, care and treatment programs in nearly 30 field offices. GAP supports more than 30 additional countries through short-term technical assistance from Atlanta; financial support to multilateral organizations like UNAIDS; and through regional support from our field offices. Additionally, GAP facilitates transfer of critical technical assistance between developing countries. Significant accomplishments in FY07 include:

- *Rapid Scale-up of Care and Treatment Programs* - GAP collaborated with the Health Resources and Services Administration (HRSA) to support four centrally funded partners to rapidly scale-up care and treatment programs in 13 PEPFAR countries. This support enabled partners to expand activities in areas such as human resources, drug procurement and management, rehabilitation of laboratory and clinic facilities, training, linkage of HIV programs, and program sustainability. This activity contributes to 20-25 percent of all people receiving ART under PEPFAR.
- *HIV Rapid Test Training Package* - Assuring access to quality HIV testing is a necessary first step in reaching the country targets set by PEPFAR for both prevention of HIV infection and treatment of HIV-infected persons. To meet the rapidly growing demand for a well-trained and competent workforce to conduct HIV rapid tests, GAP staff, along with others at CDC and the World Health Organization (WHO), developed a comprehensive HIV Rapid Testing Training Package to equip individuals with the necessary knowledge and skills to perform their jobs. The team is confirming correct implementation and quality assurance through site visits.
- *Strategic Information/Monitoring and Evaluation Field Corps* - GAP helped establish the Strategic Information/Monitoring and Evaluation Field Corps to build capacity in surveillance, monitoring, and evaluation in countries supported by the USG, UNAIDS, WHO, the Global Fund, and the World Bank.
- *Prevention of Mother-to-Child Transmission (PMTCT) Resources* - GAP staff collaborated with various international agencies and local partners to develop the *Prevention of Mother-to-Child Transmission of HIV Generic Training Package*, which is an evidence-based training course easily adaptable to include country-specific policies and guidelines to support the scale-up of PMTCT services.
- *TB/HIV Training Curriculum* - GAP staff developed a diagnostic HIV counseling and testing (DCT) training curriculum (addressing administrative, operational, and clinical issues) to be implemented in TB clinics. This curriculum was recently piloted and evaluated in three districts in Tanzania and will be rolled out in all Emergency Plan countries.

- *Improvements in HIV Surveillance* - To improve the collection and analysis of data, GAP staff worked with both WHO and UNAIDS to develop guidelines on HIV sentinel surveillance and assist countries to develop procedures to standardize HIV sentinel surveillance systems, write protocols for HIV sentinel surveillance, train for data collection, and assist with data cleaning and data analysis.

In 2005, OMB conducted a PART review of PEPFAR and received a rating of “Adequate.” The Office of Global AIDS Coordinator (OGAC) of the U.S. Department of State coordinated the review, which included activities by HHS, CDC/GAP, and other federal agencies. OMB found that several aspects of the Global Fund’s financial management practices require review and strengthening. OGAC is conducting an evaluation of technical assistance provided directly by OGAC for Global Fund grants and working to improve its performance-based systems to include reporting on program activity by budget amount and reporting on sub-recipient activity. GAP has included performance measures for focus programs and other bilateral programs that reflect the USG-wide efforts under PEPFAR.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$266,864,000
FY 2005	\$123,830,000
FY 2006	\$122,560,000
FY 2007	\$120,985,000
FY 2008	\$118,863,000

BUDGET REQUEST

The CDC FY 2009 request includes \$118,727,000 for the Global Aids Program, a decrease of \$136,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

CDC will continue to support core GAP activities, with the majority of these funds transferred to state country programs, and a small amount retained at headquarters for technical assistance and support to country programs.

In addition to the funding received through the Labor HHS appropriation, CDC receives support for PEPFAR through the State Department’s Global HIV/AIDS Initiative (GHAi) account. The State Department’s Office of the Global AIDS Coordinator (OGAC) has primary responsibility for the oversight and coordination of all USG global HIV/AIDS spending, and strategically leverages the particular strengths of all USG agencies involved in HIV/AIDS interventions. GHAi funds allocated to GAP are determined through the PEPFAR Country Operational Plan process.

In FY2009, GAP will continue its HIV/AIDS activities in conjunction with other PEPFAR implementing agencies. Some key objectives for FY 2009 include:

- Provide technical assistance and support to PEPFAR country programs for the delivery of ART to adults and children; prevention, diagnosis, and treatment of opportunistic infections (OI) including tuberculosis (TB); and prevention of mother-to-child transmission of HIV (PMTCT). In addition, GAP will support a sustainable approach to care and treatment as well as address the challenge of early identification and treatment of infants and children to assure them a healthy future. In FY 2009, HIV/AIDS treatment will be provided to 2,000,000 individuals.
- Provide systematic training, guidance, and support for GAP staff, MOH, and PEPFAR partners on HIV diagnostics, HIV incidence testing, hematology, chemistry, TB/opportunistic

infection (OI) testing, ART resistance testing, dried blood spot polymerase chain reaction (DBS-PCR) for early infant diagnosis, viral load monitoring, and laboratory testing quality assurance.

- Support PEPFAR country programs in five HIV/AIDS prevention areas: 1) Counseling and Testing; 2) HIV Infected Individuals and Families; 3) Medical Transmission; 4) High Risk Sexual Transmission; and 5) Drug Using Populations.
- Support the implementation of new biomedical interventions to prevent HIV infection, beginning with medical circumcision, and eventually including other proven interventions, when available.
- Support epidemiology and laboratory training – GAP staff work in close concert with HHS/CDC's Field Epidemiology and Laboratory Training Programs and Sustainable Management Development Program to effectively train public health professionals around the world in epidemiology, laboratory, and management sciences. These programs support newly trained professionals to train thousands of their peers in MOH and partner organizations, contributing exponentially to the capacity of health systems in PEPFAR countries.
- Build laboratory capacity in collaboration with HHS/CDC and other partners, developed rapid HIV testing protocols, conducted field trainings on an incidence based assay for HIV surveillance, and served as a reference laboratory for diagnostic testing and incidence testing issues. Staff also provides training for pediatric HIV diagnosis; supported HIV drug resistance surveillance; evaluated new testing technologies; and helped develop quality assurance programs.
- Facilitate the monitoring of outcomes and the impact of PEPFAR and other international efforts at the national level, and support surveys and monitoring and evaluation systems that measure HIV prevalence, changes in HIV-related behavior, and health status among individuals and at the population level.
- Contribute to the broader scientific body of knowledge in global public health; ensure that scientific integrity, excellence, and public health ethics are maintained in PEPFAR activities; and provide leadership on PEPFAR's Public Health Evaluation (PHE) agenda.
- Provide scientific and technical expertise to PEPFAR, as well as serve as a linkage to other CDC global health programs, including global disease detection, public health training, and prevention and control of other infectious diseases such as malaria and tuberculosis.

OUTCOME TABLE

						FY 2007				FY 2015 Target
Long-Term Objective 13.A.1: GAP will help implement PEPFAR in 15 focus countries by partnering with other USG agencies to achieve the goals of treating 2 million HIV-infected people and caring for 10 million people infected with or affected by HIV/AIDS by 2008, and preventing 7 million new HIV infections by 2010.										
13.A.1.1	Number of people receiving HIV/AIDS treatment	235,000	401,233	665,000	822,000	860,000	1,358,375 (Exceeded)	1,300,000	2,000,000	NA
13.A.1.2	Number of individuals provided with general HIV-related palliative care/basic health care and support during the reporting period, including TB.	854,800	1,397,555	2,496,157	2,464,063	3,130,341	3,901,543 (Exceeded)	NA	NA	NA
13.A.1.3	Number of pregnant women receiving PMTCT services, including counseling and testing during the reporting period.	1,271,300	1,957,932	2,100,292	2,837,409	2,916,379	4,011,797 (Exceeded)	NA	NA	NA
13.A.1.4	Number of individuals who received counseling and testing during the reporting period (counseling includes the provision of test results to clients).	1,791,900	4,653,257	5,590,762	6,426,120	7,671,789	10,580,699 (Exceeded)	NA	NA	NA
Long-Term Objective 13.A.2: GAP will help implement PEPFAR in other bilateral countries by partnering with other USG agencies, international and host country organizations to achieve the goals of preventing new HIV infections, treating HIV-infected people, and caring for people infected with or affected by HIV/AIDS.										
13.A.2.1	Number of individuals receiving ART at the end of the reporting period (includes PMTCT+sites)	20,774	69,766	43,859	165,964	306,053	276,965 (Unmet)	393,349	NA	NA
13.A.2.2	Number of individuals trained to provide laboratory-related activities	1,488	1,772	1,770	6,252	4,652	3,988 (Unmet)	NA	NA	NA
13.A.2.3	Number of pregnant women who received HIV counseling and testing for PMTCT and received their test results	145,133	603,913	633,185	1,108,500	TBD	TBD	NA	NA	NA
13.A.2.4	Number of individuals who received counseling and testing during the reporting period.	773,649	1,710,048	1,049,628	2,478,262	4,096,661	5,249,131 (Exceeded)	4,800,911	NA	NA

OUTPUT TABLE

						FY 2007				Out-year Target
13.A. A	Number of individuals receiving HIV/AIDS treatment in the 15 focus countries	235,000	401,233	665,000	822,000	860,000	1,358,375	1,300,000	2,000,000	NA
13.A. B	Number of focus countries conducting HIV/AIDS surveillance	NA	NA	NA	15	15	15	15	15	NA
13.A. C	Number of non-focus countries conducting HIV/AIDS surveillance	NA	NA	NA	9	9	9	9	9	NA
13.A. D	Number of persons trained in the provision of laboratory-related activities	NA	NA	NA	1130	1370	1,370	1,370	1,370	NA
Appropriated Amount (\$ Million) ¹		\$266.9	\$123.8	\$122.6		\$121.0		\$118.9	\$118.7	NA

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

GLOBAL IMMUNIZATION PROGRAM

				FY 2009 +/- FY 2008
Polio Eradication	\$99,768,000	\$98,025,000	\$97,913,000	-\$112,000
Measles/Other Global	\$42,570,000	\$41,826,000	\$41,778,000	-\$48,000
Total	\$142,338,000	\$139,851,000	\$139,691,000	-\$160,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341: Foreign Assistance Act of 1961 §§ 104, 627,628: Federal Employee International Organization Service Act § 3: International Health Research Act of 1960 § 5: Agriculture Trade Development and Assistance Act of 1954 § 104: Economy Act: 22 U.S.C. 3968 Foreign Employees Compensation Program: 41 U.S.C. 253 International Competition Requirement Exception): P.L 110-289 (1st Continuing Resolution FY07): P.L.-109-369 (2nd Continuing Resolution FY07): P.L. 109-383 (3rd Continuing Resolution FY07): P.L 110-5 (Revised Continuing Appropriations Resolution, FY07).

FY 2009 AuthorizationIndefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grant/Cooperative Agreement; Contracts

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

CDC supports global immunization initiatives to protect American children from vaccine-preventable diseases (VPDs) imported into the United States or acquired abroad, for humanitarian reasons, and to protect against the medical costs of morbidity and mortality associated with VPDs. CDC is one of the spearheading partners for the global polio eradication, measles mortality reduction, and Global Immunization Vision and Strategy (GIVS) initiatives along with a substantial network of partner agencies.

CDC's global immunization activities primarily target children under five years of age in developing countries at highest risk for polio, measles, and other VPDs – these children are at highest risk for VPDs and their most severe outcomes. Secondary targets include children from five to 15 years of age requiring additional doses of measles and other vaccines, as well as women of child-bearing age who are of specific concern for rubella and tetanus elimination initiatives.

CDC provides significant financial support through Cooperative Agreements with the World Health Organization (WHO), United Nations Children's Fund (UNICEF), the Pan American Health Organization (PAHO) and the United Nations Foundation (UNF), most notably for procurement of polio and measles containing vaccines through UNICEF. CDC operates in partnership with public and private sector partners to achieve global immunization objectives including Rotary International, American Red Cross, UNF, International Federation of Red Cross and Red Crescent Societies, Bill and Melinda Gates Foundation, WHO, UNICEF, and the World Bank. The Ministries of Health in countries play the lead role in ensuring the implementation and oversight of immunization and surveillance activities.

CDC supports implementation of key eradication, elimination, and control strategies through three major activities:

- Supplemental Immunization Activities (SIAs): to rapidly increase population immunity and limit susceptible persons that can become infected and transmit disease, and are a key strategy for our global immunization initiatives.

- Surveillance and laboratory capacity: to ensure that patterns of disease transmission are tracked and the disease data used to guide programmatic response, to evaluate the impact of immunization activities, and to document the absence of disease which will be required to certify regional and global polio eradication.
- Routine immunization strengthening: to maintain the gains achieved through polio eradication and measles mortality reduction, and lay the foundation for control of other VPDs as well as the introduction of new life-saving vaccines.

In addition, CDC provides other technical assistance and support for detection and response to outbreaks in collaboration with partner agencies and national governments.

The accomplishments and public health impact of polio and measles initiatives to date have been significant:

- Since 1988, global polio incidence has declined by more than 99 percent from more than 350,000 cases annually to 1,997 cases in 2006, and only 707 cases to date in 2007 (as of 13 November 2007). The number of endemic countries has been reduced from 125 in 1988 to four in 2006 (Afghanistan, India, Nigeria and Pakistan).
- As recently as 1999, more than 871,000 childhood deaths were attributed to measles, with the highest burden of disease in Africa. Since mid-2001, the Measles initiative in Africa has immunized over 200 million children in 33 countries and saved over 1,000,000 lives.
- The polio and measles initiatives clearly demonstrate the impact of immunizations on averting disease, disability, and death. Globally, more than five million cases of childhood paralysis have been prevented, 1.25 million deaths prevented through vitamin A supplementation during immunization activities, and 2.3 million deaths averted as a result of measles mortality reduction activities. While both polio and measles have been successfully eliminated from the Western Hemisphere, American children remain at risk for both diseases as long as they persist anywhere in the world.

The Global Immunization Program received a PART assessment in 2005. The assessment cited CDC's ability to eliminate or reduce vaccine preventable diseases overseas, recognized the well-established annual and long-term performance measures of the program, and stated that the program is meeting its efficiency goals in minimizing headquarters expenses. As a result of the PART review, CDC is taking steps to improve performance of the program by tying budget requests to the accomplishment of annual and long-term goals, and developing evaluations for the management of measles activities at domestic headquarters (Atlanta). These evaluations will provide insight on increased cost and staff efficiencies, and performance tracking and measurement to improve the overall program.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$137,903,000
FY 2005	\$144,386,000
FY 2006	\$144,282,000
FY 2007	\$142,338,000
FY 2008	\$139,851,000

BUDGET REQUEST

The CDC FY 2009 request includes \$139,691,000 for the Global Immunization Program, a decrease of \$160,000 below the FY 2008 Enacted level for an Individual Learning Account and administrative reduction.

The majority of the Global Immunization Program's funding is used to support mission-critical activities directly through CDC's global cooperative agreement partners: the WHO, UNICEF, PAHO, and UNF. The program has directed over 90 percent of its annual budget to the program, exceeding its efficiency targets for the last three years. Funds also maintain support to the global polio eradication and measles mortality reduction initiatives as well as implementation of key components of the GIVS.

CDC will continue to support these initiatives through the following:

- Funding will enable CDC to purchase 220 million doses of oral polio vaccine for use in mass immunization campaigns in Southeast Asia, Africa, and Europe as CDC works to achieve its target of zero countries endemic with polio virus in 2009. Funding will also be used to work with global partners to reduce the number of global measles-related deaths to 291,000 in 2009 (down from 777,000 in 2000).
- CDC will continue to support personnel and program operations, including:
 - Ensuring quality surveillance and laboratory capacity for polio,
 - Measles and other VPDs,
 - Successful implementation of supplemental immunization activities (SIAs),
 - Capacity for rapid response in the event of outbreaks or spread of disease, and
 - Program management and technical oversight,
- Providing epidemiologic, laboratory, and programmatic support to WHO and UNICEF, supporting evaluation and strengthening of surveillance capacity, collaborating with countries for outbreak investigations and supporting rapid response activities, as well as supporting planning, monitoring and evaluation of SIAs,
- Assigning expert staff overseas to help implement global immunization programs, and providing short-term technical assistance abroad through temporary assignments of CDC experts from Atlanta, and
- Providing expertise in virology, diagnostics, and laboratory procedures, serving as a global reference lab for polio, measles and rubella.

Key challenges the program faces in achieving goals include:

- Interrupting polio transmission in the remaining four endemic countries (India, Nigeria, Afghanistan and Pakistan) presents the greatest immediate challenge to the global polio eradication initiative. Despite significant progress in these countries, ongoing transmission is likely to delay global polio eradication until 2008. Low routine immunization coverage in the polio endemic countries presents a challenge to the eradication efforts in the most critical areas.
- Despite remarkable progress in reducing measles mortality, significant challenges remain to sustain the gains made and to achieve the goal of 90 percent mortality reduction by 2010. As global measles cases and mortality continue to decline, the visibility of measles morbidity and mortality proportionately decreases. With the declines in mortality in Africa, the disease burden in South Asia has become more recognized, especially in India and Pakistan. In 2005, 50

percent of the global measles deaths occurred in the WHO Southeast Asia Region. Introduction of accelerated measles control activities will be critical to addressing the remaining disease burden.

- Globally and regionally, routine immunization coverage has improved over the past five years. However, there remain many districts or subdistricts with very low coverage, some in the single digits for diphtheria-tetanus-pertussis (DTP3) coverage. This is widely attributed to the difficulty in reaching individuals in remote or hard-to-reach areas, economic and social barriers to service demand or delivery (extreme poverty, ethnic or religious minority), and security (conflict, post-conflict or poorly policed communities).

New strategies being implemented to achieve goals include:

- New laboratory procedures are being implemented which detect and confirm new polio infection twice as quickly, from 42 to 21 days, enabling more rapid detection of wild poliovirus (WPV) and allowing for faster response to importations and/or spread of virus.
- Use of monovalent OPV (mOPV), which provides greater protection against the two types of WPV currently circulating (Types 1 and 3), is now wide-spread in the four polio-endemic countries and in countries experiencing outbreaks. Use of mOPV Type 1 has significantly reduced transmission of Type 1 wild poliovirus and its sustained use will be critical to interrupting WPV Type 1 globally.

OUTCOME TABLE

						FY 2007				FY 2015 Target
13.B.E.1	The portion of the annual budget that directly supports the program purpose in the field	Baseline 93%	93%	>=90%	91%	>=90%	4/2008	>=90%	>=90%	NA
Long-Term Objective 13.B.1: Help Domestic and International Partners Achieve World Health Organization's Goal of Global Polio Eradication										
13.B.1.1	Number of doses of oral polio vaccine (OPV) purchased for use in mass immunization campaigns in Asia, Africa, and Europe (1 dose = 1 child reached)	500 million doses	428 million doses	500 million doses	341 million doses	260 million doses	287 million doses	240 million doses	240 million doses	NA
13.B.1.2	Number of children reached with OPV as a result of non-vaccine operational support funding provided to implement OPV mass immunization campaigns in Asia, Africa, and Europe.	NA	NA	Baseline	37 million children	100 million children	6/2008	60 million children	45 million children	NA
13.B.1.3	Number of countries in the world with endemic wild polio virus.	6	5	4	4	3	8/2008	0	0	NA
Long-Term Objective 13.B.2: Work with Global Partners to Reduce the Cumulative Global Measles-Related Mortality by 90% Compared with 2000 Estimates (Baseline 777,000 Deaths) and To Maintain Elimination of Endemic Measles in all 47 Countries of the Americas.										
13.B.2.1	Number of global measles-related deaths	Baseline 777,000	435,000	399,200	12/2007	363,400	12/2008	327,600	291,800	77,700
13.B.2.2	Number of non-import measles cases in all 47 countries of the Americas as a measure of maintaining elimination of endemic measles transmission	Baseline 2000: 1,755	0	0	0	0	6/2008	0	0	NA

OUTPUT TABLE

						FY 2007				Out-Year Target
13.B.A	Number of measles vaccine doses purchased for use internationally (millions)	NA	66	66	66	66	TBD	66	66	66
	Appropriated Amount (\$ Million)¹	\$137.9	\$144.4	\$144.3		\$142.3		\$139.9	\$139.7	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

GLOBAL DISEASE DETECTION

				FY 2009 +/- FY 2008
BA	\$32,004,000	\$31,445,000	\$31,409,000	-\$36,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341: Foreign Assistance Act of 1961 §§ 104, 627,628: Federal Employee International Organization Service Act § 3: International Health Research Act of 1960 § 5: Agriculture Trade Development and Assistance Act of 1954 § 104: Economy Act: 22 U.S.C. 3968 Foreign Employees Compensation Program: 41 U.S.C. 253 International Competition Requirement Exception): P.L 110-289 (1st Continuing Resolution FY07): P.L.-109-369 (2nd Continuing Resolution FY07): P.L. 109-383 (3rd Continuing Resolution FY07): P.L 110-5 (Revised Continuing Appropriations Resolution, FY07).

FY 2009 Authorization Indefinite

Allocation Methods.....Direct
Federal/intramural; Contract; Competitive Grant/Cooperative Agreement

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Established in 2004, the GDD program seeks to protect the health of Americans and the global community by developing and strengthening global, regional, and local public health capacity to rapidly detect and effectively respond to infectious disease outbreaks. Key to this strategy is the establishment of GDD Centers, strategically positioned around the world to help countries address threats at home and across borders. GDD Centers serve as a platform that supports three previously established programs, including the Field Epidemiology Training Program (FETP), the International Emerging Infections Program (IEIP), and Influenza Activities.

These GDD Centers are collaborations with the host country and the World Health Organization (WHO). Currently, GDD Centers are located in five countries, including Thailand, Kenya, Guatemala, China, and Egypt. Activities at a sixth Center in Kazakhstan will be initiated in 2008. Direct federal/intramural funding supports the CDC staff and operational costs within the Centers. Salaries for the locally employed staff and funding for activities conducted at the GDD Centers are primarily funded through contracts and cooperative agreements within the GDD host countries.

In support of the HHS Secretary's 500 Day Plan and the new International Health Regulations, these GDD Centers will focus activities in five key areas:

- Outbreak Response – to improve the timeliness and reliability of outbreak investigations and response.
- Surveillance – to strengthen surveillance systems that are capable of detecting, assessing, and monitoring the occurrence and public health significance of infectious disease threats over time.
- Research – to advance public health knowledge through innovative research into the epidemiology and biology of emerging infections and public health practice through operational research into surveillance and training methodologies.
- Training – to build capacity and improve quality of epidemiologic and laboratory science through training
- Networking – to enhance collaboration through shared resources and synergy

GDD helps to ensure that countries have ready access to the resources needed to detect and contain global disease threats, and represents the U.S. contribution to helping countries acquire the required capacities to identify, report, and contain public health threats as outlined in the revised International Health Regulations (IHR). Recent examples of CDC's disease detection activities include CDC's response support for threats such as the SARS outbreak of 2003, the December 2004 tsunami, and the avian influenza outbreaks of 2004-2006.

To date, the GDD program reports the following accomplishments:

Outbreak Response

- Collectively supported host country responses to more than 144 outbreaks, including Rift Valley Fever (Kenya), diethylene glycol poisoning (Panama), *S. suis* (China), botulism (Thailand).
- These emergency responses resulted in measurable health impact, such as disease control efforts that led to an 83 percent decline (compared to the previous year) in *Streptococcus suis* cases in one region of China, the delivery of botulism antitoxin that likely prevented multiple deaths in Thailand, and the investigation and control measures that saved hundreds of lives from methanol intoxication in Nicaragua.

Surveillance

- Supported host country establishment of population-based surveillance in two GDD Centers (China and Egypt). The establishment of population-based surveillance is under active development in three GDD Centers (Guatemala, Kenya, and Thailand).
- Conducted an international encephalitis/meningitis surveillance project in partnership with Ministries of Health in India, China, Vietnam, and Bangladesh to further develop Japanese Encephalitis surveillance, detection, and control programs in these countries.

Research

- Discovered three new pathogens and established new in-country testing capacity for more than 11 conditions. For example, the IEIP in the Kenya Center established capacity for diagnostic testing for more than five pathogens alone. Because this capacity had previously been unavailable in this region, it has measurably enhanced disease detection and identification of appropriate response interventions.
- The Thailand Center's IEIP identified diverse and previously uncharacterized *Bartonella* species from patients with undifferentiated febrile illnesses in Thailand. Rodents are likely reservoirs for a significant portion of the identified cases of bartonellosis. These findings suggest the need to assess the public health impact posed by these novel bacterial agents.

Training

- Helped to strengthen in-country and regional public health capacity for outbreak detection and response by graduating 27 FETP fellows, and providing short-term training for more than 900 public health staff. In China alone, 20 former FETP graduates now hold key positions in emergency response or infectious disease departments in 14 provinces and at China CDC.
- Conducted trainings in brucellosis laboratory and surveillance methods in Russia, Egypt, and Kyrgyzstan to support prevention and control efforts in areas where brucellosis is endemic and enzootic and results in significant human and animal illness.

Networking

- Early in the avian influenza epidemic, the IEIP in the Thailand Center in collaboration with CDC's Influenza Division staff developed and hosted rapid response training for pandemic influenza that was attended by staff from the other Centers. The participating countries were then able to provide in-country training to their colleagues and establish a greater regional capacity for avian and pandemic influenza preparedness and response. This curriculum now serves as a template for trainings conducted all over the world.

Other (H5N1 Preparedness)

- Responded to and contained 28 human cases of H5N1 influenza virus, equating to 100 percent of cases in less than 48 hours.
- Trained more than 230 participants from 32 countries in pandemic response, contributing to over 1,000 local rapid response teams (RRTs).
- Established stockpiles of protective equipment and antivirals that are immediately available to first responders and provide initial containment while the large U.S. and international stockpiles are being deployed.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$11,609,000
FY 2005	\$21,426,000
FY 2006	\$32,443,000
FY 2007	\$32,004,000
FY 2008	\$31,445,000

BUDGET REQUEST

The CDC FY 2009 request includes \$31,409,000 for Global Disease Detection, a decrease of \$36,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

Funds will be used to continue activities of six GDD Centers and build on achievements of the GDD Centers. CDC's long-term strategy for GDD is to strategically place 18 GDD Centers throughout the world to ensure optimal global coverage for emerging health threats. CDC has made substantial progress in implementing this strategy. Five GDD Centers were started in FY 2005, with activities at a sixth Center initiated in FY 2008. Initial activities and investments for these Centers have contributed to infrastructure development and established capacity in conducting activities in the areas of outbreak response, surveillance, research, training, and networking. Continued funding will enable these Centers to move beyond infrastructure development, and work towards strengthening capacity in the five core activity areas. Funds will also be used to enhance in-country capacity by working closely with the Ministry of Health and other government officials. Further expansion of the program beyond the current GDD Centers is dependent on availability of resources. With current resources, CDC is able to support the existing five GDD Centers and start-up activities in the sixth Center.

In addition, monitoring and evaluation efforts of the Centers will be continued. In 2006, CDC developed and implemented a GDD monitoring and evaluation framework that was used to collect information about the achievements of the GDD Centers. Data captured in each of the five key activity areas provided a baseline from which the impact of the Centers will be assessed over time. In 2007, this framework was further enhanced to incorporate additional measures that will help assess progress in all five key activity areas. GAO reviewed the GDD program during 2006-2007,

and in the final report (entitled “U.S. Agencies Support Programs to Build Overseas Capacity for Infectious Disease Surveillance,” October 2007) acknowledged that CDC had recently begun efforts to evaluate program impact, but recognized that it was too early to assess whether progress had been made. Continued evaluation efforts will be used to measure progress and assess program impact.

OUTPUT TABLE

						FY 2007				Out- Year Target
13.B. B	Number of “Strategic Partner” countries with disease detection and response interventio ns	0	0	5	5	5	5	6	6	NA
Appropriated Amount* (\$ Million) ¹		\$11.6	\$21.4	\$32.4		\$32.0		\$31.4	\$31.4	NA

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

GLOBAL MALARIA PROGRAM

				FY 2009 +/- FY 2008
BA	\$8,851,000	\$8,696,000	\$8,686,000	-\$10,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341: Foreign Assistance Act of 1961 §§ 104, 627, 628: Federal Employee International Organization Service Act § 3: International Health Research Act of 1960 § 5: Agriculture Trade Development and Assistance Act of 1954 § 104: Economy Act: 22 U.S.C. 3968 Foreign Employees Compensation Program: 41 U.S.C. 253 International Competition Requirement Exception): P.L 110-289 (1st Continuing Resolution FY07): P.L.-109-369 (2nd Continuing Resolution FY07): P.L. 109-383 (3rd Continuing Resolution FY07): P.L 110-5 (Revised Continuing Appropriations Resolution, FY07

FY 2009 Authorization Indefinite

Allocation Methods.....Direct

Federal/Intramural; Contracts; Competitive Grants/Cooperative Agreements

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

In 1946, CDC was established, descending from the wartime agency, Malaria Control in War Areas (MCWA). More than 60 years later, CDC continues to support the prevention and control of malaria throughout the world in partnership with local, state, and federal agencies in the U.S., medical and public health professionals, national and international organizations, and foreign governments. The malaria program at CDC conducts both global and domestic activities:

Global Activities

Globally, malaria transmission occurs in more than 100 countries. In endemic countries, malaria kills a child approximately every 30 seconds, causes more than one million deaths and 500 million infections each year, and is increasingly resistant to available medicines for treatment and to prevent infection in travelers. Malaria, along with HIV/AIDS and TB, is a destabilizing factor and continues to pose a critical threat to the national security of all sub-Saharan African countries.

On June 30, 2005, President Bush announced a five-year, \$1.2 billion USG President's Malaria Initiative (PMI) to reduce malaria mortality by 50 percent in 15 African countries. As part of this initiative, CDC provides consultation, technical assistance, and training to malaria-endemic countries and to multinational and United States agencies and organizations on issues of malaria prevention and control. Through PMI, CDC is also working in collaboration with the global Roll Back Malaria program, the WHO/Global Malaria Program, the World Bank, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and other NGOs and faith-based organizations and academic institutions engaged in the fight against malaria. CDC also provides technical assistance for malaria research and control activities to other, non-PMI countries.

The Malaria Branch funded seven external partners through cooperative agreements and six partners through contract in 2007 for research program implementation. These research initiatives strive to define the biology, ecology, transmission dynamics, parasite species differences, host-parasite relationships, diagnostics, host immune responses, populations at risk, and determinants of morbidity and mortality for malaria.

Specific CDC global malaria accomplishments include:

- Collaborated with the Kenyan Ministry of Health (MOH) to plan, execute, and evaluate the Kenya integrated insecticide-treated net (ITN) campaign, which at that time was the largest ever such integrated immunization-ITN distribution campaign. Over 3 million long lasting nets (LLINs) were distributed. CDC was instrumental in conducting the evaluation which documented a massive increase in coverage, from less than 10 percent to more than half of Kenyan's vulnerable children under age five now sleeping under life saving LLINs. Recently published articles by Kenyan colleagues have documented decreased hospital admissions and decreased child mortality attributed to increased coverage of ITNs in Kenya. Improved ITN coverage and impact on malaria have also been documented in other settings, such as Zanzibar Island, where CDC also played a role.
- Assessed the utility of rapid diagnostic tests (RDTs) in Kenya to improve malaria case management at health facilities. These tests generate results within minutes, do not require skilled microscopists or technicians to interpret, and can assist in improving diagnosis.
- Assessed and conducted strategic planning in partnership with USAID to begin the scale-up of interventions with the national malaria control programs in eight new PMI (Year Three) countries: Kenya, Zambia, Madagascar, Benin, Ghana, Mali, Liberia, and Ethiopia (Oromia region); continued to support implementation and evaluation activities in three (Year One) countries: Angola, Uganda, Tanzania; and, four (Year Two) countries: Senegal, Rwanda, Mozambique and Malawi.

Domestic Activities

In the U.S., although malaria was declared eradicated in the late 1950s, up to 1,400 people in the U.S. contract malaria each year from travel to places where malaria transmission is occurring. Approximately 20 million U.S. travelers annually must use malaria prevention medicines; and, an estimated 50,000 U.S. blood donors are rejected because of concern about malaria transmission via the blood supply.

CDC conducts malaria surveillance, prevention, and control in U.S. residents and visitors. CDC also monitors the efficacy and safety of antimalarial drugs for chemoprophylaxis and chemotherapy and offers clinical advice and epidemiologic assistance on the treatment, control, and prevention of malaria in the United States and in malaria endemic countries. This includes providing information to the U.S. public and to agencies or groups serving this population on appropriate measures to prevent and control malaria. CDC coordinates responses to malaria outbreaks in the U.S – the most recent domestic outbreak occurred in Florida in 2003. Domestic funding is largely internal, supporting staff and surveillance infrastructure.

Specific CDC domestic malaria activities include:

- Implemented and monitored the artesunate investigational new drug protocol for the treatment of severe malaria in the US. An estimated 50 to 100 cases of severe malaria occur in the U.S. every year, all of which could benefit from this medication. Usage and safety data that is collected in association with this protocol will be useful in making this life-saving medicine available to a wider audience via a new drug application to the FDA. To date, eight patients with life threatening malaria have been treated and all have survived.
- Evaluated the usability of the new malaria map application launched in 2007, which displays information on malaria risk and prevention for any location on the globe. The initial version of the map application has been successful in reducing the volume of telephone inquiries by almost half.

- Characterized malaria risk information for endemic areas around the world by mining existing data sources and generating primary data through the investigation of high volume travel destinations of U.S. residents. The impact of this effort will be to increase chemoprophylaxis usage among people who need it and decrease usage among people who don't – preventing cases of malaria as well as unnecessary medication side effects.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$9,186,000
FY 2005	\$9,108,000
FY 2006	\$8,975,000
FY 2007	\$8,851,000
FY 2008	\$8,696,000

BUDGET REQUEST

CDC's malaria program is a key component of the President's Malaria Initiative and supports the Secretarial Goals of Preparedness and Prevention.

The CDC FY 2009 request includes \$8,686,000 for the Global Malaria Program, a decrease of \$10,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. Funds are used for laboratory and epidemiological research in the United States and abroad; surveillance, prevention, and control of malaria; and consultation, technical assistance, and training to malaria-endemic countries with government and non-government partners. In addition to ongoing domestic projects, specific activities to be conducted in FY 2009 include:

- Supporting PMI implementation, monitoring, and evaluation activities in 15 African countries,
- Providing technical assistance to malaria endemic, non-PMI countries, and
- Conducting research on long-lasting insecticide-treated nets (LLINs), inside residual spraying (IRS), malaria in pregnancy (MIP), and case management including diagnosis, treatment, and drug resistance to inform new strategies and prevention approaches. Success will be measured by the number of technical assistance visits provided; the number of monitoring and evaluation activities accomplished; and the progress reached on research projects.

In FY 2009 and future years, key challenges related to the prevention, detection, and control of malaria include the need to conduct relevant epidemiologic operational research to enhance existing, and to develop new strategies to prevent and control malaria in Africa and elsewhere. Without this new information, ongoing efforts to prevent and control malaria may be less effective.

To address these challenges, CDC will conduct research to evaluate new approaches to prevention and control, including:

- Transmission reduction
- Improved case management
- Improved prevention of malaria in pregnancy
- New approaches to monitoring and evaluation

OUTPUT TABLE

						FY 2007			FY 2009 Target
13. B.C	Number of countries receiving technical assistance in malaria control scale-up through the President's Malaria Initiative (PMI)	NA	NA	NA	7	7	15	15	15
13. B.D	Number of non-PMI countries receiving technical assistance for malaria research and control activities	15	15	NA	10	10	10	10	10
	Appropriated Amount (\$ Million)¹	\$9.2	\$9.1	\$9.0		\$8.9		\$8.7	\$8.7

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

OTHER GLOBAL HEALTH

				FY 2009 +/- FY 2008
BA	\$3,319,000	\$3,516,000	\$3,512,000	-\$4,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 319, 327, 340C, 361-369, 2315, 2341: Foreign Assistance Act of 1961 §§ 104, 627,628: Federal Employee International Organization Service Act § 3: International Health Research Act of 1960 § 5: Agriculture Trade Development and Assistance Act of 1954 § 104: Economy Act: 22 U.S.C. 3968 Foreign Employees Compensation Program: 41 U.S.C. 253 International Competition Requirement Exception): P.L 110-289 (1st Continuing Resolution FY07): P.L.-109-369 (2nd Continuing Resolution FY07): P.L. 109-383 (3rd Continuing Resolution FY07): P.L 110-5 (Revised Continuing Appropriations Resolution, FY07).

FY 2009 Authorization Indefinite

Allocation Methods.....Direct federal/intramural;
Contracts; Competitive Grants/Cooperative Agreements

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

Other Global Health activities include the Field Epidemiology (& Laboratory) Training Program and the Sustainable Management Development Program.

Field Epidemiology (& Laboratory) Training Program (FE(L)TP):

The FE(L)TPs, started in 1980, in collaboration with national and international organizations (e.g., the Department of State, USAID, WHO, and the World Bank), help foreign Ministries of Health (MOH) build strong, sustained public health systems, tailored to the unique needs of each country. CDC provides training and technical assistance to health professionals around the globe, as well as building capacity to assess disease surveillance and improve intervention programs. FE(L)TPs cover a broad range of issues, including epidemiology, investigation of infectious and non-infectious health problems, health surveillance systems, applied economics, communications science, and resource management. Through these programs, foreign MOHs acquire the means to build their own programs and capacity to improve public health on a local, regional, and national level, ultimately leading to improved health on a global scale. FE(L)TPs also have a central role in helping CDC achieve its Global Health Diplomacy Goal through investments in public health capacity development and the creation of partnerships with the developing world.

This FE(L)TP strategy is implemented by helping countries set up applied epidemiology and laboratory training programs, modeled after CDC's Epidemic Intelligence Service (EIS) and CDC's public health laboratory practice training programs. Currently, CDC is supporting 12 FETPs and FE(L)TPs, covering 19 countries around the world, with six new programs under development. Teams of physicians, epidemiologists, public health advisors, instructional designers, health communication specialists, and support staff provide scientific expertise, training consultations, and other programmatic support and advice to enable MOHs to enhance health protection and health promotion programs within their respective countries. Direct federal/intramural funding and contract funding is used to support the CDC staff and operational costs in Atlanta. Funding through cooperative agreements is used to support activities within the host countries.

In support of this strategy, the FETPs will help countries implement sound, effective, public health programs and will focus activities in two major areas: applied epidemiology and surveillance systems.

In the applied epidemiology area, CDC will work with MOH and other public health institutions to strengthen their countries' epidemiology work force through a residency-based program in applied epidemiology. A combination of classroom-based instruction and mentored practical work allows trainees to receive hands-on multi-disciplinary training in public health surveillance, outbreak investigation, laboratory management, program evaluation, and other aspects of epidemiology research and methods.

In the surveillance systems area, CDC will work with partner MOH to strengthen their public health surveillance and response systems for priority disease conditions. FETP trainees learn detection, confirmation, reporting, analysis and feedback of disease data and implementation of effective public health responses in a participatory approach. As graduates, they apply these skills in their work for the ministry to operate and further strengthen the surveillance and response systems and to use the information for more effective disease detection, control, and prevention.

CDC is currently in the process of implementing a comprehensive monitoring and evaluation framework that can be used to assess the performance and progress of the FE(L)TPs. To date, FE(L)TP reports the following accomplishments:

- Provided a Resident Advisor for consultation and support to 28 FE(L)TPs and similar programs in 37 countries from 1980 to 2006. Of these, 19 programs no longer need support from a full-time Resident Advisor and 19 countries are still producing graduates. During this 26 year period, more than 1,200 epidemiologists have graduated from these programs, which has resulted in enhanced capacity in these countries for the detection and control of emerging infectious diseases. For example, in 2006, 159 FETP trainees conducted 164 outbreak investigations in 7 countries. This included responses to avian influenza in Nigeria, and anthrax and Rift Valley Fever outbreaks in Kenya.
- Since 1999, CDC has increased the number of international sites (from 20 to 28) with the capacity to conduct disease identification and intervention activities by adding FETPs in China, Kenya, Central America, Central Asia, Jordan, India, Pakistan, and South Africa. Based on the success of programs in sub-Saharan Africa, several new programs across the continent are in various parts of the planning stages including Ethiopia, Nigeria, Tanzania, and Francophone West Africa. This will provide broader global coverage of this program, and thus improve public health capacity in this region.
- Collaborated with the MOH in Uzbekistan and DTRA of the U.S. DoD to improve the sensitivity of public health surveillance for the detection of disease due to potential biothreat pathogens through training of epidemiologists, laboratory scientists, and improvement of laboratory infrastructure. This collaboration has enhanced surveillance systems and increased capacity in the detection and response to emerging infectious diseases.

Sustainable Management Development Program (SMDP):

The SMDP, started in 1992, works with partners with MOHs, educational institutions, and nongovernmental organizations in developing countries to promote organizational excellence in public health through strengthening leadership and management capacity. The goal of SMDP is to assist developing countries in improving the effectiveness of public health programs by empowering local health officials with better management skills, and by stimulating creativity and innovation in problem-solving among local health personnel to improve the delivery of public health services. SMDP works with partners to build capacity for public health leadership and management development through a multi-phased approach:

- Strategic partnerships - Develop strategic institutional partnerships for public health leadership and management capacity-building efforts

- Capacity Development – develop faculty to enhance in-country leadership and management training capacity through the Management for International Public Health (MIPH) course and in-country training-of-trainers courses
- Technical Assistance – provide support to training faculty in partner institutions to conduct performance needs assessments, develop locally appropriate curricula, and design in-country leadership and management workshops that provide participants with practical skills needed to manage public health teams, programs, and organizations
- Sustainability – work with partner institutions to ensure the long-term sustainability of global public health leadership and management development programs, and address issues such as integration with national public health priorities, local funding for recurrent costs, continuous learning opportunities, accreditation, and evaluating impact

Direct federal/intramural funding and contract funding is used to support the CDC staff and operational costs in Atlanta. Funding through cooperative agreements is used to support activities within the host countries. CDC is currently in the process of implementing a comprehensive monitoring and evaluation framework that can be used to assess the performance and progress of SMDP. To date, SMDP reports the following accomplishments:

- In 2006, there were 30 MIPH graduates from 15 countries, over 500 in-country managers trained, and 187 public health management improvement projects conducted, with 10 countries receiving technical assistance. The MIPH curriculum has provided these graduates with practical skills needed to manage public health teams, programs, and organizations, which they then implement within their own country.
- SMDP partnered with Mahidol University in Thailand to train public health managers in four rural provinces. These managers completed 12 applied management improvement projects in their work settings, including one which reduced the number of repeated laboratory tests needed for diagnosing avian influenza from 14 percent to three percent during 2006.
- SMDP collaborated with three regional institutions in Vietnam, the Hanoi School of Public Health, the Ho Chi Minh Institute for Hygiene and Public Health, and Denang Preventive Medicine Center to train 70 public health managers in 29 provinces through strengthening a decentralized management capacity-building program. These public health managers implemented 24 applied management improvement projects in their organizations, including one in Children's Hospital #1 in Ho Chi Minh City that reduced the percentage of HIV Rapid Test specimens that were lost or incorrectly processed from 90 percent to 48 percent.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$2,403,000
FY 2005	\$3,403,000
FY 2006*	\$71,364,000
FY 2007	\$3,319,000
FY 2008	\$3,516,000

*Includes DoD Appropriation of \$68 million

BUDGET REQUEST

The CDC FY 2009 request includes \$3,512,000 for other global health, a decrease of \$4,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

Funds provided to CDC for these activities are used to provide foundational and catalytic support for global field epidemiology training and sustainable management and development. The funds are utilized for 1) curriculum development—ensuring that the programs keep current with state-of-the-art methodologies and public health best practices, and 2) ongoing technical assistance from Atlanta for the countries implementing these two programs. In addition, some of these funds support activities in the host country, but these funds are highly leveraged, with additional funding coming for a diverse set of global partners.

As an example, the average annual cost of a Field Epidemiology (and Laboratory) Training is \$1 million. CDC is not the only agency who contributes to this total. Other federal agencies, including USAID and DOD, and private sector partners have recognized the value of this long-standing and highly effective program and collaborate to support country-level program implementation. Furthermore, host countries must also commit resources in order to participate. CDC generally supports a FE(L)TP program for about five years. During the first few years of a program, a large proportion of funding supports one or two CDC staff in the host country and technical support. The host country initially provides office space and staff and, as the program progresses, gradually takes on additional program costs such as trainee support, travel, equipment/supplies, books, etc. This gradual transfer of responsibility and program costs helps to ensure that the country can sustain the program once CDC staff are no longer present within country.

Because CDC funds are so highly leveraged, the outputs of these programs (such as number of countries, number of graduates, etc) do not necessarily support increases or decreases in the appropriated budget. However, these appropriations ensure the development of science-based curricula that reflect current global public health challenges. Evaluation measures linked to performance and sustainability are tracked and monitored by CDC.

PUBLIC HEALTH RESEARCH

				FY 2009 +/- FY 2008
Public Health Research (PHS)	\$31,000,000	\$31,000,000	\$31,000,000	\$0
FTE	5	5	5	0

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 317, 327

FY 2009 Authorization.....Indefinite

Allocation Method.....Direct/Federal,
Competitive Grant; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

The Public Health Research program was established in 2004 under Section 301 of the Public Health Service (PHS) Act (42 U.S.C. 238j). In FY 2005, through the evaluation set-aside authorized by Section 241 of the PHS Act, funds were derived to carry out Public Health Research. The Office of Public Health Research's (OPHR) mission is to provide leadership, vision, and coordination for the CDC research program, both for intramural and extramural research. In addition, OPHR assists in the development of a CDC-wide research agenda, evaluates and monitors CDC's overall research portfolio and alignment with CDC's Health Protection Goals and research agenda, provides support for best research practices used across CDC, and conducts peer review and grants management for new research initiatives.

The multi-year CDC Health Protection Research Initiative (HPRI) was launched in FY 2004 to fund grants to institutions to support investigator initiated research and mentored research, institutions of higher education for training of public health researchers and centers of excellence to support a variety of priority research areas. OPHR develops new extramural research initiatives that are cross-cutting in support of the goals driven research agenda, support emerging fields and new areas for innovation in public health, stimulate new areas for research growth at CDC, support public health researchers at different career stages, and have significance for public health practice and potential for impact.

In FY 2008, OPHR will continue funding new and continuation awards in the total amount of \$27,500,000, including eight new intramural research seed projects for approximately \$145,000; and \$27,355,000 in extramural research grants (translation research and dissertation grants). Two new funding opportunity announcements focus on translation research for proven effective interventions and social and behavioral science research for elimination of health disparities. CDC is partnering with NIH on the latter initiative.

In FY 2009, OPHR will support new Funding Opportunity Announcements (FOAs) for priority public health research. The extramural research funding is primarily distributed to institutions of higher education, representing nearly 80 percent of the OPHR funding, followed by independent hospitals and other research organizations. In FY 2009, about 60 percent of this funding will fund translation research.

Highlights from the first cycle of funded HPRI projects include:

- Research scientist development awards: Since 2004, OPHR has funded over 40 research scientist awards (21 in FY 2004 and 20 in FY 2007). These mentored research awards support career development experiences of young or career-changing investigators that lead to independence and substantially expand their knowledge and capabilities as research

scientists. The expected result is research findings that can improve public health and career paths toward public health research.

- **Worksite health promotion grants:** OPHR awarded 31 grants in FY 2004 to institutions of higher education and hospitals for studies of innovative cost-effective health promotion policies, programs, and activities in a variety of workplace settings including weight loss, diet, exercise, and health promotion behaviors for employees. The preliminary results yielded creative and effective ways to improve employee health with potential business benefits of reduced work absenteeism, reduced health care costs and improved health. Five of the original 21 studies are being funded for an additional two years
- **Centers of Excellence in Health Marketing and Health Communication:** Funded in FY 2005, these Centers of Excellence have been successful in building the scientific foundation for CDC's Health Marketing program. For example, during FY 2007, the Center for Health Communication and Marketing at the University of Connecticut (CHCM), developed a searchable database of evidence based health interventions for the public, tested the efficacy of video game format to influence abstinence and safer sex behaviors among urban adolescents and young adults, and is creating systems to monitor communication and marketing practices of 50 state public health departments.
- **Centers of Excellence in Public Health Informatics:** These Centers contribute to the efforts of CDC's Public Health Informatics program by advancing the ability of health care professionals to communicate health recommendations to consumers, and by making the use of electronic information systems easier. They seek to improve the public's health through discovery, innovation, and research related to health information and information technology. For example, the Center of Excellence at Harvard Pilgrim Health Care successfully engineered, tested, and deployed an operational version of a system called "Electronic medical record Support for Public health" (ESP); made major advances in "Personally Controlled Health Record" (PCHR) architecture; successfully used a peer-to-peer design for distributed public health queries to establish a linkage with the Massachusetts regional health information organization (RHIO); and maintained a relationship with the public health informatics committee of the national Council of State and Territorial Epidemiologists (CSTE).

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$29,107,000
FY 2005	\$31,000,000
FY 2006	\$31,000,000
FY 2007	\$31,000,000
FY 2008	\$31,000,000

BUDGET REQUEST

The CDC FY 2009 request includes \$31,000,000 for Public Health Research, which is the same as the FY 2008 Enacted level. The request will provide funding for continuing extramural research activities and funding awards for new and continuation initiatives addressing critical public health research needs. The program continues to seek ways to increase efficiencies in operations in order to fund more extramural research grants.

- In FY 2009, OPHR anticipates funding 39 new extramural research awards and 61 continuation awards in high priority public health research areas. In FY 2009, OPHR will fund continuation awards for \$20,789,879, and new awards at a level of \$6,510,121 for

public health priority research. In addition, OPHR will fund two new intramural research seed projects (Georgia State University and the Georgia Institute of Technology for the collaborative intramural research program) and continue funding eight projects from FY 2008.

- Key outcomes and outputs for FY 2009 include:
 - Success will be measured in terms of the number of grants awarded and focused on translation research and health disparities research. Progress and final reports of grantees also provide an assessment of their research accomplishments, outputs and impacts. This information is used for overall evaluation of each research initiative's progress and success.
- Translating research findings into practice is an important challenge. The Institute of Medicine (IOM) reported that a 17-year gap exists between the publication of research results and its impact on treatment delivery. Publishing is not the end point of research. Scientific discoveries must be translated into practical applications to provide health benefit to individuals and targeted populations. To address this challenge, OPHR is developing guidance for research translation plans to ensure that the results and findings of CDC research are used to maximize the impact of CDC's work to prevent and control disease, disability, and injury. The expectations are that all new CDC research projects include a translation plan that describes how the research findings will be translated when the project is complete.
- The FY 2008 Translation Research initiative to improve public health practice resulted in an overwhelming response from the research and public health community. The goal is to improve the adoption and accelerate the dissemination of proven effective interventions that can make critically important impacts on health. This new strategy has brought focus on how public health practice and research must collaborate to advance and achieve greater success. In addition, the Translation Plans are a new strategy to be implemented by CDC supported researchers to help catalyze the uptake of their research results into public health practice and achieve the ultimate goal of improving health.

OUTPUT TABLE

						FY 20				Out- Year Target
14. A.A	Number of extramural research grants									
14. A.B	New awards	57	4	0	1	83	76	39	39	70
14. A.C	Continuation awards	0	55	67	59	5	5	61	61	30

Appropriated Amount (\$ Million) ¹	\$29.1	\$31.0	\$31.0	\$31.0		\$31.0	
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¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP (PHIL)

				FY 2009 +/- FY 2008
BA	\$202,559,000	\$224,899,000	\$182,143,000	-\$42,756,000
FTE	889	918	904	-14

SUMMARY OF THE REQUEST

The Public Health Improvement and Leadership (PHIL) budget activity supports several cross-cutting areas within CDC that ensure more efficient, effective science and program development. This activity includes the leadership and management function, which funds the CDC Office of the Director (OD), coordinating centers and each constituent center, and the Office of Workforce and Career Development (OWCD).

The CDC FY 2009 request includes \$182,143,000 for Public Health Improvement and Leadership (PHIL), a decrease of \$42,756,000 below the FY 2008 Enacted Level, which includes a \$3,538,000 Individual Learning Account (ILA) and administrative reduction. This includes:

- \$149,332,000 for Leadership and Management to enhance the effectiveness of public health program, science, and practice and to achieve greater impact on America's health. CDC's Leadership and Management activity supports critical areas such as strategy and innovation, goals management, and health disparities.
- \$32,811,000 for Public Health Workforce Development to ensure that the public health workforce—at the federal, state and local levels and in sufficient numbers—have the skills and competencies necessary to work effectively in a rapidly changing, complex environment.
- CDC's FY 2009 request includes a decrease of \$5,895,000 and \$26,740,000 respectively for the Director's Discretionary Fund and Congressional Projects, which eliminates these activities.

LEADERSHIP AND MANAGEMENT

				FY 2009 +/- FY 2008
BA	\$161,069,000	\$158,255,000	\$149,332,000	-\$8,923,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 306, 307, 308, 310, 311, 317, 317(F), 319, 319A, 322, 325, 327, 352, 361 -369, 391, 399(F), 399G, 1102, 2315, 2341: Federal Technology Transfer Act of 1986, (15 U.S.C. 3710): Bayh-Dole Act of 1980, P.L. 96-517: Clinical Laboratory Improvement Amendments of 1988, § 4

FY 2009 Authorization.....Indefinite

Allocation Methods..... Direct

Federal/Intramural; Competitive Grants/Cooperative Agreements; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

CDC's Leadership and Management budget activity was created in FY 2005 at the request of Congress to easily identify resources supporting the administrative activities of the agency. To enhance the effectiveness of public health program, science, and practice and to achieve greater impact on America's health, CDC's Leadership and Management activity supports critical areas such as strategy and innovation, goals management, and health disparities. Funding is allocated internally to support various components of this activity described below.

CDC Office of the Director (OD)

The CDC OD is comprised of offices that manage and direct CDC's domestic and international health protection programs. The OD provides leadership, advises on strategy, and develops and evaluates the progress of goals and objectives related to disease prevention and control, including the correlation of these activities to health impact.

CDC is continuing efforts to accomplish greater health impact via its agency-wide health protection goals, ensuring these goals focus on reducing and eliminating health disparities, and balancing health protection needs, science, and available resources to accomplish CDC's mission. To this end, CDC's executive leadership is provided with decision-making support through analytical assessments and strategy recommendations for achieving the greatest health impact for the public.

CDC's OD provides leadership, coordination, and assessment for minority health initiatives; supports internal and external partnerships; and synthesizes, disseminates, and encourages use of scientific evidence identifying effective interventions to reduce health disparities. The OD also supports cooperative agreements with academic institutions and national non-governmental organizations (NGOs) to conduct prevention research, program development, analysis, and evaluation to improve the health status of minorities and reduce health disparities. CDC funds key sectors to carry out student and professional research internship and fellowship opportunities that contribute to the improvement of diversity and cultural competency in public health.

CDC has expanded and enhanced activities related to scientific vision and leadership in science innovation, research, ethics, and administration to ensure stability and commitment to long-term scientific investments, translating science into practice to achieve its overarching health protection goals. The OD facilitates developing approaches for long-term planning and evaluation of CDC's scientific enterprise, ensuring sustainability of scientific output; establishing and sustaining high-level national and global alliances and synergy; and ensuring development of public health policies using a scientific foundation. It facilitates research prioritization, planning, and evaluation across

both intramural and extramural programs. The CDC research portfolio is designed for maximum impact on public health to achieve its desired ends.

CDC maintains the integrity and productivity of scientists by resolving scientific issues, supporting training and information exchange, and providing direction on matters of scientific integrity. CDC participates in national and international initiatives regarding human subject protection in public health research. The CDC OD also manages CDC's intellectual property (e.g., patents, trademarks, copyrights) and promotes the transfer of new technology from CDC research to the private sector to facilitate and enhance the development of diagnostic products, vaccines, and products to improve occupational safety.

CDC's communications and issues management activities are coordinated across the agency through the OD. The OD collaborates with program, policy, and communications professionals to develop multi-faceted strategic responses to issues relevant to the whole agency or enterprise. These activities ensure that CDC leadership has critical information with which to respond to urgent issues and ensure that enterprise staff and partners are aware of this information and the supporting rationale.

The OD also incorporates the principal advisor to the CDC Director and manager of daily OD activities. These activities ensure that the multi-faceted and cross-cutting issues relating to efficiency and effectiveness of key decisions made by the CDC Director are reviewed and analyzed. The flow of information to the Director and CDC senior staff is also managed, ensuring the CDC director is advised on key programmatic and policy issues.

CDC's activities in Washington D.C. allow for a presence to represent CDC leadership and programs to Congress, officials from HHS, and Washington, D.C.-based organizations that are existing or potential partners with CDC. This function provides service and products to these entities which enables CDC to move forward in achieving its ultimate goal of improving health. In addition, CDC's Washington office provides strategic representation for the agency with other federal agencies to better manage public health crises. Finally, the office advises agency leaders and scientists about developments in Washington, D.C. that bear on the accomplishment of administration and agency health goals.

Public health practice is a significant area of CDC's activities, ensuring coordination and synergy between scientific and practice activities throughout CDC. The principal goal in achieving this level of coordination is to ensure practice-relevant standards, policies, and legal tools.

Coordinating Centers, Coordinating Offices, and Center Offices of the Director

CDC's structure includes several coordinating centers and offices, responsible for the coordination of thematic areas within and across operational centers. These responsibilities include identifying areas for collaboration; reduction of redundancies in business practices in concert with CDC's OD; incorporating quality science and program to meet the agency's goals; leadership, decision-making, and management of operational units; and advising the Director on scientific, strategic, and programmatic issues. The coordinating centers work closely with the national center ODs, which are responsible for developing scientific knowledge and quality program development; ensuring scientific credibility and integrity in all areas of expertise needed to address public health; addressing programmatic key performance indicators; serving as the foundation and core of CDC's science and services; and maintaining expertise needed to address public health emergencies.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$172,250,000
FY 2005	\$163,746,000
FY 2006	\$161,592,000
FY 2007	\$161,069,000
FY 2008	\$158,255,000

BUDGET REQUEST

The CDC FY 2009 request includes \$149,332,000 for Leadership and Management, a decrease of \$8,923,000 below the FY 2008 Enacted level, which includes a \$2,771,000 Individual Learning Account (ILA) and administrative reduction.

The request will enable CDC to ensure essential administration and coordination activities continue which strategically and efficiently direct the agency's efforts both on domestic and international fronts.

PUBLIC HEALTH WORKFORCE DEVELOPMENT

				FY 2009 +/- FY 2008
BA	\$33,639,000	\$34,009,000	\$32,811,000	-\$1,198,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 306, 307, 308, 310, 311, 317, 317(F), 319, 319A, 322, 325, 327, 352, 361 -369, 391, 399(F), 399G, 1102, 2315, 2341; Federal Technology Transfer Act of 1986, (15 U.S.C. 3710); Bayh-Dole Act of 1980, P.L. 96-517; Clinical Laboratory Improvement Amendments of 1988, § 4; Pandemic and All-Hazards Preparedness Act, P.L. 109-417 (S. 3678)

FY 2009 Authorization.....Indefinite

Allocation Method.....Direct/Federal;
Competitive Grants

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Established in 2005, CDC's public health workforce development program focuses on:

- Ensuring a competent and sustainable workforce prepared to meet current and emerging health promotion and protection priorities;
- Ensuring the use of best practices for workforce and career development sponsored by CDC; and
- Promoting an environment of continuous learning.

Funding for Public Health Workforce Development helps ensure a workforce for CDC and state and local health agencies capable of protecting the health of the American public.

Funds are distributed intramurally and extramurally. Extramural funds are distributed through a cooperative agreement with the Association of Public Health Laboratories (APHL). APHL has two cooperative agreements with CDC, one of which funds the majority of APHL's programs, including the National Laboratory Training Network (NLTN). The funding for this cooperative agreement comes from various Coordinating Centers. The NLTN serves as the laboratory response arm for CDC by providing prioritized laboratory training to State and local public health departments, clinical laboratories, and other partners.

Accomplishments include:

- The NLTN provides cost-effective, cutting-edge training in laboratory sciences to state and local public health workers, preparing them to respond to bioterrorism, infectious disease outbreaks, and other public health threats and emergencies.
 - Section 1.01 From October 2006 through September 30, 2007, the NLTN provided 324 classes and trained more than 32,000 public health and clinical laboratorians in areas such as biological and chemical terrorism preparedness, biosafety and biosecurity, molecular diagnostics, detection of antimicrobial resistance, diagnostic mycobacteriology, and other areas of public health concern.
 - Section 1.02 Also during FY 2007, the NLTN: 1) added a new training modality, the podcast, and selected Antimicrobial Susceptibility Testing as the first topic; and 2) began a new series of teleconferences, Laboratory Learning Links (LLL), concerning

timely public health topics such as antimicrobial resistance and influenza pandemic preparedness.

- The *Epidemic Intelligence Service* (EIS), established in 1951, participates in domestic and international infectious disease investigations including epidemics of meningococcal disease, West Nile Virus, and Severe Acute Respiratory Syndrome. EIS is also partially funded by the Coordinating Office for Terrorism Preparedness and Emergency Response. As their predecessors eradicated smallpox, today's EIS officers are working to eliminate poliomyelitis and measles, and are working to prevent chronic diseases, violence, and injury. The EIS Class of 2007 comprises 80 officers, compared with 80 in the Class of 2006, and 79 in the Class of 2005.
 - Section 1.03 During FY 2007, 70 percent of EIS graduates (the Class of 2005) obtained jobs in public health after graduation, compared with 78 percent in FY 2006 and 82 percent in FY 2005. The public health workforce development program's target is for 70 percent of EIS graduates to obtain jobs in public health after graduation. Each year, the program has met or exceeded that target. Of the graduates who do not obtain jobs in public health after graduation, many continue to benefit the public's health by returning to academia and clinical medicine.
 - Section 1.04 During FY 2007, field EIS officers assigned to state or local health departments conducted 395 epidemiologic field investigations in 43 states and three other countries. Of these, 26 were multi-state investigations. EIS officers assigned to CDC Headquarters responded to a total of 68 requests for assistance through the formal EPI-AID mechanism. Ten of these investigations were international, and the rest were domestic. In seven of the domestic investigations, EIS officers at CDC coordinated large, multi-state investigations. Pandemic influenza specific training was added to the EIS curriculum during FY 2007.
- The *Preventive Medicine Residency and Fellowship* (PMR/F) established in 1972 combines clinical medical skills with public health practice expertise (e.g., leadership, health services management, program evaluation, epidemiology, and environmental health). One of the nation's largest accredited Public Health and General Preventive Medicine Residencies, PMR/F trains six to 10 residents per year. The PMR/F Class of 2007 is comprised of seven residents/fellows, compared with six in the Class of 2006, and nine in the Class of 2005.
 - Section 1.05 During FY 2007, 100 percent of Preventive Medicine Residents/Fellows obtained jobs in public health after graduation, compared with 100 percent in FY 2006 and 100 percent in FY 2005.
 - Section 1.06 Preventive Medicine Residents assigned to the New York City Department of Health and Mental Hygiene (NYCDOHMH) during FY 2007 advocated for a change in New York State's HIV testing law, comparing the proposed bill with current law and new CDC recommendations, gathering information from other states, and exploring alternative strategies to increase HIV testing.
- The *Public Health Prevention Service* (PHPS), established in 1997, is a three-year program that trains approximately 25 master's-level public health professionals annually in public health program management. PHPS provides Prevention Specialists with experience in program planning, implementation, and evaluation through hands-on training and mentorship at CDC and state and local health agencies. The PHPS Class of 2007 is comprised of 24 Prevention Specialists, compared with 24 in the Class of 2006, and 25 in the Class of 2005.

- Section 1.07 During FY 2007, 78 percent of Prevention Specialists obtained jobs in public health after graduation, compared with 77 percent in FY 2006, and 76 percent in FY 2005.
- Section 1.08 Public Health Prevention Specialists participated on Global AIDS Program (GAP) and Stop Transmission of Polio (STOP) teams during FY 2007. Assignees: 1) conducted secondary analysis of multiple high-HIV-transmission-area studies in Malawi; 2) conducted polio case investigations and follow-up; 3) planned, implemented, and evaluated National Immunization days; and 4) facilitated workshops to increase immunization services in Papua New Guinea.
- The *Prevention Effectiveness Fellowship Program* (PEFP), established in 1995, is a two-year post-doctoral program that trains quantitative policy analysts, economists, and health services researchers to apply the tools of economics and decision analysis to public health policies, programs, and practices. Approximately 30 percent of PEFP funding comes from the Public Health Improvement and Leadership (PHIL) budget activity via the Public Health Workforce Development program. Remaining funds come from other CDC Coordinating Centers and Offices. The PEFP Class of 2007 is comprised of five fellows, compared with five in the Class of 2006, and five in the Class of 2005.
 - Section 1.09 During FY 2007, 100 percent of Prevention Effectiveness (PE) Fellows obtained jobs in public health after graduation, compared with 83 percent in FY 2006, and 80 percent in FY 2005.
 - Section 1.10 During FY 2007, PE Fellows: 1) assessed the cost-effectiveness of several interventions designed to improve patients' adherence to antiretroviral therapy; 2) measured the effects of treatment for AIDS on household welfare and community welfare; 3) calculated the impact of measles supplemental immunization activities on routine measles vaccine coverage; 4) estimated domestic versus overseas costs of vaccinating refugees; 5) estimated the net cost of rabies post-exposure prophylaxis; 6) analyzed the impact of supplemental immunization activities on routine immunization coverage; 7) assessed the cost-effectiveness of refugee vaccinations in Liberia; 8) analyzed the Health Achievement Index with an empirical application using the current population survey; 9) helped combat a July 2007 malaria outbreak among refugees in Tanzania; and 10) taught a monitoring and evaluation certificate program sponsored by Brazil's Ministry of Health and the School of Public Health at Fundação Oswaldo Cruz.
- The *Public Health Informatics Fellowship Program* (PHIFP) established in 1996 trains professionals to translate and apply new and emerging information technologies to support the needs of public health programs. In addition to building capacity for informatics within CDC, PHIFP fellows assess local and state information systems, and provide informatics-related technical assistance to CDC field offices worldwide. Approximately 20 percent of PHIFP's funding comes from the PHIL budget activity via the Public Health Workforce Development program. Remaining funds come from other CDC Coordinating Centers and Offices. The PHIFP Class of 2007 is comprised of four fellows, compared with 10 in the Class of 2006, and six in the Class of 2005.
 - Section 1.11 During FY 2007, more than 80 percent of Public Health Informatics Fellows obtained jobs in public health after graduation, compared with 75 percent in FY 2006, and 67 percent in FY 2005.
 - Section 1.12 Also during FY 2007, Public Health Informatics Fellows responded to: 1) a request for an investigation of post-Katrina epidemic of violent deaths in New

Orleans (handled jointly with the EIS); 2) requests from Maine, Tennessee, and Washington, D.C., for assistance with assessing information systems; 3) a request from NIOSH (handled jointly with the EIS) for assistance in managing data related to an investigation of an outbreak of respiratory symptoms among persons who had been swimming at a water park; and 4) a request from CDC Kenya to help evaluate a Tuberculosis surveillance system that uses personal digital assistants.

- During FY 2007, CDC's Continuing Education Accreditation program accredited 152 educational activities in various media including satellite broadcasts, conferences, journal articles, webcasts, and self-study courses that served 60,818 health professionals. CE credit was awarded for multidisciplinary health professionals as Continuing Medical Education (CME), Continuing Nursing Education (CNE), Continuing Education Units (CEU), Continuing Pharmacy Education (CPE), Continuing Health Education Credits (CHEC), and American Association of Veterinary State Boards Registry of Approved Continuing Education (AAVSB RACE).

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$20,035,000
FY 2005	\$19,920,000
FY 2006	\$19,668,000
FY 2007	\$33,639,000
FY 2008	\$34,009,000

BUDGET REQUEST

The CDC FY 2009 request includes \$32,811,000 for Public Health Workforce and Career Development, a decrease of \$1,198,000 below the FY 2008 Enacted Level, which includes a \$767,000 Individual Learning Account (ILA) and administrative reduction. These funds support federal, state, and local public health workforce needs, and assist in achieving national health prevention, promotion, and preparedness health goals.

Funds will support fellowship/training programs (EIS, PHPS, PMR/F, PEFP, and PHIFP) that provide a cadre of trained public health professionals; continue to train state and local public health workers in the laboratory sciences to prepare them to respond to bioterrorism, infectious disease outbreaks, and other public health threats and emergencies; and continue to award continuing medical education (CME) to various continuing education activities at CDC.

Key outcomes and outputs for FY 2009 will include: maintaining at 200 the number recruits who join public health programs in local, state, and federal health departments to participate in training in epidemiology or public health leadership management; ensuring that 90 percent of the public health and clinical laboratorians attending NLTN courses can correctly handle, process, or identify potential disease agents; and maintaining at 725 the number of national, state, and regional leadership-development program graduates.

Key challenges that public health workforce development faces in achieving its goals are projected shortages in the public health workforce. According to a 2007 survey conducted by the Association of State and Territorial Health Officials, 20 percent of the public health workforce will be eligible for retirement during the next three years, and 50 percent will be eligible to retire by 2012. Many states already are experiencing chronic shortages of epidemiologists, nurses, laboratorians, program staff, and managers.

New strategies the Public Health Workforce Development program is using to accomplish its goals include:

- The Fellowship Management System (FMS), an electronic system designed to increase CDC's ability to monitor and track fellows in its 10 cross-cutting fellowship programs. The system tracks the fellowships' application and selection processes, follows fellows throughout their tenure at CDC and in field placements, and maintains contact with fellows after graduation. FMS will provide a centralized and secure electronic application system similar to the systems fellowship applicants are accustomed to using when they apply to graduate and medical schools. The benefits of tracking alumni through a secure, online directory are threefold:
 1. In the event of a national public health emergency or to meet an urgent public health need, the agency will have readily accessible contact information for alumni trained by the agency and possessing mission-critical skills. Preparedness and rapid response to public health emergencies is integral to the overall mission of CDC and is authorized by the Public Health Service Act (42 USC 301).
 2. The information alumni enter in FMS will be used to document the impact of the fellowships on the career paths of participants, and thus, on the science and practice of public health.
 3. Alumni will have the benefit of maintaining their professional networks for finding jobs, staffing jobs, and collaborating and interacting with other alumni.
- Research into the development of new fellowships designed to address the public health needs of the increasingly diverse U.S. population.
- An evaluation of lab training, continuing education tracking, and continuing education accreditation activities, to ensure that priorities align with agency-wide goals.

OUTCOME TABLE

						FY 2007				Out- Year Target
Long-Term Objective 14.B.1: CDC will develop and implement training to provide for an effective, prepared, and sustainable health workforce able to meet emerging health challenges.										
14.B .1.1	Maintain the number of recruits who join public health programs in local, state, and federal health departments to participate in training in epidemiology or public health leadership management.	221	216	200	206	200	205	200*	200*	200*
Long-Term Objective 14.B.2: Increase the number of frontline public health workers at the state and local level that are competent and prepared to respond to bioterrorism, infectious disease outbreaks, and other public health threats and emergencies; AND prepare frontline state and local health departments and laboratories to respond to current and emerging public health threats.										
14.B .2.1	Evaluate the impact of training programs conducted by the NLTN on laboratory practices.	34% increase in the number of laboratories that adopt specific NCCLS practices for antimicrobial susceptibility testing and reporting	Results inconclusive	90% of the public health and clinical laboratories attending NLTN courses can correctly handle, process, or identify potential disease agents.	90%	More than 40% of public health and clinical laboratories attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course.	51%	More than 40% of public health and clinical laboratories attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course.	More than 40% of public health and clinical laboratories attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course.	More than 40% of public health and clinical laboratories attending biosecurity practice NLTN courses who reported lacking practices for physical security/access control, information security and training/practice drills added these practices or modified current practices as a result of the course.

PUBLIC HEALTH IMPROVEMENT AND LEADERSHIP
PUBLIC HEALTH WORKFORCE DEVELOPMENT

OUTPUT TABLE

						FY 20				Out- Year Target
14.B.A	Number of new Public Health Informatics Fellows annually	5	5	5	5	5	5	5	5	5
14.B.B	Number of Prevention Effectiveness Fellows annually	10	10	10	10	10	10	10	10	10
14.B.C	Number of new Public Health Prevention Service Specialists annually	25	25	25	25	25	25	25	25	25
14.B.D	States participating in public health leadership and management training annually	37	38	38	40	40	40	40	40	40
Appropriated Amount (\$ Million) ¹		\$20.0	\$19.9	\$19.7		\$33.6		\$34.0	\$32.8	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT

				FY 2009 +/- FY 2008
BA	\$99,000,000	\$97,270,000	\$0	-\$97,270,000
FTE	8	8	0	-8

AUTHORIZING LEGISLATION

PHSA §§ Title XIX Prevention Activities; 214, 301, 304, 306, 307, 308, 310, 311, 317J, 327; Violent Crime Reduction Programs 40151 of P.L. 103-322

FY 2009 Authorization Indefinite

Allocation Method.....Formula
Grants, Direct Federal/Intramural.

PROGRAM DESCRIPTION & ACCOMPLISHMENTS

The Public Health and Health Services Block Grant (PHHSBG) was authorized in 1981 to provide basic public health infrastructure including personnel, training, and systems that serve as a backbone for public health efforts. The PHHSBG is a source of funding used to support existing state programs, develop and implement new programs, and respond to unexpected emergencies.

The PHHSBG provides 61 grantees (50 states, the District of Columbia, two American Indian Tribal organizations, and eight U.S. territories) the autonomy and flexibility to prioritize use of funds for the health problems that most adversely affect their residents. Forty-one percent of PHHSBG funds are allocated by states to local communities. For example, Ohio uses the funds to support communities in 42 counties to develop walking trails, check blood pressure, and promote good nutrition.

The PHHSBG provides funding support for primary prevention activities and health services that address more than 30 different health problems in local communities. Programs target major issues such as cardiovascular disease, cancer, diabetes, tuberculosis, emergency medical services, injury and violence, infectious disease, environmental health, and sex offenses. In addition, the PHHSBG has supported activities such as clinical services, preventive screening, laboratory support, outbreak control, training, public education, and program evaluation.

FUNDING HISTORY TABLE

	Amount
FY 2004	\$131,814,000
FY 2005	\$118,526,000
FY 2006	\$98,932,000
FY 2007	\$99,000,000
FY 2008	\$97,270,000

BUDGET REQUEST

The CDC FY 2009 request includes elimination of the Preventive Health and Health Services Block Grant (PHHSBG), a decrease of \$97,270,000 below the FY 2008 Enacted level. As CDC strives to improve efficiency and effectiveness, other existing resources will continue to be available for programs which have traditionally addressed similar public health issues.

OUTPUT TABLE

						FY 2007				Out-Year Target
5.A.A.C	Number of states, territories, American Indian Tribal organizations funded	61	61	61	61	61	61	61	0	N/A
Appropriated Amount (\$ Million) ¹		\$131.8	\$118.5	\$98.9		\$99.0		\$97.3	\$0.0	

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STATE TABLE

FY 2009 BUDGET SUBMISSION	
CENTERS FOR DISEASE CONTROL AND PREVENTION	
FY 2009 DISCRETIONARY STATE/FORMULA GRANTS	
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	
	FY 2007 Actual
Alabama	\$1,568,418
Alaska	\$339,250
Arizona	\$1,184,313
Arkansas	\$882,987
California	\$6,847,385
Colorado	\$1,225,186
Connecticut	\$1,428,465
Delaware	\$185,012
District of Columbia	\$755,265
Florida	\$2,990,685
Georgia	\$3,038,541
Hawaii	\$765,904
Idaho	\$367,016
Illinois	\$2,359,349
Indiana	\$1,666,057
Iowa	\$1,084,524
Kansas	\$928,514
Kentucky	\$1,325,603
Louisiana	\$2,851,185
Maine	\$875,832
Maryland	\$1,859,616
Massachusetts	\$2,674,737
Michigan	\$3,895,418
Minnesota	\$2,484,696
Mississippi	\$1,429,999
Missouri	\$2,452,445
Montana	\$648,287
Nebraska	\$1,628,059
Nevada	\$388,705
New Hampshire	\$1,395,013

FY 2009 BUDGET SUBMISSION	
CENTERS FOR DISEASE CONTROL AND PREVENTION	
FY 2009 DISCRETIONARY STATE/FORMULA GRANTS	
PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT	
	FY 2007 Actual
New Jersey	\$2,855,234
New Mexico	\$1,374,116
New York	\$6,799,135
North Carolina	\$2,705,996
North Dakota	\$251,758
Ohio	\$4,465,530
Oklahoma	\$930,918
Oregon	\$719,299
Pennsylvania	\$4,705,798
Rhode Island	\$467,359
South Carolina	\$1,215,840
South Dakota	\$230,274
Tennessee	\$1,609,489
Texas	\$4,059,879
Utah	\$946,043
Vermont	\$268,739
Virginia	\$2,017,514
Washington	\$1,011,543
West Virginia	\$882,230
Wisconsin	\$1,931,359
Wyoming	\$223,514
Indian Tribes	\$57,772
American Samoa	\$52,036
Guam	\$214,738
Marshall Islands	\$25,948
Micronesia	\$63,210
Northern Mariana Islands	\$39,676
Palau	\$20,658
Puerto Rico	\$1,543,274
Virgin Islands	\$169,810
	\$93,385,155

BUILDINGS AND FACILITIES

BA	\$134,400,000	\$55,022,000	\$0	-\$55,022,000

AUTHORIZING LEGISLATION

PHSA §§ 304 (b)(4), 319D, 321(a)

FY 2009 AuthorizationIndefinite

ALLOCATION Methods.....Direct Federal/Intramural,
Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

The Buildings and Facilities (B&F) Program was established over 20 years ago to provide CDC with an annual source of funding to sustain, improve, and repair existing facilities and to construct new facilities to meet the mission of CDC. The B&F activity is mission support, serving approximately 14,000 CDC staff, FTE and non-FTE, who occupy CDC-controlled space. The program indirectly supports all program activities that take place in CDC-controlled space, such as laboratory research (infectious diseases, environmental health, occupational safety & health, and mine safety), and data and information systems support located in CDC-controlled data centers (i.e., Biowatch, FoodNet, etc.) and non-laboratory based public health research.

Since 2000, CDC has funded approximately \$1.7 billion (of appropriated dollars) toward its facilities, including funding for numerous capital projects in Atlanta, Ga. (Atlanta Master Plan), Repair and Improvement (R&I) of existing facilities, and a badly-needed replacement laboratory in Ft. Collins, Colorado. Funds are distributed through competitive bid design and construction contracts and through small business set-asides (8a contracts).

Taxpayer investment in new and existing facilities are protected by the incorporation of sustainable design principles, the effective maintenance and operations to reduce resource consumption (energy, water, and capital), and by effectively maintaining the facilities to keep them in good condition. For example, in 2007, the B&F Program exceeded the Executive Order (E.O.) 13423 energy reduction goal with an actual reduction of greater than three percent.

With the charge of protecting the public health of the nation, CDC is responsible for ensuring adequate facilities and equipment to carry out the agency's mission. The B&F Program provides CDC with facilities that are safer for both workers and the community, as well as facilities that allow CDC to respond more efficiently to public health emergencies.

Atlanta-Based Facilities

The Ten-Year Atlanta Facilities Master Plan envisions replacement of existing laboratories and the consolidation of approximately 3,000 professional staff from leased space into secure, CDC-owned space to be constructed on the Roybal and Chamblee Campuses.

In FY 2007, CDC continued with projects already in progress that were funded, in part or fully, with previous years' funding as part of the Atlanta Master Plan. Projects Include:

- Continued construction on the Environmental Health Facility – Building 106, with completion and occupancy achieved in 2nd Quarter FY 2008.
- Continued construction on another Atlanta Master Plan Project (East Campus Laboratory Consolidation Project – Building 23). Completion expected in FY 2010.

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- Completed pre-project planning for another Atlanta Master Plan (Epi Office Tower – Building 24). A Design/Build contract is expected to be awarded for Building 24 in April, 2008.

CDC completed and occupied four Atlanta Master Plan Projects in FY 2005 (Emerging Infectious Disease Laboratory, Tom Harkin Global Communications Center, Arlen Specter Headquarters and Emergency Operations Center, Environmental Toxicology Laboratory).

Three Atlanta area projects are registered or have received U.S. Green Building Council (USGBC) for Leadership in Energy and Environmental Design (LEED™) certification demonstrating improved sustainable design features through use of the Design/Build process.

- Building 106 – Environmental Health Facility, completed in the second quarter, FY 2008, includes:
 - minimization of maintenance costs and negative impacts on the environment by restoring vegetation after construction through the use of native plant materials and absorption storm water management systems;
 - minimization of heat island affects and increased energy efficiency by the use of vegetation shading and installation of a high-albedo roofing system;
 - incorporation of passive solar design including daylighting as the primary source of illumination supplemented by artificial lighting;
 - support of rapidly renewable materials to reduce impacts on resources and adopt procedures to minimize the waste stream including a contractor implemented waste management plan requiring recycling and/or salvage of at least 75 percent (by weight) of construction, demolition, and land clearing waste and specification of bio-based materials which typically have a ten-year or less growth cycle.

CDC anticipates LEED™ certification of Bldg. 106 in the third quarter of FY 2008.

- Building 21, Arlen Specter Headquarters and Emergency Operations Center completed in FY 2005 received an USGBC LEED™ Silver certification. The facility is designed to improve the productivity and health of employees by providing an open environment that optimizes the use of natural daylight and reducing energy levels greater than 20 percent above standard codes (FEMP Focus, April 30, 2003).
- Building 110, Environmental Toxicology Laboratory completed in FY 2005 received an USGBC LEED™ Gold certification. The facility consumes approximately 43 percent less energy than required by model energy codes incorporating energy-use zoning; provides daylight views for 90 percent of the occupants and implements the use of energy efficient lighting with daylighting controls and occupancy sensors; incorporates a rain garden to retain and absorb storm water; and includes native plant landscaping that minimizes the need for irrigation and fertilizer (FEMP Focus, Summer 2004)

The strategies used in the construction of the Atlanta-Based Facilities have positively impacted a number of the B&F program's goals.

- All of the capital projects completed have met or exceeded the performance measures for scope, schedule, budget, and quality, helping the program meet its PART Goal of "having greater than or equal to 90 percent of projects" meet/exceed the performance measures.
- The completion of the Emerging Infectious Disease Laboratory and the Environmental Toxicology Laboratory helped the program to meet its PART Goal of "having 70 percent of NCID laboratorians and 100 percent of NCEH laboratorians in CDC standard space".

Non-Atlanta Facilities

DVBID Lab Shell Space (Ft. Collins, Co.)

- This project was fully funded in FY 2007 and received HHS approval in the first quarter of FY 2008. CDC plans to award a D/B contract in the second quarter of FY 2008, to build out the fourth floor laboratory shell space in the new DVBID Laboratory for occupancy by approximately 35 scientists. The projects expected completion date is in 2009.

DVBID Laboratory (Ft. Collins, Co.)

- CDC completed and occupied an \$80.0 million laboratory in April, 2007, partially replacing the existing 40-year old leased laboratory.
- Completion of the DVBID Lab Building in 2007 met or exceeded the performance measures for scope, schedule, budget, and quality, helping the program meet its PART Goal of “having greater than or equal to 90 percent of projects” meet/exceed the performance measures.
- The completion of the DVBID Lab helped the program to meet its PART Goal of “having 70 percent of NCID laboratorians in CDC standard space”.

Cincinnati

- CDC has completed the environmental and preliminary site analysis for the consolidation of two antiquated NIOSH laboratories in Cincinnati, Ohio.

Nationwide Repair and Improvements (R&I)

In accordance with OMB and Federal Real Property Counsel guidelines, CDC's Nationwide R&I program includes sustainment, improvement, and repair projects needed to maintain or improve the condition of the CDC portfolio of assets; improving the energy efficiency of mechanical/electrical/water systems moving CDC towards meeting or exceeding energy reduction goals.; supporting program mission needs; and ensuring secure, healthy, and safe facilities.

The R&I program supports "mission critical" and "mission dependent" facilities in accordance with CDC's Sustainment strategy. Repair activities sustain buildings in an “operational status,” while improvement funds modify space to bring it into alignment with current codes and reduce “overutilized” space.

As part of the Real Property Asset Management Initiative within the President's Management Agenda, CDC has implemented HHS-level Federal Real Property Council (FRPC) performance metrics. Daily use of FRPC metrics allows CDC to obtain positive results in its asset management. CDC used the following measures and definitions detailed in the memo, HHS Real Property Asset Management Program Performance Measures (DAS/OFMP, 8 SEP 2005), to assess its FY 2009 B&F budget submission.

FRPC Performance Metrics

Nationwide Repairs and Improvements (R&I) Program		
FRPC Measure	Impact	Explanation
Mission Dependency		
Mission Dependency	Positive	R&I funds will be used for "mission critical" and "mission dependent" facilities in accordance with CDC's Sustainment strategy. Repair funds are used to sustain buildings in an "operational status." Improvement funds are used to modify space to bring it into alignment with current codes and reduce "overutilized" space.
Utilization Status	Positive	R&I funds will be used for "overutilized" and "utilized" facilities in accordance with CDC's sustainment strategy.
Utilization Rate	Positive	R&I funds are used to restore assets to a condition that allows their continued effective designated use, and to improve an assets functionality or efficiency, thus maintaining or improving the utilization of the asset.
Retention/Disposal	Positive	CDC intends to use R&I funds to demolish part of 47 identified underutilized, non-mission critical, underperforming assets between 2006-2010, that are not funded through major (Capital) projects, thereby improving portfolio utilization rates and reducing costs. An additional 13 assets have been identified for disposal by 2013.
Facility Condition	Positive	R&I funding will support CDC's sustainment strategy to maintain portfolio CI=90 or better.
Sustainment and Improvement Strategy	Positive	The strategy will allow CDC to return all assets to a CI of 100%.
O&M Cost	Positive	CDC anticipates a positive but unquantified impact on O&M costs resulting from sustainment-level R&I funding. Appropriate R&I and BSS funding will ensure that plant and equipment are operated and maintained in accordance with manufacturer's warranties, and to maximize energy and operating efficiencies.
Project Economics	N/A	

- Sustainment funding includes a combination of operations funded maintenance and minor renovations, and B&F funded repair, necessary to sustain the facility in its current condition. At present, CDC has an estimated Building Maintenance Backlog Reduction (BMAR) of \$159.8 million. CDC funds sustainment through the internal Business and Services Support (BSS) activity (operations) and the nationwide Repairs and Improvements (R&I) Program (B&F).
- Using data from the Automated Real Property Information System data base and individual Building Condition Assessments, CDC has projected R&I and BSS funding required from FY 2008 to FY 2013 inclusive, to improve and sustain CDC's owned assets at a minimum Condition Index (CI) of 90 as required by HHS. These projections take into account assets

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that CDC will propose to HHS for disposal based on the Performance Assessment Tool (PAT), as well as new assets approved, funded and under design/construction through FY 2006, and proposed assets identified in the Five-Year Plan with an out-year cost estimate (i.e., B24, B107, B108, and build-out of the Ft. Collins lab shell space). CDC's sustainment strategy incorporates the following measures:

- Base funding requests on periodically updated Facility Condition Assessments for each asset to achieve and maintain a minimum CI=90;
 - Prioritize sustainment funding around mission critical assets that are appropriately utilized and can be operated and maintained in a cost effective manner;
 - Continue to review the owned and leased inventory to identify assets for disposition in accordance with the FRPC's Disposition Decision Analysis framework (Please note that since the late 1990's, CDC has disposed of or earmarked for disposal over 40 non-performing assets nationwide); and,
 - Continue to request recapitalization funding for new construction or modernization where appropriate to replace non-performing assets.
- Current sustainment strategy will not be funded in FY 2009.

FUNDING HISTORY TABLE

	Amount
FY 2004	\$260,454,000
FY 2005	\$269,708,000
FY 2006	\$158,291,000
FY 2007	\$134,400,000
FY 2008	\$55,022,000

BUDGET REQUEST

For FY 2009, CDC requests no funding for the Buildings and Facilities Program, a decrease of \$55,022,000 from the FY 2008 Enacted level. In FY 2009, CDC will sustain existing facilities with carryover balances from previous appropriation.

OUTCOME TABLE

						FY 20				Out-Year Target
Efficiency Measures										
15. E.1	Energy and water reduction. [E] Goals under EPAct '05 and E.O. 13423	Energy Baseline 0% (2003)	N/A	N/A	N/A	Energy 03%	Energy Reduction 12.6% (Met)	Energy 06%	Energy 09%	
		Water Baseline 0% (2007)	N/A	N/A	N/A	Water N/A	Water N/A	Water 02%	Water 04%	
	Goals under E.O. 13123	Water Baseline 0% (1990)	Water 09% (unmet)	Water 30%	Water +30% (unmet)	Water 30%	Water +43% (unmet)	N/A	N/A	
		Energy Baseline 0% (1990)	Energy 18% (unmet)	Energy 20%	Energy 15% Reduction (unmet)	Energy N/A	Energy N/A	N/A	N/A	
15. E.2	Deliver leased space below Atlanta's sub-market rate. [E]	Baseline 5% under market	-10%	10% under market	-10%	10% under market	No new leased space delivered in FY 2007	10% under market	10% under market	
Long-Term Objective 15.1: Implement scheduled improvements, construction, security, and maintenance consistent with available resources and priorities identified in CDC's master facilities planning process.										
15. 1.1	Aggregate of scores for capital projects rated on scope, schedule, budget, and quality.	Greater than or equal to 90%	=>90% (Met)	Greater than or equal to 90%	=>90% (Met)	Greater than or equal to 90%	=>90% (Met)	Greater than or equal to 90%	Greater than or equal to 90%	
	Roybal Campus East CampusConsolidation Lab Project, Bldg. 23	Begin design (Pending Project and Funding Authority Approval) Met	Met	Continue design, Begin construction	Met	Complete design, Continue construction	The Design Phase as reported was completed in Oct. 06 Met	Continue construction	Continue construction	
	Research Support Tower, Bldg 24	Begin design (Pending Project and Funding Authority Approval) ¹	(Pending Project and Funding Authority Approval)	Pending	Pending Project and Funding Authority Approval	HHS Project Approval (design)	CIRB Approval 7/07 FPAA Approval Expected 2/2008	TBD (Pending Full Project Funding and Approval)	TBD (Pending Full Project Funding and Approval)	
	Infrastructure and security upgrades, Bldg 20	N/A	Continue construction	Continue construction	Met	Continue construction	Met	Complete construction	N/A	
	Chamblee Campus Environmental Health Facility, Bldg 106	Design target adjusted to FY 2005 (Met)	Begin design, Begin construction Met	Complete design; Continue construction	Met	Complete Construction	Construction Complete Expected 12/2007			

NARRATIVE BY ACTIVITY
BUILDINGS AND FACILITIES

						FY 20				Out-Year Target
	Cincinnati Campus Lab. Consolidation – Site Acquisition	Conduct analyses (Pending Project and Funding Authority Approval) Met	Pending Project and Funding Authority Approval Met	Continue analyses	Pending Project and Funding Authority Approval Met	Continue analyses	Analyses Complete 8/2007 (met)	Begin Design phase (Pending Project and Funding Authority Approval)	Pending Project and Funding Authority Approval	
	Ft. Collins, CO Campus DVBiD Replacement Laboratory	Complete design, begin construction Met	Continue Construction Met	Continue Construction	Met	Complete Construction	Met			
	DVBID Shell Space	N/A	N/A	N/A	N/A	HHS Project Approval (Design and initiate construction)	FPAA Approved 12/2007	Expect DB Award 4/2008 Begin Construction	Continue Construction	
15. 1.2	Placement of NCID & NCEH laboratories in CDC standard space (Projects occupied or underway).	N/A	NCID 70%, NCEH 100% (Met)	NCID 70%, NCEH 100%	NCID 70%, NCEH 100% (Met)	NCID 70%, NCEH 100%	NCID 70%, NCEH 100% (Met)	NCID 70%,	NCID 70%,	
15. 1.3	Relationship of work orders (scheduled and unscheduled maintenance).	Baseline Scheduled 95%, Unscheduled 5%	95%, 5% (Met)	Scheduled 95%, Unscheduled 5%	95%, 5% (Met)	Scheduled 95%, Unscheduled 5%	95%, 5% (met)	Scheduled 95%, Unscheduled 5%	Scheduled 95%, Unscheduled 5%	
Appropriated Amount (\$ Million)²		\$260.5	\$269.7	\$158.3		\$134.4		\$55.0	\$0.0	

¹Original project scope for Bldg. 24 cancelled and revised project scope submitted in FY 2007

²The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

NARRATIVE BY ACTIVITY
BUILDINGS AND FACILITIES

CENTERS FOR DISEASE CONTROL AND PREVENTION											
BUILDINGS AND FACILITIES: ONGOING/PROPOSED CONSTRUCTION											
											Line/Project
											Total
East Campus Consolidated Lab Project, Roybal Campus (#23) Δ		\$123,640	\$71,254	\$120,000	\$50,046						\$365,336
Research Support Facility (#22)											\$0
Research Support Facility (#24)					\$8,100	\$55,022		\$70,880			\$134,307
Research Support Facility (#107)								\$127,000			\$127,000
Research Support Facility (#108)								\$127,000			\$127,000
Hazardous Materials Handling Facility †								\$2,895			\$2,895
Arctic Investigations Program Lab, Anchorage, Alaska								TBD			
Building 1M Modernization, Roybal Campus ‡					\$150					TBD	\$150
Building 15 Modernization, Roybal Campus ‡						\$150			TBD		\$150
DVBID Shell Space Ft. Collins, CO - laboratory					\$15,000					TBD	\$15,000
DVBID Shell Space Ft. Collins, CO – vivarium & insectary										TBD	
NIOSH Cincinnati Lab Consolidation ‡		\$1,199							\$15,000		\$16,199
NIOSH NPPTL Lab, Pittsburgh Research Campus									TBD		\$0
NIOSH Lake Lyn Laboratory Facility Acquisition ‡				\$731				TBD			\$731
NIOSH Morgantown Laboratory Land Acquisition ‡				\$156				\$11,500			\$11,656
Environmental Microbiology Lab Initiative ‡				\$375						TBD	\$375

BUSINESS SERVICES SUPPORT

				FY 2009 +/- FY 2008
BA	\$378,289,000	\$371,847,000	\$337,906,000	-\$33,941,000
FTE	718	742	730	-12

AUTHORIZING LEGISLATION

PHSA §§ 301, 304, 307, 310, 317, 317F, 319, 327, 361, 362, 368, 399F; Federal Technology Transfer Act of 1986, (15 U.S.C. 3710) Bayh-Dole Act of 1980, P.L. 96-517

FY 2009 Authorization.....Indefinite

Allocation Method.....Direct/Federal;
Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Over the past three years, CDC's business services structures and systems have been significantly enhanced to achieve greater effectiveness. CDC's budget structure was reorganized in FY 2005 to ensure greater transparency and accountability for programmatic dollars by identifying and separating costs related to business operations and processes into the BSS budget activity. The work conducted within this activity supports the premiere public health programs and science that make CDC America's lead public health agency and a respected resource for improving public health worldwide.

Guided by the President's Management Agenda (PMA), CDC has combined best practices of the business community with those of the public sector to become a more efficient and accountable steward of taxpayer dollars. To meet the goal of providing cutting-edge business services, CDC has engaged in numerous business process improvements and continues to adapt to realize additional benefits from advancements in this area.

To ensure business processes are effective and hold business services functions at the agency accountable for the services they provide, CDC devised specific key performance indicators (KPIs), including Web usage, Hiring Speed, Cycle Time and ServiceDesk Resolution Time, to encourage more visibility into various operational areas. Over the course of the past few years, CDC maximized use of those KPIs to realize performance within the Business Services Offices (BSOs) of the Office of the Chief Operating Officer (OCOO).

However, as the agency and HHS continue to increase their focus on performance and accountability, CDC began revising the previously utilized set of KPIs to include not only a high level set of indicators reflecting agency-wide functions, but also a more detailed group within each BSO measuring each office's functional performance as it relates to the agency's overall efficiency. Thus, the Business Services Improvement Office (BSIO) was created in FY 2006 and charged with facilitating business services improvements across CDC that increase effectiveness and customer satisfaction. In FY 2008, BSIO developed and began tracking strategic KPIs for each of the BSOs located within OCOO. These strategic KPIs are related to the achievement of strategic goals and objectives, as well as key drivers of business value. The KPIs reflect different critical core processes of participating offices.

The goal of this exercise is to expand business services KPIs to each coordinating center and national center, so that the business services functions within each programmatic area are measured as successfully as within the BSOs themselves. Once business services KPIs exist

within the programmatic areas, the agency should be able to realize increased efficiencies within key areas identified through outcome-oriented performance indicators.

The OCOO is responsible for tracking and reporting many business services functions outside of those reported using KPIs. The BSS budget activity is an extension of this system of accountability for business. Funds within this budget activity include the OCOO, as well as resources for areas such as rent, utilities, telecommunications, and security for CDC employees.

Major activities within the OCOO include:

- Administrative Services and Program
- Alternative Dispute Resolution
- Buildings and Facilities
- Ethics
- Financial Management
- General Counsel
- Health and Safety
- Information Technology & Business Systems
- Procurement and Grants
- Security and Emergency Preparedness

Significant Accomplishments include the following:

- CDC became the first Federal civilian agency to successfully implement a High Performing Organization (HPO), an innovative alternative to public-private competition. As a result, the agency was awarded a President's Quality Award (PQA) in 2007, the highest award given to Executive Branch agencies for management excellence. Furthermore, CDC has successfully implemented the Public Health Integrated Business Services (PHIBS) HPO, which includes a wide spectrum of restructuring activities aimed at optimizing the business services such as acquisition support, business information systems support, facilities, funds management assistance, payroll administration, and property management.
- Consolidated all common CDC IT infrastructure services to achieve higher performance at lower cost through the Information Technology Services Office (ITSO). This consolidation reduced operating costs by 38 percent and staff by 26 percent, while increasing service offerings, expanding service hours and locations, improving service levels, and reaching a "best-in-class" customer satisfaction result.
- Experienced over 30 percent growth per year in visits to CDC's website, compounded over the last five years and now averaging 13 to 15 million visitors per month. Visits to the CDC web site reflect the quality, timeliness, trust, and value of CDC's information to the public. During public health emergencies, visits to the site spike dramatically as the public seeks emergency-related information.

FUNDING HISTORY TABLE

	Amount
FY 2004	\$287,902,000
FY 2005	\$319,152,000
FY 2006	\$317,576,000
FY 2007	\$378,289,000
FY 2008	\$371,847,000

BUDGET REQUEST

The CDC FY 2009 request includes \$337,906,000 for Business Services Support, a decrease of \$33,941,000 below the FY 2008 Enacted level, which includes a \$2,589,000 Individual Learning Account (ILA) and administrative reduction.

BSS funding supports ongoing services maintained by CDC's business service units, expansion into new business areas that are critical to the success of the agency, and federally mandatory requirements. The requested funding will help CDC fulfill unmet needs and mandatory requirements such as:

- Providing for the operations, maintenance, utilities information technology and security for all CDC facilities, including five new buildings that will be operational by early FY 2008.
- Conversion to new government-wide and HHS-wide initiatives such as:
 - Homeland Security Presidential Directive 12 (HSPD-12), aimed at creating a common identification standard for federal employees and contractors;
 - Information for Management, Planning, Analysis, and Coordination, Version 2 (IMPAC II), utilized by PGO to manage grants and cooperative agreements;
 - PRISM, a component of the HHS Consolidated Acquisition System (HCAS), utilized by PGO to create and administer contracts and purchase orders.
- Maintenance of proper levels of information technology security to allow information transmitted and housed in CDC's information technology systems to be safeguarded against potential threats.
- Compliance with OMB Circular A-123 internal controls over financial reporting.

TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

				FY 2009 +/- FY 2008
BA	\$1,472,553,000	\$1,479,455,000	\$1,419,264,000	-\$60,191,000
FTE	708	766	805	+39

SUMMARY OF THE REQUEST

CDC has made all-hazards public health preparedness and emergency response a priority and continues to build and enhance systems at the federal, state and local levels. CDC's Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) coordinates the agency priority of public health preparedness by providing direction on preparedness across CDC programs, allocating terrorism preparedness resources across CDC, ensuring program accountability through budget and performance integration, serving as point of contact on preparedness for key stakeholders, and reporting on progress and challenges in public health preparedness. These activities enable the national public health infrastructure to develop the building blocks needed to respond to varied disaster scenarios including natural, chemical, biological, radiological, and nuclear events.

Since 2001, 21 Homeland Security Presidential Directives (HSPDs) have been issued. These Directives have set in motion related Department of Homeland Security (DHS) initiatives including the publication of a National Response Framework (NRF) and a National Preparedness Goal. The NRF's all-hazards approach and the National Preparedness Goal's vision, capabilities, and priorities constitute the core of the nation's preparedness policies. This policy framework provides the foundation for CDC's Preparedness Goal Action Plan which seeks to leverage CDC's critical capacities and capabilities needed for an all-hazards approach to prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Preparedness Goal Action Plan establishes nine outcome goals for CDC; the nine goals are supported by five functionally-based all-hazards objectives. The strategies and the activities of the Goal Action Plan are aligned to these five functional objectives. The CDC Preparedness Goals focus on enhancing the nation's public health preparedness capabilities, while the objectives organize CDC's preparedness planning and results measurement around functional outcomes. These five areas include:

- Health Monitoring and Surveillance: maintaining situational awareness at the global, national, state and local levels regarding real or potential public health emergency threats
- Epidemiology and Other Assessment Sciences: activities that initiate, coordinate, and resolve investigations, specifically, investigations that identify the causes, risk factors, and interventions for all threats of national significance
- Laboratory Science and Service: conducting and supporting internal or external laboratory research and investigations, support services and partners
- Response and Recovery Operations: activities undertaken during the response and recovery phases of a disaster to minimize morbidity and mortality from all threats of national significance
- Public Health System Support: programs conducted in collaboration with state, local, and territorial health departments, foreign nations, non-profits, and others to implement programs and interventions for public health emergencies

The Pandemic and All Hazards Preparedness Act (PAHPA) of 2006 requires HHS to create a National Health Security Strategy and to enhance the capabilities of federal, state, and local public health systems to address all potential hazards. The broad central concept in this national strategy, health security, is supported by CDC's Preparedness Goal Action Plan, including the five functional objectives. Therefore, the FY 2009 budget for Terrorism Preparedness and Emergency Response seeks to further strengthen CDC's investments in all-hazards public health preparedness by addressing preparedness for chemical, biological, radiological and mass trauma events, and by assessing the effects of these investments on public health preparedness capacities.

CDC requests \$1,419,264,000 for the Terrorism Preparedness and Emergency Response budget activity, a decrease of \$60,191,000 below the FY 2008 Enacted level, which includes a reduction of \$2,695,000 for Individual Learning Accounts (ILAs) and administrative costs. The FY 2009 request includes:

- \$609,385,000 for the Upgrading State and Local Capacity program, a decrease of \$136,654,000 (of which \$1,157,000 is for an ILA and administrative reduction) below the FY 2008 Enacted level. This is a one-time realignment of the grant cycle to match the States' fiscal year and is thus level funding with FY 2008. This program supports state and local health departments through the Public Health Emergency Preparedness (PHEP) Cooperative Agreement, Centers for Public Health Preparedness and the Real Time Disease Detection pilot program.
- \$131,071,000 for the Upgrading CDC Capacity program, an increase of \$10,327,000 over the FY 2008 Enacted level. These funds continue support of the Laboratory Response Network (LRN); expand radiological and nuclear laboratory capability and capacity; support the Select Agent Program; and, research potential emergency situations such as biothreat agent releases and surveillance.
- \$100,634,000 for CDC's Biosurveillance programs, an increase of \$47,353,000 over the FY 2008 Enacted level, and includes \$49,905,000 for the BioSense program and \$43,273,000 for the Quarantine program, an increase of \$33,403,000 over the FY 2008 Enacted level, to operate 20 quarantine stations throughout the U.S. and establish five new international stations to limit the introduction and the ensuing spread of infectious disease in the U.S.
- \$570,307,000 for the Strategic National Stockpile (SNS), an increase of \$18,798,000 over the FY 2008 Enacted level, to continue to store, purchase and distribute appropriate medical countermeasures and equipment following a public health emergency event.
- \$7,867,000 for the Anthrax program, a decrease of \$15,000 below the FY 2008 Enacted level due to an ILA and administrative reduction, for the continuation of research to analyze the effectiveness, administration and dosage of anthrax vaccines.

UPGRADING STATE AND LOCAL CAPACITY

				FY 2009 +/- FY 2008
PHEP Cooperative Agreement	\$712,919,000	\$700,465,000	\$570,903,000	-\$129,562,000
Centers for Public Health Preparedness	\$29,063,000	\$28,555,000	\$28,501,000	-\$54,000
Advanced Practice Centers	\$5,355,000	\$5,261,000	\$0	-\$5,261,000
All Other State and Local Capacity	\$19,323,000	\$11,758,000	\$9,981,000	-\$1,777,000
Total	\$766,660,000	\$746,039,000	\$609,385,000	-\$136,654,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 311, 317, 319, 319A, 319C, 319D, 319F, 319G, 351A, 361-368 (42 USC 262 note), 2801-2811. Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pandemic and All Hazards Preparedness Act of 2006.

FY 2009 Authorization.....Indefinite

Allocation Method.....Competitive
Grant/Cooperative Agreements; Formula Grant/Cooperative Agreements

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Upgrading State and Local Capacity supports activities focused on CDC's provision of resources and technical assistance to state, local, and territorial health departments, foreign nations, non-profit organizations, and others to implement public health programs and interventions for public health emergencies. These programs directly achieve improvements in the Public Health Systems Support functional objective category and serve the general public and state and local health departments through the development and maintenance of all-hazards preparedness at the state and local levels, as well as ongoing evaluation and ensuing improvements of preparedness throughout CDC and its grantees. These activities began at CDC in FY 1999 with the development of the Bioterrorism (BT) Cooperative Agreement and are completed through intramural CDC programs including the Public Health Emergency Preparedness (PHEP) Cooperative Agreement program, the Centers for Public Health Preparedness (CPHP), and other programs aimed at enhancing state and local preparedness.

Public Health Emergency Preparedness (PHEP) Cooperative Agreement Program

In FY 1999, CDC began providing technical assistance and funding to state, local, and territorial public health agencies for the purposes of developing their capacity to respond effectively to terrorism related public health emergencies. Following September 11, 2001 and subsequent Anthrax attacks, the program grew to focus on ensuring that state, local, and territorial public health agencies have the capacity and capability to effectively respond to and protect populations from the public health consequences of all-hazards threats, including terrorist, chemical, biologic, radiologic, and nuclear emergencies and natural disasters. CDC administers the PHEP Cooperative Agreement (formerly known as the BT Cooperative Agreement), which funds state and local efforts to build and strengthen their preparedness and infrastructure. CDC oversees program accountability through performance measures, metric refinement and third party evaluation.

CDC supports 62 PHEP grantees including all 50 states, Chicago, New York City, Los Angeles County, Washington D.C., and eight U.S. territories. Grantees work to improve their ability to detect and respond to intentional and unintentional public health threats, such as pandemic influenza, through support for personnel, supplies, equipment, travel and training. State and local public health preparedness has been strengthened and integrated with federal, state, local, and tribal

governments, the private sector, and non-governmental organizations through the program. These emergency preparedness and response efforts aid state and local health departments in aligning with the National Response Framework (NRF) and complying with the National Incident Management System (NIMS). Through PHEP funding, all states have established the infrastructure necessary to evaluate urgent disease reports and activate emergency response operations 24 hours a day, 365 days a year. The program supports over 5,000 state and local public health employees working full or part time on preparedness activities, and also funds activities to improve preparedness and collaboration across borders with provinces and states in Canada and Mexico.

The PHEP Cooperative Agreement requires state and local governments to create and implement plans to enhance public health preparedness and security; and to use measurable evidence-based standards and objectives as outlined in PAHPA. A measurement framework in which the grantees report performance metrics is currently under development. All PHEP grantees participate in the Health Alert Network (HAN), allowing for the high-speed exchange of critical public health information to improve the practice of public health, providing linkages between all local public health jurisdictions via continuous, high speed, secure connections.

Since the events of September 11th, the PHEP program has led to several improvements:

- Eighty percent of states have response plans for anthrax, 98 percent for smallpox, 67 percent for botulism toxin, 69 percent for nuclear events, and 49 percent for nerve agents. Grantees will continue to develop these plans, as well as pandemic influenza plans, in FY 2009.
- Increased the number of Bio-Safety Level-3 Labs from 69 to 139. The number of labs participating in the LRN now exceeds 150 labs with at least one in every state. More public health labs now have the capacity to test for agents believed to be most likely used in a bioterrorist attack (e.g., Anthrax, ricin, and plague).
- Tabletop exercises are conducted, including focusing on school closings and mass vaccination clinics.
- Ninety-eight percent of cooperative agreement recipients have persons assigned to evaluate urgent disease reports on a 24/7/365 basis.
- All states have developed strategies and plans to receive and distribute SNS medical supplies and have demonstrated this capability through observed drills.
- 97 percent of states enhanced their emergency response capability by structuring their response systems using the NIMS Incident Command System structure, and all are actively exercising their response capabilities in local and regional exercises.

Annual program activities include:

- Addressing Target Capabilities and critical tasks developed for the National Preparedness Goals and focusing on preparedness activities in six areas (prevent, detect and report, investigate, control, recover and improve) to enhance and maintain response capacity.
- Facilitating collaboration with: federal partners, including DHS and DOD; partner organizations such as NACCHO, ASTHO, APHL, NALBOH and CSTE; and other partners, such as the Association of Maternal and Child Health Programs and the National Association of Community Health.
- Supporting the HHS Goal to enhance the ability of the nation's health care system to effectively respond to bioterrorism and other public health challenges.

- Funding support personnel, supplies, equipment, travel and contractors to ensure an adequate level of public health response workforce, capacity and mobility.

Centers for Public Health Preparedness (CPHP)

The Centers for Public Health Preparedness (CPHP) program is a network of 30 academic-based preparedness education and training programs located in 27 accredited Schools of Public Health and three other university entities. CPHPs work with states and collaborate with one another to develop and support the public health emergency preparedness-related knowledge and skills of first responders and other public health professionals. The CPHP program was initiated in FY 2000 to strengthen terrorism and emergency preparedness by linking academic expertise to state and local health agency needs. CPHPs have conducted 2,361 public health preparedness education and training activities and have contributed 1,351 public health preparedness resources to the public domain since the initiation of the program. All 50 states, plus Washington D.C., Puerto Rico, the Virgin Islands, and several U.S. territories are served in some capacity by at least one CPHP activity.

The 27 Centers within Schools of Public Health have demonstrated unique expertise for contributing to national terrorism preparedness and response efforts through providing preparedness educational programs and other requested services targeting state and local public health workers, public health leaders, epidemiologists, environmental health workers, clinicians, veterinarians, legal professionals, and first responders. CPHPs collaborate closely with state and local health agencies to develop, deliver, and evaluate preparedness education based on community need with the intention of targeting the state and local public health and healthcare audiences, building their skills to improve preparedness capacity on many levels thereby reducing potential health burden of emergencies on the general population.

The CPHP program strives to:

- Strengthen public health workforce readiness by implementing programs for life-long learning
- Strengthen capacity at state and local levels for all-hazards preparedness and response
- Develop a network of academic-based programs contributing to terrorism preparedness and emergency response capacity by sharing expertise and resources across state and local jurisdictions
- Provide preparedness education and other requested services to health agencies, academia, and other organizations

CPHPs complete the following activities:

- Deliver education, training, and dissemination of new information related to enhancing emergency preparedness and response
- Complete partner-requested activities based on CPHP qualifications, expertise, and resources available to commit to the specific activity
- Continue activities needed for general support of preparedness education, outreach, partnerships, and CPHP program evaluation

Advanced Practice Centers (APCs)

CDC, in collaboration with the National Association of County and City Health Officials (NACCHO), funded five Advanced Practice Centers (APCs) in November 2003. As a result of increased program funding, three additional APCs were selected and funded in September 2004. Each APC has consistently improved and evaluated their own infrastructure for public health emergency

preparedness (documenting lessons learned and successes), assisted other local health departments in replicating cutting-edge resources, technology, and methodology developed, and served as learning laboratories for designing and testing new and innovative ways to improve the nation's public health emergency preparedness and response at the local level. APC products, services and innovations are shared among local public health departments across the country.

Real Time Disease Detection

Within the recently implemented PAHPA legislation, CDC is responsible for the design and continued development of the existing national electronic data collection network. This network collects and analyzes public health data from governmental and private entities within "real time" of an exposure or release, thus quickly alerting public health authorities to begin response activities. Data collection and analysis will continue to ensue in following fiscal years. The receipt, analysis, and evaluation of national health related data enables early event detection and health situational awareness needed to identify, contain, and minimize terrorist threats in the U.S.

The Real Time Disease Detection pilot program will be implemented through the PHEP Cooperative Agreement program among 62 grantees, including the 50 states, eight territories and four metropolitan areas. By generating standardized data formats for existing state and local surveillance systems, CDC will maximize the compatibility and usefulness of real-time information to assess situational awareness capabilities.

Real Time Disease Detection program will complete the following activities:

- Provide support to 62 grantees and Poison Control Center awardees to develop a real-time public health data detection and reporting system
- Determine the feasibility of continuing the program into FY 2010, as well as the need for program expansion

CDC's State and Local Preparedness Grants program received a PART assessment in 2006. The evaluation cited that the purpose and importance of the program are clear, although results have not yet been demonstrated because of the relative newness of the program and the inherent difficulty of measuring preparedness against an event that does not regularly occur. In addition, the formula for distribution of grants may not be optimal since it does not address varying threat levels or states of preparedness. As a result of the PART review, the program is taking steps to develop and conduct independent program evaluations, as well as work with grantees to ensure the availability of performance data to determine when acceptable preparedness has been demonstrated, and target assistance for areas not adequately prepared.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$918,454,000
FY 2005	\$919,148,000
FY 2006	\$823,099,000
FY 2007	\$766,660,000
FY 2008	\$746,039,000

BUDGET REQUEST

CDC requests \$609,385,000 for Upgrading State and Local Capacity and related activities in FY 2009, a decrease of \$136,654,000 from the FY 2008 Enacted level, which includes a \$1,157,000 Individual Learning Account (ILA) and administrative reduction. These funds will continue to provide support for 62 grantees through the PHEP Cooperative Agreement, the Centers for Public Health Preparedness and implement a Real Time Disease Detection program pilot.

FY 2009 CONGRESSIONAL JUSTIFICATION

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Public Health Emergency Preparedness (PHEP) Cooperative Agreement Program

The FY 2009 request includes \$570,903,000 for the PHEP Cooperative Agreement, a decrease of \$129,562,000 below the FY 2008 Enacted level, which includes a \$1,084,000 reduction for ILAs and administrative costs. The PHEP develops activities at the state and local level that reinforce the objectives of the National Preparedness Goal, the National Health Security Strategy, and public health emergency preparedness. The PHEP cooperative agreement provides funds, technical assistance, program evaluation and performance measurement to demonstrate improvement in the ability to detect and respond to intentional and unintentional public health threats. As recommended by stakeholders as a strategy to fully implement the PAHPA legislation (Public Law 109-417), grant cycles will shift during FY 2009 to better align with state funding cycles. CDC will complete this shift in FY 2009 by providing grantees with a nine-month and three-week funding cycle, beginning on August 10, 2009 and ending on May 31, 2010, allowing the next budget period to begin June 1, 2010. This shift, along with the funding reduction of \$129,562,000, will allow monthly funding levels to the states to be maintained at expected FY 2008 funding levels. CDC will continue to provide all-hazards preparedness planning, exercise, evaluation, and technical assistance services to the grantees in FY 2009. FY 2010 grantee funding will resume the 12-month cycle as grants will have completed realignment, with a budget period starting June 1, 2010 and concluding May 31, 2011.

CDC will continue supporting state and local public health departments in FY 2009 by focusing on providing technical assistance, continued training and exercises, and planning development and implementation. In addition, investments in HAN communications systems at the state and local levels will also continue in FY 2009. These communication systems have served to integrate public health response with the medical community, as well as to help transform a once disparate and unconnected public health system into a common network able to rapidly mobilize and coordinate resources during an emergency.

In FY 2009, continued state planning for the distribution of SNS medical materiel will contribute to increased success in the relevant performance measure. In FY 2006, CDC sustained a 70 percent SNS preparedness level, not meeting its target of 80 percent since many jurisdictions lack proper facilities to receive the 50-ton package of SNS material. The FY 2007 SNS preparedness rating of 78 percent, shows improvement over the FY 2006 performance. Currently, 40 out of 54 grantees are performing at an acceptable level based on an assessment of the core functions. Although there are many challenges to sustaining this preparedness capability, CDC believes that recent efforts to enhance preparedness through more rigorous planning and assessment processes combined with technical assistance, training and exercises will improve grantees' long term ability to perform during a public health emergency.

Level-three laboratories, also called sentinel laboratories, rule out the presence of agents and refer samples to reference labs through the use of specified protocols. As a public health preparedness standard, each state should have the capacity to conduct, rule-out and transfer activities. In FY 2006, significant progress was made on this measure as 100 percent of states have level-three lab capacity. Fifty percent of the states are within an eight hour driving distance to a level-one chemical laboratory due to CDC's efforts in increasing the number of level-one laboratories from five to ten in FY 2005. In FY 2009, CDC will continue to train all 62 level-three public health chemical laboratories (chemical terrorism coordinators in these laboratories) in the proper collection and shipment of human samples following a chemical event. Training will also include an overview of chemical agents; CDC's responsibilities in responding to chemical terrorism events; a discussion of federal regulations on diagnostic packaging procedures and evidentiary-control measures; and, hands-on exercises involving the packaging and shipping of human samples. These public health chemical laboratories will then train internal partners (e.g., hospital laboratories, HAZMAT, doctors,

office laboratories) in the proper collection and shipment of human samples after a chemical-terrorism event.

CDC provides management oversight and technical assistance for the administration of the PHEP Cooperative Agreement. As part of the application process, grantees are required to submit detailed work plans and budgets. CDC Project Development Officers (PDO) review, provide feedback, and approve applications before funds can be awarded. In addition, at the end of the review process, PDOs provide recommendations for each work plan activity and line items are restricted or disallowed for the budget. The issues cited during this review are monitored and resolved during the year. Historically, PDOs conducted technical reviews of the grants using paper-based approaches resulting in difficulty tracking resolution of issues raised during the review process. CDC's Management Information System (MIS) was enhanced to centralize the collection, tracking and management of review information, and helps facilitate technical assistance efforts throughout the course of the year. The automation and integration of this process will create overall efficiencies in the grants management process by decreasing the time it takes to conduct initial reviews and by providing rapid access to information to track and manage over time.

The efficiency gained from the MIS translates into other efficiencies from the grantees' standpoint including a reduction in the time it takes them to obtain feedback regarding their work plans and budgets from Project Officers. This in turn results in a faster implementation of recommended changes, which improves the overall efficiency of their programmatic operations.

Based on ongoing evaluations, several performance measures were recently revised. These revisions will provide more accurate, all-hazards inclusive evaluations of state and local health department and laboratory progress and effectiveness. One example is the revised measure of the percentage of public health agencies that directly receive CDC PHEP funding that can convene a team of trained staff that can make decisions about appropriate response and interaction with partners within 60 minutes of notification. This revision creates an all-hazards assessment instead of focusing specifically on chemicals or category A agents.

Centers for Public Health Preparedness (CPHP)

The FY 2009 request includes \$28,501,000 for the CPHPs, a decrease of \$54,000 for an ILA and administrative reduction. CPHPs will strengthen preparedness focused educational programs targeting state and local public health workers, public health leaders, epidemiologists, environmental health workers, clinicians, veterinarians, legal professionals, and first responders. On average, the Centers reach approximately 200,000 students per fiscal year. PAHPA includes a provision for the Centers to conduct preparedness research in order to better inform their training and educational programs, which will be expanded upon in FY 2009.

CDC will also continue to encourage CPHPs to provide relevant education and training to numerous audiences at the state and local levels that often deal with underserved, at-risk and minority populations. In FY 2007, 83 activities address the special preparedness needs of at-risk populations including geriatric, pediatric, and racial/ethnic minority populations. Specifically, 23 activities will be conducted targeting the needs of tribal communities. In addition, 102 activities will address the training and education needs surrounding mental health and psychosocial preparedness issues.

Advanced Practice Centers

For the second consecutive year, CDC has not requested funding for this activity, as the capacity at the Centers has been built to an acceptable level. Additionally, other CDC activities within the FY 2009 request provide further opportunities to expand public health all-hazards preparedness with local public health departments and partners.

Real Time Disease Detection

CDC requests \$9,981,000 in FY 2009 to implement and establish the Real Time Disease Detection system through a pilot program. Funding for the pilot program will be supported through the All Other State and Local Capacity sub-budget activity. Data collection and analysis will ensue in following fiscal years. CDC will continue to work to improve public health surveillance of chemical exposures and other potential health hazards by developing the Real Time Disease Detection infrastructure to systematically collect, analyze, interpret, and disseminate data related to health events in FY 2009. This system will improve the ability of state and local health departments and Poison Control Centers to respond to public health emergencies related to chemicals or toxins in the environment by detecting a problem or an incident immediately and effectively.

The Real Time Disease Detection pilot program was established by the PAHPA legislation. CDC will provide funding and technical support to the 62 existing cooperative agreement partners, as well as Poison Control Centers with jurisdiction within those partner states and areas, to develop and implement the pilot program. CDC will also determine the feasibility of extending the Real Time Disease Detection program into additional out years during FY 2009.

OUTCOME TABLE

						FY 2007				Out-Year Target
Efficiency Measure: Create program efficiencies that improve services and conserve resources for mission-critical activities										
16. E.1	Decrease the amount of time it takes the Division of State and Local Readiness (DSLRL) Project Development Officers to conduct technical reviews of work plans and budgets for all 62 grantees by providing appropriate tools and functionality in the DSLR Management Information System (MIS).	N/A	N/A	Baseline	30 days	28 days	12/2008	25 days	21 days	20 days
Long-Term Objective 16.4: Improve the timeliness and accuracy of communications regarding threats to the public's health										
16. 4.1	100% of LRN labs will report routine public health testing results through standards-based electronic disease surveillance systems and have protocols for immediate reporting by telephone for Category A agents (bacillus anthracis, yersina pestis, francisella tularensis, clostridium botulinum toxin and variola major) for which they conduct testing. [O]	N/A	100%	100%	80%	100%	100%	100%	100%	100%

NARRATIVE BY ACTIVITY
TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

						FY 2007				Out-Year Target
Long-Term Objective 16.6: Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health										
16.6.2	Percentage of state public health agencies are prepared to use materiel contained in the SNS as demonstrated by evaluation of standard functions as determined by CDC. [O]	72% prepared	76% prepared	80% prepared	70% prepared	90% prepared	78% prepared	90% prepared	90% prepared	90% prepared

OUTPUT TABLE

						FY 2007			FY 2009 Target
Long-Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.									
16.3.1	100% of states have level three chemical lab capacity, and have agreements with and access to (specimens arriving within 8 hours) a level-one chemical lab equipped to detect exposure to nerve agents, mycotoxins, and select industrial toxins. ¹	N/A	50%	100%	100%	100%	100%	100%	100%
16.3.6	Percentage of state public health laboratories that directly receive CDC PHEP funding that can correctly subtype <i>E.Coli O157:H7</i> and submit the results into a national reporting system within four working days for 90% of the samples received.	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD
Long-Term Objective 16.9: Decrease the time needed to implement recommendation from after-action reports following threats to the public's health.									
16.9.1	Percentage of public health agencies that directly receive CDC PHEP funding that can convene within 60 minutes of notification a team of trained staff that can make decisions about appropriate response and interaction with partners.	N/A	N/A	100%	94%	75%	03/2008	90%	100%
16.9.5	Percentage of public health agencies that directly receive CDC PHEP funding that, at least once/year, re-test a response following completion of corrective action(s) identified in a prior actual or simulated response.	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD
Other Upgrading State and Local Capacity Outputs									
16.A	Academic Centers for Public Health Preparedness	23	27	27	27	27	27	27	27
16.B	Percent of state health departments that acknowledge receipt of Health Alert messages within 30 minutes of delivery 24/7.	60%	65%	70%	70%	75%	75%	75%	75%
16.C	Number of states, territories, and major metropolitan areas formally assessing public health capacity and preparedness.	62	62	62	62	62	62	62	62
Appropriated Amount (\$ Million) ²		\$918.5	\$919.1	\$823.1		\$766.7		\$746.0	\$609.4

¹Please note that the nomenclature has changed for chemical laboratories: level-three labs are now referred to as level-one labs and level-one labs are referred to as level-three labs

²The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

PHEP COOPERATIVE AGREEMENT STATE FUNDING TABLE

	FY 2007 ACTUAL
Alabama	\$10,228,438
Alaska	\$5,015,000
American Samoa	\$419,594
Arizona	\$14,284,449
Arkansas	\$7,533,982
California	\$52,023,574
Chicago	\$13,806,684
Colorado	\$11,234,142
Connecticut	\$9,112,072
Delaware	\$5,000,000
District of Columbia	\$9,129,492
Florida	\$33,289,391
Georgia	\$18,230,415
Guam	\$589,529
Hawaii	\$5,296,353
Idaho	\$5,439,853
Illinois	\$19,245,542
Indiana	\$13,406,349
Iowa	\$7,832,164
Kansas	\$7,709,812
Kentucky	\$9,905,373
Los Angeles	\$25,365,277
Louisiana	\$10,536,471
Maine	\$5,381,949
Marshall Islands	\$421,421
Maryland	\$12,815,412
Massachusetts	\$14,418,081
Michigan	\$21,555,319
Micronesia	\$496,704
Minnesota	\$12,587,653
Mississippi	\$7,797,260
Missouri	\$13,236,793
Montana	\$5,026,488
Nebraska	\$5,966,406
Nevada	\$7,662,442
New Hampshire	\$5,308,479
New Jersey	\$17,584,884
New Mexico	\$7,249,926
New York	\$22,935,076
New York City	\$24,369,122
North Carolina	\$16,570,173
North Dakota	\$5,028,972
Northern Mariana Islands	\$454,109
Ohio	\$22,745,252
Oklahoma	\$8,871,195

NARRATIVE BY ACTIVITY
TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

	FY 2007 ACTUAL
Oregon	\$9,192,614
Palau	\$361,900
Pennsylvania	\$24,743,362
Puerto Rico	\$9,036,997
Rhode Island	\$5,048,931
South Carolina	\$9,972,754
South Dakota	\$5,000,000
Tennessee	\$13,009,292
Texas	\$44,570,881
Utah	\$7,174,066
Vermont	\$5,039,717
Virgin Islands	\$497,630
Virginia	\$17,109,122
Washington	\$14,168,202
West Virginia	\$6,026,051
Wisconsin	\$12,667,934
Wyoming	\$5,000,000
	\$721,736,525

UPGRADING CDC CAPACITY

				FY 2009 +/- FY 2008
BA	\$122,928,000	\$120,744,000	\$131,071,000	+\$10,327,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 311, 317, 319, 319A, 319C, 319D, 319F, 319G, 351A, 361-368 (42 USC 262 note), 2801-2811. Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pandemic and All Hazards Preparedness Act of 2006.

FY 2009 Authorization Indefinite

Allocation Method Direct

Federal/Intramural; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Upgrading CDC Capacity is comprised of numerous programs throughout CDC that directly achieve improvements in all five all-hazards preparedness functional objectives. Programs under these functional objectives collaboratively serve the general public, research scientists, hospitals and health departments through public health security activities, and overall preparedness at global, national, state and local levels. In addition, these programs ensure the ongoing evaluation and improvements of surveillance, laboratory science, research, and support throughout CDC and its grantees while continuing to advance public health preparedness and response capabilities through technical assistance, resource allocation, planning tools, education and training. The functional objectives structured under Upgrading CDC Capacity further organize CDC's preparedness planning and results measurement, supporting achievement of the agency's strategic preparedness goals.

Health Monitoring and Surveillance

Health Monitoring and Surveillance activities conduct surveillance before, during, and after events. Accomplishments are achieved using methods that include the systematic collection, analysis and reporting of health related information for the purpose of public health action. This includes planning, developing, operating and evaluating surveillance systems.

Terrorism Injuries Information Dissemination and Exchange (TIIDE)

The TIIDE program is constructed around three interrelated areas incorporating the development of lessons learned from past terrorist events, the promotion of professional partnerships to enhance information exchange, and the development of communications plans for information dissemination. TIIDE improves the timeliness and accuracy of communications regarding threats to the public's health and to decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats.

By strengthening partnerships in public health, public safety, and injury care, TIIDE addresses key questions not only in system preparedness and response, but in the care of individual patients. TIIDE aims to develop and disseminate information that will reduce the impact of injuries sustained during a terrorist explosion by addressing critical unanswered questions regarding topics such as disaster field triage methodology, decontamination of blast patients, and surge capacity following explosions. TIIDE also provides strategies to improve public health and healthcare system preparedness for explosions resulting in mass casualties through collaborative efforts between U.S. and international cities.

TIIDE completes the following activities:

- Development of didactic and interactive curricula on the management of blast injuries presented to acute care providers nationally
- Developing information on topics including: translation of military injury care practice in Iraq to U.S. civilian health care, clinical guidance on injuries from explosions, and development of field triage criteria for mass casualty events
- Identifying model communities with unique emergency medical services and public health partnerships
- Publishing peer-reviewed literature and fact sheets regarding clinical and system response to terrorist bombings
- Collaborating with the National Preparedness Leadership Initiative to host international experts on response to terrorist bombings with public health, public safety, and acute care leadership in New York, Chicago, and Los Angeles

Epidemiology and Other Assessment Sciences

Epidemiology provides framework for the public health system's ability to conduct investigations to determine the cause and breadth of public health emergencies. Other Assessment Sciences refer to a broad group of disciplines involved in research to understand and predict how demographic, behavioral, cultural and environmental factors influence health. Accomplishments are achieved by applying scientific theory and methods, and drawing from qualitative and quantitative research techniques. These methods include the disease detection work that public health epidemiologists are known for, as well as the speed with which messages can reach the public regarding the issue and ways to protect oneself from the threat.

Preparedness and Response Investigations

CDC is developing an enhanced mathematical modeling capacity linked to preparedness and response to improve CDC's contingency planning, simulations, exercises, and benefit real-time decision support. To develop better response capacities, CDC is assessing the public's emergency knowledge, attitudes and behavior during and after public health emergencies, including examining links between physical and mental illness, trauma, violence, and preparedness. The investigations will provide a better understanding of the psychological and behavioral responses to terrorism to enhance, and thereby enable, CDC to build resiliency in the nation's communities, and develop communication policies and strategies for public health emergencies that best address the needs of the public.

Epidemic Intelligence Service (EIS)

The Epidemic Intelligence Service (EIS) is a two-year epidemiology training program modeled on a traditional medical fellowship primarily funded through CDC's Public Health Workforce Development program. EIS develops a cadre of well-trained health professionals to meet emerging and continuing needs for applied epidemiologic skills that are vital to CDC and state and local public health departments. This program integrates training with service, and is based on an instructional model that uses the scientific principles of adult learning. With guidance from the EIS program, EIS officers (EISOs) work with mentors to define individual learning activities to address their learning needs. EISOs comprise a vital element of the epidemiologic frontlines and serve as one of CDC's primary resources for field response to all hazards.

Field EISOs (assigned to state or local health departments) conducted 395 epidemiologic field investigations in 43 states and three other countries, including 26 multi-state investigations. EIS

officers assigned to CDC Headquarters responded to a total of 68 requests for assistance through the formal EPI-AID mechanism.

Laboratory Science and Service

Laboratory Science and Service activities focus on bench research designed to: develop or contribute scientific knowledge; research or develop new or improved methods or reagents for biological agents; validate methods and reagents; conduct regulatory activities concerning select biological agents and toxins; and, conduct laboratory-based research and development of countermeasures, including vaccine research and development, improvement of existing methods or materials, and development of collection or sampling methods.

CDC Laboratories

CDC laboratories contribute to all-hazards preparedness by conducting bench research on numerous biothreats and causative agents. Research regarding these potential biothreats is completed at CDC and translated into public health practice for use in state and local health departments and laboratories. CDC continues to develop and share new methods for measuring, testing and identifying chemical, biological and radiological agents that may be associated with public health emergencies.

CDC laboratories research agents associated with all-hazards preparedness, translate research and technology to share with partners and grantees and develop and test biomonitoring capabilities for biological, chemical and radiological agents.

Select Agent Program

CDC's Select Agent Program fulfills an important component of the nation's overall terrorism deterrence strategy by regulating and providing guidance for implementing standards on the possession, use, and transfer of select biological agents and toxins that could pose a severe threat to public health and safety.

In collaboration with the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) and the Department of Justice (DOJ)'s Criminal Justice Information Services (CJIS), CDC regulates 41 biological agents and toxins. CDC maintains active registrations for 326 entities possessing select agents in the U.S., including registrations by government agencies, academic institutions, corporations, companies, associations, and sole proprietorships. Inspections of registered entities to ensure appropriate security and safety measures are also completed by the CDC Select Agent Program. CDC's Etiological Import Permit Program within the Select Agent Program ensures the protection of public health by monitoring the importation of etiologic agents. In FY 2007, the program processed over 1,900 permits to allow for the importation of etiologic agents, hosts, and vectors into the U.S.

Laboratory Response Network (LRN)

The Laboratory Response Network (LRN), a network of state, local and federal public health, military and international laboratories, provides public health, food, veterinary, and environmental testing capacity to respond to biological and chemical terrorism and other public health emergencies. LRN laboratories conduct the necessary tests used to rapidly detect threat agents and other organisms that could lead to disease outbreaks. Since its inception in FY 1999, the LRN has significantly improved lab capacity at the state, local, federal, and international levels.

CDC currently supports public health, military, federal, environmental, food and veterinary labs located in all 50 states, as well as several installations abroad. More than 90 percent of labs can perform tests for detection of causative agents of Anthrax, tularemia, and plague, and many can further perform tests for detection of the causative agents for melioidosis, ricin toxin, staphylococcal enterotoxin B, non-variola orthopoxvirus, and influenza A/H5 (Avian lineage) virus. CDC has

trained over 9,000 clinical laboratorians in the detection, diagnostics and reporting of public health emergencies. LRN networks with labs on a local, regional, state and national level to aid in rapid detection of disease outbreaks and potential releases and perform tests for causative agents associated with potential public health threats

Response and Recovery Operations

Response and Recovery Operations began in the late 1990s and focus on the systematic response to, investigation of, and recovery of public health threats. CDC provides effective and timely response to a threat and takes measures to mitigate the impact of an incident on the public and the environment. Accomplishments are achieved through outbreak investigations, emergency response and support, emergency exercises, health hazard evaluations, hazardous substances assessments, risk and emergency communications, and increasing public health security at U.S. borders and ports of entry.

CDC Emergency Operations

CDC's Emergency Operations program provides core Incident Command System structure 24 hours a day, seven days a week, 365 days a year. As public health threats and events develop, staff from across CDC are merged into the CDC Incident Management Structure to increase staffing and management capabilities in a centralized location, the CDC Director's Emergency Operation Center (DEOC), for event response.

CDC's Emergency Operations activities include overall coordination of CDC's preparedness, assessment, response, recovery, and evaluation activities prior to and during public health emergencies.

The DEOC provides the following:

- Develops daily situation reports for the HHS Secretary's Operations Center, CDC public health leaders and other government agencies;
- Serves as the central location for CDC, state and local experts to report events, gather, analyze, and validate information;
- Supports the coordination of emergency response activities to public health threats, including but not limited to influenza, foodborne outbreaks, hurricanes, tsunamis and terrorist attacks;
- Coordinates deployment and logistical support for CDC staff during emergency responses;
- Communicates with deployed CDC staff assigned or traveling in affected areas; and,
- Facilitates communication between federal, state, and local health officials involved in response.

Daily DEOC staff coordinate with CDC technical experts to routinely provide Emergency Management guidance for a number of smaller-scale response efforts during the year. For example, on two separate occasions, CDC staff assisted the Thai MOH in the management of recurring botulism outbreaks. Twelve exercises were conducted throughout FY 2006 and seven agency-wide exercises and tabletops were conducted in FY 2007 to ensure more effective response operations during a real event. Between September 2001 and February 2007, CDC responded to 35 events, including the 2001 Anthrax events, SARS and Monkeypox in 2003, multiple hurricane responses, E. coli responses in 2006, California wildfires, and multiple infectious disease events both domestically and international such as the Ebola outbreak in Uganda.

Public Health Systems Support

Upgrading CDC Capacity activities within the Public Health System Support functional category encompass CDC's efforts to track and monitor public health emergency preparedness goals, assess requirements for robust tracking of lessons learned and implementation of corrective actions to support enhanced response in the future, provide secure communications and physical security to protect CDC assets such as the SNS, and, develop CDC's preparedness goal action plan. This constant re-evaluation is designed to ensure maximum efficiency, the best use of resources, and the best possible response to those affected by a public health emergency.

Epi-X

The Epidemic Information Exchange (Epi-X), is the rapid and secure 24/7 two way exchange of confidential, provisional or other sensitive information between CDC and federal, state and local public health officials nationwide. Epi-X was inaugurated in December 2000 and is an ongoing, web-based operation developed in response to possible biological, chemical and nuclear terrorism threats. Epi-X is CDC's only secure communication system and is used to report detection of serious health threats resulting from possible terrorist events and other emergency public health events. Epi-X also alerts key public health professionals using phones, pagers and e-mail to new events and to CDC's and other agencies' responses and recommendations.

CDC's Intramural Bioterrorism Activities (Upgrading CDC Capacity) program received a PART assessment in 2006. Significant findings from the evaluation include the development of targets and goals for long-term outcome measures and the establishment of baselines and targets for output measures. Independent contractor evaluations to determine the effectiveness of the funding allocation process and the program outcomes cited in performance plans are still being established by the program. As a result of the PART review, the program is also taking steps to establish outcome-oriented measures with baselines and targets to reflect CDC's enhanced preparedness.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$151,283,000
FY 2005	\$140,972,000
FY 2006	\$136,504,000
FY 2007	\$122,928,000
FY 2008	\$120,744,000

BUDGET REQUEST

CDC requests \$131,071,000 for the Upgrading CDC Capacity program in FY 2009, a \$10,327,000 increase from the FY 2008 Enacted level. This increase will ensure that all-hazards preparedness and emergency response activities continue building and enhancing systems at the federal, state and local levels catalyzing and implementing preparedness and response capabilities. Specifically, the FY 2009 increase will be directed to expand the urine radionuclide screen into five states through the creation of a radiological specific LRN, or LRN-R. Because Upgrading CDC Capacity funds support all public health preparedness functional objectives, funding will continue to improve upon the building blocks needed to respond to varied disaster scenarios, including natural, chemical, biological, radiological, and nuclear events.

Health Monitoring and Surveillance

Terrorism Injuries Information Dissemination and Exchange (TIIDES)

CDC will continue to address key questions not only in system preparedness and response, but in the care of individual patients by strengthening partnerships in public health, public safety, and injury care in FY 2009. By addressing critical unanswered questions regarding topics such as field triage methodology in disasters, decontamination of blast patients, and surge capacity following explosions, CDC will be able to develop and disseminate information that will reduce the impact of injuries sustained during a terrorist explosion. Additionally, the collaborative efforts of the U.S. and international cities will continue to improve public health and healthcare system preparedness strategies for use in the event of a terrorist explosion.

Epidemiology and Other Assessment Sciences

Preparedness and Response Investigations

CDC will continue to examine the effects of hazardous events on the psychological and behavioral responses of the general public to these events in FY 2009. In addition, CDC plans to continue developing modeling capacities related to preparedness and response, as well as improve CDC's contingency planning, simulations, and all-hazards exercises. These activities will enable CDC to build resiliency in the nation's communities through sharing investigation results with state and local public health departments for translation of research into public health practice.

Epidemic Intelligence Service (EIS)

Supplemental funds from Upgrading CDC Capacity allow the EIS program to increase the number of officers accepted each year and place more EIS Officers in state and local health departments. EISOs will continue to serve as a critical element of CDC's response to routine public health problems, as well as large scale national emergencies, during FY 2009.

The EIS program will continue to promote public health preparedness during FY 2009 by:

- Conducting research that plays an important role in the design and evaluation of public health interventions for the prevention of disease;
- Continuing surveillance projects essential to the early recognition of disease outbreaks and other public health threats (EISO surveillance system evaluations address not only infectious diseases problems, but also environmental, occupational, and injury problems);
- Deploying to the field on short notice to respond quickly to public health emergencies and rapidly implement appropriate control measures;
- Functioning as CDC's "pre-position assets" providing an immediate response capability in the field; and,
- Strengthening the collaboration between CDC and state and local health departments. Graduating EISOs frequently take jobs at the local level, thus building local epidemiologic capacity.

Laboratory Science and Service

CDC Laboratories

CDC laboratories will continue to conduct research and develop all-hazards identification methods in FY 2009, including projects investigating the effectiveness of a new ultra-filtration method for recovering biothreat agents from large-volume environmental water samples; diagnostic capacity for detecting botulism; characterization methods for major bacterial zoonotic agents also classified as biothreats; evaluations of the utility of Pulsed Field Gel Electrophoresis (PFGE) for identifying

sources of *F. tularensis* infection (which causes tularemia); enhancing the national PFGE database for *Y. pestis* (the bacterium that causes plague).

Additionally, CDC will maintain and expand proficiency testing and technology transfer activities to the 62 state and territorial laboratories in order to enhance their capacity to assess exposure to chemical agents using measurement in blood and urine. By 2010, CDC's laboratory system plans to make additional advances that will decrease the time from receipt of tissue, food and environmental samples to confirm and report chemical, biological and radiological agents to stakeholders.

Select Agent Program

The program will continue collaborating with USDA's APHIS and the DOJ's CJIS to ensure the safe use, storage and transfer of select agents. Registrations and inspections of existing and requesting entities will continue to ensure appropriate security and safety measures are in place to deter the theft, loss, or release of select agents. CDC expects to process nearly 2,000 import permits to allow for the importation of etiologic agents, hosts, and vectors into the U.S. CDC's Select Agent Program has implemented a Balanced Scorecard-based accountability monitoring system [the Division of Select Agents and Toxins Organizational Excellence Assessment (OEA)], with goals and objectives are linked to a CDC Agency-wide OEA.

As a result of the Select Agent Regulations, the nation now has:

- A database that identifies entities that possess select agents
- Minimum safety and security requirements for all entities working with these agents
- Mechanism for approving transfers of select agents
- National requirement for reporting the theft, loss, or release of select agents
- Monitoring system for the identification of select agents

Laboratory Response Network (LRN)

CDC will continue to work to strategically expand the network of labs to address preparedness and response needs in FY 2009. CDC has increased the number of LRN labs from 91 in 2001 to 164 in FY 2007 through previous expansion efforts. At its onset, very few LRN member laboratories were able to rapidly and accurately identify biological threat agents and other agents of public health importance. By the end of FY 2005, the passing rate of LRN laboratories rose to 83 percent, and at the end of FY 2006 the passing rate increased yet again to 87 percent. The passing rate again increased in FY 2007 to 91 percent. The target of a 100 percent passing rate was not met for several reasons, including an evolving priority threat list which results in the introduction of tests for new agents, and the release of new technologies and equipment which require additional training and experience to master. The combination of new tests, new technologies, and the increasing complexity of the proficiency testing (PT) program suggests that a 100 percent passing rate is unachievable.

CDC is working to increase the complexity of the PT program to include multiple agents in a single challenge, testing in various non-clinical samples (food, water, and environmental samples), and requirements to complete a full testing algorithm rather than solely focusing on rapid tests. Laboratories that fail a proficiency test are required to go through remediation steps that may include consultation, successful completion of a follow-up proficiency test, and/or hands-on training. In addition, the LRN will continue to upgrade and revise its test methods in an effort to improve on current clinical and environmental assays available to LRN members.

Radiological Laboratory Response Network (LRN-R)

In FY 2009 CDC will work to improve and expand radiological and nuclear laboratory capability and capacity by providing urine radionuclide screen to five states. This screen will test for 22 high priority radionuclides likely to be used in terrorism scenarios. This newly established radiological specific Laboratory Response Network, or LRN-R, will:

- Establish rapid situational awareness post event
- Improve CDC's radiological expertise and capacity and its ability to evaluate the nature and extent of radiological exposures
- Support health physicists and other subject matter experts for activities including field investigations, response and consultation activities, training and state capacity building

Building a dedicated CDC surveillance and situational awareness capabilities for radiological events will further define surveillance needs and gaps and develop appropriate data elements to be inserted into existing state, local, and federal surveillance systems to guide detection and monitoring of a radiological event.

Response and Recovery Operations

CDC Emergency Operations

CDC will continue to operate and improve emergency operations planning and exercise evaluations under multiple scenarios utilizing the principles of the Incident Command System to prepare for and respond to future public health emergencies. Lessons learned from exercises and responses will continue to be evaluated in after-action reports and meetings, and be implemented to ensure a faster and more comprehensive response for the next public health event. Managing day-to-day activities and information gathering, analysis, and distribution requires a consistent core staff, document preparation, training, and exercises. For deployments, CDC will continue to maintain stocks of communication equipment and personal protective equipment, separate from pharmaceuticals maintained by the SNS. Writing plans, developing and conducting exercises is a continuous process regardless of the scenario to insure synchronization internally within CDC, as well as externally with state and federal partners.

Public Health Systems Support

Epi-X

CDC's Epi-X is a communication system capable of demonstrating its ability to develop and maintain operable systems that secure its partner's capacity in terrorism preparedness and response.

Epi-X will continue the following activities in FY 2009:

- Enable state and local health departments, CDC, and other federal agencies to share preliminary, confidential reports of terrorism-related activity in a secure manner;
- Allow CDC to alert health officials of emergency events during off-business hours; and,
- Provide readily available rapid and reliable information about evolving outbreaks (e.g. influenza, food-borne outbreaks, and malaria).

These continued efforts result in an enhanced state of preparedness and response to public health emergencies.

OUTCOME TABLE

						FY 2007				Out-Year Target
Efficiency Measure 16.E: Create program efficiencies that improve services and conserve resources for mission-critical activities.										
16. E.3	Decrease annual costs for personnel and materials development with the development and continuous improvement to the budget and performance integration information system tools.	\$125,000 (Excel system) (Baseline)	\$101,000 (Budget and Performance Integration (BPI) system)	N/A	\$86,800 (BPI and Health Impact System)	\$50,000 (BPI and Health Impact System)	\$8,685.20 (BPI and Health Impact System)	\$0 (BPI and Health Impact System)	\$0 (BPI and Health Impact System)	N/A
Long-Term Objective 16. 3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.										
16. 3.2	Percentage of Laboratory Response Network (LRN) labs that pass proficiency testing for Category A and B threat agents.	N/A	83%	80%	87%	100%	91%	92%	92%	92%
16. 3.5	By 2010, CDC's laboratory system will decrease the time from receipt of tissue, food and environmental samples to confirm and report chemical, biological and radiological agents to stakeholders. [O]	N/A	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD
Long-Term Objective 16.5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.										
16. 5.3	By 2010, CDC's epidemiology system will reduce the time to initiate, coordinate and resolve investigations to identify causes, risk factors and recommended interventions. [O]	N/A	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD

OUTPUT TABLE

						FY 2007			FY 2009 Target
Long Term Objective 16.9: Decrease the time needed to implement recommendation from after-action reports following threats to the public's health.									
16.9 .4	Achieve progressive improvements in the quality of projects submitted for TPER Upgrading CDC Capacity funding consideration.	N/A	N/A	N/A	N/A	Baseline	74%	78%	85%
Appropriated Amount (\$ Million) ¹		\$151.3	\$141.0	\$136.5		\$122.9		\$120.7	\$131.1

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

ANTHRAX

				FY 2009 +/- FY 2008
BA	\$12,405,000	\$7,882,000	\$7,867,000	-\$15,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 311, 317, 319, 319A, 319C, 319D, 319F, 319G, 351A, 361-368 (42 USC 262 note), 2801-2811. Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pandemic and All Hazards Preparedness Act of 2006.

FY 2009 Authorization..... Indefinite

Allocation Method.....Direct
Federal/Intramural

PROGRAM DESCRIPTION

Anthrax vaccine research activities began at CDC in FY 1999 as a result of a Congressional mandate. Congress provided CDC with funding to conduct studies of safety and efficacy of the U.S. licensed Anthrax vaccine, Anthrax Vaccine Adsorbed (AVA, BioThrax), resulting in the Anthrax Vaccine Research Program (AVRP) and the Vaccine Analytic Unit (VAU). The AVRP clinical trial is assessing the reduction in doses of anthrax and route of administration. The VAU conducts safety studies which also has a direct bearing on public health, such as identifying any potential risks and alleviating concerns if findings do not identify causal affect with vaccines. AVRP and VAU activities conduct and support internal and external laboratory research and investigations, support services and partners as reflected in CDC's Laboratory Science and Service all-hazards preparedness objective.

Anthrax Vaccine Research Program (AVRP):

Through the AVRP, CDC has created and sustained regulatory compliant human clinical trials capability since FY 1999. This unique capability has been reinforced by strategic contracts that provide regulatory compliant pre-clinical study resources for vaccine and therapeutic molecule evaluation. In collaboration with other government agencies, including FDA, NIH and DOD, AVRP has created and characterized pivotal reagents, provided critical laboratory technologies and made significant direct contributions in the evaluation of next generation vaccines and immunotherapeutics for Anthrax. CDC data have been used to inform Department of Health and Human Services (HHS) strategic procurements for Anthrax Medical Countermeasures.

As part of the Congressional mandate, CDC is leading a phase IV human clinical trial to assess the safety and efficacy of AVA. Data generated from the trial and submitted to FDA in FY 2005 showed omitting the week-2 injection from the first four injections of the licensed regimen of AVA and changing the route of administration from subcutaneous to intramuscular did not have a significant negative impact on immunogenicity and changing the route lessened local adverse events. This research is ongoing and additional data were submitted in response to a request from FDA during FY 2007.

CDC goals within the AVRP are to:

- Optimize the vaccination schedule and administration to assure efficacy while minimizing the number of doses required;
- Reduce the occurrence of adverse events associated with AVA;

- Maximize availability of the only licensed anthrax vaccine in the U.S.;
- Establish immune correlates of protection in non-human primate models of anthrax; and,
- Evaluate surrogate markers of protection in human AVA vaccines.

Vaccine Analytic Unit (VAU):

CDC's Vaccine Analytic Unit (VAU) collaborates with the DoD's Army Medical Surveillance Activity (AMSA) and FDA to utilize data from the Defense Medical Surveillance System (DMSS) to assess whether longer term adverse events are associated with AVA and other biodefense vaccines. The DMSS is a unique source of active surveillance data, and contains medical, vaccination, and deployment information for U.S. military personnel. The AVA study on optic neuritis was published in FY 2006 and a study on health outcomes following multiple concurrent immunizations was published in FY 2007. The VAU also evaluates the implementation of Rapid Cycle Analysis (RCA) for more "real time" detection of adverse events following vaccination using DMSS data. These analyses have been used for decision support and development of vaccination policy, as well as to build acceptance for AVA, and other vaccines routinely used in the military. Additionally, the VAU maintains a system ideally suited to address concerns regarding vaccine safety with pre-pandemic and pandemic influenza vaccines, as well as other vaccines used routinely in the military.

Observational and collaborative vaccine safety research studies conducted by the VAU are also critical to improve AVA safety surveillance and acceptability. The infrastructure of these studies provides CDC with the critical experience necessary to deliver vaccine clinical trials for civilian and military populations, and population based surveillance for vaccine adverse events following mass administration of any vaccine. This experience is essential to responding to a public health emergency requiring vaccination, such as an influenza pandemic.

Successful conclusion of the AVRPP and continued support of the VAU:

- Will identify immune correlates of protection against Anthrax in non-human primates and surrogate markers of protection in humans
- Will provide animal study data demonstrating the long term protection against inhalation Anthrax afforded by a priming series of three intramuscular injections
- Could double the availability of the only licensed Anthrax vaccine in the U.S.
- Will provide the research platform in the VAU to respond to long term AVA safety concerns with AVA and, if appropriate, improve vaccine acceptance

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$17,934,000
FY 2005	\$16,666,000
FY 2006	\$13,851,000
FY 2007	\$12,405,000
FY 2008	\$7,882,000

BUDGET REQUEST

CDC requests \$7,867,000 for Anthrax vaccine and research activities in FY 2009, a decrease of \$15,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction. Over recent years, CDC has worked in collaboration with FDA to analyze the effectiveness of Anthrax vaccines within the AVRPP. The FY 2009 request will be used to conclude the AVRPP research on the safety, efficacy and use of the AVA vaccine. Specifically the

final phase of the AVRP will complete the primary endpoint immunological analysis for the phase IV human clinical trial, evaluate the potential to reduce the frequency of booster doses while sustaining immune competence, establish immune correlates of protection in animal models and determine the potential to extrapolate these to suggest surrogate markers of protection in humans. Additional FY 2009 activities will include ensuring quality assurance of collected data and drafting of a final report to be submitted by the end of FY 2009.

The final report will present immunogenicity data regarding dose-5 and dose-6, plus two annual boosters. The report will provide data to further optimize the use of AVA and will represent completion of a large scale, multi-center, Phase IV human clinical trial with over 1,500 participants. Specifically the report will:

- Further evaluate the potential for changing the route of administration, reducing the number of primary series vaccinations and boosters required, and improving the side effect profile
- Complete a non-human primate study to assess actual correlates of protection against anthrax
- Complete a study of a subset of the human clinical trial participants to assess surrogate markers of protection produced by AVA administration in humans

In FY 2009, CDC will also complete the important long term AVA safety studies included in its research agenda. Particular studies addressing diffuse connective tissue diseases, Guillian Barre Syndrome, peripheral neuropathy, paresthesia, unintentional injury and syndromic illness will be completed. Additional studies using the DMSS that are ongoing in FY 2009 include Type 1 diabetes mellitus, Stevens Johnson Syndrome and atrial fibrillation. CDC will also complete evaluation of hypothesis generation methods including the use of RCA with DMSS for more “real time” detection of long term adverse events following AVA and other biodefense vaccines.

BIOSURVEILLANCE

				FY 2009 +/- FY 2008
BioSense	\$52,005,000	\$34,389,000	\$49,905,000	+\$15,516,000
Quarantine	\$10,062,000	\$9,870,000	\$43,273,000	+\$33,403,000
Real-time Lab Reporting	\$9,182,000	\$9,022,000	\$7,456,000	-\$1,566,000
Total	\$71,249,000	\$53,281,000	\$100,634,000	+\$47,353,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 311, 317, 319, 319A, 319C, 319D, 319F, 319G, 351A, 361-368 (42 USC 262 note), 2801-2811. Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pandemic and All Hazards Preparedness Act of 2006.

FY 2009 Authorization..... Indefinite

Allocation MethodDirect
Federal/Intramural; Formula Grants/Cooperative Agreements; Contracts

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

Bioterrorism and naturally occurring events have demonstrated that the nation's public health system must advance its capabilities to rapidly detect, quantify, and localize health events and enable rapid public health response. Therefore, the purpose of the Biosurveillance program is to improve upon the capabilities of rapid identification and characterization of threats. CDC's Biosurveillance program is comprised of three programs supporting Health Monitoring and Surveillance and Response and Recovery all-hazards functional objective categories. These three programs include: BioSense; Real Time Laboratory Reporting from Laboratory Response Network (LRN) Labs; and Border Security (quarantine stations). Taken together, these Biosurveillance program activities ultimately provide ongoing collection of data that is critical to develop and implement control measures for many types of public health threats.

Health Monitoring and Surveillance

Health Monitoring and Surveillance activities conduct surveillance before, during, and after events. These activities are also related to planning for and initiating surveillance-triggers, event-specific Standard Operating (SOPs) for all infectious, occupational, environmental, and terrorist threats of national significance. Accomplishments are achieved using methods that include the systematic collection, analysis and reporting of health related information for the purpose of public health action. This includes planning, developing, operating and evaluating surveillance systems.

BioSense

BioSense is a national program intended to improve the nation's capabilities for rapid disease detection, monitoring and real-time situational awareness through access to existing data from health care organizations. Data received into the system are available simultaneously to state and local health departments, participating hospitals, and CDC, through a web-based application that is accessed through the CDC Secure Data Network. The BioSense application has over 800 users in 124 state and local public health jurisdictions. BioSense data sources cover 27 BioWatch cities and 49 of the top 50 metropolitan areas. BioSense also provides a near-real time syndromic surveillance system for jurisdictions that do not have such a system locally. The BioSense program focuses on: (1) traditional syndromic surveillance through use of less-specific data sources such as chief complaints and coded diagnoses; and (2) case-based surveillance through use more specific data sources such as laboratory results.

Syndromic surveillance is performed primarily using emergency department (ED) chief complaint data. Most such data is first transmitted to state or local biosurveillance systems, and then forwarded to CDC, making BioSense a “system of systems.” Syndromic surveillance is useful for monitoring large health events, such as seasonal influenza and gastrointestinal disease, and disaster-related injuries or other illness.

Real Time Lab Reporting

The Laboratory Response Network (LRN) is a coordinated network of public health and other laboratories for which CDC provides standard assays and protocols for testing biological and chemical terrorism agents. LRN Results Messenger (LRN RM) is a software solution created to provide LRN labs with the immediate ability to manage and share standard laboratory data currently installed in 150 LRN laboratories, including all of the LRN’s public health labs. LRN RM provides basic laboratory data management, including the ability to enter and share sample and results data. The application enables labs to submit and respond to electronic test requests from other labs, and embodies PHIN requirements and utilizes CDC’s Secure Data Network and PHIN Messaging System infrastructure.

LRN Real Time Lab Information Exchange (RTL) equips LRN laboratories to securely share data with public health partners in real time according to industry standards. Its purpose is to improve LRN data quality and availability, while decreasing the time needed to detect and respond to public health threats. The RTL program implements infrastructure needed to ensure the availability of laboratory data for integration with other data sets in support of public health situational awareness.

The Laboratory Information Management System Integration (LIMS_i) activity is a parallel effort to LRN RM. It represents the next generation of the incremental approach to data exchange for the LRN to enable laboratories to fulfill data exchange needs for the LRN using their own systems. LIMS_i is currently facilitating collaborative efforts between CDC and public health laboratory subject matter experts to refine system requirements needed to configure LIMS to manage LRN testing. The LIMS_i project is also creating a constrained version of the PHIN Laboratory Generic message guide that specifically targets the messaging and data mapping needs for the LRN. The LIMS_i team ensures that laboratory LIMS efforts are in alignment with appropriate Public Health Information Network (PHIN) requirements.

RTL’s primary stakeholders include LRN laboratories and the CDC business owners of the LRN. LRN RM team maintains continual communication with the LRN business owners to develop and fulfill software requirements, draft communication to labs, and ensure the data exchange needs of the LRN are met. Laboratories are regularly engaged to provide feedback on LRN RM, including formal feedback sessions.

Response and Recovery Operations

Response and Recovery Operations focus on the systematic response to, investigation of, and recovery of public health threats. CDC provides effective and timely response to a threat and takes measures to mitigate the impact of an incident on the public and the environment. Accomplishments are achieved through outbreak investigations, emergency response and support, emergency exercises, health hazard evaluations, hazardous substances assessments, risk and emergency communications, and increasing public health security at U.S. borders and ports of entry.

Quarantine and Migration Health System

The Quarantine and Migration Health System improves CDC’s capacity to respond to natural and intentional communicable disease emergencies of public health significance through the collection, analysis, interpretation and dissemination of data related to public health events and U.S. ports of entry and in mobile populations abroad. CDC establishes multidisciplinary teams of quarantine

officers, public health advisors, epidemiologists, and information technicians to respond to public health emergencies at 20 U.S. ports of entry. These quarantine stations allow CDC to monitor and enforce U.S. and international regulatory requirements for travelers while providing CDC with disease intelligence information to communicate with domestic and international partners. CDC also supervises the expeditious movement of clinical and research materials for CDC and its public health partners. CDC quarantine stations help enhance the nation's capability to prevent, detect, and recovery disease and help to ensure that potential outbreaks are identified early.

CDC's Quarantine program maintains 20 quarantine stations to prevent, detect and recovery disease potentially entering the U.S., and monitors and enforces U.S. and international travel regulations. The program also supervises the movement of clinical and research materials.

CDC's Biosurveillance program was assessed using the PART in 2006. The assessment cited that although results have not yet been demonstrated, the purpose and importance of the program are clear. Independent evaluations are underway for both BioSense and the LRN, although they have yet to be completed. As a result of the PART review, the program is taking steps to complete independent evaluations of all biosurveillance programs and to develop measures and targets, as well as milestones and targets associated with outcome goals and measures through a collaborative effort among relevant offices and programs. CDC's Division of Global Migration and Quarantine, which runs the Quarantine program, will be reassessed in March 2008.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$21,900,000
FY 2005	\$79,271,000
FY 2006*	\$133,380,000
FY 2007	\$71,249,000
FY 2008	\$53,281,000

*Includes DOD Appropriation of \$35 million for BioSense and \$20 million for Quarantine.

BUDGET REQUEST

CDC requests \$100,634,000 for Biosurveillance related activities in FY 2009, a \$47,353,000 increase from the FY 2008 Enacted level. This funding will expand and support 25 fully operational Quarantine Health stations; continue BioSense coverage and data exchanges; and continue to improve the timeliness and accuracy of communications between CDC, laboratories and state and local public health departments regarding threats to the public's health through the LRN.

BioSense

The FY 2009 funding request includes \$49,905,000, an increase of \$15,516,000 over the FY 2008 Enacted level, to enhance capabilities for syndromic surveillance, develop capabilities for case-based surveillance, support basic and applied research and evaluation, and help CDC implement connections with emerging Regional Health Information Organizations (RHIOs) and Health Information Exchanges (HIEs) to implement case-based surveillance. In particular the program will focus on increasing population coverage in major metropolitan areas and coordinating with other federal preparedness initiatives. The program's FY 2006 baseline and FY 2007 performance evaluations reflect its early progress toward this goal.

Research grants, cooperative agreements, and grants are instrumental in improving the BioSense system and achieving the PART related targets. These efforts are providing: (1) improved use of detailed medical data, for example through natural language processing of text data; (2) better methods to use multiple data types to recognize disease; practical systems to find reportable

diseases using electronic data; (3) standardization of syndromes and sub-syndrome definitions; and (4) more sensitive and specific algorithms for detecting outbreaks; and improved methods for monitoring data. Over time, incorporation of these research products into BioSense will improve quality and timeliness.

PART measures found in the outcome section are based on FY 2007 receipt of data from 337 EDs, as ED data facilitates early recognition of outbreaks and could reduce the time needed from a triggering biosurveillance event to initiation of event-specific measures. BioSense also receives data from 349 Department of Defense (DoD) and 814 Veterans Affairs (VA) outpatient clinics. Though useful for monitoring disease, DoD and VA data are received three to seven days after the visit and therefore are not counted toward the PART measure. Both agencies have plans to transmit more timely data to BioSense when they have completed modernization of their information systems.

Real Time Lab Reporting

The FY 2009 request includes \$7,456,000 for the Real Time Lab Reporting program, a decrease of \$1,566,000 below the FY 2008 Enacted level, which includes a \$14,000 Individual Learning Account (ILA) and administrative reduction. While recognizing competing priorities, Real Time Lab Reporting will continue to strengthen preparedness by: (1) equipping LRN labs to securely share data; (2) providing secure and rapid communications of potential threats to public health authorities; and (3) decreasing the time needed to detect agents and report results to appropriate investigators in the event of a terrorist, biological, or radiological attack. Activities related to Real Time Lab Reporting will continue to advance capabilities of rapid identification and characterization of threats through established programs in FY 2009.

CDC will enhance FY 2008 releases of LRN Results Messenger, which will provide for the general availability of LRN-Chemical functionality to support data exchange for LRN laboratories performing chemical terrorism testing in FY 2009. Usability enhancements will also be a key component of releases to make LRN RM more efficient to use and easier to learn. A vocabulary-authoring tool is being designed, which will give business owners greater control over vocabulary and terminology used in the application. CDC will also work with users and stakeholders to develop enhancements for LRN Results Messenger and Viewer in support of the LRN mission in FY 2009. Overall goals include expanded functionality, increased usability, and improved application performance. Specific goals include the inclusion of functionality to support data exchange for the LRN for Chemical Terrorism (LRN-C).

The LIMS Integration (LIMSi) Team is producing tools to help laboratories enable standard electronic exchange of LRN data using their own laboratory information management systems. The LIMSi Team is currently facilitating collaborative efforts between CDC and public health laboratory subject matter experts to refine system requirements needed to configure LIMS to manage LRN testing. The LIMSi project has finalized a constrained version of the PHIN Laboratory Generic message guide that specifically targets the messaging and data mapping needs for the LRN. The LIMSi project is will continue to engage with several LRN laboratories to validate LIMS-generated initial Health Level 7 (HL7) messages to support electronic data exchange in FY 2009.

Milestones for the LIMSi project include updates to implement CDC infrastructure to receive, process, and interpret incoming HL7 test results messages for the LRN coming directly from labs' LIMS. Other LIMSi milestones include engaging a greater number of LRN laboratories to accomplish data exchange using their own systems.

A total of 155 Biological LRN labs are capable of submitting HL7 laboratory messages to CDC for all LRN assays, including BioWatch, using the LRN Results Messenger. The FY 2009 target is to expand this number to include LRN labs testing for chemical agents. LRN Biological laboratories

currently use LRN Results Messenger to exchange data for BioWatch, routine testing, and proficiency testing. Nearly 500,000 standard laboratory results have been exchanged in the LRN.

Quarantine Health Stations

The FY 2009 request includes \$43,273,000 for Quarantine stations, an increase of \$33,403,000 that will help CDC maintain and expand staff in 20 domestic quarantine stations and five international quarantine stations by the end of FY 2009. Staff will continue to respond to public health emergencies at U.S. ports of entry, supporting communication of disease intelligence information to domestic and international partners, as well as the expeditious movement of clinical and research materials through ports of entry.

In addition, Quarantine Station expansion and enhancement will improve the systematic collection, analysis, interpretation, and dissemination of data related to public health events at U.S. ports of entry. An expanded and enhanced quarantine system includes not only increasing CDC's physical presence at U.S. ports of entry, but also fully staffing each station with a multidisciplinary team of quarantine medical officers, public health advisors, epidemiologists, and information technicians; enhancing the stations' links to a global network for international traveler disease surveillance; increasing preparedness and response at U.S. ports of entry; and expanding collaboration and partnership activities with state and local agencies. This expansion will allow CDC to continue to enhance the Quarantine and Migration Health System through expanded field presence, community partnership, preparedness and response activities, and increased surveillance and epidemiologic research.

The current 20 quarantine stations operated by CDC across the U.S. serve to limit the introduction of infectious diseases into the U.S. and to prevent the spread of diseases as tuberculosis, smallpox and cholera. These stations serve the over 150 million airline passengers who fly internationally each year. The importance of quarantine stations continues to rise as new infectious diseases such as SARS and avian influenza emerge as more people travel internationally.

An Institute of Medicine (IOM) report published in September 2005 recommended that CDC increase the number of quarantine stations from eight to 25. In response, CDC has worked to increase the number of domestic quarantine stations to 20 and has identified the need for five international migration quarantine stations, which would work to detect disease in U.S.-bound populations of international travelers, refugees, and immigrants. The current cost to fully fund an international quarantine station is \$2,000,000. Establishing five stations internationally at key hub locations abroad will leverage CDC's ability to protect the U.S. public from diseases before they arrive at our border. Together, the international and domestic quarantine stations, along with partnerships with local, national, and global public health authorities, will constitute the U.S. Quarantine and Migration Health System.

Fully staffing the existing U.S.-based stations and standing up an additional five international migration quarantine stations will increase by at least 100 percent the number of reported illnesses the quarantine system is able to respond to in real time. Additional staffing in current domestic stations will allow stations to adjust hours of operation from the current average of 60 per week to approximately 112 hours per week with all stations operating seven days per week (currently only four of the stations operate on weekends). Full staffing of stations will allow for more robust partnership activities with federal agencies operating at the ports of entry as well as state and local agencies and industry in the port community. These activities will lead to increased surveillance and prevention of introduction, transmission, and spread of infectious disease into the U.S. from foreign countries.

CDC will continue to collaborate with federal, state, and local partners in the development of a comprehensive operational plan for the management of ill and/or exposed travelers at U.S ports of entry during a communicable disease emergency such as an influenza pandemic. CDC will also

continue to collaborate with Department of Homeland Security (DHS) partners to establish operational protocols for issuing a "no boarding" alert for persons diagnosed with a quarantinable disease, or a disease of public health significance in FY 2009. The protocols are based on an existing memorandum of understanding between HHS and DHS.

OUTCOME TABLE

						FY 20						Out-Year Target
Long Term Objective 16.2: Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies												
16.2.2	By 2010, the BioSense program will reduce the time needed from a triggering biosurveillance event (the identification of a potential disease event or public health emergency event) to initiate event-specific standard operating procedures (the initiation of a public health investigation and, if needed, subsequent public health intervention) for all infectious, occupational or environmental (whether man-made or naturally occurring) threats of national importance. [O] ¹	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD	TBD		
Long Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food or environmental samples that cause threats to the public's health												
16.3.4	By 2010, the Laboratory Response Network Results Messenger will reduce the time needed from a triggering biosurveillance event (i.e., transmission of data regarding the identification of any Category A or B agent) to initiate event-specific standard operating procedures (e.g., aggregation of data at a national level) for all infectious, occupational or environmental threats of national importance.	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD	TBD		
Long-Term Objective 16.5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health												
16.5.1	Number of quarantine stations that are fully staffed with public health professionals who are prepared to respond appropriately when needed	N/A	10 (Baseline)	20	18	Up to 25	20	20	25			

NARRATIVE BY ACTIVITY
TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

						FY 20				Out-Year Target
Long-Term Objective 16.5: Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health										
16.5.2	By 2010, the Quarantine Stations will reduce the time needed from a triggering biosurveillance event to initiate event-specific standard operating procedures for all infectious, occupational or environmental threats of national importance.	N/A	N/A	N/A	N/A	Establish Baseline	03/2008	TBD	TBD	TBD

¹ This PART measure is based on FY 2007 receipt of data from 337 EDs, since ED data facilitates early recognition of outbreaks and could reduce the time needed from a triggering biosurveillance event to initiation of event-specific measures. BioSense also receives data from 349 DOD and 814 VA outpatient clinics. DOD and VA data are received three to seven days after the visit, and therefore are not counted toward this measure. Both agencies have plans to transmit more timely data to BioSense after completing modernization of their information systems. Data are verified by comparison with two separate databases and SAS programs within the BioSense Analytic Data Mart (ADM). Data reported to BioSense are supplied to datasets used by the BioSense Application, and a separate copy is supplied to the ADM. The ADM is used for numerous data quality checks, including number of data sources, volume of data, and data latency. Therefore, the ADM was used to validate the number of data sources supplying data.

OUTPUT TABLE

						FY 2007			FY 2009 Target
Long-Term Objective 16.2: Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies									
16. 2.1	Number of top 50 metropolitan areas using BioSense	N/A	10	40	38	50	57	50	Additional population coverage in Top 50 metropolitan areas
Long-Term Objective 16.3: Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health									
16. 3.3	Number of Laboratory Response Network member laboratories able to use the current Laboratory Information Management System (LIMS) for electronic data exchange	N/A	N/A	Baseline	5	15	10	30	50
Other Biosurveillance Outputs									
16.D	Number of U.S. quarantine stations at U.S. international airports and other selected ports of entry	8	18	35	20	20	20	20	25
16.E	Number of state and local public health agencies in key jurisdictions that access BioSense data regularly to monitor for possible events	N/A	44	55	70	96	95	96	96

NARRATIVE BY ACTIVITY
TERRORISM PREPAREDNESS AND EMERGENCY RESPONSE

						FY 2007			FY 2009 Target
Other Biosurveillance Outputs									
16.F	Percent of state health departments that have interoperable redundant communication systems	20%	25%	30%	30%	35%	35%	35%	35%
16.G	Number of local health departments developing advanced information technology in support of terrorism preparedness and response	5	5	5	5	5	5	5	5
Appropriated Amount (\$ Million) ¹		\$21.9	\$79.3	\$133.4		\$71.2		\$53.3	\$100.6

¹The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

STRATEGIC NATIONAL STOCKPILE (SNS)

				FY 2009 +/- FY 2008
BA	\$496,348,000	\$551,509,000	\$570,307,000	+\$18,798,000

AUTHORIZING LEGISLATION

PHSA §§ 301, 307, 311, 317, 319, 319A, 319C-1, 319D, 319F, 319G, 351A, 361-368 (42 USC 262 note), 2801-2811. Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pandemic and All Hazards Preparedness Act of 2006.

FY 2009 Authorization Indefinite

Allocation MethodDirect

Federal/Intramural; Formula Grants/Cooperative Agreements; Contracts

PROGRAM DESCRIPTION

CDC's Response and Recovery operations have evolved since the late 1990s, along with the development of the Strategic National Stockpile (SNS), into an integrated response operation based on public health science and focused on the systematic response, investigation, control and recovery from catastrophic health events. CDC applies these techniques to provide an effective and timely response to a threat to take appropriate measures to mitigate the impact of an incident on the American public. Emergency response and recovery operations are provided through a variety of functions including 24/7 emergency response and support, emergency exercises and training, public health impact assessments, technical assistance and risk and emergency communication. SNS activities are undertaken during the response and recovery phases of a disaster to minimize morbidity and mortality from all threats of national significance as reflected in CDC's Response and Recovery all-hazards preparedness objective.

Strategic National Stockpile (SNS)

CDC's Strategic National Stockpile is a national repository of life saving pharmaceuticals, medical supplies, and equipment available for rapid delivery in the event of a catastrophic health event. The Stockpile has expanded from its initial concept of large quantities of pharmaceuticals to one that not only provides response support in the event of a terrorist attack, but now includes a broader range of public health emergencies including natural disasters and pandemic influenza. The recent passage of PAHPA and HSPD-21 establishes formal processes to: determine long and short range acquisition goals and targets for SNS; strengthen associated science and research; require annual formulary reviews; deployment and use strategies; set forth a framework for ensuring processes and plans are in place to assist state and local partners; and, leverage the resources of both private and governmental entities.

SNS is recognized as a strategic national medical supply and material asset that demonstrates continuous improvement in managing and distribution through systems derived from proven practices and innovative solutions for acquisition, flexible storage, configuration and emergency response support. SNS provides for planning, training and exercises of state and local public health representatives and emergency response personnel to quickly receive, store, stage, distribute and dispense assets from the SNS. These efforts focus on assuring that state and local health departments, in conjunction with federal teams can quickly respond, learn, and improve from each event.

Since FY 1999, the SNS has expanded emergency response capabilities from countermeasures for Category A threat agents to include natural disasters and pandemic influenza. This includes 50-ton,

12-hour Push Packages of containerized life-saving medical materiel that can be delivered to an incident within 12 hours of a federal decision to deploy. Collectively, the twelve 12-hour Push Packages now represent approximately five percent of the SNS inventory. The vast majority of SNS assets are managed inventories of pharmaceuticals, vaccines, and medical supplies maintained by manufacturers or commercial logistics partners in repositories strategically located around the country. CDC has increased the number of Push Packages from one in FY 1999 to maintaining 12 in FY 2007, and manages the science, acquisition, storage and logistical operations of a national countermeasures inventory for optimal use during a public health emergency.

SNS also maintains several emergency response capacities, including the Federal Medical Station (FMS) program and the Technical Advisory Response Unit (TARU) teams. The FMS program consisted of four prototype units each with 250 beds designed for a low to mid-acuity patient hospital bed surge mission prior to Hurricane Katrina. Hurricanes Katrina and Rita triggered the rapid development of FMS from prototype to deployable capacity resulting in the deployment of 5,500 beds to provide care for the victims of these disasters. Given the extensive medical needs created by the hurricanes, the operation of the shelters expanded to include the care of non-hospitalized patients with medical needs exacerbated by the disaster. A TARU consists of a seven to nine member team deployed by the CDC in the event of a national emergency to support state and local officials in requesting, receiving, and managing SNS assets. These teams provide on-site expertise in the management of requested SNS materiel.

Part of the efficient SNS management strategy includes participation in the Shelf Life Extension Program (SLEP) which refers to a collaboration that began in FY 2002 with the DOD and the Food and Drug Administration (FDA) program to test the efficacy of products in order to extend the shelf life beyond the original manufacture's expiration date. For the annual cost of FDA product testing, re-labeling, and shipping, SNS can extend the shelf life of many formulary items for a fraction of the cost of replacing them.

Cities Readiness Initiative (CRI)

The CRI is a federal effort designed to increase bioterrorism preparedness in the nation's Metropolitan Statistical Areas (MSAs), accounting for approximately 55 percent of the nation's population. CRI aids state and local officials in developing and testing plans that support mass dispensing prophylaxis to 100 percent of the identified population within 48 hours of a federal decision to deploy SNS assets. The traditional method of dispensing prophylaxis in the CRI is through a network of Points of Dispensing (PODs) set up as designated locations for persons who are currently healthy but may have been "exposed" to a threat and are in need of medication that will prevent illness. Dispensing prophylactic medications will help to avert mass casualties during a large scale public health emergency, such as a bioterrorism attack. Another method used in the CRI involves ongoing levels of collaboration between CDC, the U.S. Postal Service (USPS), and other federal agencies to develop successful strategies for support of the CRI. CDC conducts technical reviews of these select cities to assess readiness levels and identify gaps in planning and resource allocation.

The CRI annually conducts training and exercises with cities to prepare for mass dispensing of countermeasures during public health emergencies, and provides planning guides, educational web casts and tools. CRI also evaluates a city's ability to develop and test plans containing standard functions established by the CDC for dispensing medical countermeasures to the population. Local plans are assessed on a 100 point scale with an acceptable rating of 69 and above. Cities are evaluated semi-annually by SNS program consultants by: (1) providing avenues to share best practices; (2) identifying gaps in needed resources and training; and, (3) providing modeling and simulation assistance.

Assessed using the PART in 2005, results stated that the SNS has a focused and well-defined mission, as well as utilizes regular evaluations to fill performance gaps and highlight areas of potential improvement. SNS also developed new performance measures to demonstrate progress in its ability to treat the public appropriately in response to known threats and a new efficiency measure to demonstrate cost reductions made by extending the shelf life of products through FDA's SLEP program. However, the assessment found that improvement is needed in identifying procurement priorities. As a result of the PART review, SNS is analyzing trade-offs between cost, schedule, risk and performance goals to guide future activity and participating in budget and performance integration activities.

FUNDING HISTORY TABLE

	AMOUNT
FY 1999	\$51,000,000
FY 2000	\$52,000,000
FY 2001	\$52,000,000
FY 2002	\$645,000,000
FY 2003	\$298,050,000
FY 2004	\$397,640,000
FY 2005	\$466,700,000
FY 2006	\$524,339,000
FY 2007	\$496,348,000
FY 2008	\$551,509,000

BUDGET REQUEST

CDC requests \$570,307,000 for the SNS program and related activities in FY 2009, an \$18,798,000 increase from the FY 2008 Enacted level. FY 2009 funding for the SNS program will enable CDC to continue to purchase, warehouse and manage medical countermeasures necessary to provide an adequate response during a catastrophic public health event to treat affected populations, prevent additional illness, and provide medical services and shelter. The recent passage of PAHPA, HSPD-21, and the implementation of the Biomedical Advanced Research and Development Authority (BARDA) will provide further guidance on future expansions of SNS, management strategies and emergency support operations.

Following the PART assessment, SNS has undergone a series of internal strategic planning processes to strengthen management practices and measure the performance of achieving the mission to deliver countermeasures to the site of a national emergency. These strategic planning processes emphasize objectives to enhance response and recovery program operations and public health system support activities. As a result of the PART and SNS planning process, CDC developed performance measures to track inventory discrepancies. The discrepancy percentage represents the total number of instances where the locations for items identified for that quarter's inventory do not exactly match with the inventory report for that item. In FY 2006, inventory discrepancies were reduced to 0.33 percent, exceeding the target of less than five percent. In FY 2007, discrepancies were at the rate of 24.33 percent. This large discrepancy rate was caused by a single clerical error and no SNS items were lost as a result of that error. The average for the first three quarters of FY 2007 was 3.67 percent, meeting the target of less than five percent.

CDC will continue to partner with FDA on the Shelf Life Extension Program (SLEP). The return on investment (ROI) calculation for SNS participation in SLEP is based on each \$1.00 spent on SLEP costs (e.g., testing, shipping, re-labeling). For FY 2007, ROI was \$13.00 for each \$1.00 spent on SLEP costs. CDC will continue to pursue cost savings in association with participation in the SLEP program in FY 2009.

The FMS program designed for low to mid-acuity patient hospital bed surge for victims of catastrophic health events will continue to advance in FY 2009. Strategies include building and kitting additional FMS units to meet interim goals for this type of emergency response support and forward deployment strategies to mitigate the potential effects of a public health emergency.

CDC will also continue working towards the achievement of 100 percent preparedness of state public health agencies regarding the use of materials contained in the SNS as demonstrated by evaluation of standard functions that are determined by CDC. In FY 2007, 78 percent representing 42 out of 54 project areas performing within the acceptable range. Preparedness to receive, stage, store and distribute SNS material is essential to save lives at risk during a public health emergency. CDC will continue to evaluate the preparedness of state public health agencies through exercises and reviews of SNS distribution plans.

Cities Readiness Initiative (CRI)

Since beginning the program in FY 2004 with 21 cities, the program has expanded to a total of 72 CRI cities. In FY 2009, CDC will continue the CRI program by targeting funding to the 72 selected cities. The intent of targeted funding is to develop plans and infrastructure so the selected cities and their MSAs are prepared to provide oral medications during an event to their entire population within 48 hours.

CDC achieved a significant CRI milestone during FY 2007. In collaboration with the Rand Corporation, CDC worked to improve the SNS assessment process through developing revised performance standards and metrics, resulting in an improved tool to evaluate state and local preparedness. CDC will implement this tool in FY 2009. In collaboration with NACCHO and ASTHO, CDC is acting on findings in a recent NACCHO survey by conducting regional meetings to collect, review and share state and locally developed tools, templates, processes, plans and other resources deemed by state and local public health, medical and emergency management experts as a national best practice. To assist with testing and validating state and local SNS plans, two modeling and simulation projects are also underway with partners and subject matter experts.

Recent drills of CRI with the USPS to test the postal plan option for mass prophylaxis at the local level have been successful. Drills in Seattle, Philadelphia and Boston successfully tested their capability to use the USPS modality. Local response entities participating in these drills met objectives to test real-time capability and collected data on successes and needed improvements in areas of interoperable communications, transportation, dissemination of public information, security and commitment to civic responsibility. Strategies are underway to develop core infrastructure standards with accompanying drills that will test key performance measures necessary in the completion of a successful mass dispensing campaign to further strengthen the CRI program.

OUTCOME TABLE

						FY 2007				Out-Year Target
Efficiency Goal 16.E: Create program efficiencies that improve services and conserve resources for mission-critical activities										
16.E.2	Dollars saved per \$1 invested in the Food and Drug Administration's (FDA) Shelf Life Extension Program (SLEP) for available projects	N/A	\$22	\$24	\$20 (Unmet)	\$26	\$13	\$28	\$28	
Long-Term Objective 16.6: Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health										
16.6.3	Number of treatments/prophylaxis for the appropriate response to known terrorist threats or public health emergencies for chemical, biological, radiological and nuclear threats in millions [O]	N/A	N/A	N/A	N/A	N/A	N/A	2.3; 60; 0.17	TBD per BARDA	TBD per BARDA
16.6.4	The number of successful annual exercises that test response to multiple events with a 12-hour response time. [O]	N/A	1	1	1	1	1	1	1	1
16.6.5	Number of trained and ready Technical Advisory Response Units (TARU) for response to multiple events. ¹	N/A	5	6	6	7	6	9	7	
16.6.6	Percentage of inventory discrepancies that are reduced by using quality inventory management systems. [O]	N/A	6%	<5%	0.33% (Met)	<5%	24.33% ² (Unmet)	<5%	<5%	
Appropriated Amount (\$ Million) ³		\$367.6	\$466.7	\$524.3		\$496.4		\$551.5	\$570.3	

¹As a result of the PART process, CDC developed new performance measures. In FY 2006, CDC met its goal of six trained and ready TARU for response to multiple events. At this time, TARU capacity remains at the target level of six technical teams. The added mission of deploying Federal Medical Stations (FMS) when needed with CDC personnel will have an impact on the program's future ability to increase the number TARUs. Thus, CDC has reduced its TARU target from nine in FY 2008 to seven in FY 2009. In light of these competing resources, CDC will evaluate its capacity to sustain current emergency response systems and meet growth targets.

²In FY 2006, inventory discrepancies were reduced to 0.33 percent, exceeding the target of less than five percent. In FY 2007, discrepancies were at the rate of 24.33 percent. This large discrepancy rate was caused by a single clerical error and no SNS items were lost as a result of that error. The average for the first three quarters of FY 2007 was 3.67 percent, meeting the target of less than five percent.

³The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

REIMBURSEMENTS AND TRUST FUNDS

AUTHORIZING LEGISLATION

PHSA §§ 301, 306(b)(4), 353; Clinical Laboratory Improvement Act; User Fee: Labor-HHS FY Appropriations.

BA	\$556,527	\$556,527	\$556,527	\$0

STATEMENT OF THE BUDGET

The FY 2009 estimate for Reimbursements and Trust Funds of \$556,527,000 reflects level funding with FY 2008 Estimate.

PROGRAM DESCRIPTION

CDC's reimbursable activities provide technical assistance and consultation to other agencies and organizations. CDC has a long history of working and partnering with other federal agencies in the shared interest of public health improvement and prevention programs.

CDC provides a wide range of support and assistance to other agencies. For instance, CDC is working with the United States Agency for International Development on various projects to support infectious disease and family planning. In another agreement, CDC is assisting the Department of Homeland Security in evaluating and assessing fire prevention grants to firefighters. CDC also works with the Department of Justice on the assessment of hand-held assays for threat agents. Also, CDC collaborates with the Environmental Protection Agency and the Federal Emergency Management Administration on several projects of public health concern.

CDC will continue its longstanding agreements with other agencies of the Public Health Service, HHS, and others associated with CDC's Health Statistics studies. CDC will continue to provide consultation and technical assistance in areas such as genetic diseases, laboratory tests, investigations and diagnostic reagents, development of worker safety guidance, and training and model screening programs.

The Clinical Laboratory Improvement Amendments of 1967 (CLIA) transferred responsibility for the laboratory licensure programs from CDC to the Centers for Medicaid and Medicare Services (CMS), which resulted in the disbanding of CDC's regulatory staff. Under CLIA of 1988, the Secretary directed that the CLIA program be jointly implemented by CMS and CDC. CDC will provide scientific/technical support related to patient test management, Quality Assurance/Quality Control, personnel requirements, and test categorization; develop information materials including brochures, a slide presentation, and a user guide; develop and facilitate information education for newly regulated public health laboratories and clinics; and work with CMS to initiate a process for accrediting programs developed by nonprofit organizations and states to apply the CLIA standards.

The CDC program to implement the Federal Technology Transfer Act (FTTA) has three components: sharing research and materials, patenting inventions, and licensing inventions. CDC scientists have a long history of successful collaboration with scientists in private industry and other government agencies.

The FTTA allows government scientists to enter into formal agreements with scientists outside the government and in other government agencies. Two types of formal agreements are used for this

purpose: Cooperative Research and Development Agreements (CRADA) and Biologic Materials Licensing Agreements. The FTTA gives preference to small businesses and to businesses producing products in the United States for the CRADA. Federal participants – individuals as well as organizations – can share patent rights and license fees for inventions made jointly under CRADAs.

RATIONALE FOR THE BUDGET

The FY 2009 estimate for Reimbursements and Trust Funds of \$556,527,000 reflects level funding with FY 2008 Estimate.

OUTPUT TABLE

					FY 2009 +/- FY 2008
18.A	Agency for International Development 11 Agreements for various projects, an infectious disease project, and family planning logistics.	\$43,149	\$43,149	43,149	\$0
18.B	Department of Agriculture 4 Agreements for various projects, National Nutrition Monitoring, NHANES 2002, to support active Surveillance Systems for bacterial diseases in the U.S.	\$6,080	\$6,080	\$6,080	\$0
18.C	Department of Commerce 2 Agreements for various projects, Develop Standards for Respiratory Protection Equipment and National Death Index Services.	\$1,381	\$1,381	\$1,381	\$0
18.D	Department of Defense 15 Agreements to perform various tasks such as Biowatch.	\$15,179	\$15,179	\$15,179	\$0
18.E	Department of Energy 7 Agreements for various projects including energy related analytical epidemiological research.	\$7,576	\$7,576	\$7,576	\$0
18.F	Department of Health and Human Services 116 Agreements to perform various projects, provide ongoing participation in the clinical laboratory improvement, develop questions for the National Health Interview Survey, and an estimated \$265,100,000 derived from evaluation funding under section 241	\$360,902	\$360,902	\$360,902	\$0
18.G	Department of Homeland Security 3 Agreements to evaluate and assess fire prevention grants to firefighters, and for National Pharmaceutical Stockpile and Smallpox activities.	\$1,164	\$1,164	\$1,164	\$0
18.H	Department of Housing and Urban Development 3 Agreements for Healthy Homes Initiatives, Lead-Based Paint Hazard Control, and inspections and risk assessments of project-based rental assisted housing.	\$677	\$677	\$677	\$0
18.I	Department of Interior 3 Agreements for various projects: Understanding of the Geography and Pathway of West Nile virus, and for the Pacific Emergency Health Initiative.	\$410	\$410	\$410	\$0

NARRATIVE BY ACTIVITY
REIMBURSEMENTS AND TRUST FUNDS

					FY 2009 +/- FY 2008
18.J	Department of Justice 5 Agreements for the evaluation of hand-held assays for threat agents.	\$816	\$816	\$816	\$0
18.K	Department of Labor 4 Agreements to perform various tasks: NIOSH response to Energy Employees Occupational Illness, and space commodities and support services.	\$151	\$151	\$151	\$0
18.L	Department of State 2 Agreements for Consultation and Assistance in Addressing Refugee Health Needs, for ICASS-IAG Working Group Chairperson, and Decontamination of State Annex 32.	\$1,000	\$1,000	\$1,000	\$0
18.M	Department of Transportation 2 Agreements for various projects including: carbon monoxide houseboats study and for a public health assessment	\$636	\$636	\$636	\$0
18.N	Environmental Protection Agency 7 Agreements for various projects including, health issues along the U.S./Mexican border, cost effectiveness measures, studies on occupational and environmental risks, and research of microbes on the Contaminant Candidate List.	\$4,256	\$4,256	\$4,256	\$0
18.O	Federal Emergency Management Agency 4 Agreements for health monitoring of response and recovery personnel in New York City.	\$34,158	\$34,158	\$34,158	\$0
18.P	Various Agencies/Organizations 29 Agreements for various projects with various agencies and organizations	\$78,992	\$78,992	\$78,992	\$0

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

				FY 2009 +/- FY 2008
BA	\$75,212,000	\$74,039,000	\$72,882,000	-\$1,157,000
FTE	304	313	320	+7

AUTHORIZING LEGISLATION

The Great Lakes Critical Programs Act of 1990, 33 U.S.C. § 1268, Section 104(i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S.C § 9604(i), The Defense Environmental Restoration Program, 10 U.S.C. § 2704, The Resource Conservation and Recovery Act, as amended, 42 U.S.C § 321 et seq, The Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

FY 2009 Authorization..... Indefinite

Allocation Methods.....Direct

Federal/Intramural; Competitive Grants/Cooperative Agreements; Contracts; Other

PROGRAM DESCRIPTION AND ACCOMPLISHMENTS

In 1980, the Agency for Toxic Substances and Disease Registry (ATSDR) was created by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as the Superfund law. ATSDR's purpose is to lead federal public health efforts at Superfund and other sites with known or potential toxic exposures. Its mission is to use the best science, take responsive action, and provide trustworthy health information to prevent and mitigate harmful exposures and related disease

ATSDR shares common concerns with other federal agencies and institutes, such as the Environmental Protection Agency (EPA), the National Institute of Occupational Health and Safety (NIOSH), and the Chemical Safety and Hazard Investigation Board (CSHIB). What distinguishes ATSDR is its unique focus. In the area of toxic substances, other federal agencies' efforts address substances in the environment and/or the workplace. ATSDR concentrates almost exclusively on the human health effects of substances in the environment. A non-regulatory agency, ATSDR often serves in an advisory capacity to other agencies, delivering authoritative scientific expertise on the human health effects of hazardous environmental exposures. ATSDR's programs are also distinctive in their emphasis on both community involvement and environmental justice.

The ATSDR Cooperative Agreement Program helps the Agency accomplish its mission in communities nationwide. This extramural grant program funds 30 states and one tribal government to build their ability to assess and respond to site-specific issues involving human exposure to hazardous substances in the environment. The Agency's partners use these funds to support approximately 100 environmental public health professionals who serve as front-line responders in site assessments, emergency spills, and community concerns. In addition, ATSDR maintains regional staff located in EPA regional offices around the country. This structure enables ATSDR to respond quickly to emergencies. In 2007, ATSDR and its partners served approximately 1.6 million people in approximately 206 communities.

ATSDR is directed by congressional mandate to perform specific activities concerning the effect on public health of hazardous substances in the environment. These activities generally fall into one of four functional areas:

- 1) Protecting the public from hazardous exposures – ATSDR applies its public health expertise to the task of preventing and responding to exposures at hazardous waste sites; the Agency also leads the public health component of responses to acute or short-term releases of hazardous substances resulting from accidents, natural disasters, and terrorist events. To accomplish this work, ATSDR performs a variety of site-specific activities, including the following:
 - *Public Health Assessments (PHAs)* review information about hazardous substances found at a waste site. PHAs evaluate whether people living or working at the site or nearby may be exposed to harmful levels of these substances. These assessments may also recommend that EPA or other agencies take certain actions to protect public health such as conducting blood tests for children or remediating a waste site. ATSDR conducts a PHA for each site proposed for the National Priorities List (NPL) and for other sites in response to petitions from communities.
 - *Exposure Investigations* collect and analyze site information and perform biological tests, and, when appropriate, determine whether people have been exposed to hazardous substances.
 - *Health Consultations (HCs)* provide guidance on specific, health-related questions about hazardous wastes in communities. More limited in scope than PHAs, health consultations may be written or oral, and may contain recommendations.
 - *Technical Assistance* reports provide public health input to address specific requests from regulatory agencies, public health agencies, and the public, related to hazardous waste sites, chemical releases, hazardous chemicals, and related environmental public health issues. Technical assistance reports are more limited in scope than PHAs and Health Consultations and address requests that are very limited in scope.
 - *Emergency Responses* help protect public health during emergencies. ATSDR provides resources, staff, and technical assistance when needed anywhere in the U.S.
- 2) Increasing knowledge about toxic substances – ATSDR increases knowledge of the scientific community, decision-makers, and the general public regarding the human health effects from toxic substances by regularly reviewing existing scientific knowledge and summarizing this work in a variety of state-of-the-art scientific publications. ATSDR also identifies information gaps, and takes steps to fill these data gaps by encouraging research by others, conducting research, or sponsoring partners. Under this function, ATSDR's products and services include:
 - *Toxicological Profiles (ToxProfiles)* summarize, interpret, and evaluate available data and possible health effects of hazardous substances found at NPL sites. To date, 296 toxicological profiles have been published or are under development. Of these, 281 profiles have been published as final eight are being revised on the basis of public comments, and seven are out for public comment. These ToxProfiles are regularly updated and are used by health and scientific professionals worldwide.
 - *Toxicologic Research*, especially computational toxicology, provides rapid, cost-effective information on health effects of chemicals, especially useful in assessing emergency releases.
 - *Collaboration in interagency research priorities* with EPA, NIOSH and the National Institute for Environmental Health Sciences (NIEHS). This Tri-Agency Superfund Applied Research Committee (TASARC) coordinates research related to filling priority

data needs. ATSDR partners with industry via a voluntary research program to aid in the completion of research questions related to hazardous substances.

- *Health Studies* help determine whether exposures to hazardous substances can lead to increased risk for various health problems, such as cancer, birth defects, auto-immune or neurological disorders, respiratory diseases, and other illnesses. ATSDR conducts its own health studies and supports others through agreements with state health departments and universities.
 - *ATSDR's Hazardous Substances Emergency Events Surveillance (HSEES) System* is recognized as the only federal database collecting information on the public health impact of acute hazardous substance releases. In collaboration with 14 state agencies and the National Response Center, HSEES tracks and reports hazardous substances releases, enabling ATSDR and its partners to depict patterns of releases, as well as plan for release prevention and response.
- 3) Educating health care providers and the public about toxic chemicals – ATSDR informs the public and local health care providers about local circumstances, if toxic substances represent a public health hazard, and advises the public and agencies on how to minimize the hazard. Under this function, ATSDR's products and services include:
- *Health Education* provides information and training to affected communities and medical professionals about ways to assess, control, or prevent exposure to hazardous substances in the environment.
 - *Continuing Education* provides information and training to physicians, nurses and other professionals on environmental health issues. Materials include the Case Studies in Environmental Medicine (CSEM) series and webcasts for health care professionals.
 - *The ATSDR ToxGuides™* are quick reference pocket guides. Developed for field use, they provide information such as chemical and physical properties, sources of exposure, routes of exposure, minimal risk levels, children's health, and health effects. The ToxGuides™ also discuss how the substance might interact in the environment. ToxGuides™ are excerpted from the corresponding toxicological profiles.
 - *ToxFAQs™* provide a quick and easy to understand version of ATSDR's ToxProfiles and Public Health Statements. Each document provides answers to the most frequently asked questions (FAQs) about exposures to hazardous substances found around sites and the effects of these exposures on human health. The ToxFAQs™ and Public Health Statements have been translated into Spanish.
- 4) Maintaining health registries – ATSDR maintains selected exposure registries that enumerate people with defined exposures to toxic substances, track them over time to understand associated health impacts, and provide health information to registrants as appropriate. Registries can help scientists understand the extent of exposures and provide data that can be used to demonstrate exposures and health outcomes. ATSDR is currently maintaining the following registries:
- *Tremolite Asbestos Registry* which traces, locates, and tracks individuals affected by the tremolite asbestos mined in Libby, Montana.
 - *World Trade Center Registry* tracks long-term health effects among workers, residents, and school children who were the most directly exposed to smoke, dust, and debris resulting from the World Trade Center disaster. This registry is maintained in collaboration with the New York City Department of Health and Mental Hygiene.

Program Assessment Rating Tool (PART) Results

In 2007, ATSDR was reassessed by the Office of Management and Budget (OMB) – the Agency achieved an “Effective” rating, the highest rating for federal programs. The OMB cited ATSDR’s ability to demonstrate impact on the health of people living in communities exposed to toxic substances, as well as recognizing numerous efficiency efforts by the agency, including its new cost-savings efficiency measure, as strong attributes of the program. As a result of the PART review, ATSDR is taking steps to track efficiencies throughout the agency and participating in agency-wide budget and performance integration activities.

Goals and Measures

CDC implemented four overarching Health Protection Goals to ensure efficient and effective use of resources to achieve health impact. The goals guide activities and performance, organize the agency’s portfolio by priority to activities that have the greatest health impact and reduce health disparities, align the agency’s annual budget to the priorities, and demonstrate accountability.

Efficiency Goal: Reduce cost to deliver health findings and recommendations.

Measure: Reduce the average cost per site to deliver public health findings and recommendations to the public.

In the event of a known or suspected public health threat, the timeliness with which critical information is delivered to the public may greatly influence the speed with which site managers, public health agencies, and the American people can take protective actions. Toward this end, ATSDR is working to provide critical public health findings and recommendations to the public in the most expedient manner. Historical data demonstrate that ATSDR’s HCs can be conducted in a fraction of the time (and therefore at less cost) required to conduct PHAs. In many cases, HCs are sufficient to provide the public with the information they need, therefore ATSDR is working to increase the proportion of sites that are addressed with HCs rather than PHAs, where appropriate.

In FY 2007, ATSDR did not meet its target of 21 percent, because many of the sites were addressed through technical assists rather than through HCs. Technical assists are often the most efficient and cost-effective way to address site-related requests. However, this method was not included in the original baseline used to estimate the original PART targets. While ATSDR did not meet the numeric PART target, it did meet the intent of the goal by using a more cost-effective method of addressing the sites.

Goal 1: Assess current and prevent future exposures to toxic substances and related human health effects.

Measure: Reduce exposures to toxic substances and mitigate the likelihood of future toxic exposures by increasing EPA’s, state regulatory agencies’, or private industries’ acceptance of ATSDR’s recommendations at sites with documented exposures.

ATSDR responds to toxic substance releases when they occur or as they are discovered. One of the agency’s primary responsibilities during these events is to provide information and to recommend actions, from a public health perspective, to the agency or industry responsible for cleaning up the released toxins and/or mitigating the likelihood of future releases. Since ATSDR serves in an advisory capacity, with no regulatory or enforcement authority, the protection of the public’s health from toxic substance releases is dependent on the extent to which 1) ATSDR’s recommendations are adopted by those entities that do have enforcement authority,(e.g., (EPA and state regulatory agencies); and 2) private industries adhere to ATSDR’s recommendations and regulations. This measure reports the percentage of ATSDR’s public health and safety recommendations accepted by EPA, state

regulatory agencies, and private organizations. The annual results may fluctuate as decisions are made regarding pending adoption of ATSDR recommendations.

In FY 2006, ATSDR tracked a total of 373 recommendations for urgent and public hazard conclusion category. The FY 2006 target of 80 percent was exceeded, with a result of 89 percent of the recommendations accepted.

Goal 2: Determine human health effects associated with exposures to priority hazardous substances.

Measure 1: Advance understanding of the relationship between human exposures to hazardous substances and adverse health effects by completing toxicological profiles for substances hazardous to human health.

A significant part of ATSDR's work is determining the relationship between human exposures to hazardous substances and health effects. As required by law, ATSDR prepares ToxProfiles for hazardous substances found at the NPL sites and upon request from the scientific community. This "Priority List of Hazardous Substances" is a catalog of the hazardous substances most commonly found at NPL facilities and those that pose significant potential threat to human health. Hazardous substances may be added or deleted from the NPL annually; therefore, each year there may be substances for which ToxProfiles must be developed.

Each profile provides a summary and comprehensive evaluation, and an interpretation of available scientific information on a substance. Because ToxProfiles are intended to be comprehensive in nature, when there are insufficient data to provide a complete picture of the health effects of a toxic substance, ATSDR identifies what data are needed, and works to collect needed information to complete the profile. This measure tracks the number of identified data gaps that are resolved annually.

Data needs were filled for 18 substances including heptachlor, ethylbenzene and xylene. Many of the data needs were filled by information/studies that were identified during the development of the updated toxicological profiles. For example, for heptachlor, using recent studies available, acute- and intermediate-duration oral Minimal Risk Levels (MRLs) were derived which fill the priority data need for dose-response animal data for acute- and intermediate-duration oral exposures. Also, priority data needs for chloroethane and cyanide are being filled through the ATSDR/EPA test rule.

Measure 2: Fill data needs for human health effects/risks relating to hazardous exposures.

ATSDR also works to determine the relationship between toxic exposures and disease through health studies, disease tracking, and surveillance activities. ATSDR's research findings help determine whether exposures to hazardous substances can lead to increased risk for various health problems, such as cancer, leukemia, multiple sclerosis, asthma, and other illnesses.

This measure tracks the number of data needs (i.e., gaps in knowledge about effects from exposure to hazardous substances) that ATSDR fills through the completion of site-specific or broader research studies. A data need is a specific question posed by a community or other stakeholders at sites where ATSDR provides services. It may also be a question ATSDR seeks to answer under its research agenda.

In FY 2007, ATSDR met its target of completing 30 site-specific and research data needs. Examples of these data needs include:

- A community report on Environmental Beryllium Disease (November 2006)

- A journal article on Arsenic Exposure in Mongolia in the Human and Ecological Risk Assessment (HERA) journal (July 2007);
- A journal article on B-Cell Lymphocytic Abnormalities published on the Clinical Cytometry web site.

Goal 3: Mitigate the risks of human health effects from toxic exposures.

Measure: Protect human health by preventing or mitigating human exposures to toxic substances or related health effects at sites with documented exposures.

This outcome measure captures the impact of the agency on human health in communities where actual or potential exposures exist. The long-term measure tracks the percentage of sites where human health risks or effects have been mitigated. The measure compares documented human health risks or effects at the time of the initial site assessment to those after intervention, thus measuring the reduction in people's actual or potential exposures. Depending on the toxic substance(s) and route(s) of exposure, the impact of interventions on human health can be measured through the following:

- Morbidity/Mortality rates that measure, for example, the reduction in childhood cancer or birth defects rates.
- Biomarkers, which signal the presence of toxic substances in the body, are used in cases where reliable and affordable tests are available.
- Environmental monitoring that measures reduction in environmental contaminants to below levels of human health concern.
- Behavioral change that documents changes in behavior that prevent future exposures.

In FY 2007, ATSDR continued to work with the EPA and other partners to assess the status of the implementation of interventions. Based on current data, interventions have been implemented at 70 percent of those sites posing an urgent or public health hazard.

Recent ATSDR accomplishments include the following:

- A Reason to Give Thanks in Massachusetts — The Massachusetts Department of Public Health (MDPH), an ATSDR-funded partner, successfully reduced the risk to humans for contracting Eastern Equine Encephalitis (EEE)—and helped save the state's 1.97 million-barrel cranberry crop, which accounts for some 29 percent of the nation's cranberries. In response to a public health emergency, MDPH and the Massachusetts Department of Agricultural Resources applied for and received an emergency exemption in August 2006 to apply the pesticide Anvil 10+10 over agricultural lands. Aerial application of Anvil began immediately to reduce the level of adult mosquitoes in southeastern Massachusetts, where surveillance of mosquitoes and birds showed the presence of EEE in mosquitoes. MDPH's Center for Environmental Health and the Cape Cod Cranberry Growers Association tested samples of cranberries both before and after the aerial applications of Anvil for the presence of sumithrin, the active ingredient in Anvil. Since no method yet existed for the direct analysis of sumithrin, MDPH worked with a laboratory in California with experience analyzing pesticides in other agricultural products to confirm the absence of detectable limits of sumithrin. This coordinated action by government and industry interests helped avoid an EEE outbreak and saved the state's cranberry crop, which was valued at \$63 million.
- Community Air Monitoring Uncovers Hazards to Workers in Florida – Since March 2006, ATSDR, the Florida Department of Health, and the Escambia County Health Department have responded to community concerns and health complaints due to hydrogen sulfide

emissions from an adjacent construction and demolition debris landfill. As part of a joint study, ATSDR conducted air monitoring for hydrogen sulfide and found dangerous levels of hydrogen sulfide where landfill employees worked. The Escambia County Health Department immediately requested the Occupational Safety and Health Administration (OSHA) to inspect the site. OSHA declared the site unsafe and ordered the facility to be shut down until the recommendations for proper training and protective gear were implemented. The company implemented the order and subsequently hired remediation specialists trained to work in hazardous environments.

- **Public-Private Cooperation Helps Reduce Cancer Risks** – ATSDR and the Wisconsin Department of Health and Family Services (DHFS) helped protect a community from cancer risk due to trichloroethylene (TCE) exposures when a DHFS health consultation prompted a metal working shop to voluntarily change its manufacturing process. Air modeling revealed that Trent Tube, a large metal working facility in East Troy, Wisconsin, was a significant source of TCE air emissions into the surrounding community. Modeling and supplementary sampling showed that most of the 3,500 residents had increased levels of exposure to TCE. DHFS investigated and prepared a health consultation on the exposure risks predicted by the air modeling. DHFS recommended that the company reduce their emissions of TCE. Despite already being in compliance with their existing emissions permit, the company voluntarily agreed to processing changes to curtail TCE emissions. Trent Tube's voluntary initiative to reduce emissions illustrates how cooperation between a private and public entity can help protect public health. Without this intervention, the community would have continued to experience an increased cancer risk from TCE exposure.
- **Train Derailment Prompts Emergency Response** – ATSDR helped protect residents in a Kentucky community from toxic chemical exposures following a train derailment 25 miles south of Louisville. On January 16, 2007, a CSX Transportation freight train derailed, releasing hazardous substances into the environment. The incident prompted an evacuation of homes, schools, and businesses within a one-mile radius. It also forced authorities to shut down an eight-mile stretch of Interstate 65 for 12 hours. The derailment involved tank cars of 1,3-butadiene, c-hexane, and methyl ethyl ketone (MEK). ATSDR, EPA, and the Coast Guard responded.
- **ATSDR, working with EPA and a CSX contractor, the Center for Toxicology and Environmental Health (CTEH), established air-monitoring action levels for the chemicals and particulate matter (PM).** Two teams conducted air monitoring at the northern and southern edges of plume along Interstate 65. A third conducted air monitoring and reconnaissance in Ruhl Acres neighborhood and areas around Shepardsville, Kentucky. All air data was forwarded to ATSDR for review and comment. ATSDR worked with EPA and CTEH to establish action levels for cleanup and assisted in several media briefings. Working with the county health department, ATSDR provided guidance for returning residents and employees on reoccupation and pet protection. ATSDR also assisted in the inspection and care of residents' pets and several horses left behind during the evacuation.
- **AMACOR Magnesium Fire and Residential Clean-up in Indiana** -- ATSDR worked with EPA to protect the health of some 5,000–8,000 residents evacuated during a fire at the AMACOR magnesium recycling facility in Anderson, Indiana. ATSDR helped determine where air-monitoring equipment needed to be located to be effective. The fire burned for about 48 hours, and roofing material was blown from the buildings and scattered around the surrounding residential community. The impacted area covered a two-mile radius and affected approximately 1,300 residences. ATSDR and others developed a

neighborhood clean-up clearance sampling protocol to help protect against residential exposures to asbestos-containing debris potentially left behind after the clean up.

FUNDING HISTORY TABLE

	AMOUNT
FY 2004	\$73,034,000
FY 2005	\$76,041,000
FY 2006	\$74,905,000
FY 2007	\$75,212,000
FY 2008	\$74,039,000

BUDGET REQUEST

The ATSDR FY 2009 request includes \$72,882,000, a decrease of \$1,157,000 below the FY 2008 Enacted level for an Individual Learning Account (ILA) and administrative reduction.

FY 2009 funds will support public health assessments of waste sites, health consultations concerning specific hazardous substances, health surveillance and registries, response to emergency releases of hazardous substances, applied research in support of public health assessments, information development and dissemination, and education and training concerning hazardous substances, and approximately 31 cooperative agreement programs to states and partners.

Examples of ATSDR current and FY 2009 activities include the following:

- **Brownfield Sites - Redevelopment** is occurring nationwide, with approximately 450,000 sites being reutilized to prevent further urban sprawl. Most of these properties are labeled as Brownfield sites, which are defined as real properties of which the expansion, redevelopment, or reuse may be complicated by the presence of hazardous substances. There are public health concerns regarding redevelopment of these properties. Engagement by local public health in land reuse decisions is limited because of the shortage of environmental public health staff at the municipal level. In order, to optimize the participation of the available environmental health staff in redevelopment issues, ATSDR is developing a number of tools to help health officials prioritize which sites need their immediate attention.
- **Mercury Vapors - Synthetic gymnasium flooring and out door track surfaces** installed in schools in 1960's -1980's were formulated with polyurethane containing mercury. Over the past several years, ATSDR has addressed health concerns that mercury vapors may have been released from the flooring at levels that cause health effects. School age children are the most likely receptor of these exposures. There is a high degree of variability in the mercury vapor concentrations released from the flooring. In order, to be able to make generalized conclusions about why some floors are emitting unacceptable amounts of mercury vapor, while others are not, ATSDR will analyze the conditions of several schools sites to determine what conditions result in exposure risks to students.
- **Minority Health Professions Schools - ATSDR offers funds through the Association of Minority Health Professions Schools, Inc.** for toxicologic research and training at 12 member institutions. The arrangement is mutually beneficial: to date, the institutions have filled 14 specific priority data needs; at the same time, ATSDR supports the development of environmental health scientists and students at minority institutions. This work has been carried out at schools of medicine, pharmacy, and veterinary science at several historically black colleges and universities, including Charles R. Drew

University, Morehouse School of Medicine, Hampton University, Howard University, Texas Southern University, Florida A & M University, Xavier University of Louisiana, Meharry Medical College, and Tuskegee University.

- **Digital X-Rays use in Classifying Occupational Dust Diseases** - ATSDR is conducting a study to compare digital x-rays with film x-rays to see if they are equivalent with regard to detecting and classifying occupational dust disease such as pleural (outer lining of the lung) abnormalities, which are typically considered a marker of asbestos exposures. If digital x-rays are equivalent with film x-rays in detecting pleural abnormalities, current U.S. and international screening methods can be updated to use the more efficient digital technology. The advantages of digital radiography included decreased processing time, increased efficiency of radiology departments, remote reading capability, and enhanced image quality compared to film.
- **Evaluating Environmental Exposures** - ATSDR is funding the development of physiologically-based pharmacokinetic models that will evaluate environmental exposures to a class of emerging environmental contaminants called perfluorochemicals (PFCs). These chemicals have documented endpoints for cancer and noncancer effects in rats, mice, rabbits, monkeys, and humans. However, numerous uncertainties and extreme species and gender variability have slowed the understanding of the toxicological and public health issues surrounding PFCs. They are resistant to both physical and biological degradation and very recent investigations have shown that the contaminants are persistent in humans, wildlife, and the environment world-wide. PFCs are widely used as water, stain, and grease repellants for food wrappings, carpet, furniture, and clothing. The completion of the project is expected to produce exposure evaluation tools that will have applications world-wide.
- **Environmental Exposure to TDI and Respiratory Effects** - ATSDR is supporting the North Carolina Department of Health and Human Services in a study of environmental exposures to toluene diisocyanate (TDI) and respiratory health effects as some workers exposed to this chemical develop asthma. TDI is a chemical used in production of many products, including polyurethane foam (used for bedding, furniture, and automobiles), and floor coatings. The purposes of the study are to determine whether community members living near TDI sources (such as foam factories) have a higher proportion of residents reporting asthma-like symptoms than those living further away; whether community members living near TDI sources have more antibodies to this chemical in their blood than people living further away; and if air samples collected in communities near these facilities detect this chemical in the air more often than in communities further away.
- **Asbestos Exposure Review** - ATSDR is helping protect Americans from exposures to asbestos fibers and resulting health effects. Over 200 facilities around the country received and processed vermiculite ore from Libby, Montana, which is known to have contained asbestos. ATSDR's national Asbestos Exposure Review continues to investigate these sites and is helping local agencies educate those who may have been exposed to asbestos, particularly plant workers and their families, about preventing and coping with asbestos-related disease. ATSDR is also conducting the National Asbestos Health Project (NAHP) to identify persons with past radiographic or spirometry-related evidence of asbestos associated health conditions. To date, the NAHP has successfully screened former workers of the former Zonolite/W.R. Grace & Company site in Hamilton Township, NJ and their household members. In 2007, the NAHP will conduct additional screenings at additional facilities in California, Arizona, and Minneapolis. A manuscript

will also be developed detailing reported exposure and frequency of radiographic and spirometry-related abnormalities.

- Toxic Chemical Education for Primary Care Providers - ATSDR continues to develop Case Studies in Environmental Medicine (CSEM). These are interactive, self-study educational documents available in electronic or printed form. The series is designed to assist primary care providers to understand the health effects of toxic chemicals on human health and to deliver appropriate care to those impacted by environmental causes. Continuing education credit specific to physicians, nurses, health educators, and other health professionals will be offered.
- Tremolite Asbestos Registry - ATSDR continues to passively enroll registrants to the Tremolite Asbestos Registry (TAR) through the Montana Asbestos Screening and Surveillance Activity (MASSA) program. ATSDR implemented the registry in FY 2003 to include persons eligible for medical testing (e.g., chest x-rays and pulmonary function tests) as well as vermiculite workers and their household contacts. To date, 83 percent of former workers and their household contacts in Libby have been located. Approximately 4,150 persons from the MASSA program and the first new screening site have been added to the TAR.
- World Trade Center Health Registry - Over 71,000 registrants in the World Trade Center Health Registry, launched in September 2003, will be interviewed periodically over the next 20 years to track the long-term health effects of exposures during the event. The first follow-up interviews were conducted in November 2006 and will continue through FY 2007. Data collected from participants on health outcomes will be analyzed and reported in quarterly newsletters and peer reviewed publications.

OUTCOME TABLE

						FY 20				FY 2012 Target
Efficiency Goal: Reduce cost to deliver health findings and recommendations.										
1	Reduce the average cost per site to deliver public health findings and recommendations to the public.	\$36,174	10%	N/A	17%	21%	6% (Unmet)	24%	27%	30%
Long-Term Objective 1: Assess current and prevention future exposures to toxic substances and related human health effects.										
1	Reduce exposures to toxic substances and mitigate the likelihood of future toxic exposures by increasing EPA's, state regulatory agencies', or private industries' acceptance of ATSDR's recommendations at sites with documented exposures.	>83% (Exceeded)	91% (Exceeded)	80%	89% (Exceeded)	82%	12/2008	>83%	>84%	>87%
Long-Term Objective 3: Mitigate the risks of human health effects from toxic exposures.										
1	Protect human health by preventing or mitigating human exposures to toxic substances or related health effects at sites with documented exposures	33% (Met)	54% (Exceeded)	65%	65% (Met)	70%	70% (Met)	72%	74%	75%

OUTPUT TABLE

						FY 2007				Out-Year Target
Long-Term Objective 2: Determine human health effects associated with exposures to priority hazardous substances.										
1	Advance understanding of the relationship between human exposures to hazardous substances and adverse health effects by completing toxicological profiles for substances hazardous to human health.	10 (Met)	15 (Met)	18	18 (Met)	18	18	18	18	18
2	Fill data needs for human health effects/risks relating to hazardous exposures.	N/A	N/A	Determine baseline	24 (Met)	30	30 (Met)	32	34	34
Other ATSDR Outputs										
1	Cooperative Agreements	NA	29	29	31	31	31	31	31	31
2	Sites Evaluated/Chemical Release Responses	NA	399	400	742	720	1001	730	730	730
3	Public Health Assessments/Health Consults (includes chemical specific health consults)	NA	388	300	527	526	310	300	300	300
4	Technical Assists	NA	1,842	2,000	10,429	7,062	1996 ²	1900	1900	1900
5	Exposure Investigations	NA	9	10	8	8	10	9	9	9
6	Emergency Responses and Exercises	NA	126	126	58	58	179	58	58	58
7	Health Studies	NA	53	48	45	43	46	45	45	45
8	Surveillance (# of states) and Registries (# of registries by exposure type)	NA	15	12	17	11	14	11	11	11
9	Hazardous Substances Emergency Event Surveillance (states and events)	NA	15 states/ 8,858 events	15 states/ 8,000 events	14 states/ 8,062 events	14 states/ 8,062 events	14 states/ 8,150 events	14 states/ 8,062 events	14 states/ 8,062 events	14 states/ 8,062 events
10	Great lakes Research Projects (studies)	NA	5	5	5	6	4 ³	4	4	4
11	Minority health Professions Foundation (grants)	NA	7	7	7	5	5	5	5	5
12	Toxicological Profiles	NA	16	13	13	13	14	13	13	13
13	Information Dissemination	NA	2,589,843	2,580,000	6,859,883	7,000,000	8,413,182	8,700,000	9,100,000	9,500,000
14	Pediatric Environmental health Specialty Units	NA	11	11	11	11	11	11	11	11

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY
NARRATIVE BY ACTIVITY

						FY 2007				Out- Year Target
15	Health Professionals Trained	NA	42,145	40,000	60,970	63,600	68,675	63,600	63,600	NA
16	Community Members Educated	NA	183,649	29,000	142,943	133,000	172,231	133,000	133,000	NA
	Appropriated Amount (\$ Million)⁴	\$73.0	\$76.0	\$74.9		\$75.2		\$74.0	\$72.9	

¹ In FY 2005, outputs were reorganized into different categories. Information comprising FY 2004 outputs are not consistent with those reported in FY 2005 and beyond.

² FY 2007 actual represents Technical Assists which were ATSDR –specific. For FY 2007 and forward, Technical Assists are now accomplished among other CDC CIOs (CDC Information Center, the Director's Emergency Operations Center, and the Office of Terrorism Preparedness and Emergency Response) and therefore not tabulated by ATSDR. Future target years have been adjust to reflect this change.

³ In FY 2007, the Great Lakes Human Health Effects Research (GLHHRP) program began its new cycle of competitive funding which resulted in funding 4 projects.

⁴ The outputs/outcomes are not necessarily reflective of all programmatic activities funded by the appropriated amount.

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SUPPLEMENTAL MATERIAL

BUDGET AUTHORITY BY OBJECT

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION OBJECT CLASSIFICATION- DIRECT OBLIGATIONS (DOLLARS IN THOUSANDS)			
Object Class	FY 2008 Estimate	FY 2009 Estimate	FY 2009 +/- FY 2008
Personnel Compensation:			
Full-Time Permanent (11.1)	\$530,940	\$540,852	\$9,912
Other than Full-Time Permanent (11.3)	\$57,388	\$60,657	\$3,269
Other Personnel Comp. (11.5)	\$27,774	\$25,675	(\$2,099)
Military Personnel (11.7)	\$61,993	\$65,363	\$3,370
Special Personal Service Comp. (11.8)	\$1,190	\$1,409	\$219
Total Personnel Compensation	\$679,285	\$693,956	\$14,671
Civilian personnel Benefits (12.1)	\$167,798	\$168,984	\$1,186
Military Personnel Benefits (12.2)	\$38,961	\$42,424	\$3,463
Benefits to Former Personnel (13.0)	\$0	\$0	\$0
SubTotal Pay Costs	\$886,044	\$905,364	\$19,320
Travel (21.0)	\$44,151	\$39,397	(\$4,754)
Transportation of Things (22.0)	\$21,689	\$19,354	(\$2,335)
Rental Payments to GSA (23.1)	\$71,194	\$63,164	(\$8,030)
Rental Payments to Others (23.2)	\$1,061	\$946	(\$115)
Communications, Utilities, and Misc. Charges (23.3)	\$22,279	\$19,879	(\$2,400)
Printing and Reproduction (24.0)	\$9,418	\$8,403	(\$1,015)
Other Contractual Services:			
Advisory and Assistance Services (25.1)	\$394,293	\$351,825	(\$42,468)
Other Services (25.2)	\$222,366	\$195,861	(\$26,505)
Purchases from Government Accounts (25.3)	\$359,210	\$320,520	(\$38,690)
Operation and Maintenance of Facilities (25.4)	\$80,199	\$71,560	(\$8,639)
Research and Development Contracts (25.5)	\$130,457	\$118,799	(\$11,658)
Medical Services (25.6)	\$19,468	\$17,369	(\$2,099)
Operation and Maintenance of Equipment (25.7)	\$21,835	\$19,483	(\$2,352)
Subsistence and Support of Persons (25.8)	\$3,622	\$3,231	(\$391)
Subtotal Other Contractual Services	\$1,231,450	\$1,098,648	(\$132,802)
Supplies and Materials (26.0)	\$548,439	\$430,702	(\$117,737)
Equipment (31.0)	\$72,738	\$64,904	(\$7,834)
Land and Structures (32.0)	\$106,842	\$98,952	(\$7,890)
Investments and Loans (33.0)	\$0	\$0	\$0
Grants, Subsidies, and Contributions (41.0)	\$3,033,943	\$2,867,623	(\$166,320)
Insurance Claims and Indemnities (42.0)	\$103	\$98	(\$5)
Interest and Dividends (43.0)	\$623	\$576	(\$47)
Refunds (44.0)	\$0	\$0	\$0
Subtotal Non-Pay Costs	\$5,163,930	\$4,712,645	(\$451,285)
Total Budget Authority	\$6,049,974	\$5,618,009	(\$431,965)

SALARIES AND EXPENSES

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION SALARIES AND EXPENSES (DOLLARS IN THOUSANDS)			
	FY 2008 Estimate	FY 2009 Estimate	FY 2009 +/- FY 2008
Personnel Compensation:			
Full-Time Permanent (11.1)	\$530,940	\$540,852	\$9,912
Other than Full-Time Permanent (11.3)	\$57,388	\$60,657	\$3,269
Other Personnel Comp. (11.5)	\$27,774	\$25,675	(\$2,099)
Military Personnel (11.7)	\$61,993	\$65,363	\$3,370
Special Personal Service Comp. (11.8)	\$1,190	\$1,409	\$219
Total Personnel Compensation	\$679,285	\$693,956	\$14,671
Civilian personnel Benefits (12.1)	\$167,798	\$168,984	\$1,186
Military Personnel Benefits (12.2)	\$38,961	\$42,424	\$3,463
Benefits to Former Personnel (13.0)	\$0	\$0	\$0
SubTotal Pay Costs	\$886,044	\$905,364	\$19,320
Travel (21.0)	\$44,151	\$39,397	(\$4,754)
Transportation of Things (22.0)	\$21,689	\$19,354	(\$2,335)
Rental Payments to Others (23.2)	\$1,061	\$946	(\$115)
Communications, Utilities, and Misc. Charges (23.3)	\$22,279	\$19,879	(\$2,400)
Printing and Reproduction (24.0)	\$9,418	\$8,403	(\$1,015)
Other Contractual Services:			
Advisory and Assistance Services (25.1)	\$174,752	\$127,893	(\$46,859)
Other Services (25.2)	\$222,366	\$195,861	(\$26,505)
Purchases from Government Accounts (25.3)	\$31,133	\$27,782	(\$3,351)
Operation and Maintenance of Facilities (25.4)	\$57,941	\$48,856	(\$9,084)
Medical Services (25.6)	\$19,468	\$17,369	(\$2,099)
Operation and Maintenance of Equipment (25.7)	\$21,835	\$19,483	(\$2,352)
Subsistence and Support of Persons (25.8)	\$3,622	\$3,231	(\$391)
Subtotal Other Contractual Services	\$531,117	\$440,476	(\$90,641)
Supplies and Materials (26.0)	\$302,641	\$179,988	(\$122,653)
Subtotal Non-Pay Costs	\$932,356	\$708,443	(\$223,914)
Total Salary and Expense	\$1,818,400	\$1,613,807	(\$204,594)
Direct FTE	7,657	7,583	(74)

DETAIL OF FULL-TIME EQUIVALENT EMPLOYMENT (FTE)

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION DETAIL OF FULL-TIME EQUIVALENT EMPLOYMENT (FTE) ¹			
	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate
Infectious Diseases	2,405	2,484	2,451
Health Promotion ²	1,023	1,065	1,049
Health Information and Service	790	816	804
Environmental Health and Injury Prevention	489	505	497
Occupational Safety and Health	1,150	1,188	1,170
Global Health	91	94	93
Public Health Research	5	5	5
Public Health Improvement and Leadership	889	918	904
Preventive Health & Health Services Block Grant (PHHSBG) ²	8	0	0
Business Services Support	718	742	730
Terrorism ³	708	766	805
Agency for Toxic Substances and Disease Registry	304	313	320
TOTAL, CDC/ATSDR FTE	8,579	8,896	8,829

¹ FTE levels across CDC are projected to increase due to processing backlogged hiring actions in light of relief from hiring controls from FY 2006.

² PHHSBG is eliminated in the FY 2008 President's Budget. As a result, FTE levels for Health Promotion include those from PHHSBG in FY 2008 and FY 2009.

³ FTE levels for Terrorism include proposed increases for assigning additional FTEs to Pandemic Influenza Planning and Preparedness which will require hiring scientific and public health personnel in FY 2008 to ensure CDC is able to effectively carry out its role in domestic and global preparedness. Terrorism preparedness activities and the Strategic National Stockpile (SNS) program are areas where a stable workforce is essential. Conversion of contractor SNS staff to federal employees to support state and local preparedness efforts is underway.

DETAIL OF POSITIONS

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION PROGRAM ADMINISTRATION DETAIL OF POSITIONS			
	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate
Executive Level			
Executive level I	-	-	-
Executive level II	-	-	-
Executive level III	-	-	-
Executive level IV	-	-	-
Executive level V	-	-	-
<i>Subtotal</i>	-	-	-
Total-Executive Level Salary	-	-	-
<i>Total - SES</i>	32	32	32
Total - SES Salary	\$5,006,576	\$5,181,806	\$5,332,079
GS-15	477	477	477
GS-14	1,306	1,306	1,306
GS-13	2,040	2,040	2,040
GS-12	1,137	1,137	1,137
GS-11	709	709	709
GS-10	54	54	54
GS-9	449	449	449
GS-8	79	79	79
GS-7	379	379	379
GS-6	82	82	82
GS-5	88	88	88
GS-4	51	51	51
GS-3	30	30	30
GS-2	3	3	3
GS-1	0	0	0
<i>Subtotal</i>	6,884	6,884	6,884
Total - GS Salary	\$566,966,780	\$586,810,617	\$603,828,125
Average GS grade	12.0	12.0	12.0
Average GS salary	82,360	85,243	87,715
Average Special Pay Categories			
Average Comm. Corps Salary ¹	96,477	99,854	103,249
Average Wage Grade Salary	51,574	53,379	54,927

¹ Includes special pays and allowances.

PROGRAMS PROPOSED FOR ELIMINATION

The following table shows the programs proposed for elimination or consolidation in the President's 2009 Budget request. Termination of these 13 programs frees up approximately \$250.3 million – based on FY 2008 levels – for \$2.2 billion – based on 2007 levels – for priority health programs that have a demonstrated record of success or that hold significant promise for increasing accountability and improving health outcomes. Following the table is a brief summary of each program and the rationale for its elimination.

PROGRAM	REDUCTION AMOUNT (DOLLARS IN MILLIONS)
Block grants	\$97.3
B & F	\$55.0
Johanna's Law	\$6.5
Mind-Body Research Program	\$1.7
Pioneering Healthier Communities (YMCA)	\$2.9
Food Allergies	\$0.5
Demonstration Project for Teen Pregnancy	\$2.9
Newborn Screening Quality Assurance Program & Newborn Screening for Severe Combined Immunodeficiency Diseases (within Environmental Health Laboratory) ¹	\$7.4
Safe Water	\$7.2
Director's Discretionary Fund	\$5.9
Congressional Projects	\$26.7
Advanced Practice Centers	\$5.3
Individual Learning Accounts (ILA)	\$31.0
Total:	\$250.3

¹Newborn Screening Quality Assurance Program & Newborn Screening for Severe Combined Immunodeficiency Diseases programs were eliminated from the Environmental Health Laboratory Program

PREVENTIVE HEALTH AND HEALTH SERVICES BLOCK GRANT (-\$97.3 MILLION)

CDC proposes the elimination of the Preventive Health and Health Services Block Grant (PHHSBG). As CDC strives to improve efficiency and effectiveness, other existing resources will continue to be available for programs which have traditionally addressed similar public health issues.

BUILDINGS AND FACILITIES (-\$55.0 MILLION)

For FY 2009, CDC requests no funding for the Buildings and Facilities Program, a decrease of \$55,022,000 from the FY 2008 Enacted level. In FY 2009, CDC will sustain existing facilities with carryover balances from previous appropriation.

JOHANNA'S LAW (-\$6.5 MILLION)

In FY 2008, CDC was funded to continue activities authorized by Johanna's Law: The Gynecologic Cancer Education and Awareness Act. In FY 2009 CDC is not requesting funds for Johanna's Law. The FY 2009 Budget continues to support funding for gynecologic cancer prevention through the National Education Campaign.

MIND-BODY RESEARCH PROGRAM (-\$1.7 MILLION)

The FY 2009 request includes a decrease of \$1,719,000 for the Mind Body Research Program. This program will end its five-year cooperative agreement cycle in FY 2008. In FY 2009, the Mind Body Research Program will not be continued.

PIONEERING HEALTHIER COMMUNITIES - YMCA (-\$2.9 MILLION)

The FY 2009 Budget includes no funding for this activity. CDC will continue to support community health promotion activities through other funding mechanisms.

FOOD ALLERGIES (-\$0.5 MILLION)

The FY 2009 request includes a decrease of \$491,000 for the Food Allergies program, which will eliminate this program. CDC was funded to manage the risk of food allergies and anaphylaxis in schools and provide parents with enhanced information on these conditions via the Internet. In FY 2009, CDC is not requesting funds for the food allergy project.

DEMONSTRATION PROJECT FOR TEEN PREGNANCY (-\$2.9 MILLION)

The FY 2009 request includes a decrease of \$2,948,000 for the Demonstration Project for Teen Pregnancy. CDC received funding to assist states with preventing teen pregnancies by providing information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. In FY 2009, CDC does not request additional funds for the demonstration project. CDC will continue its work with teen pregnancy prevention through other programmatic mechanisms.

NEWBORN SCREENING QUALITY ASSURANCE PROGRAM & NEWBORN SCREENING FOR SEVERE COMBINED IMMUNODEFICIENCY DISEASES (-\$7.4 MILLION)

NCEH's Environmental Health Laboratory provides technical assistance to State newborn screening labs, assisting in developing new screening tools, and methods to increase accuracy and expand the number of disorders screened, and population-based pilot testing to ensure the effectiveness of new screening tools. CDC also provides technical assistance and training to States in biomonitoring. The FY 2009 Budget is consistent with FY 2008 Budget policy for this activity.

SAFE WATER (-\$7.2 MILLION)

The FY 2009 request does not include funding for this program, redirecting resources to other high priority public health activities. The decrease will eliminate research, surveillance, and technical assistance activities associated with *Pfisteria* issues. This program was also proposed for termination in the FY 2007 Budget.

DIRECTOR'S DISCRETIONARY FUND (-\$5.9 MILLION)

The FY 2009 request includes a decrease of \$5,895,000 for The Director's Discretionary Fund, which would eliminate this activity. This funding has given the CDC Director the flexibility to address a number of important public health issues. While this funding has given the agency's leadership the ability to support critical public health initiatives and programs that are typically not funded elsewhere within CDC's annual budget, the agency is confident that many of the major issues facing the public health system can be effectively addressed without the use of discretionary funding.

CONGRESSIONAL PROJECTS (-\$26.7 MILLION)

Funding for Public Health Improvement and Leadership is reduced in FY 2009 to reflect the removal of FY 2008 Congressional Projects.

ADVANCED PRACTICE CENTERS (-\$5.3 MILLION)

For the second consecutive year, CDC is not requesting funding for the Advanced Practice Centers in FY 2009. Capacity at the participating Centers has been built to an acceptable level. Additionally, other CDC activities provide further and similar opportunities to expand all-hazards preparedness at local public health departments and with relevant partners.

INDIVIDUAL LEARNING ACCOUNTS (-\$31.0 MILLION)

The CDC FY 2009 request includes an across-the-board reduction of \$31,000,000 from the FY 2008 Enacted level related to CDC's Individual Learning Accounts (ILA's) and other administrative costs. ILA's and administrative costs are shared across CDC; therefore this reduction is applied directly to programs across the agency with the exception of the Public Health Service (PHS) Evaluation Transfer activities. This reduction will reduce training for CDC/ATSDR employees. Existing CDC/ATSDR staff will be able to utilize carryover balances for training in FY 2009.

CROSSWALK – FUNDING BY PROGRAM AND ORGANIZATION (2007)

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION FUNDING BY PROGRAM AND ORGANIZATION – FY 2007 (DOLLARS IN THOUSANDS)													
	ATSDR	CCID	CCHP	CCHIS	CCEHIP	NIOSH	COGH	COTPER	L&M	OD	OWCD	BSS	Total
Infectious Diseases		1,809,586											1,809,586
Health Promotion			947,004										947,004
Health Information and Service				270,073									270,073
Environmental Health and Injury Prevention					282,752								282,752
Occupational Safety and Health						315,100							315,100
Global Health							307,497						307,497
Public Health Research										31,000			31,000
Public Health Improvement and Leadership									161,069	7,851	33,639		202,559
Preventive Health and Health Services Block Grant			99,000										99,000
Buildings and Facilities										134,400			134,400
Business Services Support												378,289	378,289
Terrorism								1,472,553					1,472,553
Total, CDC		1,809,586	1,046,004	270,073	282,752	315,100	307,497	1,472,553	161,069	173,251	33,639	378,289	6,249,813
Agency for Toxic Substances and Disease Registry	75,212												75,212
Vaccines for Children		2,905,330											2,905,330
Total, CDC/ATSDR	75,212	4,714,916	1,046,004	270,073	282,752	315,100	307,497	1,472,553	161,069	173,251	33,639	378,289	9,230,355

CROSSWALK – FUNDING BY PROGRAM AND ORGANIZATION (2008)

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION FUNDING BY PROGRAM AND ORGANIZATION – FY 2008 (DOLLARS IN THOUSANDS)													
	ATSDR	CCID	CCHP	CCHIS	CCEHIP	NIOSH	COGH	COTPER	L&M	OD	OWCD	BSS	Total
Infectious Diseases		1,904,535											1,904,535
Health Promotion			961,193										961,193
Health Information and Service				276,778									276,778
Environmental Health and Injury Prevention					289,323								289,323
Occupational Safety and Health						381,954							381,954
Global Health							302,371						302,371
Public Health Research										31,000			31,000
Public Health Improvement and Leadership									158,255	32,635	34,009		224,899
Preventive Health and Health Services Block Grant			97,270										97,270
Buildings and Facilities										55,022			55,022
Business Services Support												371,847	371,847
Terrorism								1,479,455					1,479,455
Total, CDC		1,904,535	1,058,463	276,778	289,323	381,954	302,371	1,479,455	158,255	118,657	34,009	371,847	6,375,647
Agency for Toxic Substances and Disease Registry	74,039												74,039
Vaccines for Children		2,702,206											2,702,206
Total, CDC/ATSDR	74,039	4,606,741	1,058,463	276,778	289,323	381,954	302,371	1,479,455	158,255	118,657	34,009	371,847	9,151,892

CROSSWALK – FUNDING BY PROGRAM AND ORGANIZATION (2009)

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION FUNDING BY PROGRAM AND ORGANIZATION – FY 2009 (DOLLARS IN THOUSANDS)													
	ATSDR	CCID	CCHP	CCHIS	CCEHIP	NIOSH	COGH	COTPER	L&M	OD	OWCD	BSS	Total
Infectious Diseases		1,869,977											1,869,977
Health Promotion			932,073										932,073
Health Information and Service				284,355									284,355
Environmental Health and Injury Prevention					270,872								270,872
Occupational Safety and Health						271,053							271,053
Global Health							302,025						302,025
Public Health Research										31,000			31,000
Public Health Improvement and Leadership									149,332	0	32,811		182,143
Preventive Health and Health Services Block Grant			0										0
Buildings and Facilities										0			0
Business Services Support												337,906	337,906
Terrorism								1,419,264					1,419,264
Total, CDC		1,869,977	932,073	284,355	270,872	271,053	302,025	1,419,264	149,332	31,000	32,811	337,906	5,900,668
Agency for Toxic Substances and Disease Registry	72,882												72,882
Vaccines for Children		2,766,230											2,766,230
Energy Employees Occupational Illness Compensation Program Act (EEOICPA)													55,359
Total, CDC/ATSDR	72,882	4,636,207	932,073	284,355	270,872	271,053	302,025	1,419,264	149,332	31,000	33,578	337,906	8,779,513

MECHANISM TABLE – BUDGET ACTIVITY

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION MECHANISM TABLE - BY BUDGET ACTIVITY (DOLLARS IN THOUSANDS)				
Budget Activity	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate	FY 2009 +/- FY 2008
Infectious Diseases	\$1,809,586	\$1,904,535	\$1,869,977	(\$34,558)
Intramural Research and Program Assistance	\$304,495	\$322,536	\$315,970	(\$6,566)
Extramural Programs	\$1,465,765	\$1,542,673	\$1,514,681	(\$27,992)
PHS Evaluation Transfers	\$39,326	\$39,326	\$39,326	\$0
Health Promotion	\$947,004	\$961,193	\$932,073	(\$29,120)
Intramural Research and Program Assistance	\$128,571	\$130,827	\$126,197	(\$4,630)
Extramural Programs	\$796,430	\$808,363	\$783,873	(\$24,490)
PHS Evaluation Transfers	\$22,003	\$22,003	\$22,003	\$0
Health Information and Service	\$270,073	\$276,778	\$284,355	\$7,577
Intramural Research and Program Assistance	\$169,538	\$173,796	\$178,607	\$4,811
Extramural Programs	\$98,577	\$101,024	\$103,790	\$2,766
PHS Evaluation Transfers	\$1,958	\$1,958	\$1,958	\$0
Environmental Health and Injury Prevention	\$282,752	\$289,323	\$270,872	(\$18,451)
Intramural Research and Program Assistance	\$104,798	\$107,387	\$100,118	(\$7,270)
Extramural Programs	\$171,348	\$175,330	\$164,148	(\$11,181)
PHS Evaluation Transfers	\$6,606	\$6,606	\$6,606	\$0
Occupational Safety and Health	\$315,100	\$381,954	\$271,053	(\$110,901)
Intramural Research and Program Assistance	\$212,377	\$257,437	\$182,690	(\$74,747)
Extramural Programs	\$102,723	\$124,517	\$88,363	(\$36,154)
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Global Health	\$307,497	\$302,371	\$302,025	(\$346)
Intramural Research and Program Assistance	\$71,565	\$70,253	\$70,164	(\$89)
Extramural Programs	\$228,778	\$224,964	\$224,707	(\$257)
PHS Evaluation Transfers	\$7,154	\$7,154	\$7,154	\$0
Public Health Research	\$31,000	\$31,000	\$31,000	\$0
Intramural Research and Program Assistance	\$2,976	\$31,000	\$31,000	\$0
Extramural Programs	\$28,024	\$0	\$0	\$0
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Public Health Improvement and Leadership	\$202,559	\$224,899	\$182,143	(\$42,756)
Intramural Research and Program Assistance	\$160,176	\$177,892	\$143,986	(\$33,906)
Extramural Programs	\$41,930	\$46,554	\$37,704	(\$8,850)
PHS Evaluation Transfers	\$453	\$453	\$453	\$0
Preventive Health and Health Services Block Grant	\$99,000	\$97,270	\$0	(\$97,270)
Intramural Research and Program Assistance	\$1,188	\$1,167	\$0	(\$1,167)
Extramural Programs	\$97,812	\$96,103	\$0	(\$96,103)
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Buildings and Facilities	\$134,400	\$55,022	\$0	(\$55,022)
Intramural Research and Program Assistance	\$134,400	\$55,022	\$0	(\$55,022)
Extramural Programs	\$0	\$0	\$0	\$0

FY 2009 BUDGET SUBMISSION CENTERS FOR DISEASE CONTROL AND PREVENTION MECHANISM TABLE - BY BUDGET ACTIVITY (DOLLARS IN THOUSANDS)				
Budget Activity	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate	FY 2009 +/- FY 2008
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Business Services Support	\$378,289	\$371,847	\$337,906	(\$33,941)
Intramural Research and Program Assistance	\$360,888	\$354,742	\$322,362	(\$32,380)
Extramural Programs	\$17,401	\$17,105	\$15,544	(\$1,561)
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Terrorism	\$1,472,553	\$1,479,455	\$1,419,264	(\$60,191)
Intramural Research and Program Assistance	\$328,824	\$330,377	\$316,834	(\$13,543)
Extramural Programs	\$1,141,229	\$1,146,578	\$1,099,930	(\$46,648)
PHS Evaluation Transfers	\$2,500	\$2,500	\$2,500	\$0
CDC Budget Authority Total	\$6,249,813	\$6,375,647	\$5,900,668	(\$474,979)
Intramural Research and Program Assistance	\$1,979,796	\$2,012,436	\$1,787,928	(\$224,508)
Extramural Programs	\$4,340,591	\$4,436,041	\$4,180,940	(\$255,101)
PHS Evaluation Transfers	\$214,400	\$135,022	\$80,000	(\$55,022)
Agency for Toxic Substances and Disease	\$75,212	\$74,039	\$72,882	(\$1,157)
Intramural Research and Program Assistance	\$58,665	\$57,750	\$56,848	(\$902)
Extramural Programs	\$16,547	\$16,289	\$16,034	(\$255)
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Vaccines for Children	\$2,905,330	\$2,702,206	\$2,766,230	\$64,024
Intramural Research and Program Assistance	\$66,823	\$62,151	\$63,623	\$1,473
Extramural Programs	\$2,838,507	\$2,640,055	\$2,702,607	\$62,551
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
Energy Employee Occupational Illness	\$0	\$0	\$55,359	\$55,359
Intramural Research and Program Assistance	\$0	\$0	\$55,359	\$55,359
Extramural Programs	\$0	\$0	\$0	\$0
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
PHS Evaluation Transfers(non-add)	\$265,100	\$325,673	\$282,659	(\$43,014)
Intramural Research and Program Assistance	\$145,540	\$178,794	\$155,180	(\$23,615)
Extramural Programs	\$119,560	\$146,879	\$127,479	(\$19,399)
PHS Evaluation Transfers	\$0	\$0	\$0	\$0
CDC/ATSDR Program Level Total	\$9,230,355	\$9,151,892	\$8,795,139	(\$356,753)
Intramural Research and Program Assistance	\$2,105,286	\$2,132,338	\$1,963,759	(\$168,579)
Extramural Programs	\$7,045,069	\$6,939,555	\$6,751,380	(\$188,174)
PHS Evaluation Transfers	\$80,000	\$80,000	\$80,000	\$0

PRESIDENT'S MANAGEMENT AGENDA

OVERVIEW

Included in this section are CDC's key program management activities to address the President's Management Agenda (PMA). The activities below briefly describe CDC's progress in these areas and outline some important initiatives designed to further improve the agency's program management.

CDC has been actively pursuing the PMA's goals since the inception of the PMA. As a result, CDC has built a robust PMA program resulting in continuously strong PMA scorecard results for both progress and status indicators. In a recent quarterly scorecard, for example, CDC achieved seven green in progress, four greens and three yellows in status scores.

PROGRESS ON PRESIDENT'S MANAGEMENT AGENDA

CDC made major achievements in addressing the President's Management Agenda (PMA) objectives. CDC has consolidated or restructured nearly 40 major human capital or business services improvements and more than doubled its supervisory ratio, thereby making the agency more efficient and effective. CDC has maintained its reasoned strategic planning approach in Competitive Sourcing for FY 2002 - FY 2006. Another major, successful effort is implementing HHS' Unified Financial Management System (UFMS) which integrates the Department's financial management structure and provides HHS leaders with a more timely and coordinated view of critical financial management information. Furthermore, CDC has made extraordinary progress in Expanded Electronic Government initiatives, such as consolidating IT infrastructure services, having a leadership role in the establishment of a multi-department architecture for the President's Biosurveillance Initiative, and being actively engaged in HHS' modernization efforts. CDC's efforts to integrate budget and performance have taken on increased significance as the agency continues work to implement a new strategy and organization under the Futures Initiative. Recently, the agency announced modernizations to enhance health impact, support the capacity to respond to public health emergencies, and to directly engage CDC's customers, the American public.

STRATEGIC MANAGEMENT OF HUMAN CAPITAL INITIATIVE

CDC's significant growth in its workforce over the past years is attributable to an ever-expanding public health mission. From FY 1996 to present, the number of employees has grown from 6,406 to 9,239 - an increase of approximately 44 percent. This trend clearly reflects the agency's expanded disease prevention and control responsibilities. CDC's workforce is comprised of individuals working in over 170 job series with an emphasis on scientific and medical occupations. Approximately two-thirds of CDC employees work in the Atlanta headquarters area. However, the agency has a major presence (defined here as more than 50 employees) in such diverse geographical areas as Cincinnati, OH; Morgantown, WV; Hyattsville, MD; Pittsburgh, PA; Washington, D.C.; Spokane, WA; Durham, NC; and Fort Collins, CO. CDC's overseas presence will be up to 250 (we have 167 employees stationed overseas at this writing) employees this year.

This year, CDC implemented the Public Health Apprentice Program, a program that provides an excellent entry level mechanism for individuals seeking a career in public health. CDC also participated in a number of key recruiting trips and seminars during the fiscal year. These events provide an important pipeline to reach out to the public health community. A comprehensive "CDC Strategic Human Capital Management Plan (SHCMP)" was developed which includes 20 human capital initiatives that will be undertaken over the next 3-5 years. Additionally, the Office of Workforce and Career Development (OWCD) created the Strategic Workforce Development Division (SWDD) to focus on such areas as workforce and succession planning, recruitment, quality of work life and incentive awards. SWDD recently hired a Strategic Recruiter who will chair an agency-wide Recruitment Team.

PERFORMANCE MANAGEMENT INITIATIVE

CDC developed guidance and operating procedures for all employees covered by the new Performance Management Appraisal Program (PMAP) in December 2006. The guidance compliments the HHS PMAP policy and serves as a resource for CDC leaders and managers. All employees have a new performance plan which is directly linked to the CDC Director's performance plan and the HHS organizational initiatives.

WORKFORCE RESTRUCTURING

CDC continues to promote and enhance its Strategic Management of Human Capital initiatives in support of the PMA. These initiatives include reducing layering, eliminating administrative positions through consolidation, further improving our supervisory ratio, and supporting the transition of our workforce toward providing more frontline public health functions.

CDC has consolidated most of its program support offices to eliminate duplication prior to the PMA. Centralized offices included equal employment opportunity, procurement, human resources, facilities operations, security and emergency preparedness, and others. This consolidation resulted in substantial savings and efficiencies. CDC has undertaken a wide range of additional administrative consolidations and business improvements.

Administrative Consolidations

- CDC virtually doubled its supervisory ratio from 1:5.5 in 2002 to a current ratio of over 1:12.45. This documents the overall success in flattening organizations, reducing management layers, and consolidating and/or restructuring administrative functions.
- CDC consolidated 13 information technology (IT) infrastructure functions, services, staff and fiscal resources into the new Information Technology Services Office (ITSO). This consolidation reduced operating costs by 38 percent and staff by 29 percent.
- CDC is effectively completing its Business Services Consolidation Plan. This is an overarching strategy, approved by HHS in July 2003, to reduce administrative positions, centralize reporting and supervisory relationships, and establish agency-wide shared services.
- The CDC/IS Training system remains operational and has been modified to capture the Office of Personnel Management's mandated Enterprise Human Resource Integration (EHRI) data requirements, which mirrors the SF-182. This system modification also supports the President's Management Agenda.
- CDC completed the evaluation and detailed planning for consolidation of travel services in 2005 with associated fiscal and staff savings for redirection to mission direct activities. In FY 2006, CDC fully implemented e-travel services throughout the agency.

- CDC continues to expand its use of Electronic Official Personnel Folders (eOPF). At this writing all Federal employees at CDC have access to this tool which simplifies the personnel processing record keeping needs for employees and human resources staff. Over 84 percent of employees have logged into the system to use its many features.

Business Process Improvements

CDC is continuing to improve procurement and grants operations. Operational improvement opportunities have been identified that will result in increased employee productivity through workforce alignment, process redesign, and operational performance management. CDC evaluated vaccine purchase processes and will streamline CDC's purchase of over half of the nation's childhood vaccines through its Vaccine Management Improvement Project.

The Office of Personnel Management approved CDC/ATSDR's plan to offer Voluntary Separation Incentive Payments (VSIPs), or buyouts, to staff who worked in mission support functions in FY 2005. Under the VSIP authority, 336 mission support staff separated during FY 2005. CDC's plan was to use the VSIPs to help implement major reorganizations and business services consolidations, which resulted in significant business efficiencies and redeployment of positions to front line public health efforts. In FY 2006, 15 staff separated under VSIP.

CDC has effectively used Voluntary Early Retirement Authority (VERA) to reduce mission support staff and restructure efficiencies accordingly. In FY 2003, 73 staff accepted VERA. In FY 2004 and FY 2005, 39 and 93 staff, respectively, retired early under VERA. In FY 2006, three staff accepted VERA.

FY 2008 ACTIVITIES

- CDC/ATSDR will continue efforts to redirect more mission support staff to mission direct positions.
- CDC will strategically retrain and redeploy employees impacted by initiatives such as competitive sourcing, consolidations, and reduction of mission support positions.

COMPETITIVE SOURCING INITIATIVE

CDC has actively used public-private competitions under the competitive sourcing program to obtain highly effective services that are commercial in nature. Through this initiative, CDC has conducted 14 studies to date covering 610 government positions which have resulted in government staff successfully competing for the work in 13 of the studies at a combined five-year savings of \$70 million.

Additionally, CDC has also been a leader in using an innovative competitive sourcing program approach, i.e. the development of high performing organizations (HPOs). In these instances, CDC has developed plans to provide services in certain functional areas at a substantial cost savings but without conducting a public-private competition. By mid fiscal year 2007, CDC has three HPOs in place covering a combined 1,134 positions with a projected five-year cost savings of \$350 to \$375 million.

During fiscal year 2008, CDC will continue to implement and improve the three existing HPOs. CDC will also seek to re-study two of its existing Most Efficient Organizations (MEOs) as a result of significant changes in programmatic requirements.

COMPETITIVE SOURCING SAVINGS

CDC savings that accrue from competitive sourcing are reinvested in mission-direct, public health activities. For example, reductions in FTEs associated with mission support functions will be redirected to activities such as epidemiology, laboratory science, medical officials, and pandemic preparedness teams. Information technology savings are used to fund projects that support Health IT, science and other core mission activities such as linking public health and electronic medical records. Similarly, as CDC's mission continually expands with new and re-emerging diseases and health risks, savings are effectively invested in meeting urgent challenges such as avian influenza, tsunami response teams, and hurricane disaster relief efforts. Moreover, new requirements are resulting from opening the new CDC laboratory facilities and Global Communications Center as part of our facilities modernization program. This will help make our health protection tools and information accessible to the global community. CDC has participated in independent audits sponsored by HHS to validate our performance and savings.

IMPROVED FINANCIAL PERFORMANCE INITIATIVE

UNIFIED FINANCIAL MANAGEMENT SYSTEM (UFMS)

The Unified Financial Management System (UFMS) was successfully implemented and replaced five legacy accounting systems used across the Operating Divisions (Agencies). The UFMS integrates the Department's financial management structure and provides HHS leaders with a more timely and coordinated view of critical financial management information. The system also facilitates shared services among the Agencies, and thereby, helps management reduce substantially the cost of providing accounting service throughout HHS. Similarly, UFMS, by generating timely, reliable and consistent financial information, enables the component agencies and program administrators to make more timely and informed decisions regarding their operations. As further evidence of improved financial reporting, CDC is also working towards producing Federally Mandated Reports from the new system in FY 2008. UFMS has been in production for the CDC and FDA for almost three years, and added a new GRANTS Module in October 2008. The Indian Health Services moved into production October 2008.

UFMS Operations and Maintenance (O & M)

UFMS has now been fully deployed. The Program Support Center, through the Service and Supply Fund, manages the ongoing Operations and Maintenance (O & M) activities for UFMS. The scope of O & M services includes post deployment support and ongoing business and technical operations services, as well as an upgrade of Oracle software from version 11.5.9 to version 12.0. CDC will use \$11,999,469 for these O&M costs in FY 2009.

Financial Management Improvement

In FY 2003, CDC successfully began issuing quarterly financial statements and accelerating the closing of accounting records at the end of the fiscal year. The use of automated tools has expedited the financial data consolidation process and streamlined financial statement preparation. CDC continues to prepare timely quarterly statements and implement reviews, checks, reconciliations, and functions analysis to ensure the accuracy and completeness of financial statements. CDC is also proceeding with its Financial Management Excellence Initiative to further improve financial operations by following guidelines set by PricewaterhouseCoopers and the U.S. General Accounting Office in their respective November 2000 reports.

Accountability

CDC participated in the HHS "top down" audit approach in FY 2003 through FY 2007 for which HHS received clean opinions. CDC will participate in the HHS "top-down" audit for FY 2008. Additionally, CDC received five consecutive clean audit opinions from FY 1998 through FY 2002 as evidenced in the independent auditors' report in the CDC/ATSDR Chief Financial Officer's annual reports for the applicable years. CDC also performs internal control reviews and risk assessments pursuant to the Federal Managers' Financial Integrity Act and OMB Circular A-123. CDC reports results to HHS in an annual report.

As part of the Corrective Action Plan, CDC anticipates UFMS-generated financial statements by the end of the first quarter in FY 2008. CDC is working with UFMS Global and contractors to devise an automated procedure for financial statement preparation.

In response OMB Circular A-123 effective FY 2006, CDC implemented changes to emphasize the internal control program (ICP). Specifically, CDC formed a Senior Assessment Team (SAT) to envision a revised plan for conducting internal control reviews (ICRs) and a strategic plan for identifying, approving, and assigning the reviews. Responsibilities of the SAT also include providing oversight of the internal control assessment process and reporting activities to the CDC Management Council. In addition, CDC has worked diligently to identify the agency's assessable units, update related risk assessments, coordinate the reviews throughout the agency, and report on results as required. CDC plans to continue to strive to improve these processes each year.

Improper Payments

CDC has a total of 18 programs that may be susceptible to significant improper payments as defined by the Improper Payments Information Act of 2002. Five of these programs would have improper payments in excess of \$10 million if there were an error rate of 2.5 percent (Phase I programs). Three programs would have improper payments in excess of \$10 million if there were at error rate of up to five percent (Phase II programs). Risk assessments were completed for the eight Phase I and II programs to determine whether they were susceptible to improper payments. Based on results of CDC's review, none of these programs were susceptible to improper payments.

HHS CONSOLIDATED ACQUISITION SYSTEM

The HHS Consolidated Acquisition System (HCAS) initiative is a Department-wide contract management system that will integrate with the Unified Financial Management System (UFMS). The applications within the HCAS are Compusearch Professional Records and Information Services Management (PRISM) and a portion of the Oracle Compusearch Interface (OCI). PRISM is a federal contract management system that streamlines the procurement process. PRISM automates contract writing, simplified acquisitions, electronic approvals and routing, pre-award tracking, contract monitoring, post award tracking, contract closeout and reporting. Major functions, once integrated with the UFMS, include transfer of iProcurement requisition for commitment accounting and funds verification to PRISM and transmission of the award obligation from PRISM to Oracle Financials. CDC will use \$950,369 to support the completion of the HCAS implementation in FY 2009.

The following benefits will be realized by the Department and the individual OPDIVs/STAFFDIVs once the HCAS system is fully implemented:

- Commitment Accounting
- Integration to other HHS Administrative Systems
- Decreased Operational Costs
- Increased Efficiency and Productivity
- Improved Decision Making – Unified systems
- Data Integrity
- Reporting
- Performance Measurement
- Financial Accountability
- Standardization
- Business Processes
- Information Technology
- Consistent Customer Service Levels
- Refocus personnel efforts on value-added tasks
- Knowledge Sharing
- System Enabled Work
- HHS Acquisition Personnel – contracting
- Customers in requirement preparation – requisitioning
- Meets Organizational Drivers and Goals (President's Management Agenda, One-HHS, OMB Line of Business)

The CDC HCAS team is working closely with the UFMS Program Management Office and HHS PMO to ensure a smooth roll out of both PRISM and iProcurement. An integrated team, including personnel from UFMS, Acquisition and Assets has been formed to ensure maximum utilization of in-house expertise. CDC is currently moving forward with efforts to fully implement these mandates by the department.

CDC E-GOV INITIATIVES

ENTERPRISE ARCHITECTURE

CDC continues to advance its Enterprise Architecture (EA) development, to include: initiating architecture segment analysis of CDC systems in four of CDC's five "Core Mission Functions" (Health Monitoring, Epidemiology and Other Assessment Science, Public Health Laboratory Science and Service, and Response and Control); CDC EARB establishment of standing committees for enterprise security architecture management, and acquired software management; contributing to development of interoperability standards for public health and between public health and clinical care via NHIN, NHIN-Connect and FHA initiatives; and actively contributing to the HHS' EA Model Working Group and the HHS EA Review Board. The EA team also expanded EA support into key public health related functions, such as

PAHPA/pandemic flu emergency response capacity. The EA team developed and shepherded CDC adoption of the CDC Enterprise Architecture Policy and the CDC Open Source Policy, and launched the CDC EA Community of Practice to develop a broad community of EA knowledgeable staff to bring EA analysis to bear in program level project management throughout the systems development lifecycle. The EA team contributed to development of a new comprehensive CDC Information Resources Governance process. CDC EA has helped maintain a Level 3 OMB Enterprise Architecture Assessment Framework (EAAF) rating throughout the fiscal year.

SECURITY

The 2008 CDC Cyber Security Plan, with measurable metrics and milestones, facilitates tracking the progress of our goals in the area of Information Security and FISMA compliance. The Cyber Security Plan focuses on alignment with current HHS, NIST and OMB goals and strategic plans in addition to CDC specific Cyber Security requirements. CDC's computer systems, networks, and data are under constant attack every day from worms, viruses, phishing, web site attacks and other malicious code via email, instant messaging (IM), peer-to-peer (P2P), and web sites. The attacks are becoming increasingly sophisticated, often targeting specific individuals within an organization and utilizing customized code to avoid common anti-virus detection. Therefore in addition to greater prevention efforts, CDC is focusing on its ability to detect and analyze events and incidents through a layered approach of automated tools. In order to manage risk to the CDC IT environment and comply with FISMA requirements, CDC continues to implement Certification and Accreditation of its information systems with a heavy emphasis on the usage of Enterprise Master System Security plans to achieve more consistent security control implementation for its IT systems.

CDC Information Technology Strategic Plan

In 2007 the CDC Information Technology Strategic Plan (CITSP); a conceptual framework of an information supply chain to emphasize that the driving force behind technology investment is to promote improved health outcomes through the provisioning of high quality, timely, relevant information to the CDC, its partners, and customers. The purpose of this plan is to guide the direction, focus, mission alignment, initiatives, investments, and accountability of CDC's IT program supporting CDC's health protection goals and to maximize the information technology value to CDC programs, partners, stakeholders, and customers. Expanded e-Gov is supported by providing the IT foundation for infrastructure functions and quality services, while assuring transparency and accountability for our customers and reducing operating costs.

Information Resource Governance

CDC is implementing a refinement to its information resources (IR) governance processes. Recent accomplishments include CDC's Executive Leadership Board's endorsement of the recommendations developed by a cross-functional and diverse working group with membership from the program, science, administrative, informatics and IT professionals within CDC. The refinements address the decision making structures and processes that focus on ensuring information resource strategies are aligned with the overall strategy of CDC. Included in the refinements are the identification of 46 functions which address synchronization with national health IT agenda & CDC goals. These functions provide greater alignment to CDC structural changes, give the ability to oversee increased complexity and integration of CDC activities and allow the optimization of investments in challenging fiscal environment. Implementation of these refinements is scheduled in 2008.

CDC Web 2.0 Efforts

CDC is aggressively pursuing use of Web 2.0 methods and technologies to provide health and safety information when, where, and how citizens want to get that information. Among CDC's 2.0 efforts to engage citizens and other key audiences in improving their own health/safety and the health/safety of their friends, families, communities, workplaces, etc., CDC launched the following "social media" initiatives: health-e-cards (electronic greeting cards users can send), email alerts of CDC.gov updates, audio/video podcasts, webinars with bloggers, online web campaigns/partnerships, mobile texting campaign, health promotion efforts in two virtual worlds (Whyville and Second Life), CDC areas in social networks (MySpace, Daily Strength, Sermo, and more in process), gadgets/widgets that share CDC.gov content, tools, and data/graphs, social bookmarking (using Digg, del.icio.us, etc.), user-generated and user-shared content (YouTube, Flickr, etc.), viral multimedia methods, and more. Increasingly, citizens are using these social media to find health and safety information, and CDC is a leader in federal efforts to effectively use these new and emerging tools to improve the health, safety, and preparedness of people around the world. CDC is also working pro-actively across government (federal, state, and local) to share (and learn) best practices, lessons learned, and effective ways to evaluate and optimize Web 2.0 opportunities.

HHS MODERNIZATION

Government-Wide E-Gov Projects

The CDC will contribute \$5,241,000 of its FY 2009 budget to support Department enterprise information technology initiatives as well as the President's Management Agenda (PMA) Expanding E-Government initiatives. Operating Division contributions are combined to create an Enterprise Information Technology (EIT) Fund that finances both the specific HHS information technology initiatives identified through the HHS Information Technology Capital Planning and Investment Control process and the PMA initiatives. These HHS enterprise initiatives meet cross-functional criteria and are approved by the HHS IT Investment Review Board based on funding availability and business case benefits. Development is collaborative in nature and achieves HHS enterprise-wide goals that produce common technology, promote common standards, and enable data and system interoperability. The HHS Department initiatives also position the Department to have a consolidated approach, ready to join in PMA initiatives.

Of the amount specified above, \$1,159,366 is allocated to support the President's Management Agenda Expanding e-Government initiatives for FY 2009. This amount supports the PMA e-Government initiatives as follows:

<i>PMA e-Gov Initiative</i>	<i>FY 2009 Allocation</i>
Business Gateway	\$38,120
e-Authentication	--
e-Rulemaking	--
e-Travel	--
Grants.Gov	\$249,859
Integrated Acquisition	--
Geospatial LoB	\$33,779
Federal Health Architecture LoB	\$651,855
Human Resources LoB	\$17,771
Grants Management LoB	\$26,170
Financial Management LoB	\$21,677
Budget Formulation & Execution LoB	\$14,415

<i>PMA e-Gov Initiative</i>	<i>FY 2009 Allocation</i>
IT Infrastructure LoB	
Integrated Acquisition – Loans and Grants	\$25,720
Disaster Assistance Improvement Plan	\$80,000
<i>TOTAL</i>	<i>\$1,159,366</i>

Prospective benefits from these initiatives are:

- Improved decision making and financial accountability
- Standardization of business processes
- Decreased operational costs
- Increased transparency and accountability for CDC's customers
- Improved efficiency and productivity

CDC is actively engaged in eight of the federal e-Gov initiatives, namely Federal Health Architecture, CHI, e-Vitals, e-Grants, e-Travel, Geospatial Information One Stop, SAFECOM, and GovBenefits, with an initial 16 CDC programs represented covering \$4.4 billion. CDC has actively advanced e-commerce using FedBizOpps to post all contract opportunities electronically. CDC has migrated to HHS' enterprise-wide grants management system for research grants using NIH's eRA (IMPAC II) system and migrated other grants to the same system in FY 2006. CDC is co-chairing the FHA surveillance working group and has actively participated in the interoperability working group and the data architecture working group. CDC met the October 2003 goal for the Government Paperwork Elimination Act to make all information collections and disseminations available electronically.

IT Infrastructure Consolidation

CDC consolidated the agency's IT infrastructure functions, services, staff, and fiscal resources in accordance with OMB and HHS instructions. CDC has reduced costs by 38 percent and reduced staff by 26 percent in line with the overall agency reduction in mission support staffing. The 12 functions defined as IT infrastructure are: personal computing hardware and software, customer service support, directory services, e-mail services, infrastructure software, application server hosting, IT infrastructure security, mainframe services, networking services telecommunications services, and videoconferencing services.

Citizen-Centered Service

CDC launched its newly redesigned web site www.cdc.gov. The new site is based on significant citizen input through online surveys, interviews, and usability testing of the old and new site. Before/after usability testing demonstrates that citizens' ability to find information on the site has increased by 22 percent and citizens' satisfaction with the site increased 70 percent. Key improvements include making the site more citizen-centered including improvements in content organization, navigation, searching, interactivity and enriching and expanding content in a consumer-oriented presentation. CDC has one of the most frequently visited Web sites in the government as the authoritative trusted source of public health information for health care providers, public health officials, the public, students/teachers, and the media. CDC's web site attracts 13 million different visitors per month on average and more than 40 million page views per month, with site usage increasing steadily since the new site was introduced. Citizens' satisfaction with CDC.gov has increased dramatically, as measured by the American Customer Satisfaction Index (ACSI), the standard metric used to monitor citizen satisfaction with federal government websites. CDC.gov's score of 81 in December 2007

makes it the second-highest ranked federal government portal/agency main site, based on citizen rankings.

The CDC-INFO Contact Center handles public inquiries by telephone (1-800-CDC-INFO) and email, 24 hours per day, every day, providing services in English/Spanish and for hearing-impaired callers. Since its creation in 2005, CDC-INFO has received 1.2 million inquiries, and growth is expected to continue as CDC-INFO completes the transition of more than 40 CDC call centers/hotlines into this one-stop contact center. In FY 07, the CDC-INFO Contact Center responded to approximately 329,000 calls and 39,300 emails, and the CDC Publication Service mailed approximately 5.4 million publications across the United States.

A recent survey of CDC-INFO users found that 93 percent of callers to CDC-INFO were satisfied or more than satisfied with the service they received, with 76 percent reported being very satisfied. (The industry gold standard for this measure is 75%; the industry average is 52 percent).

FEDERAL REAL PROPERTY ASSET MANAGEMENT INITIATIVE

CDC has no new Capital Project Initiatives for FY 2009. CDC will fully implement CDC's Asset Business Plan (ABP) initiative to enhance Repairs & Improvements (R & I) and Operations funding at the asset level and fully integrate the ABPs into Integrated Facility Management System (IFMS) for Automated Real Property Inventory System (ARIS) reporting. Additionally, CDC will continue to enhance the IFMS system and continue to utilize the data for day-to-day decision making. CDC will work closely with HHS to develop enhanced data verification and validation processes and procedures. CDC will further develop and enhance the Human Capital Plan for Real Property which is one of the FY 08 Initiatives and continue to update the three year rolling timeline which includes disposals.

PERFORMANCE IMPROVEMENT INITIATIVE

CDC's new Health Protection Goals focus on health rather than specific diseases or risk factors. This creates a further connection to driving the Agency based on results. CDC has established a horizontal-spanning architecture of Goal Team Leaders and Team Members, as well as processes and systems to support integration of goals-based horizontal consideration with its more traditional disease- and risk factor-oriented vertical perspectives. In addition, to help guide execution of key strategies, CDC is in the early stages of implementing an "Organizational Excellence Assessment", its version of a "balanced scorecard", or a set of "balanced measures of excellence" built around excellence in service, science, strategy & workforce, and systems.

Goals of the initiative include:

- Application of program evaluation to inform strategic goals and objectives which ensure the best use of CDC resources to achieve health impact
- Begin a knowledge management approach to systematically define, select, organize and present information in ways that improve comprehension of specific areas of interest
- Develop tools and processes to measure the effectiveness of CDC's external partners and their programs
- Further implement a rigorous pre-fiscal year planning process to guide decision-making and share information through evaluation
- Begin a process to support multi-year planning initiatives at all levels of the Agency
- Allow organization of CDC's portfolio by goals and objectives, function, population served, etc.

- Demonstrate accountability to public, partners, Congress, OMB, and DHHS.Senior Agency Manager Meetings

CDC has implemented a Senior Agency Management retreat cycle to review its goals and objectives and the financial and performance information needed to accomplish them. In January 2007, a large group of CDC leaders (including leaders from the Executive Leadership Board (ELB), Center Leadership Council (CLC), Divisions, Centers, the Office of the Director, and many others) completed a three day retreat. Three main topics were addressed: 1) a vision for CDC in the year 2020; 2) CDC's Goal Action Plans and Objectives; and 3) a tool for measuring organizational CDC excellence at the ELB level that will be piloted by the Coordinating Centers, Coordinating Offices, and the offices within the Office of the Director over the next year.

In addition, CDC has aligned agency PART measures with the CDC goal areas. Each ELB member with responsibility for a CDC goal area will report on performance to other Board members.

Senior Agency managers from CDC's Financial Management Office (FMO), Office of Strategy and Innovation (OSI), and Coordinating Office of Terrorism Preparedness and Emergency Response (COTPER) collaborated on the FY 2008 spend-plan process. The spend plan process is moving towards funding programs based on performance rather than allocation and is intended to map program success and methods used to budget and track resources contributing to health impacts. COTPER reviews and evaluates projects and provides recommendations on funding. Projects recommended for funding were submitted to FMO for a detailed review of the project budget, and finally, submitted to the Executive Leadership Board and HHS for final approval.

Additionally, senior managers from CDC's OSI, FMO, COPTER, Procurement and Grants Office (PGO), and the Management Information Systems Office (MISO) collaborated to develop FY 2006 joint planning activities for budget, goals, and extramural awards. Health Impact Planning, and its accompanying application, HealthImpact.net (HI.net) are the primary means for connecting CDC plans with resources agency-wide. FY 2008 marks the fourth straight year that CDC has implemented the Health Impact Planning process. HI.net is a tool that will allow staff to track projects, performance, budget, and health impact through a uniform electronic system across the agency.

CDC leadership held meetings to discuss the best strategies to fully implement the HHS Performance Management Appraisal Program. Part of the meetings were dedicated to finalizing a timeline for CDC policy development and analyzing historical funding data, which is related to the new percentages of awards to forecast for budget impact in FY 2007.

Monthly and ad hoc financial management meetings occur at all levels of the organization with and between Coordinating Center Directors, Chief Management Officials, Division Directors and Branch Chief to define and establish clear objectives for both program and budget. Regular meetings are scheduled reinforcing or modifying goals as program and financial situations change.

PART

In 2002 through 2007, 23 CDC programs participated in a PART review by OMB: 317 Immunization Program, Breast and Cervical Cancer, Diabetes, Domestic HIV/AIDS Prevention, HAN, ATSDR, State and Local Preparedness, Buildings and Facilities, Epidemic Services and Response, Occupational Safety and Health, Infectious Diseases, STD/TB, Environmental Health, Global AIDS, in conjunction with the President's Emergency Plan for AIDS Relief, Global Immunization, Health Statistics and the Strategic National Stockpile, Chronic Disease

Prevention and Health Promotion, Birth Defects and Developmental Disabilities, Injury Prevention and Control, BioSurveillance and Upgrading CDC Capacity, and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. These programs have developed performance measures which are reported on in each submission of the performance budget. Due to reorganizations and/or assessment of larger organizational units, CDC no longer reports on HAN, Epidemic Services and Response, Breast and Cervical Cancer, Diabetes, Infectious Diseases, and Domestic HIV/AIDS Prevention. Many of the performance measures are outcome-oriented and support the direction of CDC's goals process. Many programs reviewed by PART have made improvements in strategy, program management and results based on OMB's recommendations.

For example:

- CDC has initiated a business improvement project to revamp the entire vaccine distribution process which will strengthen the efficiency and accountability of vaccine management systems. Once fully implemented, the new systems will automate and integrate vaccine ordering and management by centralizing distribution of all public purchased vaccines.
- CDC's Domestic HIV/AIDS Prevention program developed a template for project officers' use to analyze progress reports from state health departments, community-based organizations and providers. CDC is phasing-in the implementation of the Program Evaluation and Monitoring System (PEMS) which will allow CDC to augment qualitative data from grantee annual progress reports with quantitative data to show client and program effectiveness.
- CDC's Environmental Health program and ATSDR initiated an intramural review program to evaluate all of its activities and projects with the goal of identifying shortcomings and making recommendations for improvement. This program is conducted by the Peer Review Subcommittee of their Board of Scientific Counselors, an independent organization whose charter is to provide guidance to the program. The subcommittee will evaluate the entire Environmental Health program within the next five years.
- As a result of its 2004 PART review, NIOSH contracted with the National Academies (NA) to conduct a comprehensive review of its OSH research programs. Evaluation criteria were established by the NA Framework Committee in FY 2005. In FY 2006 and early FY 2007, NA Evaluation Committees reported favorably on the hearing loss and mining research programs. Currently in progress or soon to begin are reviews of the respiratory disease, agriculture, fishing and forestry, traumatic injury, health hazard evaluation, protective technology, and construction programs. Results of these reviews will provide insight into the overall relevancy of the programs and their impact on occupational safety and health.
- ATSDR implemented a new long-term outcome measure for documenting the effectiveness of its interventions at sites that pose the most urgent public health hazards. ATSDR now evaluates its interventions at each site to determine their impact on public health. As a result, this new measure has focused the agency's leadership, its Cooperative Agreement Partners, and EPA on achieving public health outcomes.
- Critical tasks and performance measures were developed for the Public Health Emergency Preparedness Cooperative Agreement Program and were incorporated into the grant guidance for FY 2005.

- CDC's TB program began to award state health department cooperative agreements for a new project cycle utilizing a new funding formula based on the burden of the disease.

Efficiency Measures

All CDC PART programs have at least one OMB-approved efficiency measure. These efficiency measures, along with their targets and actual performance, can be found in the Detail of Performance Analysis sections of this document.

HealthImpact.net

HealthImpact.net is an online tool that enables the implementation of the CDC Health Impact Planning process. HealthImpact.net has been designed to be a technologically advanced means for connecting CDC plans and resources agency-wide, thereby demonstrating the relationship between those resources and results. This enables the agency to maximize the use of federal budget dollars in support of CDC's Health Protection Goals.

HealthImpact.net will allow users to:

- Leverage an historical knowledge base
- Collaborate with others by leveraging transparency
- Foster greater integration of projects
- Better manage projects
- Actively support CDC's Health Protection Goals

This central repository of CDC work is also intended to foster visibility across organizational boundaries, expanding the opportunity for information sharing and networking among CDC programs leading to better integrated projects and enhanced public health.

FULL COST

CDC continues to report the full costs calculated at the goal and performance measure level in the Performance Budget. The full cost table has been changed to include the allocation of costs to the Vaccines for Children Program.

Faith-Based and Community Initiative

CDC supports the development of partnerships between public health and Faith Based and Community Organizations (FBCOs) in order to provide more effective health and human services.

Enhance Emergency Response: Prepare FBCOs to prevent and address the health effects of a disaster. CDC has increased the nation's preparedness for a potential influenza pandemic and other health emergencies by:

- Serving as a lead author of three national Pandemic Influenza Preparedness guidance documents. CDC staff wrote and developed three vital planning documents: the HHS Faith-based and Community Organization Pandemic Influenza Preparedness Checklist released by HHS Secretary Leavitt in January 2006, the Pandemic Influenza Community Mitigation Interim Planning Guide for Faith-Based and Community Organizations (Appendix VIII) released by Dr. Gerberding in February 2007, and FAQs What will be the role of Faith-Based and Community-Based Organizations (FBCOs) in helping their communities during an influenza pandemic? posted on www.pandemicflu.gov in December 2007. These three documents were instrumental in providing FBCOs with guidance on the design of emergency response plans where none had existed before.

- Conducting a series of FBCO communication strategy focus groups in collaboration with CDC's Emergency Communications System (ECS). These focus groups were designed to improve CDC's ability to communicate with FBCOs during emergencies. As a result of these efforts, CDC now has a database of key FBCO contacts. CDC leads and organizes monthly preparedness planning calls involving representatives from CDC's DEOC and ECS, DHS, HHS and the National Voluntary Organizations Active in Disaster (National VOAD), an umbrella organization of over 50 nonprofit and faith-based agencies that regularly participate in national disaster response. The American Red Cross and the National VOAD are the only nongovernmental signatories to the National Response Plan (NRP).
- As an example of this communication network, in October 2007 CDC ECS needed to get health information to organizations responding to the California wildfires. CDC was able to rapidly reach representatives of numerous state and local FBCOs through our networks. These groups included: the California VOAD, the California Council of Churches, the American Red Cross, Mennonite Disaster Service, Regional Lutheran Social Services (representing Lutheran Disaster Response), the Salvation Army, the California Southern Baptist Convention, the United Church of Christ, the U.S. Conference of Catholic Bishops, Catholic Charities USA, and Tzu Chi International Medical Association. Other partners included the Catholic Health Association, Texas Interfaith Disaster Response, the national AME Church and the Interdenominational Theological Center.
- Leading national training efforts on Pandemic Flu and Emergency Preparedness. At the request of the White House Homeland Security Council, CDC was the lead organizer of two October 2006 FBCO National Roundtables on Pandemic Influenza Preparedness held at HHS in Washington DC. CDC then organized and led six internet-based Webinars to expand reach of training efforts nationally. CDC conducted 24 workshops and directly trained leaders from over 73 organizations through live presentations and workshops. Over 50 national faith-based, community-based, volunteer, and non-profit organizations and federal agencies received training and participated in planning for a severe influenza at the National Roundtables. From December 2006-December 2007, six internet-based Webinars trained a network of over 130 Jewish Federations from across North America, the National VOAD, the Salvation Army, the Church of Jesus Christ of Latter-Day Saints, the national African Methodist Episcopal Church, the Islamic Medical Association of North America, the Islamic Society of North America, Southern Baptist Disaster Relief, BAPS Charities and others. These Webinars reached organizations as widespread as New York, Washington DC, Virginia, Oklahoma, Alabama, Georgia, Tennessee, Mississippi, Florida, Illinois, Missouri, Iowa, Indiana, Utah, Nevada, Puerto Rico, and many other locations.

Emphasize Faith Based and Community Solutions: Meet the OMB mandated "Green" Standards for Success and Best Practices Referenced in Standards. CDC has taken several critical steps to ensure that it is meeting the OMB "Green" Standards for Success by:

- Participation in the Annual Reports and Case Studies for the White House Office of Faith-Based and Community Initiatives.
- Supporting numerous White House Office of Faith-Based and Community Initiatives Regional Conferences and Workshops. These targeted workshops are designed to help FBCOs learn more about the White Houses Faith-Based and Community Initiative and offer grant writing tutorials for certain Federal grant programs that present some of the greatest opportunities for FBCOs.

- Referring FBCOs to sign up for the HHS CFBCI Weekly Digest for Faith-Based and Community Organizations. This weekly digest summarizes grant opportunities at CDC and HHS for which faith-based/community organizations are eligible to apply.
- Collaborating with other federal agencies and offices on Grant Writing Workshops for FBCOs and panel reviews. For example, on May 15-16, 2007, provided staff for the U.S. Department of Housing and Urban Development, Atlanta Regional Office, Region IV- Grant Writing Workshop.

Support community-based approaches to reduce health disparities that affect racial, ethnic, and under-served populations. Some examples of community-based approaches to reduce health disparities include the following:

- Rapid HIV testing initiative with African American Churches for 2007 National Black HIV/AIDS Awareness and Information Day. CDC led a collaborative project involving Recovery Consultants of Atlanta, Inc., the Institute for Health Protection, the United Way of Atlanta, CDC National Center for HIV, Hepatitis, STD and TB Prevention, SAMHSA, CMS, the African Methodist Episcopal (AME) church and the Interdenominational Theological Center on a Rapid HIV testing initiative with African American Churches as part of the 2007 National Black HIV/AIDS Awareness and Information Day.
- CDC sessions at 2006 and 2007 Global Summit on AIDS and the Church. CDC sent staff to the 2006 and 2007 Global Summit on AIDS and the Church. The Purpose Driven network sponsoring this summit includes over 400,000 church leaders and congregations in every country. The CDC delegation presented information about HIV/AIDS, malaria, tuberculosis, and diseases from unsafe water affecting vulnerable populations in developing countries.
- CDC Working Group on Health of Muslim Populations. CDC has developed an officially recognized Working Group to improve the health of Muslim populations. It was approved in September 2007.

Inform and educate federal grantees, including state and local officials who administer funds, about the requirements of the Equal Treatment regulations. The HHS Equal Treatment Regulations are designed to remove barriers to the participation of FBCOs in HHS programs. CDC ensures that staff and partners are aware of these regulations by:

- Distributing the HHS Equal Treatment Regulations through the Association of State and Territorial Health Officials, the National Association of Local Boards of Health, and the National Association of City and County Health Officials to state and local public health agencies administering CDC grants/cooperative agreements.
- Distributing the HHS Equal Treatment Regulations to each of the CDC Faith-Based and Community Initiative Coordinators, the official point of contact for all FBCI activities within each CIO.
- Including the HHS Equal Treatment Regulations in the 2006 CDC Partnership Toolkit.
- Hosting Mr. Michael Costigan, Director of the HHS Center for FBCI and his staff, who met with CDC FBCI Coordinators in September 2007 in Atlanta, GA.
- Posting a link to the HHS Equal Treatment Regulations on the CDC intranet.

SIGNIFICANT ITEMS

SIGNIFICANT ITEMS IN APPROPRIATIONS REPORTS – HOUSE

**SIGNIFICANT ITEMS FOR INCLUSION IN
THE FY 2009 CONGRESSIONAL JUSTIFICATION
AND OPENING STATEMENTS
HOUSE REPORT NO. 110-231
CENTERS FOR DISEASE CONTROL AND PREVENTION**

ITEM

Teen pregnancy prevention demonstration grants -- A new \$10,000,000 initiative is recommended within the Centers for Disease Control and Prevention for grants to support factually and medically accurate, complete, and age-appropriate approaches to preventing teen pregnancies, including information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. The Secretary of Health and Human Services shall require each applicant for financial assistance under this program to certify that all materials proposed in the application and funded during the project period of the grant are medically accurate. The Secretary of Health and Human Services shall require a panel of medical experts to review all grant applications and assess whether the materials proposed are medically accurate. These demonstration projects shall be evaluated based on their success in reducing the rate of teen pregnancies in their respective communities. (Page 15-16)

ACTION TAKEN OR TO BE TAKEN

In response to the Committee's support on this effort, CDC plans to work collaboratively with partners to enhance the skills and capacities needed, at the local level, to use science-based teen pregnancy prevention interventions. CDC will expand and increase the number of communities funded for teen pregnancy prevention interventions that include information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. This will include evaluating the program "Promoting Science-Based Approaches to Teen Pregnancy Prevention-- Using Getting to Outcomes." The activities will also support research to help understand the factors associated with sexual risk behavior in order to expand the body of programs that effectively improve adolescent reproductive health and reduce the rate of teen pregnancies in communities.

ITEM

[317 adolescent and adult demonstration models] -- The Committee is concerned that immunization levels for vaccines routinely recommended for many adolescents and adults lag far behind coverage levels for vaccines for children. The Committee understands that CDC led a process during the early 1990s that resulted in the development of immunization action plans (IAPs) in all 50 States and in many major urban areas to achieve 90 percent immunization coverage for vaccines recommended for young children. These IAPs were the result of community planning efforts led by State and local health departments and included detailed actions thought to be needed to achieve coverage goals, activities that could be undertaken with available resources and estimates of the resources required for such efforts. The Committee believes that while maintaining the commitment to and the coverage levels for children, a similar process may be useful for reaching adolescent and adult immunization goals, and encourages CDC to provide funding to States or local organizations that receive section 317 immunization grant funds to develop community adolescent and adult immunization planning demonstrations to achieve 90 percent immunization coverage for vaccines routinely recommended for

adolescents and adults. These models should include existing and new efforts planned within existing resources; new activities needed and estimates for those needs. (Page 98)

ACTION TAKEN OR TO BE TAKEN

CDC recognizes that adolescent and adult immunization coverage levels do not approach the levels achieved for children. CDC also recognizes that many factors are involved in the development of successful immunization programs for adolescents and adults. A process similar to the immunization action plans (IAPs) of the early 1990s, whereby state and local health department determine actions and activities needed to increase coverage and estimate the resources needed to do so, would be a first step in the development of adolescent and adult immunization programs. CDC intends to competitively award funding to several Section 317 grantees to develop community IAPs that would serve as models for other jurisdictions.

ITEM

Hepatitis B -- The Committee applauds CDC's efforts to develop and implement a new strategy to screen individuals at risk for chronic hepatitis B. As only approximately one-third of individuals with hepatitis B are aware of their condition, the Committee urges CDC to continue to collaborate with the National Institute of Diabetes and Digestive and Kidney Diseases in the development of a public health strategy to expand the screening of individuals at risk for chronic hepatitis B. . . . (Page 100)

ACTION TAKEN OR TO BE TAKEN

CDC and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) at the National Institutes of Health (NIH) are working together to develop national recommendations for chronic hepatitis B virus (HBV) screening and care. As part of the process for developing screening recommendations, CDC held a consultation with approximately 30 partners, including NIDDK. On February 7-8, 2008, CDC plans to publish recommendations in the Morbidity and Mortality Weekly Report (MMWR) in 2008. CDC is also co-sponsoring an additional NIDDK consensus conference on hepatitis C management and treatment issues that will be held in the fall of 2008.

ITEM

Hepatitis C -- The Committee is concerned that more than 75 percent of the 4 million people with hepatitis C are unaware of their condition because the condition is often asymptomatic until advanced liver damage develops. Therefore, the Committee urges CDC to implement an aggressive screening program. In addition to targeting at-risk populations, the Committee urges the consideration of age-based screening policies to more effectively reach infected populations. The Committee also urges CDC to support a campaign of public announcements that will highlight the need for appropriate screening and medical follow-up for target populations. (Page 100)

ACTION TAKEN OR TO BE TAKEN

CDC continues to investigate various screening and public education approaches, including age-based screening programs, to identify the most effective strategies for reaching populations at risk for chronic infection with hepatitis C virus (HCV). Two studies of age-based screening for HCV are in progress: a cost/effectiveness study and a clinical feasibility study looking at testing in primary care settings. Data from these and other studies will be used to update HCV screening recommendations and to inform strategies to promote screening. CDC has also extended viral hepatitis prevention funding to additional areas, thereby increasing the number of states and cities with adult viral hepatitis prevention coordinators. Coordinators provide management, networking, and technical expertise for successful integration of hepatitis C

prevention activities into existing public health programs and may also undertake local public awareness campaigns as part of their overall viral hepatitis prevention programs.

ITEM

[Hepatitis C and HIV] -- The Committee also recognizes the alarming rate of individuals co-infected with hepatitis C and HIV, and that end-stage liver disease secondary to hepatitis C is now the leading cause of death for individuals with HIV disease. The Committee urges that funding be focused on expanding the capability of State health departments, particularly to enhance resources available to the hepatitis C State coordinators and for increased screening initiatives. The Committee also encourages the division of viral hepatitis to collaborate with the Health Resources and Services Administration (HRSA) to implement improved HCV screening programs for HIV-infected individuals served by HRSA programs. (Page 101)

ACTION TAKEN OR TO BE TAKEN

CDC is working to meet the large public health burden of HIV/HCV co-infection by supporting surveillance for HIV/HCV co-infection, and promoting integration of public health services for individuals at risk for both infections. Recent CDC funding for expanded routine HIV testing and for Adult Viral Hepatitis Coordinators provides support for funded cities and states to integrate HCV testing into venues providing HIV testing. The organizational relocation of the Division of Viral Hepatitis into the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) places that program within the purview of the CDC/HRSA Advisory Committee on HIV and STD Prevention and Treatment (CHAC) and provides an additional mechanism for future collaboration between CDC and HRSA regarding HCV screening for HIV-infected individuals. Representatives of CDC will meet with HRSA's community health center program in late 2007 to discuss opportunities for future collaboration.

ITEM

Intensified support and activities to accelerate control (ISAAC) of TB in Africa -- The Committee applauds CDC for implementing the ISAAC initiative for targeting TB in African Americans and along the U.S.-Mexico border, universal genotyping of all culture positive TB cases, and expanding clinical trials and development of new tools for the diagnosis and treatment of TB. The Committee notes with concern, however, reports of extensively drug resistant tuberculosis strains in Africa that demonstrate extremely high mortality rates. The Committee urges CDC to continue to provide leadership and technical expertise to other nations experiencing outbreaks of extensively drug resistant tuberculosis and to coordinate activities with other Federal and international health agencies. (Page 101)

ACTION TAKEN OR TO BE TAKEN

The ISAAC initiative, aims to sustain the momentum of the past 14 years and accelerate the control and elimination of tuberculosis in the United States. During FY 2007, CDC continued to implement key ISAAC components. These include efforts to reduce the disproportionately high rates of TB in African Americans and along the U.S.-Mexico Border, continued support for universal genotyping, and conducting research to improve TB diagnosis and treatment. Efforts aimed at these activities can help prevent drug resistant TB. CDC personnel also provided technical assistance for TB control to multiple African nations in coordination with World Health Organization (WHO), US Agency for International Development (USAID), Office of the U.S. Global AIDS Coordinator (OGAC), and other international and federal agencies. Finally, CDC has formed outbreak response teams that are ready to provide rapid response to international outbreaks upon request.

ITEM

Multi-drug resistant (MDR) tuberculosis and extensively drug resistant tuberculosis (XDRBTB) -- The Committee is extremely concerned about MDR TB and XDR TB. The Committee urges CDC to expand resources for global TB control to enhance, maximize, and target resources for surveillance, including laboratory testing, and control of TB in the U.S. and around the world, while ensuring preparedness and response capacity for both MDR TB and XDR TB. (Page 101)

ACTION TAKEN OR TO BE TAKEN

In FY 2007, CDC directed \$1.8 million Emerging Infectious Disease dollars to XDR TB-related activities, including enhanced laboratory capacity at the domestic and global level; increased surveillance, a new pilot study of a drug regimen to treat drug resistant TB, and communication activities for health care providers.

ITEM

Tuberculosis elimination and laboratory cooperative agreements -- The Committee is concerned that CDC is not meeting its commitment to fully implement the new funding formula under the TB elimination and laboratory cooperative agreements. The Committee supports the CDC distribution formula that would award funds in proportion to the number and complexity of TB cases in a jurisdiction and urges CDC to accelerate and complete the implementation of this new formula as soon as possible to ensure Federal TB funds are awarded to reflect the actual number and complexity of TB cases in each jurisdiction. (Page 101-102)

ACTION TAKEN OR TO BE TAKEN

In FY 2008 CDC will revise, for the second time, its funding formula for TB prevention, control, and laboratory cooperative agreements. Thirty-five percent (as opposed to 25 percent in FY 2005) of the total amount of dollars available to state and local areas for TB will be distributed based on epidemiologic findings in each area. The formula relies on the number and complexity of cases so that grantees with particularly hard-to-reach and treat patients receive additional resources.

ITEM

Community-associated Methicillin-resistant Staphylococcus aureus (CABMRSA) -- The Committee is concerned about the explosion in virulence and prevalence of MRSA strains in the U.S. Compounding this problem is a fundamental shift from primarily hospital-based transmission to community-based transmission of MRSA. The spread of CABMRSA through perfectly healthy community members with no hospital contact concerns the Committee. Within the funds provided, the Committee encourages CDC to conduct a strong, extramural research program in MRSA epidemiology and pathophysiology. The Committee encourages CDC to maximize this MRSA research through continued support for entities with established MRSA research programs. (Page 102)

ACTION TAKEN OR TO BE TAKEN

CDC has been at the forefront of recognition and prevention of community-associated methicillin-resistant Staphylococcus aureus (CA-MRSA) infections. In addition to epidemiologic and laboratory research, CDC has collaborated with a broad range of public and private partners throughout the country, including other federal agencies, state and local health departments, athletic organizations, academic partners, and industry. Objectives for recent and ongoing extramural research have included analysis of risk factors, evaluation of strategies to prevent recurrent infections, molecular characterization of invasive CA-MRSA strains, and the

development of new methods for preventing transmission of these and other antimicrobial-resistant pathogens. CDC is also developing a national educational campaign for both healthcare providers and the public to increase awareness of CA-MRSA and how it can be prevented, including ensuring that clinicians are using the best methods to recognize, treat, and care for patients with CA-MRSA. While the prevention of CA-MRSA remains an important focus of CDC's efforts to address antimicrobial resistance, recently published findings indicate that the vast majority of severe MRSA infections remain strongly associated with the healthcare system. Towards the prevention of both community- and healthcare-associated MRSA infections, CDC continues to work to provide the best science-based strategies and information for prevention, including providing guidelines for healthcare facilities and clinicians, tracking and analyzing trends from the National Healthcare Safety Network (NHSN), and disseminating practical information to the public.

ITEM

Chronic kidney disease -- The Committee previously has expressed concern regarding the need to expand public health strategies to combat chronic kidney disease (CKD) given that many individuals are diagnosed too late to initiate treatment regimens that could reduce morbidity and mortality. There are 20 million Americans who have CKD, and another 20 million who are at risk of developing the disease. Individuals with diabetes or hypertension have especially high vulnerability. Kidney disease is the ninth leading cause of death in the U.S., and death by cardiovascular disease is 10 to 30 times higher in kidney dialysis patients than in the general population. The Committee encourages CDC to continue development of a public health strategy for chronic kidney disease. (Page 104-105)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work closely with grantees and other partners to develop a kidney disease surveillance, epidemiology, health economics, and health outcomes research program. CDC is examining the natural history of the disease, assessing its economic burden, raising awareness, and facilitating the advancement of public health research in chronic kidney disease. CDC is working with partners to develop a surveillance system for chronic kidney disease and intermediate stages of the disease, and to identify gaps in the knowledge of the disease. In addition, CDC is working with partners to develop a state-based screening and demonstration project to detect people at high risk for developing chronic kidney disease. In 2007, CDC convened a meeting of national experts, sister federal agencies and external partners to examine comprehensive public health strategies for preventing the development and progression of chronic kidney disease. A report of the proceedings is being prepared and is expected to be published in the spring of 2008.

ITEM

Colorectal cancer -- Colorectal cancer is the third most commonly diagnosed cancer among both men and women in the U.S. and the second leading cause of cancer-related deaths. When colorectal cancer is detected and treated early, survival is greatly enhanced. The Committee is pleased with the leadership of CDC's national colorectal cancer roundtable in promoting the availability and advisability of screening to both health care providers and the general public. The Committee encourages CDC to continue to expand its partnerships with State health departments, professional and patient organizations, and private industry to combat this devastating disease. (Page 105)

ACTION TAKEN OR TO BE TAKEN

CDC works with national and state partners towards colorectal cancer control, conducts epidemiologic and behavioral science research and colorectal cancer surveillance, and educates providers and the public about colorectal cancer control. Through "Screen for Life: National Colorectal Cancer Action Campaign," CDC educates Americans about the importance of regular colorectal cancer screening for men and women of all racial and ethnic groups who are aged 50 years or older.

Additionally, CDC initiated a three-year colorectal cancer screening demonstration program in 2005 for low-income, under or uninsured persons between 50 and 64 years of age to explore effective screening settings and program models. More than 2,300 men and women have been screened for colorectal cancer, 272 polyps have been identified and removed, and seven persons have been detected with cancer and treatment initiated. CDC has also undertaken an extensive evaluation of program implementation, clinical effectiveness, program cost and cost-effectiveness. This information is being used to inform future activities.

ITEM

Diabetes -- The Committee encourages CDC to establish additional national public-private partnerships to leverage Federal resources with private-sector contributions to expand the national diabetes education program. These new efforts could augment public awareness campaigns encouraging individuals with diabetes to be tested and know their A1C levels so that they and their healthcare professionals can take appropriate action to control their condition. (Page 105)

ACTION TAKEN OR TO BE TAKEN

CDC, through the National Diabetes Education Program (NDEP), has established a national partnership network involving hundreds of private and public sector organizations. This national partnership network has been a valuable extension of the federally funded NDEP through their participation on workgroups, testing and marketing of campaign materials, and numerous community-based projects. CDC is always seeking new partners and opportunities to leverage limited Federal resources. The NDEP has a highly effective campaign (ABC Campaign) that focuses on controlling A1C, blood pressure, and cholesterol. Expansion of the NDEP would yield greater impact by focusing on broader dissemination of campaign materials and messages -- especially by targeting high risk minority populations.

Item

Genetics of diabetic kidney disease -- Committee acknowledges CDC for its collaboration with the National Institute of Diabetes and Digestive and Kidney Diseases to implement the Genetics of Kidneys in Diabetes (GoKinD) Study, a large scale effort to identify the genetic determinants of diabetic kidney disease. The Committee urges CDC to take steps to ensure that GoKinD biosamples are made available to the research community in a sustainable and long-term manner, such as through a central biorepository, so that this valuable genetic collection can be efficiently mined for knowledge that could lead to the development of new therapies to treat diabetic kidney disease. (Page 106)

ACTION TAKEN OR TO BE TAKEN

CDC houses the GoKind samples, and to date has responded to all approved requests from researchers for samples from the collection. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) administers the special Type I Diabetes statutory funding, which funded the creation of the GoKind collection at CDC. CDC, through its Human Subjects Coordinator and appropriate laboratory leadership, has approved a plan for sample distribution.

Institutional Review Board (IRB) approval for GoKind is deferred to the Joslin Diabetes Center (JDC), a CDC collaborator, and the plan is currently undergoing ethical review at JDC.

ITEM

Interstitial cystitis -- The Committee is pleased by the progress made by CDC on educating the public and professional communities about interstitial cystitis (IC). In addition to generating public attention to IC, the Committee encourages CDC to develop and implement a comprehensive structured outreach plan for the provider community. (Page 107)

ACTION TAKEN OR TO BE TAKEN

CDC will continue its cooperative agreement partnership with the Interstitial Cystitis Association and seek advice and guidance from others within the interstitial cystitis (IC) community in the implementation and dissemination of IC educational and awareness materials to the general public and health care providers. In FY 2008, CDC plans to continue outreach activities to the provider community through partnerships with key organizations that can reach providers directly, such as the American College of Obstetrics and Gynecology to disseminate symptom recognition and treatment guidelines for IC; the American Urological Association and Association of Reproductive Health Professionals to provide informational resources about IC to urologists and reproductive health specialists and their patients; and the American Pain Society and the National Vulvodynia Association to enhance their reach and support for patients with IC symptoms and their health care providers.

ITEM

National school lunch and breakfast program -- The Committee is aware that the disparity of national standards is having a negative effect on national school lunch and breakfast programs. Therefore, the Committee encourages CDC to work with the Secretary of the U.S. Department of Agriculture to establish uniform national nutrition standards for all schools participating in the national school lunch and breakfast programs and to define what it means to implement the dietary guidelines for Americans. (Page 107)

ACTION TAKEN OR TO BE TAKEN

CDC works closely with the U.S. Department of Agriculture to assist states in the development and implementation of local school wellness policies, including developing the nutrition standards for the Institute of Medicine (IOM) Report entitled "Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth." The report concluded that: a) federally-reimbursable school nutrition programs should be the main source of nutrition at school; b) opportunities for competitive foods should be limited; and, c) if competitive foods are available, they should consist of nutritious fruits, vegetables, whole grains, and nonfat or low-fat milk and dairy products, as consistent with the 2005 Dietary Guidelines for Americans (DGA).

In developing the nutrition standards, the IOM School Foods Committee was guided principally by the 2005 Dietary Guidelines for Americans (DGA), which provide comprehensive, science-based recommendations on diet and physical activity to promote health and reduce risk for major chronic diseases. The IOM School Foods Committee established nutrition standards for individual food and beverage items, thereby increasing the likelihood that over time, students would meet overall DGA recommendations.

ITEM

Oral health -- The Committee recognizes that to reduce disparities in oral diseases will require additional and more effective efforts at the State and local levels. The Committee has provided funding to strengthen State capacities to assess the prevalence of oral diseases and the associated health burden, to target resources and interventions, such as additional water

fluoridation and school-linked sealant programs, and resources to the underserved, to assess trends in oral diseases, and to evaluate changes in policies and programs. The Committee encourages CDC to advance efforts to reduce the disparities and burden from oral diseases, including those that are closely linked to chronic diseases such as diabetes and heart disease. (Page 107)

ACTION TAKEN OR TO BE TAKEN

CDC is working with 12 states and one territory to build capacity for effective oral health prevention programs and to reduce disparities among disadvantaged populations. This effort includes working with states to develop school-based or school-linked programs to reach children at high risk of oral disease with proven prevention services, such as dental sealants. CDC also works with states to expand the fluoridation of community water systems and operates a fluoridation training and quality assurance program. In addition, CDC will expand its efforts to assess the extent of oral diseases, target prevention programs and resources to those at greatest risk, fund prevention research, and evaluate changes in policies and programs to reduce disparities. CDC will continue to develop methods to identify and reach adults at greatest risk of oral diseases associated with other chronic diseases (e.g., diabetes and heart disease) and their risk factors.

ITEM

Primary immunodeficiency diseases -- Within funds available, the Committee encourages CDC to support the national physician education and public awareness campaign for primary immunodeficiency syndrome. The campaign has featured public service announcements, physician symposia, publications, and the development of website and educational materials, as well as mailings to physicians, school nurses, daycare centers, and others. Together with the private investments in this activity, the campaign has directly resulted in a three-fold increase in diagnosis, testing, and treatment since the campaign began. (Page 107)

ACTION TAKEN OR TO BE TAKEN

CDC funds the Jeffrey Modell Foundation to support awareness campaigns related to primary immune deficiencies through dissemination of materials and provision of educational sessions. The Foundation has evaluated their public service advertising campaign by surveying physicians at Jeffrey Modell Diagnostic and Referral Centers. Physicians reported increases in the number of diagnosed patients, patients receiving treatment, and patient referrals; and reductions in the number of infections, hospitalizations, and days of school or work missed.

ITEM

Psoriasis -- As many as 7.5 million Americans are affected by psoriasis and/or psoriatic arthritis chronic, inflammatory, painful and disfiguring diseases for which there are limited treatment options and no cure. The Committee understands that there are very few efforts to collect epidemiologic and other related data on individuals with psoriasis and psoriatic arthritis, and as such, researchers and clinicians are limited in their longitudinal understanding of these diseases and their effects on individual patients. The Committee encourages CDC to support longitudinal studies to learn about key attributes such as response to treatment, substantiating the waxing and waning of psoriasis, understanding associated manifestations like nail disease and arthritis, the relationship of psoriasis to other public health concerns such as the high rate of smoking and obesity among those with the disease as well as the association of psoriasis with other serious medical conditions such as diabetes and heart attack. The Committee believes a national registry that collects longitudinal psoriasis and psoriatic arthritis patient data will help improve the care and outcomes for people with these diseases by increasing the understanding

of: psoriasis incidence/prevalence, the distribution of disease severity, risk factors, and the incidence/prevalence of co-morbidities. (Page 107-108)

ACTION TAKEN OR TO BE TAKEN

Psoriasis can compromise the quality of life for people affected by the condition by affecting basic life functions such as sleeping, preventing work in certain occupations, staying physically active, and causing psychological distress. A national registry that collects longitudinal psoriasis and psoriatic arthritis patient data may help improve the care and outcomes for people with these conditions. CDC is currently examining ways to undertake a registry.

ITEM

Sleep disorders -- The Committee is aware that sleep disorders are critically under-addressed contributors to many chronic diseases and has provided \$1,000,000 for CDC's participation in the national sleep awareness roundtable, a partnership with other Federal agencies and the health community, and to integrate messages about sleep into the national public health network. The Committee also urges CDC to incorporate sleep and sleep related disturbances into established CDC surveillance systems. (Page 108)

ACTION TAKEN OR TO BE TAKEN

In the past, CDC analyzed data from a Behavioral Risk Factor Surveillance System (BRFSS) module specifically assessing relevant health risk behaviors, which indicated that sleep insufficiency is associated with impairments in both quality of life and self reported general health. CDC has participated in the Frontiers in Knowledge in Sleep and Sleep Disorders program and the State of the Science Conference of Manifestations and Management of Chronic Insomnia in Adults, both sponsored by the National Institutes of Health (NIH). CDC also serves in an advisory capacity as an ex officio member of the Sleep Disorders Research Advisory Board coordinated by the National Heart, Lung, and Blood Institute within NIH. CDC also participates in the National Sleep Awareness Round Table (NSART), a group comprised of agencies across the United States that focuses on raising the visibility of the importance of sleep. In November 2007, CDC established a "Sleep and Sleep Disorders" Web site to begin to address these public health issues. With the funding provided, CDC plans to continue to participate in NSART activities as well as develop, cognitively test, and implement an optional BRFSS module related to sleep and sleep-related disorders in order to assess the prevalence of sleep disorders and better enable researchers to address the complex interrelationship widely reported between sleep and the public's health.

ITEM

Teen pregnancy prevention demonstration grants -- A new \$10,000,000 initiative is recommended for grants to State and local public health departments, school districts, and nonprofit organizations to support factually and medically accurate, age-appropriate approaches to preventing teen pregnancies, including information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. The Secretary of Health and Human Services shall require each applicant for financial assistance under this program to certify that all materials proposed in the application and funded during the project period of the grant are medically accurate. The Secretary of Health and Human Services shall require a panel of medical experts to review all grant applications and assess whether the materials proposed are medically accurate. These demonstration projects shall be evaluated based on their success in reducing the rate of teen pregnancies in their respective communities. The Committee's recommendation for this activity is part of its initiative to reduce the number of abortions in America by alleviating the economic

pressures and other real life conditions that can sometimes cause women to decide not to carry their pregnancies to term. (Page 108)

ACTION TAKEN OR TO BE TAKEN

With the funds provided, CDC will work collaboratively with partners to enhance the skills and capacities needed, at the local level, to use science-based teen pregnancy prevention interventions. CDC will expand and increase the number of communities funded for teen pregnancy prevention interventions that include information about both abstinence and contraception, and dissemination of science-based tools and strategies to prevent HIV, STD, and teen pregnancy. This will include evaluating the program "Promoting Science-Based Approaches to Teen Pregnancy Prevention-- Using Getting to Outcomes." The activities will also support research to understand the factors associated with sexual risk behavior in order to expand the body of programs that effectively improve adolescent reproductive health and reduce the rate of teen pregnancies in communities.

ITEM

Cerebral palsy -- The Committee is pleased with CDC's progress in autism and developmental disabilities surveillance and is encouraged to learn of the launch of the largest ever epidemiologic study of potential causes of autism spectrum disorders. The Committee encourages CDC to build upon these successes and to also focus on the development of surveillance and research activities focused on cerebral palsy, another priority public health concern. (Page 110)

ACTION TAKEN OR TO BE TAKEN

CDC shares the Committee's concern on public health needs for surveillance and research on cerebral palsy. CDC has monitored the prevalence of cerebral palsy in metropolitan Atlanta since the early 1980's. In 2002, two of CDC's autism and developmental disability monitoring (ADDM) sites expanded their surveillance activities to include cerebral palsy. In 2006, the number of sites also tracking cerebral palsy increased to four. CDC is supportive of expanding the surveillance of cerebral palsy within this established network utilizing already existing systems.

ITEM

Down syndrome -- The Committee commends CDC for initiating a study to document the onset and course of secondary and related developmental and mental disorders in individuals with Down syndrome. The Committee encourages further research relating to these areas of dual diagnosis. (Page 110)

ACTION TAKEN OR TO BE TAKEN

CDC has continued with its studies of secondary and related developmental and mental disorders among individuals with Down syndrome. To date, little is known about the interaction between Down syndrome and autism spectrum disorders. Obtaining reliable estimates of how often Down syndrome and autism co-occur have been compromised in previous work by the unique challenges posed by screening children with Down syndrome for autism spectrum disorder symptoms. CDC is conducting two epidemiologic studies that examine the co-occurrence of these disorders and will also provide insight into appropriate diagnostic tools for use in clinical settings. This information is critical for better understanding of the unique behavioral features of both Down syndrome and autism and for guidance on appropriate services, interventions and support for families of affected children. The investigators plan to collaborate on publications concerning behavioral assessment and intervention strategies for Down syndrome in clinical and educational settings. In addition, CDC is conducting an analysis

of National Health Interview Survey data which will provide national level data that may further our understanding of the range of health and health care issues faced by children with Down syndrome. In combination, these research activities will result in the development and testing of effective prevention and intervention strategies.

CDC also organized a meeting "Setting a Public Health Research Agenda for Down Syndrome" held in November 2007. This meeting brought together more than 70 experts with the goal of identifying the most important areas for future public health research on Down syndrome. A report from this meeting outlining priority areas for Down syndrome public health research is currently under development. Publication of the report is expected in late 2008.

ITEM

Duchenne and Becker muscular dystrophy (DBMD) -- The Committee is aware of recent efforts by CDC to develop a Duchenne and Becker muscular dystrophy patient registry that will provide a virtual web interface that identifies and characterizes the patient population, provides, as examples, common data elements and clinical endpoints for clinical trials, and accelerates translational research through broader clinical trial networks. This patient registry will serve as a model for rare disease. The Committee encourages the agency to work directly with the patient and scientific communities to accelerate this project with a goal for its launch of March 1, 2008, and to the extent possible and practicable, to align these efforts with any cross-agency initiative to coordinate focus and investments in rare disease patient registries. The Committee also urges CDC to work with the Agency for Healthcare Research and Quality to finalize the DBMD care considerations and integrate the care considerations as part of the DBMD international patient registry. (Page 110)

ACTION TAKEN OR TO BE TAKEN

CDC appreciates the Committee's acknowledgment of the agency's work with respect to Duchenne and Becker Muscular Dystrophy. CDC is currently working with national and international partners to assess the feasibility of establishing a nationwide patient registry and agrees such a registry would be an important asset to research and practice. With regard to the agency's Muscular Dystrophy Surveillance Tracking and Research Network, CDC also hopes to fund the expansion of this program to an additional site. Finally, CDC shares the Committee's concern regarding the lack of evidence-driven standards of care. The agency is serving on a steering committee along with representatives from the Agency for Healthcare Research and Quality, Parent Project Muscular Dystrophy, Muscular Dystrophy Association, and academic institutions in order to advance work in this area by utilizing established methods to synthesize information from scientific literature and expert opinion regarding evidence-driven standards of care.

ITEM

Early hearing detection and intervention -- Within the total provided, \$10,500,000 is designated for the early hearing detection and intervention (EHDI) program for newborns, infants, and young children with hearing loss. This funding will allow States to continue to invest in developing appropriate surveillance and tracking systems to provide timely and appropriate diagnostic and intervention services to infants and toddlers. Funding also may be used to support applied research projects related to increasing the accuracy of newborn hearing screening, improving the effectiveness of tracking and surveillance programs, determining the etiology and epidemiology of childhood hearing loss, and analyzing the costs and benefits of such programs. The Committee encourages CDC to assist States in clarifying how EHDI surveillance, tracking, and data management programs are affected by the Health Insurance Portability and Accountability Act and the Family Education Rights and Privacy Act. The

Committee urges CDC to coordinate its efforts with the Health Resources and Services Administration, the National Institute on Deafness and Other Communication Disorders, the National Institute on Disability and Rehabilitation Research, and the Office of Special Education and Rehabilitative Services. (Page 110-111)

ACTION TAKEN OR TO BE TAKEN

The CDC EHDI program continues to work to increase the number of U.S. states and territories that have a complete EHDI tracking and surveillance system to ensure all newborns are screened for hearing loss no later than one month of age, all infants who screen positive have a diagnostic audiologic evaluation no later than three months of age, and all infants identified with a hearing loss receive appropriate early intervention services no later than six months of age. These EHDI tracking and surveillance systems also need to be enhanced to identify and track infants and young children who are missed or who do not have an identified hearing loss at birth. The CDC EHDI program continues to provide assistance for the EHDI state programs to evaluate how their program is being implemented and the extent to which national objectives are being achieved. The program continues to provide funding to support applied research projects.

The CDC EHDI program continues to actively engage in several collaborative efforts with multiple federal partners including Health Resources and Services Administration, the National Institute on Deafness and Other Communication Disorders, the Agency for Healthcare Research and Quality, the Office of Special Education and Rehabilitative Services, and others. In recognition of the CDC EHDI program's exemplary collaborative efforts, the program was awarded the Outstanding Partnership Award (Interagency) by the Federal Executive Board of Atlanta for its "exemplary efforts and contributions, which required significant coordination, planning, and interaction with various governmental units across agency jurisdictions within the Federal government."

ITEM

Folic acid education campaign -- The Committee is aware of a recent analysis conducted by CDC that showed folate concentrations among non-pregnant women of child bearing age have decreased by 16 percent from 1999B2000 through 2003B2004. These findings are troubling and the Committee is concerned that women are not receiving an adequate level of folic acid to prevent neural tube defects. Within the funds provided, the Committee has included sufficient resources for CDC to expand the folic acid education campaign and inform more women and healthcare providers about the benefits of folic acid, particularly the Hispanic population. (Page 111)

ACTION TAKEN OR TO BE TAKEN

While the decreases in blood folate levels were observed in all race and ethnic groups, CDC has focused on Hispanic women of reproductive age because they have well documented higher rates of neural tube defects (NTDs) than the other two groups. For this reason, CDC has conducted formative research with Hispanic Spanish-speaking women of childbearing age with the goal of developing new educational materials and media messages. Focus groups and interviews were segmented by women's level of acculturation and multivitamin use status. The formative research phase is now complete. The new materials and messages have been developed and will be printed and available to the public by the end of 2007. Media buys for radio and print have been purchased and will air during National Folic Acid Awareness Week in January 2008. In addition, CDC is working with partners to explore the impact of fortifying corn masa flour with folic acid.

It is also important to recognize that all race and ethnic groups of women in the US have a need for more education; providing resources for expanding the campaign to effectively reach them and their healthcare providers will benefit all women of reproductive age in the US.

ITEM

Hemophilia -- The Committee recognizes the many accomplishments of the blood disorders division and the network of hemophilia treatment centers. The Committee expects CDC to continue its efforts to support and expand access to comprehensive chronic disease management for people with bleeding and clotting disorders and to improve outreach to the growing numbers of women with bleeding disorders. (Page 112)

ACTION TAKEN OR TO BE TAKEN

CDC is continuing its efforts to support and expand access to comprehensive chronic disease management for people with bleeding and clotting disorders. CDC is attempting to improve outreach to the growing numbers of women with bleeding disorders through the expansion of the universal data collection program through the development and implementation of specific data collection tools for females with bleeding disorders and for persons with rare bleeding disorders, which includes women. In addition to existing programs the CDC recently initiated a new funding opportunity announcement entitled "Promoting the Health of People with Bleeding and Clotting Disorders." Outreach and education projects were funded for bleeding disorders, which includes the continuation of the National Hemophilia Foundation's campaign "Project Red Flag."

ITEM

Hereditary hemorrhagic telangiectasia (HHT) -- The Committee encourages CDC to establish a hereditary hemorrhagic telangiectasia resource center to increase identification of people affected with HHT, and increase knowledge, education and outreach of this largely preventable life-threatening condition. The Committee encourages CDC to provide information on effective evidence-based interventions and treatments to prevent premature death in the HHT population, improve outcomes and the quality of life for people living with HHT by creating a database to collect and analyze data, support epidemiology studies, provide surveillance, and train health care professionals. (Page 112)

ACTION TAKEN OR TO BE TAKEN

During the 2007 calendar year CDC met with the Hereditary Hemorrhagic Telangiectasia Foundation International, Inc to follow up on previously identified opportunities for collaboration. CDC provided both technical assistance and seed funding to support the development and implementation of a comprehensive agenda for the "HHT Health Initiatives for the 21st Century" conference to improve knowledge of this condition as well as evidence-based interventions and treatment. The conference will take place in March, 2008 due to a scheduling conflict.

ITEM

Marfan syndrome -- The Committee continues to be interested in Marfan syndrome, a heritable condition that affects the connective tissue. In the Marfan syndrome, the connective tissue is defective and degenerates. Because connective tissue is found throughout the body, the Marfan syndrome can affect many body systems, including the skeleton, eyes, heart and blood vessels, nervous system, skin, and lungs. The problems that occur in the heart and blood vessels are the most life-threatening aspects of the Marfan syndrome. Many individuals with Marfan syndrome are undiagnosed or misdiagnosed until they experience a cardiac complication, frequently due to valvular prolapse or aortic aneurysms. The Committee

encourages CDC to increase awareness of the condition and requests a report on these outreach activities as part of CDC's fiscal year 2009 budget justification. (Page 112)

ACTION TAKEN OR TO BE TAKEN

CDC is aware of the public health concerns regarding Marfan syndrome and shares the Committee's concerns. CDC has included Marfan syndrome in an External Partner's Group within CDC's National Center for Birth Defects and Developmental Disabilities (NCBDDD) to work collaboratively with other similar groups interested in disabling conditions.

ITEM

National Birth Defects Prevention Study --The Committee supports CDC's efforts in the area of birth defects surveillance, research, and prevention and encourages CDC to continue the promising research being conducted by the regional centers for birth defects research and prevention and to increase assistance to States to implement community-based birth defects tracking systems, programs to prevent birth defects, and activities to improve access to health services for children with birth defects. The Committee encourages the CDC to expand the birth defects studied in the National Birth Defects Prevention Study to include single gene disorders, like fragile X. (Page 112)

ACTION TAKEN OR TO BE TAKEN

Because approximately two thirds of the causes of birth defects remain unknown, CDC continues to work closely with its grantees and funded partners to establish priorities for birth defects surveillance, research, and prevention and to advance efforts in these areas. CDC relies on pooled data from state tracking programs to conduct the largest study of the causes of birth defects ever conducted, the National Birth Defects Prevention Study. Recently, the decade-long investment in this collaborative research effort has yielded a significant return on investment with the publication of several important findings on medication use, smoking, and obesity, among others, and their relationship to birth defects. Additional findings are being prepared for publication, and collaborators continue to collect and analyze data in an effort to find additional causes of birth defects.

In the next funding cycle in the spring of 2008, CDC expects to fund six of the eight Centers for Birth Defects Research and Prevention.

CDC shares the concern of the Committee about the one in 33 babies born with birth defects and in improving access to health services for these children. Three sites in the National Birth Defects Prevention Study have developed a model follow-up study of children with certain defects, and have conducted an assessment of outcomes including quality of life and family satisfaction with care.

ITEM

Preterm birth -- Preterm birth is a serious and growing public health problem that occurs in 12.5 percent of all births in the U.S. The Committee strongly encourages CDC to conduct additional epidemiological studies on preterm birth, including the relationship between pre-maturity, birth defects, and developmental disabilities. The Committee also encourages the establishment of systems for the collection of maternal-infant clinical and biomedical information to link with the pregnancy risk assessment monitoring system (PRAMS) and other epidemiological studies of pre-maturity in order to track pregnancy outcomes and prevent preterm birth. (Page 112)

ACTION TAKEN OR TO BE TAKEN

Preterm birth is the leading cause of infant death and severe neurological disability, including cerebral palsy and mental retardation. A recent CDC publication demonstrated that preterm birth is the most frequent cause of infant mortality, accounting for 34 percent of all infant deaths. Available evidence shows that no interventions are universally effective in preventing preterm birth and current interventions are applicable to only a small percentage of high-risk women. CDC is conducting research to understand the reasons for preterm birth. This research focuses on the public health goals of identifying biological and social risk factors for preterm birth, discovering what causes labor to occur, developing ways to detect women who will deliver preterm, and designing interventions based on risks and targeting interventions to those most susceptible to the risk. CDC's Pregnancy Risk Assessment Monitoring System currently uses data to determine which women delivered at term and before term, and characterizes the births by access to care, race, age, and other general guidelines.

ITEM

Spina bifida -- The Committee recognizes that spina bifida is the leading permanently disabling birth defect in the U.S. While spina bifida and related neural tube defects are highly preventable through adequate daily folic acid consumption, and its secondary effects can be mitigated through appropriate and proactive medical care and management, such efforts have not been adequately supported to result in significant reductions in these costly conditions. The Committee encourages CDC to use resources for quality of life activities related to improving medical and psychosocial treatment. The Committee continues to strongly support CDC's collaboration with the Agency for Healthcare Research and Quality to develop a patient registry. (Page 112-113)

ACTION TAKEN OR TO BE TAKEN

CDC continues its programs to promote maternal folic acid consumption and to promote the health and well-being of children and adults living with spina bifida. With regards to the latter activity, CDC continues to support the national spina bifida clearinghouse and resource center and other information and support activities provided by the Spina Bifida Association. CDC also continues to work in collaboration with the Agency for Healthcare Research and Quality to establish a spina bifida clinic registry for the purposes of improving care and advancing understanding of interventions that will improve health and quality of life for children and adults living with spina bifida.

ITEM

Tuberous sclerosis complex (TSC) -- TSC is a genetic disorder that causes uncontrollable tumor growth. Because this disorder can affect multiple organs of the body, it is difficult to diagnose, track and properly treat. The Committee encourages CDC to develop an initiative to collect and analyze data from the nationwide network of TSC clinics; support surveillance and epidemiological studies; and to educate health care professionals and teachers who come into contact with TSC patients. (Page 113)

ACTION TAKEN OR TO BE TAKEN

CDC shares the Committee's concern regarding tuberous sclerosis complex. CDC is supportive of activities such as surveillance, epidemiological studies and awareness as part of a public health response to this issue.

ITEM

Food allergies -- Life-threatening food allergies severely impair the quality of life for allergic children and their parents. For reasons that scientists can not yet explain, food allergies appear to be afflicting more and more children each year. The Committee is disappointed that CDC does not currently track the incidence of food allergies as it does for other conditions. The Committee strongly urges CDC to include the incidence of food allergies in the National Health Interview Survey, or a comparable annual tracking mechanism. (Page 113)

Action taken or to be taken

CDC continues to obtain and disseminate information on food allergies through the National Health Interview Survey (NHIS). The NHIS has asked about food or digestive allergies since 1997. Responses to this question provide a national estimate of food allergy prevalence among children. CDC's National Center for Health Statistics features the prevalence of food allergy on its interactive data warehouse site "Health Data for All Ages". This data warehouse tracks the prevalence of food allergy among children according to age, race/ethnicity, gender, urban/rural area, and year, using the NHIS data (http://www.cdc.gov/nchs/health_data_for_all_ages.htm). CDC will continue to collect data on food allergy through future administration of the NHIS, and additional prevalence data on food allergy are being collected as part of the 2007-2008 National Health and Nutrition Examination Survey.

ITEM

Nontuberculous mycobacteria (NTM) -- The Committee is concerned that NTM incidence continues to rise. Mycobacteria are environmental organisms found in both water and soil that cause substantial respiratory damage. The Committee continues to encourage the national center for health statistics to include questions regarding NTM testing in ongoing surveys to gain a better understanding of the epidemiology of this emergent disease. (Page 114)

ACTION TAKEN OR TO BE TAKEN

Testing for nontuberculous mycobacteria (NTM) is not part of standard clinical practice, so individuals are unlikely to be aware of possible exposure to NTM. As part of CDC's National Health and Nutrition Examination Survey, however, skin tests for NTM were conducted in the early 1970s, 1999 and 2000. The resulting data, which reveal possible exposure to antigens but cannot be used to determine whether a person is ill due to a particular disease, were released on public use files for analysis by interested researchers.

ITEM

Nutrition monitoring --The Committee affirms America's commitment to nutrition for all and encourages NCHS and the Agricultural Research Service at the U.S. Department of Agriculture to develop a national nutrition monitoring system. Such system should support both management decision-making and research needed to address and improve the crisis of obesity, nutrition-related diseases, physical inactivity, food insecurity, and the poor nutritional quality of the American diet, as well as provide the data needed to protect the public against environmental pathogens and contaminants. (Page 114)

ACTION TAKEN OR TO BE TAKEN

CDC's National Center for Health Statistics (NCHS) continues to work closely with the Agricultural Research Service to collect and disseminate detailed information on the dietary consumption patterns and nutritional status of the population to provide for nutrition monitoring. These data combined with other measurements obtained through the National Health and Nutrition Examination Survey (NHANES), such as body measures, interview data on food

insecurity and physical activity, and laboratory measures of exposure to environmental chemicals, allow for a more complete assessment of nutritional status for research and public policy needs. NCHS will begin releasing data from the 2005-2006 survey in November of 2007, only ten months following the completion of the data collection cycle.

ITEM

Vital statistics -- The Committee values NCHS and its critical role in monitoring our nation's health. The Committee is troubled that NCHS lacks the support it needs to collect a full year's worth of data on births, deaths, and other vital information. CDC should ensure that NCHS has sufficient funds to contract with the vital records jurisdictions for the purchase of 12 months of vital statistics data under the agreed upon terms of the vital statistics cooperative program. In addition, CDC should develop a plan on how to directly support jurisdictions as they implement electronic systems that will improve the timeliness, quality, and security of birth and death data. (Page 114)

ACTION TAKEN OR TO BE TAKEN

Vital statistics are an essential component of our national health information system, allowing CDC to monitor critical health indicators. The National Center for Health Statistics (NCHS) remains committed to working with its state partners to obtain a complete census of births and deaths based on the collection and registration of these events at the state and local levels. Moving the states away from outdated systems to web-based systems and re-engineering internal NCHS vital statistics processing systems remain priorities that are essential to NCHS' ongoing efforts to improve the timeliness, quality, and security of vital statistics data.

ITEM

Physician registry -- The Committee directs the national center for public health informatics to continue to fund at a level of \$325,000 from existing appropriations the establishment of a nationwide database of contact information for practicing physicians that can be used by Federal agencies and State and local health departments in the event of a terrorist attack, natural disaster, pandemic, or other severe public health emergency. The Committee expects this effort to be coordinated with the Office of the Assistant Secretary for Preparedness and Response to avoid any programmatic duplication. (Page 115)

ACTION TAKEN OR TO BE TAKEN

CDC's National Center for Public Health Informatics (NCPHI) and the Federation of State Medical Boards (FSMB) are in the second year of a three-year contractual agreement and expect to complete the national database of physician contact information by the end of FY 2009. FSMB is working with the medical boards of all states to implement routine, ongoing collection of contact information for all licensed physicians. NCPHI and FSMB jointly work with the medical boards and state health departments to establish the data agreements and technical standards necessary to integrate this contact information into the Health Alert Network (HAN) systems operated by CDC and state health departments and to align this activity with the Public Health Information Network (PHIN). NCPHI has been monitoring similar and potentially overlapping initiatives within Department of Health and Human Services and the Department of Homeland Security in order to avoid duplicative efforts and will coordinate with the Office of the Assistant Secretary for Preparedness and Response to further assure there is no duplication of efforts.

ITEM

Asthma -- The Committee is pleased with the work that CDC has done to address the increasing prevalence of asthma. However, the increase in asthma among children remains alarming. The Committee encourages CDC to continue to expand its outreach aimed at increasing public awareness of asthma control and prevention strategies, particularly among at-risk populations in underserved communities. To further facilitate this effort, CDC is urged to support community-based interventions that apply effective approaches demonstrated in research projects within the scientific and public health community. (Page 116)

ACTION TAKEN OR TO BE TAKEN

CDC's asthma control program continues to expand its outreach aimed at increasing public awareness of asthma control and prevention strategies, particularly among at-risk populations in underserved communities. In FY 2008, through its National Asthma Health Education Enhancement effort, CDC is funding voluntary health organizations such as the Allergy and Asthma Network/Mothers of Asthmatics, American Lung Association, and Asthma and Allergy Foundation of America to conduct activities related to asthma education. These activities range from educating children with asthma, their families and caregivers in a variety of settings, to identifying effective educational programs for adults with asthma that can be adapted for nationwide use.

ITEM

Biomonitoring -- The Committee applauds CDC's biomonitoring efforts and encourages CDC to continue this program and to continue to improve its efforts to communicate these results in context. In particular, the CDC's National Report on Human Exposure to Environmental Chemicals is a significant new information database that provides invaluable information for setting research priorities and for tracking trends in human exposures over time. Accordingly, the Committee continues to support the CDC environmental health laboratory's efforts to provide exposure information by conducting biomonitoring for environmental chemicals. The Committee urges CDC to devote a greater proportion of program resources to implement the recommendations of the National Academies' National Research Council, particularly with regard to the development of necessary methods to interpret human biomonitoring concentrations in the context of potential health risk and the enhancement of efforts to communicate results in context. CDC is encouraged to collaborate with toxicologists, health scientists, laboratory analytical chemists, and Environmental Protection Agency scientists in this effort. (Page 116)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work closely with and encourage collaboration among scientists, toxicologists, physicians, laboratorians, federal agencies, public health officials, and other groups to address potential health risks associated with human exposure to environmental chemicals and to place the results of biomonitoring studies in context when communicating those results.

ITEM

Climate change -- Additional scientific research is needed to further understand the potential health effects of global climate change and to identify tools to educate health professionals about adaptation strategies. The Committee encourages CDC to begin to develop public health research, technical assistance, and surveillance programs to understand the impacts of climate change on health. (Page 116)

ACTION TAKEN OR TO BE TAKEN

In January 2007, the CDC convened a workshop of experts on climate change to discuss the public health response to climate change. Participants, including representatives from Federal, state, local, and international agencies, academia, non-governmental organizations, and the private sector discussed “framing” climate change in public health terms, and identified priority areas for public health action. Drawing from the meeting discussions, CDC has identified 11 priority health actions for climate change and developed a policy statement, placing CDC in a leadership role in the area of Climate Change and Public Health. A series of five follow-up workshops are planned to further explore key dimensions of climate change and public health.

ITEM

Landmine survivors -- The Committee commends CDC for its effective response to the public health threat posed by landmines and improvised explosive devices. Within the funds provided, the Committee urges CDC to support programmatic and geographic expansion to include those injured by civil strife and terrorism, including, but not limited to, landmines. (Page 117)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work closely with grantees and other partners to advance its work responding to public health threats posed by landmines, improvised explosive devices (IEDs), and unexploded remnants of war resulting from conflict, civil strife and terrorism. This work includes preventing injury, tracking health effects, mitigating the impact of injury on survivors, and determining new public health approaches for this global problem. CDC will continue to support U.S., United Nations, and non-governmental organization partners in their efforts to apply best-practices public health methods to address these critical issues in the populations most in need and most likely to benefit from public health interventions. Because of the use of IEDs to many nations, a special emphasis will be placed on gathering lessons learned from victims of IEDs to establish the most effective prevention and treatment strategies for the victims of future IED attacks.

ITEM

National Report on Dietary and Nutritional Indicators in the U.S. Population -- The Committee supports the efforts of the environmental health laboratory and its commitment to improving the measurement of dietary and nutritional indicators in the American people. The Committee is aware that many Americans are confused about which foods to eat to improve and maintain their health. The Committee is also aware that there is a wide gap between recommended dietary intake and what people eat. Consequently, without knowledge of what levels of most dietary or nutritional indicators actually are in people's bodies, it is difficult for public health officials and others to improve the diet and nutritional status of Americans. The Committee recognizes that future reports will provide this essential information, which is not available in any other document in either the private or public sector. A publicly funded program that monitors human levels of vitamins, trans fats and omega-3 fatty acids, and other indicators of nutritional and dietary status is needed to provide the hard scientific data needed to make critical decisions about nutritional health for the nation. (Page 117)

ACTION TAKEN OR TO BE TAKEN

CDC is in the process of preparing its first National Report on Selected Dietary and Nutritional Indicators in the U.S. Population. The document will contain data on levels of 21 key indicators measured in people who take part in CDC's National Health and Nutrition Examination Survey (NHANES). With the development of new analytic methods, CDC will publish Nutrition Reports that contain never-before available data on other important indicators that will provide public

health officials with the information they need to improve the diet and nutritional status of the American people.

ITEM

Child maltreatment -- The Committee applauds CDC's activities in the area of child maltreatment. A growing body of research indicates that childhood abuse and neglect may contribute significantly to the development of both acute and chronic health conditions throughout the lifespan, including obesity and heart disease. The Committee encourages CDC to develop a network of consortia that will address research and training, as well as the dissemination of best practices and prevention efforts, on the health harms of child abuse and neglect. (Page 118)

ACTION TAKEN OR TO BE TAKEN

CDC recognizes that child maltreatment can impact the development of the brain of a child and subsequently increase vulnerabilities to a broad range of mental and physical health problems, ranging from anxiety disorders and depression to cardiovascular disease and diabetes. Safe, stable, and nurturing relationships with parents and other significant adults build healthy brains that provide a strong foundation for healthy development. CDC is committed to advancing the science of prevention for child maltreatment, with a focus on translating scientific advances into practical application through effective programs and policies. CDC will continue to encourage relationships between child maltreatment prevention programs and academic institutions, teaching hospitals, injury prevention organizations and other groups to share and disseminate knowledge.

ITEM

National violent death reporting system -- The Committee is supportive of the national violent death reporting system (NVDRS) and has included funds to continue implementation of the NVDRS in fiscal year 2008. The Committee urges CDC to continue to work with private health and education agencies as well as State agencies in the development and implementation of this injury reporting system. (Pages 118-119)

ACTION TAKEN OR TO BE TAKEN

Established by the CDC in Fiscal Year 2002, the National Violent Death Reporting System (NVDRS) allows states and communities to develop a system to collect timely, complete and accurate information about violent deaths through the linkages of information from law enforcement agencies, medical examiners and coroners, health providers, crime laboratories and other agencies. As of October 2007, CDC continues to fund 17 states for the implementation of NVDRS. CDC continues to work with state health departments, academic institutions, health care providers, national organizations, health care providers, national organizations, and others regarding the system's development and implementation.

ITEM

Cancer incidence and mortality study -- The Committee continues to be pleased with the progress of research and the translation of that research into practice under the national occupational research agenda. Within the funding provided, the Committee encourages NIOSH to continue its study of former manufacturing workers through the initiation of a cancer incidence and mortality study within this population. (Page 119)

ACTION TAKEN OR TO BE TAKEN

In January of 2007, NIOSH completed the feasibility assessment for a cancer study among former IBM employees who worked at the Endicott, New York plant. It was determined that there is enough information to conduct a study to determine if former IBM employees at Endicott are more likely to get cancer than other people. The public comment period for the feasibility assessment ended in August of 2007 and NIOSH is currently reviewing the comments received. Responses to these comments will be prepared and disseminated to stakeholders and interested parties. NIOSH is prepared to move in an expedited fashion to initiate a cohort mortality and cancer incidence study of these former manufacturing workers.

ITEM

Malaria --The Committee recognizes that malaria is a global emergency affecting mostly poor women and children. While malaria is treatable and preventable, tragically it remains one of the leading causes of death and disease worldwide. The Committee appreciates the integral and unique role that the CDC malaria program plays in national and global efforts to prevent and control malaria. The Committee urges CDC to expand malaria-related research, program implementation, and evaluation. Insecticide resistance and drug resistance have the real potential to compromise global malaria efforts and point to the need for the development and testing of new technologies and materials for insecticide-treated nets and new anti-malarial therapies. The Committee is concerned that failure to support these efforts could seriously impair future control efforts. Additionally, the Committee encourages CDC to provide technical assistance and support program research in non-African malaria-affected countries, which, in turn, can then be used to strengthen control efforts in African countries. (Page 120)

ACTION TAKEN OR TO BE TAKEN

CDC's Malaria program focuses on prevention and control of malaria throughout the world in partnership with local, state, and federal agencies in the United States, medical and public health professionals, national and international organizations, and foreign governments. Activities include conducting malaria surveillance, prevention, and control activities in the U.S.; providing consultation, technical assistance, and training to malaria endemic countries; conducting multidisciplinary research in the U.S. and internationally to develop new tools and improve existing interventions; and translating research findings into appropriate global policies and effective practices through the Roll Back Malaria Consortium and other international partners.

Insecticide resistance and drug resistance have the potential to compromise global malaria efforts. CDC is involved in a variety of research efforts including conducting field studies in Kenya to assess durability and effectiveness of different long-lasting insecticide treated nets (LLIN), as well as assessing the following: durability of different indoor residual insecticides; prevalence and extent of counterfeit drugs and their contribution to drug resistance; preventive intermittent treatment for pregnant women and infants; and the impact of artemisinin-containing combination drug regimens, the interaction of HIV and malaria, and mosquito larval ecology for the reduction of vector breeding.

In addition to conducting activities in the President's Malaria Initiative countries (in Africa), CDC also conducts research in non-African settings such as Indonesia, South America, India, and Southeast Asia. These initiatives may bring about new insights and collaborations that could be applied in African countries affected by malaria.

ITEM

Public health professionals -- The Committee is concerned about documented shortages in State health departments of applied epidemiologists and laboratory scientists core public health professionals. The Committee urges CDC to provide a stable, dedicated source of funding for existing fellowship training programs designed to alleviate these shortages. (Page 123)

ACTION TAKEN OR TO BE TAKEN

CDC supports the need to address shortages of applied epidemiologists. One approach CDC supports is the Epidemic Intelligence Service (EIS) Program, a two year post-graduate fellowship program of service and on-the-job training for health professionals interested in the practice of epidemiology. More than 70 percent of EIS graduates remain in the field of public health after completing the fellowship. Another approach CDC utilizes is the Career Epidemiology Field Officer (CEFO) Program, which assigns EIS-trained epidemiologists to State and local health departments. Assignment of CDC epidemiologists in CEFO positions provides some immediate relief to the epidemiologic workforce shortage in state and local health agencies and enhances public health preparedness. State and local health departments, in collaboration with CDC, make the strategic decisions regarding the placement of field epidemiologists in geographical areas where critical public health preparedness needs exist.

Through a cooperative agreement that CDC has with the Association of Public Health Laboratories (APHL), CDC's Environmental Health Laboratory provides funding for an Environmental Public Health Laboratory Traineeship program. This program provides travel for current laboratory staff to attend relevant conferences or trainings, or short-term (one-six weeks) specialized training in environmental health technology and analytical testing methods at another state health department. Any APHL-member public health laboratory or any environmental health laboratory affiliated with an APHL member public health laboratory may apply to the program. In addition, CDC's Environmental Health Laboratory, in an effort to build capacity and competency within state public health laboratories to respond to events or emergencies involving chemicals, provides extensive on-site training at CDC to state public health laboratories in the analysis of a host of chemical compounds, including those that could be used in a chemical-terrorism incident.

ITEM

Autism and vaccines -- The Committee continues to be aware of concerns about reports of a possible association between the measles component of the measles-mumps-rubella vaccine and a subset of autism termed autistic enterocolitis. There have been presentations at medical meetings by researchers presenting data showing the presence of measles RNA in inflamed intestines of children with autism. The Committee continues its interest in this issue and encourages the interagency coordinating committee to continue to give serious attention to these reports. The Committee is aware that research is underway, supported by NIH, and encourages NIH to expedite this research. (Page 168-169)

ACTION TAKEN OR TO BE TAKEN

A CDC funded case control study is investigating the association between MMR vaccine, gastrointestinal tract disorders, and autism spectrum disorders (ASD) through examination of intestinal tissue samples for measles virus genome. The estimated date for publication of the study is December 2008.

SIGNIFICANT ITEMS IN APPROPRIATIONS REPORTS – SENATE

**SIGNIFICANT ITEMS FOR INCLUSION IN
THE FY 2009 CONGRESSIONAL JUSTIFICATION
AND OPENING STATEMENTS
SENATE REPORT NO. 110-107
CENTERS FOR DISEASE CONTROL AND PREVENTION**

ITEM

[Food borne illnesses] The Committee notes that 76 million Americans suffer from food borne illnesses each year and the CDC coordinates with State and local health officials to respond to the most severe outbreaks. The Committee is concerned by recent E. coli outbreaks linked to spinach and lettuce, and urges the CDC to work with the Food and Drug Administration to prevent future outbreaks. (Page 76)

ACTION TAKEN OR TO BE TAKEN

CDC shares the Committee's concern over E. coli outbreaks linked to spinach and lettuce and is working with the Food and Drug Administration to prevent future outbreaks. In addition to regular ongoing communications among the scientific and program staff working on foodborne illnesses, CDC and FDA have been meeting regularly to improve food safety collaboration and coordination in general. Prominent on the agenda is CDC and FDA collaboration on farm-to-table investigations to further elucidate the ecologies of foodborne diseases and the exact chain of events that may lead to the contamination of leafy greens such as lettuce and spinach.

CDC actively participated in the field environmental investigation on California spinach farms for this outbreak. The purpose of this CDC and FDA collaboration was to determine the environmental sources of the contamination and how that contamination reached the spinach plants. Actions taken include sending a CDC environmental engineer for two separate two-week deployments to California to investigate contamination issues potentially associated with irrigation water used on spinach farms. CDC was also an active participant in field investigations of the irrigation systems on the farm where the lettuce implicated in the Taco John outbreak of late 2006 was grown. Actions taken include analyzing sources of irrigation water and potential interconnections between various systems.

Item

Morgellons Disease -- The Committee urges the Centers for Disease Control and Prevention to study an unexplained skin condition commonly known as Morgellons Disease, which affects over 10,000 individuals with skin lesions, joint pain, and neurological difficulties, among other symptoms. The Committee encourages the Centers for Disease Control and Prevention to work as quickly as possible to plan and begin this important research to increase the amount of information available to practitioners and the public. (Page 76-77)

ACTION TAKEN OR TO BE TAKEN

Recently, CDC received an increased number of inquiries regarding an unexplained skin condition which some refer to as "Morgellons." The cause of this condition is unknown, and the medical community has insufficient information to determine whether persons who identify themselves as having this condition have a common cause for their symptoms or share common risk factors. To learn more about this condition, CDC is conducting an epidemiologic

investigation. CDC has awarded a contract to Kaiser Permanente in Northern California to assist CDC in the investigation of this condition. The investigation will begin after review and approval of the scientific protocol by CDC and the Kaiser Permanente institutional review boards (IRBs). IRBs have an important role in the protection of the rights and welfare of all research participants.

The primary goals of the investigation are to better describe the clinical and epidemiologic features of this condition and to generate hypotheses about possible risk factors. The investigation will involve: assessing histopathologic features of the skin condition based on skin biopsies from affected patients; characterizing the foreign material such as fibers or threads obtained from patients with the condition to determine their potential source; describing the geographic distribution of the illness; and estimating rates of illness in the community.

ITEM

Antimicrobial Resistance -- The Committee is aware that infectious pathogens such as methicillin-resistant *Staphylococcus aureus* [MRSA] are rapidly gaining new forms of resistance to available antimicrobial drugs. The Committee commends the CDC for its work in tracking trends over time in community acquired MRSA [CA-MRSA] and urges the CDC to continue supporting this surveillance effort. The Committee further encourages the CDC to strengthen research on CA-MRSA prevention, control and treatment strategies, including the expansion and routinization of its collection of isolates of resistant pathogens from a broad range of sites for analysis by CDC experts. Finally, the Committee encourages the CDC to post timely and pertinent information available to the public through its website. (Page 77)

Action taken or to be taken

CDC has been at the forefront of recognition and prevention of community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infections. In addition to epidemiologic and laboratory research, CDC has collaborated with a broad range of public and private partners throughout the country, including other federal agencies, state and local health departments, athletic organizations, academic partners, and industry. Objectives for recent and ongoing extramural research have included analysis of risk factors, evaluation of strategies to prevent recurrent infections, and the development of new methods for preventing transmission of these and other antimicrobial-resistant pathogens. CDC also supports multiple sites conducting characterization of invasive CA-MRSA strains to better describe these bacteria and their associated illnesses and outcomes and improve prevention measures. These sites include several academic institutions as well as nine U.S. sites currently participating in the CDC's Active Bacterial Core Surveillance program (ABC), representing a population of about 16.3 million persons. CDC is also developing a national educational campaign for both healthcare providers and the public to increase awareness of CA-MRSA and how it can be prevented, including ensuring that clinicians are using the best methods to recognize, treat, and care for patients with CA-MRSA. While prevention of CA-MRSA remains an important focus of CDC's efforts to address antimicrobial resistance, recently published findings indicate that the vast majority of severe MRSA infections remain strongly associated with the healthcare system. Towards the prevention of both community- and healthcare-associated MRSA infections, CDC continues to work to provide the best science-based strategies and information for prevention, including developing and disseminating guidelines for healthcare facilities and clinicians, tracking and analyzing trends from the National Healthcare Safety Network, and disseminating practical information to the public through CDC's and partners' websites and through print and other promotional materials developed for use in publications and in healthcare facilities.

ITEM

[Hepatitis among Asian Americans] -- The Committee continues to be concerned with the high prevalence of hepatitis among Asian Americans. One out of ten Asian Americans are affected with hepatitis B, which along with hepatitis C is associated with an increased incidence of liver cancer. The Committee encourages the CDC to develop targeted research and approaches towards the Asian American community in its work on hepatitis. (Page 78)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work with its partners to address the disproportionate effect of viral hepatitis and liver cancer on the Asian American community, particularly for those who are foreign born. CDC supports organizations to produce and disseminate culturally appropriate educational materials for a variety of ethnic populations at increased risk for chronic viral hepatitis infections. In addition, CDC funds research about chronic viral hepatitis infections in those populations.

ITEM

Hepatitis B -- The Committee applauds CDC's efforts to develop and implement a new strategy to screen at risk individuals for chronic hepatitis B. As only approximately one-third of individuals with hepatitis B are aware of their condition, the Committee urges CDC to continue to collaborate with NIDDK in the development of a public health strategy to expand the screening of individuals at risk for chronic hepatitis B. In addition, the Committee notes that accurate national statistics are lacking as to the number of Americans infected with hepatitis B, as existing population-based surveys have not included Asian/Pacific Islander groups in whom hepatitis B is by far the most common. The Committee urges CDC to continue to implement the recommendations of the National Hepatitis C Prevention strategy and the report of the National Viral Hepatitis roundtable. (Page 78)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work with the National Viral Hepatitis Roundtable and other partners to implement the National Hepatitis C Prevention Strategy. CDC is studying the impact of immigration on the burden of disease from chronic HBV infection in this country and how to properly represent that burden in national disease estimates. As part of the process to develop screening recommendations, CDC held a consultation with approximately 30 partners, including NIDDK, on February 7-8, 2007, and recommendations will be published in the Morbidity and Mortality Weekly Report (MMWR) in 2008. CDC is also co-sponsoring an additional NIDDK consensus conference that will be held in the fall of 2008.

ITEM

HEPATITIS C -- The Committee notes that, as 2008 will be the 10th anniversary of the National Hepatitis C Prevention Strategy, this plan may need to be reviewed and updated. The Committee continues to be concerned that less than half the people infected with hepatitis C are aware of their condition, and encourages any update of the strategy to include an aggressive screening program. In addition to targeting at-risk populations, the Committee encourages the consideration of age based screening policies to more effectively reach infected populations. (Page 78)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work to implement the recommendations of the National Hepatitis C Prevention Strategy. CDC is investigating various screening and public education approaches, including age-based screening programs, to identify those which are best able to reach populations at risk for chronic infection with hepatitis C virus (HCV). Two studies of age-based screening are currently underway.

ITEM

Hepatitis Prevention -- The Committee continues to be concerned about the prevalence of hepatitis and urges CDC to promote liver wellness with increased attention to childhood education and primary prevention. (Page 78)

ACTION TAKEN OR TO BE TAKEN

CDC continues to provide support to organizations to develop, evaluate, and distribute educational materials on viral hepatitis and liver wellness for health professionals, patients, and the public. These and other informational materials are also available online, and in 2007, approximately 600,000 persons used the Internet to access information about viral hepatitis. CDC continues to work with the National Viral Hepatitis Roundtable, whose member organizations have developed a wide variety of educational materials and campaigns to increase awareness about viral hepatitis and liver wellness.

ITEM

Infertility Prevention -- The Committee notes that there are multiple causes for infertility including ovulatory and hormonal disorders, blocked fallopian tubes, endometriosis and cervical problems among women and poor sperm quality, motility and count among men. There are also recognized risk factors that contribute to these causes in addition to sexually transmitted diseases, which have been the primary focus of CDC's education on infertility risks. These factors include delayed child bearing, smoking, low or excessive body weight and other chronic conditions, exposures to hazardous environmental toxins and contaminants, drug and alcohol abuse, diabetes, cancer and, particularly for men, exposure to high temperatures. The Committee encourages CDC to consider expanding the scope of this program and provide greater support to public education on the risks to fertility. (Page 79)

ACTION TAKEN OR TO BE TAKEN

CDC is committed to learning more about infertility as a public health issue. CDC recognizes that there are multiple known causes and perhaps unknown causes to infertility. CDC has formed an internal workgroup to examine the scope of infertility work conducted at CDC. Before 2009, CDC will bring together a small panel of external experts to meet and discuss infertility as a public health issue.

ITEM

Tuberculosis -- the Committee heard testimony about current testing methods that take 6 to 16 days to correctly diagnose the presence of TB bacteria. The Committee is concerned by this long delay. The Department of Defense has been working on biological and chemical detection and identification technology that can confirm the presence of specific bacteria in just 2 hours. This technology is currently being developed to identify chemical and biological threat agents but may be adapted for use in medical diagnosis. The Committee encourages the CDC to work with the Department of Defense and the National Institutes of Health to develop new diagnostic tools to identify TB more rapidly. (Page 79)

ACTION TAKEN OR TO BE TAKEN

Research on new diagnostics is critical in the elimination of TB. CDC is currently working with numerous partners, including NIH, DOD, and nonprofit organizations, to evaluate better diagnostic tools for TB. Specifically, CDC is evaluating the use of a tool that relies on blood tests to replace the traditional skin test to determine whether a person is infected with TB.

ITEM

[Phase II TB Elimination] -- The Committee understands that Phase II of CDC's new formula under the TB Elimination and Laboratory Cooperative Agreements is scheduled to be implemented in fiscal year 2008. The Committee expects the CDC to implement Phase II within the increase provided. (Page 79-80)

ACTION TAKEN OR TO BE TAKEN

CDC plans to implement the second phase of its formula for TB Elimination and Laboratory Cooperative Agreements within its FY 2008 appropriation. Thirty-five percent of funds will be allocated according to a formula based on jurisdictions' reported incident cases of TB, cases among the foreign-born, cases among the homeless, and other complexities such as drug resistance, HIV co-infection, and substance abuse.

ITEM

[317 Grant Support] -- The Committee understands that infrastructure costs of delivering vaccines to children in remote areas are substantially higher than in other areas of the country, because of the distances that must be traveled to administer the vaccine. Some communities are so remote, they must be served primarily by air, dramatically increasing the cost of each dose. The Committee encourages CDC to increase section 317 grant support for infrastructure development and purchase of vaccines for States facing these extreme challenges. (Page 80)

ACTION TAKEN OR TO BE TAKEN

CDC recognizes the increased costs associated with delivering vaccines to remote communities and takes it into account when allocating grant funds to support the delivery of vaccines and infrastructure development. In addition, CDC provides both Section 317 and Vaccines for Children Program (VFC) funds for vaccine purchase. CDC has streamlined the funds management process by awarding vaccine purchase funds to federal vaccine purchase contracts and provides grantees with "purchasing power" needed to meet their population needs (VFC program) or population-based allocation of discretionary vaccine purchase dollars (Section 317). This approach provides greater flexibility in matching funding and vaccine need.

ITEM

Chronic Kidney Disease -- The Committee encourages CDC to continue development of a Public Health Strategy for Chronic Kidney Disease. (Page 83)

ACTION TAKEN OR TO BE TAKEN

CDC continues to work closely with grantees and other partners to develop a kidney disease surveillance, epidemiology, health economics, and health outcomes research program. CDC is examining the natural history of the disease, assessing its economic burden, and raising awareness and facilitating the advancement of public health research in chronic kidney disease. CDC is working with partners to develop a surveillance system for chronic kidney disease and intermediate stages of the disease, and to identify gaps in the knowledge of the disease. In addition, CDC is working with partners to develop a state-based screening and demonstration project to detect people at high risk for developing chronic kidney disease. In 2007, CDC convened a meeting of national experts, sister federal agencies and external partners to examine comprehensive public health strategies for preventing the development and progression of chronic kidney disease. A report of the proceedings is being prepared and is expected to be published in the spring 2008.

ITEM

COPD Self Management Demonstration -- The Committee is aware that Chronic Obstructive Pulmonary Disease [COPD] is a chronic condition similar to diabetes that requires an aggressive self-management in order to prevent continued deterioration, hospitalization and costly medical interventions. In view of the increasing mortality, morbidity, and cost to the Nation's health care system, the Committee urges CDC to demonstrate and validate intervention and training protocols that are needed to improve health outcomes and reduce health care costs for COPD patients. (Page 83)

ACTION TAKEN OR TO BE TAKEN

CDC recognizes that COPD is a serious public health issue, given that it is the fourth leading cause of death and a major contributor to disability and impaired quality of life in this country. CDC is interested in developing a roadmap to explore the public health issues related to COPD, which would potentially address the public health role in prevention, treatment and management. CDC supports the initial assessment and planning for public health roles in this important area.

ITEM

Diabetes -- ... The Committee encourages CDC to conduct public awareness campaigns aimed at getting at-risk individuals to identify the stage of their diabetes and to prevent or slow the progression of their disease. In particular, the Committee is pleased with CDC's goal to increase the percentage of individuals with diabetes who receive annual eye and foot exams, and at least two A1C measures per year. (Page 83)

ACTION TAKEN OR TO BE TAKEN

The National Diabetes Education Program (NDEP) is the leading federal government public education program that promotes diabetes prevention and control. NDEP is a joint initiative of CDC and NIH, with the goal of reducing illness and deaths associated with diabetes and its complications. NDEP has a broad reach through public service announcements, distribution of publications through the National Diabetes Information Clearinghouse, and downloads of NDEP materials from the NDEP web site. NDEP materials target a broad array of audiences, including people with diabetes, health care professionals, people at risk for diabetes and their family members, educators and parents of children with diabetes, community organizations and leaders, and business leaders.

ITEM

[Diabetes education activities] -- It is estimated that maintaining a certain blood glucose level (A1C target of 7 or below) would reduce complications of diabetes. The Committee encourages CDC to expand diabetes education activities to encourage individuals to be tested and know their A1C levels so they can take appropriate steps to control their conditions. (Page 83)

ACTION TAKEN OR TO BE TAKEN

As part of its national strategy, CDC continues to provide resources and technical assistance to 59 state and territorial diabetes prevention and control programs. Through national, state and local partnerships, these programs strive to reduce the burden of diabetes and diabetes-associated complications.

CDC, through the National Diabetes Education Program (NDEP), has established a national partnership network involving hundreds of private and public sector organizations. This national partnership network has been a valuable extension of the federally funded NDEP through their participation on workgroups, testing and marketing of campaign materials, and numerous

community-based projects. The NDEP has a highly effective campaign (ABC Campaign) that focuses on controlling A1C, blood pressure, and cholesterol.

ITEM

SEARCH FOR DIABETES IN YOUTH STUDY [SEARCH] -- The Committee applauds the CDC and NIDDK for their strong support and continuation of the SEARCH which has, for the first time, assembled robust data on the epidemic of type 1 and type 2 diabetes in American youth. The Committee encourages the CDC to expand this important work, including the consideration of ancillary studies and innovative analyses on the biosamples collected through SEARCH. (Page 83)

ACTION TAKEN OR TO BE TAKEN

CDC and NIDDK continue to work closely with SEARCH grantees to assess the burden of type 1 and type 2 diabetes, in U.S. children and youth less than 20 years of age. SEARCH has recently published the first nationwide estimates of type 1 and type 2 diabetes, in U.S. children and youth, and has research underway to monitor trends in diabetes by type, to learn more about how diabetes affects the daily lives of children and youth, and to learn how their care and medical treatment can be improved. The SEARCH study has become a valuable resource for studies on children with diabetes and has already generated numerous federally funded ancillary studies. SEARCH has also developed a comprehensive public website with information on data and resources that are available to the scientific research community. SEARCH investigators are working closely with CDC, NIDDK, and collaborators such as the Juvenile Diabetes Research Foundation (JDRF) to facilitate studies on children with diabetes.

ITEM

Diabetes and Obesity in Diverse Populations -- The Committee is concerned about the adverse health toll that the twin epidemics of diabetes and obesity are taking across the Nation. An informed and culturally sensitive response is urgently needed to address this escalating epidemic. The Committee encourages CDC to fund projects of national and community organizations that have the capacity to carry out coordinated health promotion programs that will focus on diabetes and obesity in the general population and across minority communities. The Committee further encourages CDC to identify potential grantee organizations directed by and serving individuals from communities with disproportionate diabetes and obesity rates. (Page 83-84)

ACTION TAKEN OR TO BE TAKEN

CDC shares the Committee's concerns regarding the disproportionate impact of diabetes and obesity on racial and ethnic minorities. At the state level, CDC is working to reduce chronic diseases and obesity through state programs, research, surveillance, training, intervention development and evaluation, leadership, policy and environmental change, communication and social marketing, and partnership development. CDC has sponsored joint obesity/diabetes conferences that highlighted successful, cost-effective public and private programs on diabetes and obesity, as well as awareness-raising strategies. CDC is also currently developing an agenda for addressing health disparities in physical activity, nutrition, and obesity prevention and control.

At the community level, CDC's REACH U.S. Program - Racial and Ethnic Approaches to Community Health – funds communities to develop and implement innovative, community-based approaches to addressing racial and ethnic health disparities, particularly in the inter-related chronic disease areas of diabetes, heart disease, and related risk factors (such as physical inactivity, poor nutrition, obesity, high blood pressure, etc.) Strategies developed and implemented are based on the unique historical and cultural experiences of racial and ethnic

minority communities, and CDC requires that local work be conducted through the engagement of a community coalition that includes representatives from communities that area severely impacted. REACH is demonstrating results in the elimination of disparities in funded communities. Additionally, the Steps to a HealthierUS Program is acting as a catalyst to make needed changes in local communities related to physical inactivity, poor nutrition, and smoking to combat the rising rates of obesity, diabetes, and asthma. Special focus is directed toward populations with disproportionate burden of disease and preventive services.

At the national level, the National Diabetes Education Program, a joint initiative of CDC and NIH, provides competitive funding and technical assistance to national minority organizations to promote culturally appropriate diabetes prevention and control resources and strategies in their communities since 1999. In fiscal year 2008 and 2009, CDC will continue to fund eight organizations to promote diabetes education strategies in minority communities.

ITEM

[Diabetes among Native American populations] -- The high incidence of diabetes among Native American, Native Alaskan, and Native Hawaiian populations persists. The Committee is pleased with the CDC's efforts to target these populations. It is important to incorporate traditional healing concepts and to develop partnerships with community health centers. The Committee encourages CDC to build on all its historical efforts in this regard. (Page 84)

ACTION TAKEN OR TO BE TAKEN

CDC seeks formal tribal consultation to guide efforts to identify and share traditional knowledge about health promotion and diabetes prevention through storytelling, art, talking circles, and community adaptations to assure healthy environments. The Program's four-story "Eagle Book Series" engage young children in a dialogue about traditional healing concepts, in the context of modern-day threats to health that include inadequate physical activity and nutrition. CDC collaborated with the National Institutes of Health and the Indian Health Service on "Diabetes Education in Tribal Schools," a K-12 curriculum project, to be released in 2009. The curriculum incorporates the "Eagle Books" in the K-4 lessons. The series will expand into "chapter books" to create stories for middle school age children in 2009. Additionally, the Program has awarded eight cooperative agreements to tribes and urban programs (FY 2005-2008) to complement health promotion and diabetes prevention with holistic traditional approaches that identify and adapt community environments. Community activities have included restoring traditional foods and activities with an emphasis on youth.

ITEM

Diabetic Kidney Disease -- The Committee strongly encourages the CDC to work closely with the National Institute of Diabetes, Digestive and Kidney Diseases to ensure that the biosamples and data from the Genetics of Kidneys in Diabetes collection are made available to the research community in a timely and efficient manner. (Page 84)

ACTION TAKEN OR TO BE TAKEN

CDC houses the GoKind samples, and to date has responded to all approved requests from researchers for samples from the collection. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) administers the special Type I Diabetes statutory funding, which funded the creation of the GoKind collection at CDC. However CDC, through its Human Subjects Coordinator and appropriate laboratory leadership, has approved a plan for sample distribution. Institutional Review Board (IRB) approval for GoKind is deferred to the Joslin Diabetes Center (JDC), a CDC collaborator, and the plan is currently undergoing ethical review at JDC.

ITEM

Eating Disorders -- The Committee is concerned about the increasing prevalence of eating disorders affecting 8 to 10 million Americans. Research suggests that for females between 15 and 24 years of age, the mortality rate associated with anorexia nervosa is 12 times higher than for all other causes of death. The Committee urges the CDC to implement data collection regarding the morbidity and mortality of anorexia nervosa, bulimia nervosa, and related eating disorders so that prevention and treatment strategies may be most effective. (Page 84)

ACTION TAKEN OR TO BE TAKEN

CDC is similarly concerned about the increase and consequences of eating disorders among the population, and understands that NIH and SAMHSA take a leadership role in the U.S. for researching the extent of the problem, its causes, and effective treatment strategies. CDC currently does not collect data about the prevalence of eating disorders; however, through several of CDC's ongoing data collection/surveillance systems (e.g., Youth Risk Behavioral Surveillance System (YRBSS), National Health and Nutrition Examination Survey (NHANES), and National Health Interview Survey (NHIS)) collect data periodically about unhealthy dieting and eating behaviors, such as fasting, taking diet pills, vomiting, and reducing caloric intake.

ITEM

[Food Allergy and Anaphylaxis Information Center] -- The Committee encourages CDC to create an information center on food allergy and anaphylaxis. Food allergy is the leading cause of anaphylaxis (a severe, potentially life-threatening allergic reaction) outside the hospital setting, virtually all of which can be prevented with proper education. The Committee encourages the CDC to create a Center that will provide guidance to the public and health care professionals about how to avoid products with allergy-causing ingredients and how to respond to potentially life-threatening reactions to food allergens. (Page 84)

ACTION TAKEN OR TO BE TAKEN

CDC uses the expertise and resources of the Food Allergy and Anaphylaxis Network (FAAN) to develop and provide information and materials to schools across the U.S. CDC worked with FAAN to incorporate guidance on food allergies into the Food-Safe Schools Action Guide currently available at www.foodsafeschools.org and into an upcoming guidance document providing schools with recommendations for addressing the needs of students with chronic health conditions, including food allergy and anaphylaxis.

CDC is working with the National School Boards Association (NSBA) to develop guidance on food-borne illness and food allergies to school boards and administrators. In 2007, CDC created a website which provides guidance for schools on food allergies at <http://www.cdc.gov/healthyyouth/foodallergies/index.htm>.

This website provides basic information on food allergy and links to data, publications, and federal agency and national non-governmental organization websites, including FAAN.

CDC supports exploring the creation of a Center to address guidance for the public on food allergens.

ITEM

[Vision screening education programs] -- In addition, the Committee is encouraged by the CDC's exploration of strategies to implement a national initiative to combat the effects of eye-related disorders, especially glaucoma. . . . the Committee has included an increase . . . for the expansion of vision screening and education programs and to evaluate the efficacy of glaucoma screening using mobile units. (Page 85)

ACTION TAKEN OR TO BE TAKEN

CDC provides funding to the Friends of the Congressional Glaucoma Foundation to screen for glaucoma, reduce the economic burden of the disease and to improve the quality of life of those who have or are at risk for glaucoma. In fiscal year 2007, CDC established a five-year grant with the Foundation for a screening program using mobile units.

ITEM

Gynecologic Cancer Education and Awareness Program -- The Committee is encouraged by the progress that has been made by CDC, in coordination with the Office of Women's Health at the Public Health Service, to initiate a national education campaign on Gynecologic Cancers. The Committee strongly urges the rapid completion of the evaluation of past and present activities to increase the awareness and knowledge regarding gynecologic cancers and the creation of a strategy for improving efforts to increase awareness and knowledge of the public and health care providers with respect to gynecological cancers. (Page 85)

ACTION TAKEN OR TO BE TAKEN

CDC, in coordination with HHS' Office of Women's Health, is developing a national campaign to increase awareness of gynecologic cancers by providing information about five gynecologic cancers: cervical, ovarian, vulvar, uterine, and vaginal. CDC has completed an analysis of existing gynecologic cancer educational materials and messages available to the public, to identify gaps in information and determine the need to develop specialized materials. CDC convened a panel of experts in March 2007 to provide recommendations for campaign messages and development strategies. CDC has developed consumer-oriented materials that include a campaign identity logo and a web site design, which are currently included under CDC's Cervical Cancer web site. The creation of a Gynecologic Cancers web site is nearing completion and is expected to launch in early 2008.

ITEM

Heart Disease and Stroke -- The Committee remains strongly supportive of CDC's new Division for Heart Disease and Stroke Prevention and has included \$4,431,000 over the fiscal year 2007 level to support and expand its work. Heart disease, stroke and other cardiovascular diseases continue to be the leading cause of death in every state; however, effective prevention efforts are not practiced universally. Additionally, the current surveillance systems in the United States cannot track our progress towards achieving our Healthy People 2010 goals to reduce the epidemic burden of heart disease and stroke. (Page 85)

ACTION TAKEN OR TO BE TAKEN

In fiscal year 2007, CDC increased the number of funded state Heart Disease and Stroke Prevention programs to 34. At the same time, the number of Paul Coverdell National Acute Stroke Registries increased from four to six. With the funding provided, CDC intends to fund additional states for Heart Disease and Stroke Prevention Programs. CDC also promotes cardiovascular disease prevention by publishing guides such as *Moving into Action: Promoting Heart-Healthy and Stroke-Free Communities* and by providing technical assistance to all states. Finally, though much work to improve surveillance remains, in early 2007 CDC reported for the first time state-specific data on the prevalence of both heart disease and stroke through CDC's Behavioral Risk Factor Surveillance System.

ITEM

[Coordination of Services to the Mississippi Delta] -- The Mississippi Delta Region experiences some of the Nation's highest rates of chronic diseases, such as diabetes, hypertension, obesity, heart disease, and stroke. The Committee recognizes CDC's expertise

in implementing research and programs to prevent the leading causes of death and disability. The Committee is aware that CDC has been conducting a background community assessment of health and related social and environmental conditions in the delta. The Committee has provided \$2,000,000 within the program, for CDC to continue and expand these activities (Requested by Senator Cochran). (Page 85)

ACTION TAKEN OR TO BE TAKEN

CDC is continuing its assessment of the health and health determinants of the communities of the Mississippi Delta. CDC created a repository of Delta-specific information and is continuing to conduct surveys in the region. Additionally, CDC is working with the Delta Health Alliance and other leaders within the Mississippi Delta and the Mississippi Department of Health to develop a comprehensive strategic plan to help reduce the high rates of chronic disease in the region.

ITEM

Lupus -- The Committee recognizes that lupus is a serious, complex, debilitating chronic autoimmune disease that can cause inflammation and tissue damage to virtually any organ system in the body and impacts between 1.5 and 2 million individuals. The Committee is concerned by the lack of reliable epidemiological data on the incidence and prevalence of all forms of lupus among various ethnic and racial groups. The Committee has included \$500,000 over the fiscal year 2007 operating plan level to continue and expand CDC's lupus-related activities. (Page 85-86)

ACTION TAKEN OR TO BE TAKEN

CDC currently funds two Lupus registries in Georgia and Michigan that are in the process of collecting epidemiological data for whites and blacks. With the additional funds provided by the committee to continue and expand CDC's lupus-related activities, CDC intends to expand the work of the registries with the goal of collecting data for other ethnic and racial groups (e.g., Hispanics, Asians, and American Indians). Fiscal year 2008 work will be dedicated to scientific planning and preparation, and an additional registry will be added beginning in fiscal year 2009, to coordinate funding cycles with all three registries.

ITEM

[5 A Day program] -- Given the large, preventable health and economic burden of poor nutrition, physical inactivity, and unhealthy body weight, the Committee encourages CDC to continue its leadership role in developing, implementing, and evaluating nutrition and physical activity population-based strategies to prevent and control overweight and obesity. Targeting prevention efforts throughout the lifespan--including children as young as toddlers--as well as promoting fruit and vegetable consumption through CDC's Federal lead role in the national 5 A Day program, and increasing the proportion of children, adolescents, and adults who meet daily physical activity recommendations should remain priorities for the agency. The Committee has provided \$1,000,000 above the fiscal year 2007 level to sustain and expand CDC's support of the 5 A Day Program. (Page 86)

ACTION TAKEN OR TO BE TAKEN

CDC is continuing to implement and evaluate nutrition and physical activity population-based strategies to prevent and control overweight and obesity. CDC is leading the National Fruit and Vegetable Alliance (formerly 5 A Day) and its efforts to increase daily physical activity in the US. CDC, as the federal lead for the National Fruit and Vegetable Alliance, is in the process of signing a new memorandum of understanding with NIH and USDA related to fruit and vegetable

activities and is currently licensing all states and territories to use the new brand that has replaced 5 A Day: Fruits & Veggies – More Matters®

ITEM

[Obesity among Native Hawaiians] -- The Committee continues to be concerned with the prevalence of obesity among Native Hawaiians. The Committee urges the CDC to use culturally-sensitive methods to promote diet, exercise, and healthy behaviors in children, adolescents, and adults, particularly among Native Hawaiians. (Page 86-87)

ACTION TAKEN OR TO BE TAKEN

CDC supports the efforts of 28 state health programs in these areas. Currently, Hawaii is not one of the funded states; however a new opportunity to apply for funding will be available in fiscal year 2008. Although all states are not currently funded, CDC provides all states technical assistance and training related to nutrition, physical activity, and weight control. Further, CDC is also developing an agenda for addressing health disparities in physical activity, nutrition, and obesity prevention and control.

ITEM

Oral Health -- The Committee recognizes that to effectively reduce disparities in oral disease will require improvements at the State and local levels. The Committee has provided sufficient funding to States to maintain their capacities to assess the prevalence of oral diseases, to target interventions, such as additional water fluoridation and school-linked sealant programs, and resources to the underserved, and to evaluate changes in policies, programs, and disease burden. (Page 87)

ACTION TAKEN OR TO BE TAKEN

CDC is working with twelve states and one territory to build capacity for effective oral health prevention programs and to reduce disparities among disadvantaged populations. This effort includes working with states to develop school-based or school-linked programs to reach children at high risk of oral disease with proven prevention services, such as dental sealants. CDC also works with states to expand the fluoridation of community water systems and operates a fluoridation training and quality assurance program. In addition, CDC will expand its efforts to assess the extent of oral diseases, target prevention programs and resources to those at greatest risk, fund prevention research, and evaluate changes in policies and programs to reduce disparities. CDC will continue to develop methods to identify and reach adults at greatest risk of oral diseases associated with other chronic diseases (e.g., diabetes and heart disease) and their risk factors.

ITEM

[Health burden from oral cancers] -- The Committee encourages the CDC to advance efforts to reduce the disparities and health burden from oral cancers that are closely linked to chronic diseases such as diabetes and heart disease. (Page 87)

ACTION TAKEN OR TO BE TAKEN

CDC works with 12 funded states intensively, and with all states, to reduce oral diseases and conditions and to reduce disparities among disadvantaged populations. CDC will continue to develop methods to identify and reach adults at greatest risk of oral diseases associated with other chronic diseases (e.g., diabetes and heart disease) and their risk factors.

ITEM

Public Health Genomics -- The coming era of personalized medicine has broad applicability for the field of public health. The Committee urges CDC to conduct and sponsor public health genomics research and develop appropriate programs to identify people at risk for disease and early death. CDC is further urged to use genomic information to provide targeted and personalized interventions that will prevent disease, disability, and death, and may ultimately save public resources. (Page 87)

ACTION TAKEN OR TO BE TAKEN

CDC is investing in ways to enable genomic information to be used to improve the health of all Americans, including accelerating translation research and surveillance activities to advance knowledge about the validity, utility, utilization and population health impact of genetic tests and family history for improving health and preventing disease; developing a sustainable process for assessing the clinical usefulness of genetic tests for practice and prevention; assessing human genetic variation in the United States using NHANES; integrating genomics into public health investigations; and assessing and building laboratory, epidemiology, and programmatic capacity to support the application of genomics in public health.

ITEM

REACH Initiative -- The Committee recognizes the strengths that national/multi-geographical minority organizations may be able to provide to the REACH Initiative. Such organizations could have the capacity to influence communities through pre-existing coalitions and collaborative relationships. Such organizations may also be able to provide key support to local organizations that may lack the infrastructure needed to fully implement the programmatic activities required for this important program. The Committee urges CDC to include such organizations among the entities that are eligible to compete for funding without preventing other applicants from receiving these grants. (Page 88)

ACTION TAKEN OR TO BE TAKEN

CDC has established a comprehensive national program that supports a coordinated, systematic approach to sharing best practices in the reduction and elimination of racial and ethnic health disparities. In fiscal year 2007, REACH U.S. began to include two tiers of interlinked funding: Centers of Excellence in the Elimination of Health Disparities (CEED) and Action Communities. The 18 CEEDs will serve as regional/national resource centers that provide an infrastructure to disseminate programmatic activities in one of five racial and ethnic populations: African American, Hispanic/Latino, Asian American, Hawaiian/Pacific Islander and American Indian/Alaska Native. The 22 Action Communities will implement and evaluate successful evidence-based approaches within a specific community. CEEDs and Action Communities will address the key health areas of breast and cervical cancer, cardiovascular disease, diabetes, infant mortality, adult/older adult immunizations, hepatitis B, and asthma. In addition, each CEED will train, mentor, and provide start-up funds for at least two "legacy" communities each year for at least three years, to spread and expand the national impact of successful strategies for reducing health disparities.

ITEM

Preterm Birth -- Preterm birth is a serious and growing public health problem that occurs in 12.5 percent of all births in the United States. The Committee encourages the CDC to conduct additional epidemiological studies on preterm birth, including the relationship between prematurity, birth defects and developmental disabilities. The Committee also encourages the establishment of systems for the collection of maternal-infant clinical and biomedical information

to link with the Pregnancy Risk Assessment Monitoring System [PRAMS] and other epidemiological studies of prematurity in order to track pregnancy outcomes and prevent preterm birth. (Page 88)

ACTION TAKEN OR TO BE TAKEN

Preterm birth is the leading cause of infant death and severe neurological disability, including cerebral palsy and mental retardation. A recent CDC publication demonstrated that preterm birth is the most frequent cause of infant mortality, accounting for 34 percent of all infant deaths. Available evidence shows that no interventions are universally effective in preventing preterm birth and current interventions are applicable to only a small percentage of high-risk women. CDC is conducting research to understand the reasons for preterm birth. This research focuses on the public health goals of identifying biological and social risk factors for preterm birth, discovering what causes labor to occur, developing ways to detect women who will deliver preterm, and designing interventions based on risks and targeting interventions to those most susceptible to the risk. CDC's Pregnancy Risk Assessment Monitoring System currently uses data to determine which women delivered at term and before term and characterizes the births by access to care, race, age, and other general guidelines.

ITEM

Steps to a Healthier United States -- The Committee applauds the Department's continued commitment to tackling the problems of obesity, diabetes, and asthma. The Committee agrees that these are three of the most critical chronic conditions afflicting Americans. The Committee is concerned that existing programs that address these problems have not yet been implemented in all of the States. The Committee has provided the President's request level to continue this initiative and existing programs within CDC that are aimed at obesity, diabetes, and asthma. The Committee strongly urges CDC to coordinate the efforts of these programs such that the best possible outcome is achieved using these limited funds. (Page 88)

ACTION TAKEN OR TO BE TAKEN

In fiscal year 2007, CDC assessed program experiences, successes, and lessons learned from the first Steps communities in order to inform future direction. Using the results from the original 40 communities, and input from national and community leaders, CDC is working to transform the program to maximize its impact and achieve a national reach. The next generation of the Steps program will address the demand for community guidance, training, and support from CDC. Lessons learned from CDC's initial investment in the Steps communities will be applied in communities across the nation through the development and dissemination of tools, resources, and training to a wide range of community leaders and public health professionals. The tools and training will equip communities to effectively confront the growing national crises of diabetes, asthma, physical activity, nutrition, tobacco use and other chronic diseases.

The Steps program is changing the grant structure in the second phase. Communities will receive funding to spark local-level action, establish and sustain state-of-the-art programs, test new models of intervention, create models for replication, and help train and mentor additional communities. The 13 Steps programs ending their five year funding cycle in fiscal year 2008 will not be continued.

ITEM

Centers for Birth Defects Research and Prevention -- The Committee encourages CDC to consider expanding the promising research being conducted by the regional Centers for Birth Defects Research and Prevention and maintain assistance to States to implement and expand

community-based birth defects tracking systems, programs to prevent birth defects, and activities to improve access to health services for children with birth defects. (Page 89)

ACTION TAKEN OR TO BE TAKEN

Because approximately two thirds of the causes of birth defects remain unknown, CDC continues to work closely with its grantees and funded partners to establish priorities for birth defects surveillance, research, and prevention and to advance efforts in these areas. The CDC-funded Centers for Birth Defects Research and Prevention rely on pooled data from state tracking programs to conduct the largest study of the causes of birth defects ever conducted, the National Birth Defects Prevention Study. Recently, the decade-long investment in this collaborative research effort has yielded a significant return on investment with the publication of several important findings on medication use, smoking, and obesity, among others, and their relationship to birth defects. Additional findings are being prepared for publication, and collaborators continue to collect and analyze data in an effort to find to find additional causes of birth defects.

In the next funding cycle in the spring of 2008, CDC expects to fund six of the eight Centers for Birth Defects Research and Prevention.

CDC shares the concern of the Committee about the one out of 33 babies born with birth defects and in improving access to health services for these children. Three sites in the National Birth Defects Prevention Study have developed a model follow-up study of children with certain defects, and have conducted an assessment of outcomes including quality of life and family satisfaction with care.

ITEM

Birth Defects Research, Surveillance and Prevention -- The Committee understands that birth defects are a leading cause of infant mortality and about 120,000 babies are born each year with a birth defect. Both genetic and environmental factors can cause a birth defect, however the causes of 70 percent of birth defects are unknown. The Committee supports CDC's efforts in the area of birth defects surveillance, research and prevention and encourages CDC to continue the promising research being conducted by the regional centers for birth defects research and prevention. The Committee has included sufficient funding to maintain the current level for states to continue birth defects surveillance systems, programs to prevent birth defects and activities to improve access to health services for children with birth. The Committee encourages the CDC to expand the birth defects studied in the National Birth Defects Prevention Study to include single gene disorders [SGD], like Fragile X. Although these disorders are rare individually, when grouped together they affect approximately 1 in 300 births. (Page 89)

ACTION TAKEN OR TO BE TAKEN

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ITEM

Down Syndrome -- The Committee commends the CDC for initiating a study to document the onset and course of secondary and related developmental and mental disorders in individuals with Down syndrome. The Committee encourages further research relating to these areas of dual diagnosis. (Page 90)

ACTION TAKEN OR TO BE TAKEN

CDC has continued with its studies of secondary and related developmental and mental disorders among individuals with Down syndrome. To date, little is known about the interaction between Down syndrome and autism spectrum disorders. Obtaining reliable estimates of how often Down syndrome and autism co-occur have been compromised in previous work by the unique challenges posed by screening children with Down syndrome for autism spectrum disorder symptoms. To this end, CDC is conducting two epidemiologic studies that examine the co-occurrence of these disorders and will also provide insight into appropriate diagnostic tools for use in clinical settings. This information is critical for better understanding of the unique behavioral features of both Down syndrome and autism and for guidance on appropriate services, interventions and support for families of affected children. The investigators plan to collaborate on publications concerning behavioral assessment and intervention strategies for Down syndrome in clinical and educational settings. In addition, CDC is conducting an analysis of National Health Interview Survey data which will provide national level data that may further our understanding of the range of health and health care issues faced by children with Down syndrome. In combination, these research activities will result in the development and testing of effective prevention and intervention strategies.

CDC also has organized a meeting "Setting a Public Health Research Agenda for Down Syndrome" to be held in November 2007. This meeting brought together more than 70 experts with the goal of identifying the most important areas for future public health research on Down syndrome. A report from this meeting outlining priority areas for Down syndrome public health research is currently under development. Publication of the report is expected in late 2008.

ITEM

Hereditary Hemorrhagic Telangiectasia -- The Committee is aware of interest in the establishment of a Hereditary Hemorrhagic Telangiectasia [HHT] National Resource Center. The Committee encourages the CDC to examine carefully proposals to establish such a center. (Page 91)

ACTION TAKEN OR TO BE TAKEN

During the 2007 calendar year CDC met with the Hereditary Hemorrhagic Telangiectasia Foundation International, Inc to follow up on previously identified opportunities for collaboration. CDC provided both technical assistance and seed funding to support the development and implementation of a comprehensive agenda for the "HHT Health Initiatives for the 21st Century" conference to improve knowledge of this condition as well as evidence-based interventions and treatment. The conference will take place in March, 2008 due to a scheduling conflict.

ITEM

Eating Disorders -- The Committee is concerned about the growing incidence and health consequences of eating disorders among the population. The extent of the problem, while estimated by several long-term outcome studies as being high, remains unknown. The Committee urges the CDC to research the incidence and morbidity and mortality rates of eating disorders, including anorexia nervosa, bulimia nervosa, binge eating disorder, and eating disorders not otherwise specified across age, race, and sex. (Page 93)

Action taken or to be taken

Data from a variety of CDC surveys and data collection systems can contribute to our understanding of eating behaviors and disorders. Coding systems for both mortality and morbidity data include categories for various eating disorders. National mortality data, including causes of death, are produced from death certificates and included in the National Vital Statistics System. Health care data, including morbidity associated with eating disorders, are obtained from national surveys of providers and provide information on patients, diagnoses, and treatments in various settings. Given the Committee's interest in eating disorders, CDC's National Center for Health Statistics will prepare informational materials describing in more complete detail the data that it collects about eating disorders and what these data show.

ITEM

Food Allergy -- Life-threatening food allergies severely impair the quality of life for allergic children and their parents, and the incidence of food allergies seems to be increasing. For that reason, the Committee encourages the CDC to include food allergy in its National Health Interview Survey, or a comparable annual tracking mechanism. (Page 93)

ACTION TAKEN OR TO BE TAKEN

CDC continues to obtain and disseminate information on food allergies through the National Health Interview Survey (NHIS). The NHIS has asked about food or digestive allergies since 1997. Responses to this question provide a national estimate of food allergy prevalence among children. CDC's National Center for Health Statistics features the prevalence of food allergy on its interactive data warehouse site "Health Data for All Ages". This data warehouse tracks the prevalence of food allergy among children according to age, race/ethnicity, gender, urban/rural area, and year, using the NHIS data (http://www.cdc.gov/nchs/health_data_for_all_ages.htm). CDC will continue to collect data on food allergy through future administration of the NHIS, and additional prevalence data on food allergy are being collected as part of the 2007-2008 National Health and Nutrition Examination Survey.

ITEM

Genomics -- With the success and continual improvement of genomic technologies, the Committee encourages CDC to consider expanding NHANES to include the genotyping of participants (with appropriate consideration for consent and privacy) and assessing the genomic impact on public health, along with nutrition and environmental factors. (Page 93)

ACTION TAKEN OR TO BE TAKEN

CDC and the CDC Foundation are launching the Beyond Genome Discovery initiative to test previously collected DNA samples from the National Health and Nutrition Examination Survey (NHANES) using a large scale genotyping platform. This will provide genetic variation data that can be associated with demographic and health data available from this representative sample of the U.S. population. These data will be provided to the research community in a manner that is consistent with the consent and confidentiality agreement under which the samples were

collected. Improved access systems that protect respondents' confidentiality will need to be developed to maximize the use of these data. DNA samples are being collected from current and future participants in the NHANES survey who provide consent.

ITEM

Nontuberculous Mycobacteria -- The Committee is concerned that nontuberculous mycobacteria [NTM] incidence continues to rise. Mycobacteria are environmental organisms found in both water and soil that cause significant respiratory damage. The Committee continues to encourage NCHS to include questions regarding NTM testing in ongoing surveys to enhance understanding of the epidemiology of this emergent disease. (Page 93)

ACTION TAKEN OR TO BE TAKEN

Testing for nontuberculous mycobacteria (NTM) is not part of standard clinical practice, so individuals are unlikely to be aware of possible exposure to NTM. As part of CDC's National Health and Nutrition Examination Survey, however, skin tests for NTM were conducted in the early 1970s, 1999 and 2000. The resulting data, which reveal possible exposure to antigens but cannot be used to determine whether a person is ill due to a particular disease, were released on public use files for analysis by interested researchers.

ITEM

Psoriasis -- As many as 7.5 million Americans are affected by psoriasis and/or psoriatic arthritis--chronic, inflammatory, painful and disfiguring diseases for which there are limited treatment options and no cure. The Committee understands that there are few efforts to collect epidemiologic and other related data on individuals with psoriasis and psoriatic arthritis, and as such, researchers and clinicians are limited in their longitudinal understanding of the disease and its effects. As such, the Committee strongly encourages the NCHS to add psoriasis and psoriatic arthritis specific components to the 2009-2010 National Health and Nutrition Examination Survey [NHANES]. Further, the Committee is concerned by reports that there is a dearth of scientists conducting epidemiologic research in dermatology. As such, the Committee encourages the NCHS to work with others within CDC and NIAMS in developing programs to encourage dermatologists to work in the field of epidemiology. (Page 93)

ACTION TAKEN OR TO BE TAKEN

The National Health and Nutrition Examination Survey (NHANES) collected data on psoriasis from 2003- 2006. The data were collected in collaboration with NIH. Three questions about psoriasis, developed with input from the National Psoriasis Foundation, were asked of survey participants ages 20 to 59. These data provide estimates of psoriasis and severity for the U.S. population ages 20 to 59. Discussions are underway with representatives of the National Psoriasis Foundation regarding the possibility of collecting psoriasis and psoriatic arthritis data in NHANES 2009-2010 or future years.

ITEM

Vital Statistics -- The Committee values the National Center for Health Statistics and its critical role in monitoring our Nation's health. The Committee has included sufficient funding to ensure that NCHS collects a full years worth of data on births, deaths, and other vital information under the agreed upon terms of the Vital Statistics Cooperative Program. In addition, CDC should consider ways to encourage local jurisdictions to implement electronic systems that will improve the timeliness, quality, and security of birth and death data. (Page 93)

ACTION TAKEN OR TO BE TAKEN

Vital statistics are an essential component of our national health information system, allowing us to monitor critical health indicators. The National Center for Health Statistics (NCHS) remains committed to working with its state partners to continue a complete census of births and deaths based on the collection and registration of these events at the state and local levels. Moving the states away from outdated systems to web-based systems and re-engineering internal NCHS vital statistics processing systems remain priorities that are essential to NCHS' ongoing efforts to improve the timeliness, quality, and security of vital statistics data.

ITEM

Asthma -- The Committee is pleased with the work that the CDC has done to address the increasing prevalence of asthma. However, the increase in asthma among children remains alarming. The Committee encourages CDC to continue to expand its outreach aimed at increasing public awareness of asthma control and prevention strategies, particularly among at-risk populations in underserved communities. In addition, the Committee is deeply concerned with the high incidence of asthma among Hawaiian children, and the high prevalence of asthma among Native Hawaiians compared to other adults, including those who are similarly located. The Committee is pleased with the efforts that the CDC has taken to monitor lung function and other asthma interventions among this and other disparately affected populations and encourages the CDC to continue this important research. (Page 95)

ACTION TAKEN OR TO BE TAKEN

CDC's asthma control program continues to expand its outreach aimed at increasing public awareness of asthma control and prevention strategies, particularly among at-risk populations in underserved communities. In FY 2008, through its National Asthma Health Education Enhancement effort, CDC funds voluntary health organizations, such as the Allergy and Asthma Network/Mothers of Asthmatics, American Lung Association, and Asthma and Allergy Foundation of America to conduct activities related to asthma education. These activities range from educating children with asthma, their families and caregivers in a variety of settings, to identifying effective educational programs for adults with asthma that can be adapted for nationwide use.

ITEM

Laboratory Measurement of Trans Fat -- The Committee is aware that experimental evidence shows an increasing risk of heart disease associated with trans fat intake, and that many State and local governments are proposing bans in restaurants and schools. The Committee encourages the CDC to explore the development of a surveillance system to monitor trans fat levels and other important fatty acids, such as omega-3 fatty acids, in humans. (Page 96)

ACTION TAKEN OR TO BE TAKEN

CDC's Environmental Health Laboratory is currently working on the development and validation of analytical methods that measure trans fats and omega-3 and omega -6 fatty acids to include information about their concentrations in future releases of CDC's Nutrition Report. CDC plans to begin to measure these compounds in 2008.

ITEM

Nontuberculous Mycobacteria Prevention -- Mycobacteria are environmental organisms found in both water and soil that can cause significant respiratory damage. The Committee is aware of the increasing incidence of nontuberculous mycobacteria [NTM] pulmonary infections and encourages the CDC to study the environmental issues related to NTM transmission and infection via water and soil, as well as to implement a public health education and outreach

initiative to promote NTM education for health care providers and the general public. Further the Committee encourages that CDC develop specific epidemiology studies regarding prevalence, geographic, demographic and host specific data regarding NTM infection in the population. (Page 96)

ACTION TAKEN OR TO BE TAKEN

CDC is a national reference for local and state public health labs and private medical labs for diagnosis of all mycobacteria including TB and nontuberculous mycobacteria (NTM). CDC does not conduct clinical trials on NTM; this function is carried out by the National Institutes of Health (NIH), with CDC maintaining close communication with NIH regarding these studies. In response to concern about disease caused by NTM, CDC has convened one (and is planning a second) expert consultation with other federal agencies and non-federal external partners from academic medical institutions and public health agencies. The purpose of these consultations is to develop an action plan for CDC to evaluate prevalence, risk factors, comorbidities, and costs for conducting surveillance for NTM.

ITEM

Volcanic Emissions -- The Committee remains concerned about the public health issue of volcanic emissions. Such emissions contribute to the exacerbation of a myriad of pre-existing health conditions in many island residents, especially children. The acute- and long-term impact that these emissions have on both the healthy and pre-disposed residents warrants further study. The Committee has included \$17,000 over the fiscal year 2007 level for research into the health effects of volcanic emissions and encourages the CDC to explore the establishment of a dedicated center that embraces a multi-disciplinary approach in studying the short- and long-term health effects of the volcanic emissions. (Page 96)

ACTION TAKEN OR TO BE TAKEN

CDC continues to fund the Hawaii State Department of Health (HDOH) to address the public health issue related to volcanic emissions. CDC is funding the HDOH to conduct a research study to monitor the air quality in Hawaii communities during periods of high SO₂ emissions and explore the effects of volcanic air pollution ("vog") on cardiopulmonary health. Community researchers will work with Hawaii Department of Health staff, volcanologists, and environmental health scientists to test the feasibility of measuring airway function, inflammation, and autonomic heart rate variability in communities affected by these releases. In addition, they will continue to build capacity to address environmental research questions related to vog, monitor concentrations of particulate matter, acid aerosols, and SO₂ in these communities, and plan future investigation of these health effects in at-risk residents in the affected communities.

ITEM

Child Maltreatment -- The Committee recognizes that child maltreatment is a serious public health threat with extensive short-and long-term health consequences. New avenues to support child maltreatment prevention would allow CDC to further the identification, enhancement, and dissemination of evidence-based child maltreatment prevention programs, such as positive parenting programs and home visitation programs. (Page 97)

ACTION TAKEN OR TO BE TAKEN

Developing effective prevention programs is essential to stop abuse and neglect before either occurs. CDC works to develop, evaluate, and disseminate evidence-based interventions that support and promote safe, stable, and nurturing relationships to encourage positive parenting and to prevent child maltreatment.

ITEM

Falls Prevention -- The Committee is pleased that the CDC has initiated a falls prevention and safety program to teach older Americans how to prevent falls. The Committee encourages the CDC to engage in an awareness campaign to train health care professionals on the prevention of falls. (Page 97)

ACTION TAKEN OR TO BE TAKEN

CDC seeks to increase older adults' knowledge and understanding of ways to prevent falls through the promotion and distribution of educational materials. CDC, in partnership with the MetLife Foundation and the CDC Foundation, released new multi-lingual fall prevention educational materials for use by older adults, their friends, family members, and health care providers. More than 280,000 copies of "What You Can Do to Prevent Falls," 300,000 copies of "Check for Safety: A Home Fall Prevention Checklist for Older Adults," and 12,000 sets of posters have been distributed to date. CDC also is partnering with the Administration on Aging to support the Falls Free Coalition, members of which include health care professionals and other older adult caregivers who will be continuing or developing older adult falls awareness campaigns.

ITEM

Injury Control Research Centers -- The Committee recognizes the need for an Injury Control Research Center specializing in children and adolescents. Injury is the leading cause of death and disability among children and teenagers in the United States. Currently, no existing Centers focus exclusively on childhood and adolescent injuries. Therefore, if new Centers are to be added to the program, the Committee encourages CDC to give preference to applicants with proven experience in children and adolescent injury control and prevention research. (Page 97)

ACTION TAKEN OR TO BE TAKEN

CDC will continue to support 13 Injury Control Research Centers (ICRCs) in FY 2009 with anticipated funding levels in the FY 2009 President's Budget. However, while no ICRC focuses solely on childhood and adolescent injuries, most are engaged in research projects addressing children and teenage youth, including youth DUI, anger in college drivers, pedestrian injuries, prevention of traumatic brain injury and spinal cord injury in youth, fetal injuries in motor vehicle crashes, window falls, child rear seat airbag injuries, urban youth violence, child home injuries, and school emergency preparedness. CDC agrees that childhood and adolescent injuries should continue to be an important component of the ICRC program.

ITEM

National Violent Death Reporting System -- The Committee is supportive of the National Violent Death Reporting System, which is a State-based system that collects data from medical examiners, coroners, police, crime labs, and death certificates to understand the circumstances surrounding violent deaths. The information can be used to develop, inform, and evaluate violence prevention programs. The Committee continues to urge the CDC to work with private health and education agencies as well as State agencies in the development and implementation of an injury reporting system. (Page 97)

ACTION TAKEN OR TO BE TAKEN

Established by CDC in Fiscal Year 2002, the National Violent Death Reporting System (NVDRS) allows states and communities to develop a system to collect timely, complete and accurate information about violent deaths through the linkages of information from law enforcement agencies, medical examiners and coroners, health providers, crime laboratories

and other agencies. As of October 2007, CDC continues to fund 17 states to implement NVDRS. CDC continues to work with state health departments, academic institutions, health care providers, national organizations, health care providers, national organizations, and others regarding the system's development and implementation.

ITEM

Suicide Prevention -- The Committee encourages CDC to consider supporting the evaluation of suicide prevention planning, programs, and communication efforts to change knowledge and attitudes and to reduce suicide and suicidal behavior. These evaluation efforts would support communities to identify promising and effective suicide prevention strategies that follow the public health model and build community resilience. (Page 97)

ACTION TAKEN OR TO BE TAKEN

CDC seeks to lessen the burden of suicide and suicidal behavior by developing and promoting the widespread adoption of policies and practices that effectively prevent suicide and suicidal behaviors. CDC promotes individual, family, and community resilience and connectedness to prevent suicidal behavior through data collection and monitoring; research and evaluation to determine effective strategies to prevent suicide and suicidal behavior; and dissemination for effective strategies to communities. CDC is uniquely positioned to address the need for effective, population-based prevention and intervention strategies through the public health model.

ITEM

Violence Against Women - The Committee urges CDC to increase research on the psychological sequelae of violence against women and expand research on special populations and their risk for violence including adolescents, older women, ethnic minorities, women with disabilities, and other affected populations. (Page 97)

ACTION TAKEN OR TO BE TAKEN

CDC conducts both intramural and extramural research to address the psychological consequences of violence against women. For example, CDC funded Emory University to evaluate a randomized controlled trial on suicidal ideation in abused women. CDC is also supporting four sites to conduct efficacy and effectiveness trials of interventions to prevent intimate partner violence and/or its negative consequences for at-risk or underserved populations.

ITEM

Youth Violence -- The Committee has included an increase of \$1,982,000 for CDC's youth violence prevention activities. The Committee notes that the increasing level of youth violence in schools and in cities around the Nation is troubling and urges the CDC to expand efforts to reduce it. (Page 97)

ACTION TAKEN OR TO BE TAKEN

CDC supports programs and research to ensure the development, evaluation, and dissemination of evidence-based interventions that create communities in which youth are safe from violence, because of the significant burden of youth violence in the United States. For example, CDC funds ten Academic Centers of Excellence on Youth Violence to foster joint efforts between university researchers and communities to address the problem of youth violence. Two of these Centers have a particular focus on better understanding and preventing youth violence in urban areas.

ITEM

Farm Health and Safety initiative -- The Committee has included funding to continue the farm health and safety initiative .The Committee encourages NIOSH to give priority to grants to States and private organizations with a focus on disseminating and translating research for occupational safety and health. (Page 98)

ACTION TAKEN OR TO BE TAKEN

NIOSH continues to address farm health and safety issues nationwide through active cooperative agreements with six Centers for Agricultural Research, Education, and Disease/Injury Prevention and one National Center for the Prevention of Childhood Agricultural Injury Independent of the Agriculture Centers. NIOSH also funds extramural research grants focused on outreach and education and injury and risk prevention/intervention for farmers, farm families, children and youth living on farms, and on young migrant/seasonal farm workers. NIOSH scientists continue to focus intramural research efforts on surveillance, risk-reducing interventions, and the health and safety aspects of various issues related to farming. Strategic planning is provided by the National Occupational Research Agenda (NORA) Agriculture, Forestry and Fishing Sector Council. This Council is currently developing guidance for addressing research priorities and partnership needs for the next ten years. The Sector Council's strategic plan will be posted on the web for public comment in FY 2008.

ITEM

[Collaboration on the use of communication devices] -- The Committee is strongly supportive of the memorandum of understanding NIOSH has worked out with the U.S. Army surrounding communication devices and is eager to see NIOSH expand on this model of collaboration with other Agencies and industries. In particular, the Committee encourages NIOSH to investigate establishing an innovation challenge award similar to those given out by NASA and the Department of Defense to leverage private resources to tackle difficult technological problems. (Page 98-99)

ACTION TAKEN OR TO BE TAKEN

NIOSH has developed draft Interagency Agreements with the Naval Research Laboratory and the Army Corps of Engineers to investigate issues associated with explosions in confined spaces and the analysis of mine seal performance. These agreements are currently under review in the respective agencies. The Institute is also exploring other collaborative agreements. For example, NIOSH is scheduled to meet with Sandia National Laboratory to finalize a scope of work in two areas: emergency wireless communications systems and a high speed drill for mine rescue application. NIOSH sees significant value in these interagency collaborations and the associated funding arrangements, and plans to expand the number of such arrangements.

NIOSH is exploring innovation challenging awards and other programs used by the Small Business Administration, NASA, and others, to determine how they might be used to improve mine safety.

ITEM

Miners' Choice Health Screening Program -- The Committee has provided an increase of \$300,000 to further implement the Miners' Choice Health Screening Program in fiscal year 2008. . .This program was initiated to encourage all miners to obtain free and confidential chest x-rays to obtain more data on the prevalence of Coal Workers' Pneumoconiosis in support of development of new respirable coal dust rules. The Committee is strongly supportive of these

efforts and urges NIOSH to work to improve this health screening program, thereby helping to protect the health and safety of our Nation's miners. (Page 99)

ACTION TAKEN OR TO BE TAKEN

NIOSH works with its partners in government, labor, and industry, as well as non-governmental organizations, to enhance the mandated level of health surveillance offered to coal miners. From November 2006 to September 2007, NIOSH professional staff, using a newly equipped mobile examination van, provided confidential health examinations to more than 1,700 underground coal miners. The van was stationed at multiple coal field locations in Alabama, Illinois, Kentucky, Pennsylvania, Utah, Virginia, and West Virginia, as well as other sites convenient for miners, such as mine rescue competitions. In many cases, health surveillance was targeted to areas with low participation rates in mandated surveillance programs and/or high rates of advanced and progressive pneumoconiosis. The examinations included both radiographic and spirometric testing. With a few exceptions from the most recent surveys, each examined miner has been provided with a written report of his or her individual test results. Notable findings from these surveys have been reported in the CDC's Mortality and Morbidity Weekly Report (MMWR), and summaries have been disseminated on the NIOSH web site and at appropriate meetings. A continuing series of health surveys is planned for fiscal year 2008. Various analyses are in progress to examine factors that might be impacting disease levels and miner participation in the program.

ITEM

National Occupational Research Agenda -- NIOSH provides national and international leadership to prevent work-related illness, injury, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. The Committee is pleased with the progress NIOSH has made in consulting with partners and stakeholders across the country to examine and update the National Occupational Research Agenda for the coming decade. The Committee expects that this updated agenda will provide an important blueprint for conducting occupational research and examining the impact of stressful workplaces on psychological functioning. (Page 99)

ACTION TAKEN OR TO BE TAKEN

The National Occupational Research Agenda (NORA) continues to expand its outreach to partners and stakeholders in order to provide an agenda that addresses the high priority needs of workers in all industrial sectors. NORA Sector Councils, consisting of researchers and practitioners from NIOSH, other government agencies, unions, corporations, professional associations and others, are drafting strategic plans for conducting occupational safety and health research and improving workplace practice. In developing these strategic plans, examining the impact of stress and psychological functioning have been raised as priority areas by multiple sectors. NIOSH will continue to work with its partners to develop strategic plans that address the most critical issues in workplace safety and health. These strategic plans will be placed on the web for public comment in FY 2008.

ITEM

[Expansion of National Occupational Research Agenda] -- The Committee continues to strongly support NORA and encourages expansion of its research program to cover additional causes of workplace health and safety problems. (Page 99)

ACTION TAKEN OR TO BE TAKEN

National Occupational Research Agenda (NORA) is a stakeholder-driven agenda for high priority research in occupational safety and health. The sector-based structure of the second decade of the NORA facilitates the identification of new workplace safety and health challenges. As the NORA Sector Councils develop their strategic plans, a number of additional areas have been highlighted as priorities, such as: pesticide exposure, organizational culture, cardiovascular disease, and addressing the initial design of facilities, equipment and work processes to more effectively protect worker safety and health. NORA will serve as the occupational safety and health research framework for NIOSH and the nation.

ITEM

Volcanic Emissions -- The Committee strongly urges NIOSH to continue to study the impact of potentially toxic volcanic emissions. In particular, preexisting respiratory conditions such as asthma, chronic bronchitis, and emphysema seem to be particularly susceptible to the effects of sulfur dioxide. The acute and long-term impact that these emissions have on both the healthy and pre-disposed residents warrants further study. The Committee strongly advises a multi-disciplinary approach in studying the short-and long-term health effects of the volcanic emissions. (Page 99-100)

ACTION TAKEN OR TO BE TAKEN

NIOSH does not have any activities related to volcanic emissions. However, CDC's National Center for Environmental Health continues to fund the Hawaii State Department of Health (HDOH) to address the public health issue related to volcanic emissions. CDC is funding the HDOH to conduct a research study to monitor the air quality in Hawaii communities during periods of high SO₂ emissions and explore the effects of volcanic air pollution ("vog") on cardiopulmonary health. Community researchers will work with Hawaii Department of Health staff, volcanologists, and environmental health scientists to test the feasibility of measuring airway function, inflammation, and autonomic heart rate variability in communities affected by these releases. In addition, they will continue to build capacity to address environmental research questions related to vog, monitor concentrations of particulate matter, acid aerosols, and SO₂ in these communities, and plan future investigation of these health effects in at-risk residents in the affected communities.

ITEM

Global Malaria -- The Committee recognizes that malaria is a global emergency affecting mostly poor women and children. While malaria is treatable and preventable, it remains one of the leading causes of death and disease worldwide. The Committee appreciates the integral and unique role that the CDC Malaria Program plays in national and global efforts. Insecticide resistance and drug resistance have the potential to compromise global malaria efforts and point to the need for the development and testing of new technologies and materials for insecticide treated nets and new anti-malarial therapies. The Committee is concerned that failure to support these efforts could seriously impair future control efforts. In addition, the Committee supports CDC's role in providing technical assistance to the President's Malaria Initiative, the World Bank, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and other malaria control initiatives. These programs are in need of greater expertise and capacity in monitoring and evaluation to support documentation of impact of efforts. The Committee recognizes and appreciates that the impact of malaria is not limited to Africa; millions of cases and thousands of deaths occur in Asia and the Americas--areas not currently targeted by the President's Malaria Initiative. Therefore, the Committee intends the CDC Director may have discretion to use some of the funding provided for technical assistance and support program

research in non-African malaria-affected countries, which, in turn, can then be used to strengthen control efforts in African countries. (Page 100-101)

ACTION TAKEN OR TO BE TAKEN

CDC's Malaria program focuses on prevention and control of malaria throughout the world in partnership with local, state, and federal agencies in the United States, medical and public health professionals, national and international organizations, and foreign governments. Activities include conducting malaria surveillance, prevention, and control activities in the U.S.; providing consultation, technical assistance, and training to malaria endemic countries; conducting multidisciplinary research in the U.S. and internationally to develop new tools and improve existing interventions; and translating research findings into appropriate global policies and effective practices through the Roll Back Malaria Consortium and other international partners.

Insecticide resistance and drug resistance have the potential to compromise global malaria efforts. CDC is involved in a variety of research efforts including conducting field studies in Kenya to assess durability and effectiveness of different long-lasting insecticide treated nets (LLIN), as well as assessing the following: durability of different indoor residual insecticides; prevalence and extent of counterfeit drugs and their contribution to drug resistance; preventive intermittent treatment for pregnant women and infants; and the impact of artemisinin-containing combination drug regimens, the interaction of HIV and malaria, and mosquito larval ecology for the reduction of vector breeding.

CDC partners with USAID to implement the President's Malaria Initiative, and provides leadership in monitoring and evaluation of malaria control activities. CDC also provides technical assistance, including monitoring and evaluation, to WHO, the World Bank, UNICEF, UNF and USAID in malaria endemic countries in Africa, Asia and the Americas in support of the global Roll Back Malaria Program and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. In addition to conducting activities in the President's Malaria Initiative countries (in Africa), CDC also conducts research in non-African setting such as Indonesia, South America, India, and Southeast Asia. These initiatives may bring about new insights and collaborations that could be applied in African countries affected by malaria.

ITEM

Centers for Public Health Preparedness -- ... The Committee expects the Secretary and CDC to submit an implementation plan to the Committee prior to making program changes to ensure continuity of competency-based education and training as a public health systems research agenda is developed and added to the program. (Page 101)

ACTION TAKEN OR TO BE TAKEN

To fully support the goals of the Pandemic and All-Hazards Preparedness Act (PAHPA), CDC plans to develop two specifically funded Centers for Public Health Preparedness (CPHPs) program activities: core curriculum development and public health systems research. CDC will continue to partner with CPHPs to establish an academic-based core curriculum, collaborate on the development of a core competency-based training program for practitioners, and identify research priorities that include collaboration with CPHPs and other partners around the structure of the new competitive research funding opportunity announcement. The research center solicitation and review process will follow standard procedures for biomedical research grants and research centers of excellence, including external peer review. The initial research program announcement will support the infrastructure for multidisciplinary research in public health preparedness systems. The CPHPS will continue required education and training

program activities and maintain partnerships at the state and local levels under the new funding opportunity announcement.

ITEM

[Public health emergency preparedness] -- The Committee continues to recognize that bioterrorism events will occur at the local level and will require local capacity, preparedness and initial response. It is the Committee's intent that significant funding for State and local public health infrastructure be used to improve local public health capacity and meet the needs determined by local public health agencies. The Committee notes that HHS' cooperative agreement guidance now includes explicit requirements for local concurrence with State spending plans for public health emergency preparedness and urges CDC to monitor and enforce these requirements. (Page 101)

ACTION TAKEN OR TO BE TAKEN

CDC requires that each awardee describe a process by which local health departments or their equivalents are engaged in the development of the public health emergency preparedness objectives for the funding period. In addition, we require concurrence by a majority of these entities (and, for the first time in 2007, Tribes within the jurisdiction) with both the submission to CDC and the plan to distribute funds. An awardee that fails to achieve concurrence will have portions of the funds it intends to retain restricted from use until concurrence is achieved. Consultation plans, developed for the budget period by Project Officers and Subject Matter Experts in conjunction with Program Directors, will highlight non-concurrence as an issue that must be resolved immediately.

ITEM

[Public health department performance measures] -- The Committee also recognizes that HHS has incorporated the National Response Plan into the cooperative agreement guidance and established new CDC Preparedness Goals. The Committee therefore urges the Department to assure that any performance metrics intended to measure public health preparedness include measures of local health department performance in the context of their own communities' emergency management systems. (Page 102)

ACTION TAKEN OR TO BE TAKEN

The performance metrics for State Public Health Emergency Preparedness Programs for FY 2008 have been developed based on empirical review of preparedness literature and extensive discussion with grantees and other stakeholders. Aspects of each measure, such as its actual utility as a reflection of preparedness or progress, the ease and reliability of reporting the measure, and its usefulness for comparisons over time and across grantees are under review and refinement. Currently, there is a subset of performance measures applicable to local health departments (i.e., Metropolitan Statistical Areas) directly funded by CDC. Plans to expand the number of performance measures for local health departments are underway based on the development of a measurement framework in which the state and local grantees report performance metrics.

ITEM

[Grants for bioterrorism prevention] -- Funds for bioterrorism prevention and response are distributed through grants to 50 States and four metropolitan areas. The Committee strongly recommends that these funds be distributed based on a formula that includes factors for risk of a terrorist event. Risk is challenging to quantify, but the Committee suggests that CDC, in coordination with the Secretary of Health and Human Services, consider the following and other factors: (1) site of headquarters or major offices of multinational organizations; (2) site of major

financial markets; (3) site of previous incidents of international terrorism; (4) some measure of population density versus just population; (5) internationally recognized icons; (6) percent of national daily mass transit riders; and (7) proximity to a major port, including major port ranked on number of cargo containers arriving at the port per year. (Page 102)

ACTION TAKEN OR TO BE TAKEN

Currently, CDC calculates the variable portion of awards for the Public Health Emergency Preparedness Program using population (volume) only. We have, however, developed data sets on preparedness and have access to additional classified and unclassified information, as well as the Department of Homeland Security's model and methods. Consideration of the aforementioned list above would have to include adequate accounts of the vulnerabilities of the national food supply, and in particular, the needs of rural areas related to medical surge, transportation issues, and air and water safety. Decisions concerning the specific formula that will be used to distribute fiscal year 2008 funds are pending further interpretation of the Pandemic All-Hazards Preparedness Act (PAHPA) of 2007 and decisions by the Health and Human Services Assistant Secretary for Preparedness and Response (ASPR).

ITEM

[Reusable respirator facemasks] -- The Committee commends the Secretary for commissioning the Institute of Medicine to evaluate the potential development of reusable respirator facemasks in the event of an influenza pandemic. The Committee encourages the Secretary to consider comparative data regarding duration of effectiveness, range of tidal activity and shelf life for disposable NIOSH approved respirator facemasks with particulate filter, antimicrobial coated and antimicrobial iodinated technology, and to consider supply needs and issue end-user recommendations for such facemasks. (Page 102)

ACTION TAKEN OR TO BE TAKEN

CDC has continued to expedite approval of N95 respirators in response to respirator supply needs, and collaborate with FDA and EPA for efficient and expedient evaluation of products with antimicrobial treatments. Research is being conducted to assess the impact of biological decontamination methods on disposable filtering facepiece respirator performance, to develop test protocols that measure the efficacy of disposable NIOSH approved respirator facemasks with particulate filter, antimicrobial coated and antimicrobial iodinated technology, to inactivate trapped viruses, and to measure the filtration performance of stored disposable filtering facepiece respirators. User guidance for healthcare workers and other user groups will be developed as part of CDC pandemic preparedness tasks when the current research is completed and new information becomes available.

SIGNIFICANT ITEMS IN APPROPRIATIONS REPORTS – CONFERENCE

***SIGNIFICANT ITEMS FOR INCLUSION IN
THE FY 2009 CONGRESSIONAL JUSTIFICATION
AND OPENING STATEMENTS
CONFERENCE REPORT NO. 110-424
CENTERS FOR DISEASE CONTROL AND PREVENTION***

ITEM

[Lupus] -- ... \$3,167,000 is available to continue and expand the National Lupus Patient Registry to operate seven sites, including a coordinating site. The House proposed \$930,000 for lupus-related activities and the Senate proposed \$1,430,000. The conferees are concerned by the lack of reliable epidemiological data on the incidence and prevalence of all forms of lupus among various ethnic and racial groups. These sites should have an expertise in lupus epidemiology and represent the geographic regions of the United States that have a sufficient number of individuals of racial and ethnic groups that are disproportionately affected by lupus, principally African Americans, Hispanics/Latinos, Asian Americans, and Native Americans. (Page 127)

ACTION TAKEN OR TO BE TAKEN

Since lupus is difficult to diagnose, its broad spectrum of severity and corresponding burden on society has been extremely difficult to estimate. There is consensus that science needs to be improved in this area. CDC's registry is a first major step forward in improving this science. CDC has initiated two carefully designed, focused, population-based lupus registries in Michigan and Georgia; the projects are in the fifth year of study. This investment will give CDC important information about lupus with national implications. In addition, the registries are a ready-made platform for additional studies that will provide both public health and clinical communities with information to start to alleviate the suffering that lupus causes.

With the increased resources provided by Congress in 2008, CDC will increase funding to these two sites, enabling them to complete their analyses. Both pilot registries are in localities with large African American populations, a group disproportionately impacted by lupus. With the increased resources provided by Congress, CDC will provide planning grants to two new sites to address epidemiological gaps among Hispanics/Latinos, Asian Americans, and Native Americans and explore geographic differences. Based on experience to date, CDC and the scientific community believe that four total sites plus work with federal data sources will provide reliable prevalence estimates for all subgroups of interest.

ITEM

[Biomonitoring programs] -- Within the funds provided for the Environmental Health Laboratory, the conferees encourage CDC to provide funding for States with existing biomonitoring programs to expand laboratory capacity; conduct subpopulation studies; conduct representative analyses of routinely collected blood, cord blood and other biospecimens; develop protocols for conducting biomonitoring of sensitive subpopulations such as children; and support biomonitoring field operations such as participant enrollment, sample collection, data analysis, report generation and results communications. The conferees encourage the CDC to begin developing new methods for identifying chemical sources and routes of exposure using model exposure questionnaires and collection of relevant household and other environmental samples. (Page 131-132)

ACTION TAKEN OR TO BE TAKEN

CDC's Environmental Health Laboratory will continue to work with state and local public health laboratories to develop and expand laboratory capacity for biomonitoring by providing sample-collection protocols, method and technology transfer, and technical support. CDC also will participate in 52 studies of exposure to environmental chemicals among subpopulations, including elderly, women of childbearing age and children. Further, the Environmental Health Laboratory will play a major role in the critically important National Children's Study. The Laboratory will publish CDC's influential Fourth National Report on Human Exposure to Environmental Chemicals, which will contain exposure data by age, sex, and race/ethnicity on approximately 275 chemicals in the U.S. population and will also publish CDC's First National Report on Selected Dietary and Nutritional Indicators in the U.S. Population. Initially, this Report will contain data on 27 indicators, and with the development of advanced laboratory methods, will include data on many more indicators in subsequent years.

ITEM

[Environmental health tracking] -- Within the funds provided for the environmental and health outcome tracking network, the conferees encourage CDC to make funding available to State environmental health tracking programs to develop replicable models for disease, hazard and exposure data sharing at the local, State and national levels that incorporate data confidentiality protections. The conferees further direct CDC to include non-governmental organizations representing health-affected constituencies, environmental health and environmental justice in their advisory groups. (Page 132)

ACTION TAKEN OR TO BE TAKEN

CDC has made funding available to one local and 16 state health departments for the development of state and/or local tracking networks. These tracking networks will serve as models for disease, hazard, and exposure data sharing. The state and local networks are joining a national network that will facilitate data sharing and incorporate multiple data confidentiality protection methods. A key data sharing requirement is consistency and CDC has worked with state and federal tracking partners, data owners, and national non-governmental organizations to develop recommendations for nationally consistent data and measures. Confidentiality protections include the separation of the national network into secure-restricted and publicly accessible networks as well as the implementation of data protection policies and plans that will govern the release of data. The national secure web site (or portal) will serve as a means for data exchange between public health and environmental professionals and researchers. CDC is working with state and other partners to identify and minimize potential barriers to data sharing while ensuring network participants continue to meet data protection requirements. This work includes collaboration between CDC, the National Association of Health Data Organizations and several state tracking programs in a pilot project that will develop and test methods for sharing hospitalization data among states and with the national network. Other national partners include: the National Association of City and County Health Officials, the Association of State and Territorial Health Officials, and the National Environmental Health Association. These partnerships assist CDC in providing information to state and local health departments not currently funded by Tracking.

CDC will continue to include non-governmental organizations (NGO's) representing health-affected constituencies, environmental health and environmental justice in its advisory processes as it develops the National Environmental Public Health Tracking Network. In 2007, CDC conducted assessments of potential network users to provide user preferences, information on how users currently research environmental public health topics and data, and recommendations for the design of CDC's Tracking Network portal. Advocacy organizations that

work with a specific environmental public health concern were among the user groups interviewed. CDC is also participating in and co-sponsoring a series of workshops focused on community environmental health indicators. These workshops bring together community leaders, activists, NGOs, policy makers, public health professionals, researchers, and national experts to examine what kinds of data, tools or analyses contribute to successful efforts improve environmental health at the community level and how to make these more readily available. In 2008, CDC will continue to involve NGO's by bringing together 65-80 stakeholders of the national program, including health-affected constituencies, environmental health and environmental justice groups, to discuss progress and tracking network implementation. CDC will present portal design proposals, providing stakeholders the opportunity to advise CDC on the construction and design of the network public portal.

ITEM

Terrorism Preparedness and Response -- Funding is provided for the Centers for Public Health Preparedness at accredited schools of public health to ensure continuity of planned education and training commitments to State, local, and tribal health departments during the fifth and final year of the existing cooperative agreements. The conferees encourage CDC to manage this program and work with appropriate public health organizations to begin implementation of the provisions of the Pandemic and All-Hazards Preparedness Act during fiscal year 2008. (Page 135)

ACTION TAKEN OR TO BE TAKEN

To fully support the goals of the Pandemic and All-Hazards Preparedness Act (PAHPA), CDC plans to develop two specifically funded Centers for Public Health Preparedness (CPHPs) program activities: core curriculum development and public health systems research. CDC will continue to partner with CPHPs to establish an academic-based core curriculum, collaborate on the development of a core competency-based training program for practitioners, and identify research priorities that include collaboration with CPHPs and other partners around the structure of the new competitive research program announcement. The research center solicitation and review process will follow standard procedures for biomedical research grants and research centers of excellence, including external peer review. The initial research program announcement will support the infrastructure for multidisciplinary research in public health preparedness systems. The CPHPs will continue required education and training program activities and maintain partnerships at the state and local levels under the new program announcement.