

# National Conference on Health Statistics

## NATIONAL CENTER FOR HEALTH STATISTICS

As the Nation's principal health statistics agency, we compile statistical information to guide actions and policies to improve the health of our people. We are a unique public resource for health information - a critical element of public health and health policy. Our health statistics allow us to: document the health status of the population and of important subgroups, identify disparities in health status and use of health care by race or ethnicity, socioeconomic status, region, and other population characteristics, describe our experiences with the health care system, monitor trends in health status and health care delivery, identify health problems, support biomedical and health services research, provide information for making changes in public policies and programs, evaluate the impact of health policies and programs. Working with partners throughout the health community, we use a variety of approaches to efficiently obtain information from the sources most able to provide information. We collect data from birth and death records, medical records, interview surveys, and through direct physical exams and laboratory testing. NCHS is a key element of our national public health infrastructure, providing important surveillance information that helps identify and address critical health problems. Here at NCHS, information is at the core of our mission, and our website is a vital part of our effort to make this information work for you.

# 1960-2010

## CELEBRATING 50 YEARS

# Data for Action and Health Reform



## NATIONAL CENTER FOR HEALTH STATISTICS

As the Nation's principal health statistics agency, the Center for Health Statistics provides the data and information that help us understand the health and well-being of the Nation. We collect, analyze, and disseminate data on the health status and use of health services in the United States. We also provide information on the health care system and the health care workforce. Our data and information are used by policymakers, researchers, and the public to make decisions about health care and to improve the health of the Nation.

**1960-2010**  
CELEBRATING 50 YEARS



# NCHS at 50

## A brief history ...

- NCHS today
  - Our principal roles
- Impact of Reform
- A glimpse of the future
  - Dissemination and Community Data

# But first....

- Thank you to our plenary speakers
  - Thomas Frieden *(this morning)*
  - Ed Spar *(this afternoon)*
  - Bob Groves *(this afternoon)*
  - Kathy Wallman *(this afternoon)*
  - Connie Citro *(this afternoon)*
  - Michael Wolfson *(Wednesday morning)*

**But first....**

**Thank you to our NCHS**

**Conference Committee**

**Our Speakers and**

**Our Reception's Sponsors**

# We invite you to...

- Our Conference sessions, exhibits and posters
- Join us for tonight's reception
- Give us your feedback—*attend our informal session in the Senate room during lunchtime today or tomorrow*

# A Brief History ...

- 1956: Congress passed the National Health Survey Act
- 1960: NCHS was established
  - Brought together the **National Health Survey** and the **National Office of Vital Statistics**
- Mission:
  - Monitor Health and Health Care
  - State and local needs (Cooperative Program)
  - Research and Training

**National Center for  
Health Statistics**

**Bureau of  
Transportation  
Statistics**

**National Center for  
Education Statistics**

**Economic  
Research Service**

**Bureau of Labor  
Statistics**

**National  
Agricultural  
Statistics Service**

**Bureau of  
Justice Statistics**

**Federal  
Statistical  
System**

**Bureau of  
the Census**

**Energy Information  
Administration**

**NSF Science  
Resources Statistics**

**Bureau of  
Economic Analysis**

**IRS Statistics of Income**

**SSA Research Evaluation  
and Statistics**

**Committee on National Statistics**  
of the National Academy of Sciences

**HIGHLIGHTS**

# *Principles and Practices for a Federal Statistical Agency*

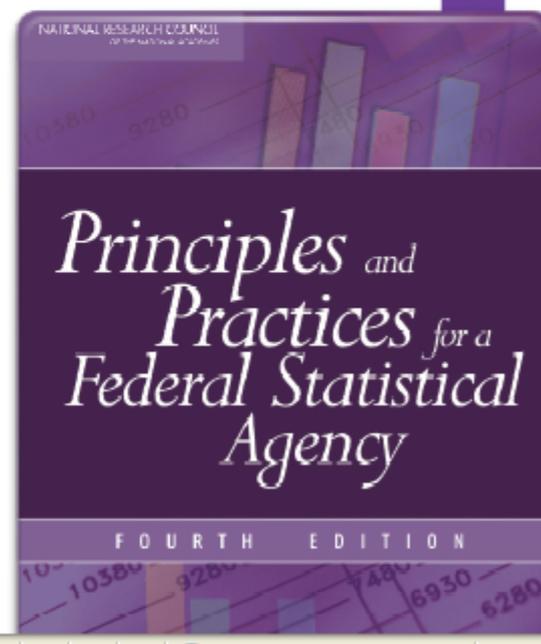
**Fourth Edition • 2009**

## Four Principles for an Effective Statistical Agency

1. **A federal statistical agency must be in a position to provide objective information that is relevant to issues of public policy.** Objective information is information that is as accurate and comprehensible as possible and is not intended to promote a particular policy position or group interest.
2. **A federal statistical agency must have credibility with those who use its data and information.** Few data users are in a position to

## Eleven Practices for an Effective Statistical Agency

1. A Clearly Defined and Well-Accepted Mission
2. Continual Development of More Useful Data
3. Openness About Sources and



**VITAL and HEALTH STATISTICS**

PROGRAMS AND COLLECTION PROCEDURES

NATIONAL  
CENTER  
For HEALTH  
STATISTICS

Series 1  
Number 1

Origin, Program, and  
Operation of the U.S.  
National Health Survey

U.S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
Public Health Service



SERIES A—No. 4

**HEALTH  
STATISTICS**

FROM THE U.S. NATIONAL HEALTH SURVEY

plan and initial program of the  
Health Examination Survey

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

# A Brief History ...



## The Health Survey's major programs

- Health Interview Survey (1957)
- Health Examination Survey (1959)
  - ➔ Health and Nutrition Examination Survey
- Health Records Survey (1965)
  - ➔ Health Care Surveys
- National Survey of Family Growth (1973)
- State and Local Area Integrated Telephone Survey (1997)

**Plus Others**

# A Brief History ...



- The Health Survey's major programs
- Health Interview Survey (1957)
- Health Examination Survey (1959)
  - ➔ Health and Nutrition Examination Survey
- Health Records Survey (1965)
  - ➔ Health Care Surveys
- National Survey of Family Growth (1973)
- State and Local Area Integrated Telephone Survey (1997)

**Vital Statistics (Ancient Egypt, 900, 1946, 1960)**



**2009 NHIS Questionnaire - Sample Adult**  
**Adult Identification**

Document Version Date: 12-Apr-10

Question ID: AID.005\_00.000 Instrument Variable Name: SADULT QuestionnaireFileName: Sample Adult

QuestionText: \* The sample adult person is [fill: ALIAS of Sample Adult]. The next questions must be answered by this person. Probe as necessary to determine the availability of [fill: ALIAS of Sample Adult].

\* If refused enter CTRL-R

- 1 Available
- 2 Not available
- 3 Physical or mental condition prohibits responding
- 7 Refused

UniverseText: This is the Sample Adult and (the Sample Adult section has not been started or completed).

SkipInstructions: <1> if Sample Adult = demographics.hhc.RELRESP\_A  
goto beginning of adult.asd  
elseif Sample Adult = demographics.hhc.HHRESP  
goto beginning of adult.asd  
else  
goto AIDVERF\_S  
endif  
<2> goto callbk.ACALLBK1  
<3> goto PROX1  
<R> store '4' in ASTAT  
if recontact.RCIFLAG ne '1'  
goto recontact.RCI\_BEGIN procedure  
else  
goto back.OUTCOMEBl procedure

# Mobile Exam Center Circa 1960



# Mobile Exam Center Today



# 1960 Data Challenges

## (National Health Survey Act)

- Number and characteristics of persons suffering from heart disease, cancer, diabetes, arthritis and rheumatism, and other diseases, injuries and handicapping conditions...
- Need for reasonably current periodic inventories
  - For appraising true state of health
  - For adequate planning to improve health
  - For research in the field of chronic diseases
  - For measurement of the numbers of persons in working ages so disabled as to be unable to perform gainful work

# Current Data Challenges

- Health Reform/Affordable Care Act
  - *What are the data needs in this time of health reform?*
- Open Government and Community needs
  - *How is NCHS meeting state and local (community) needs*
- Dissemination
  - *How do we focus our data to meet research and policy needs?*

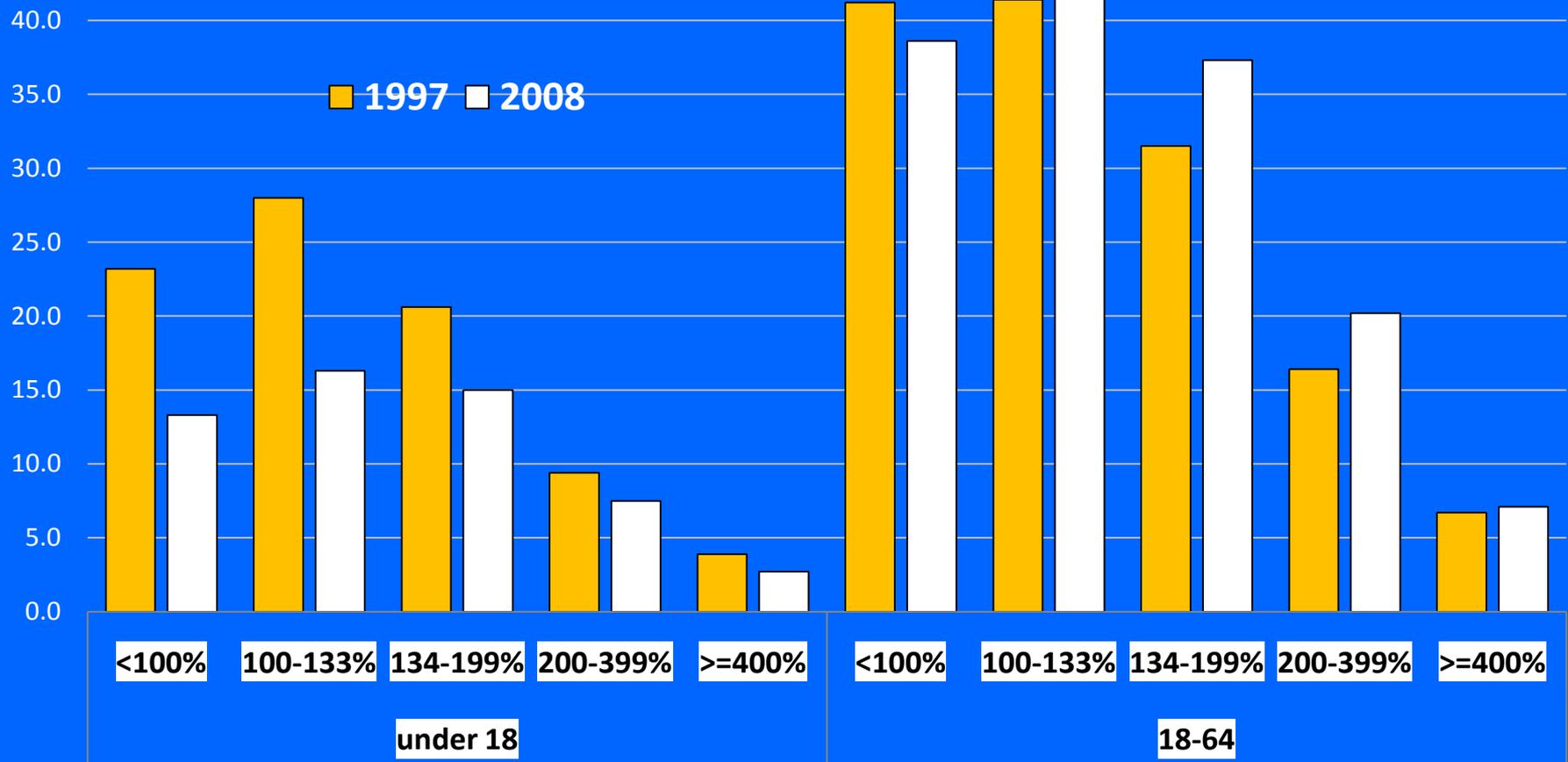
# Patient Protection and Affordable Care Act

# Affordable Care Act Data and Measurement Provisions

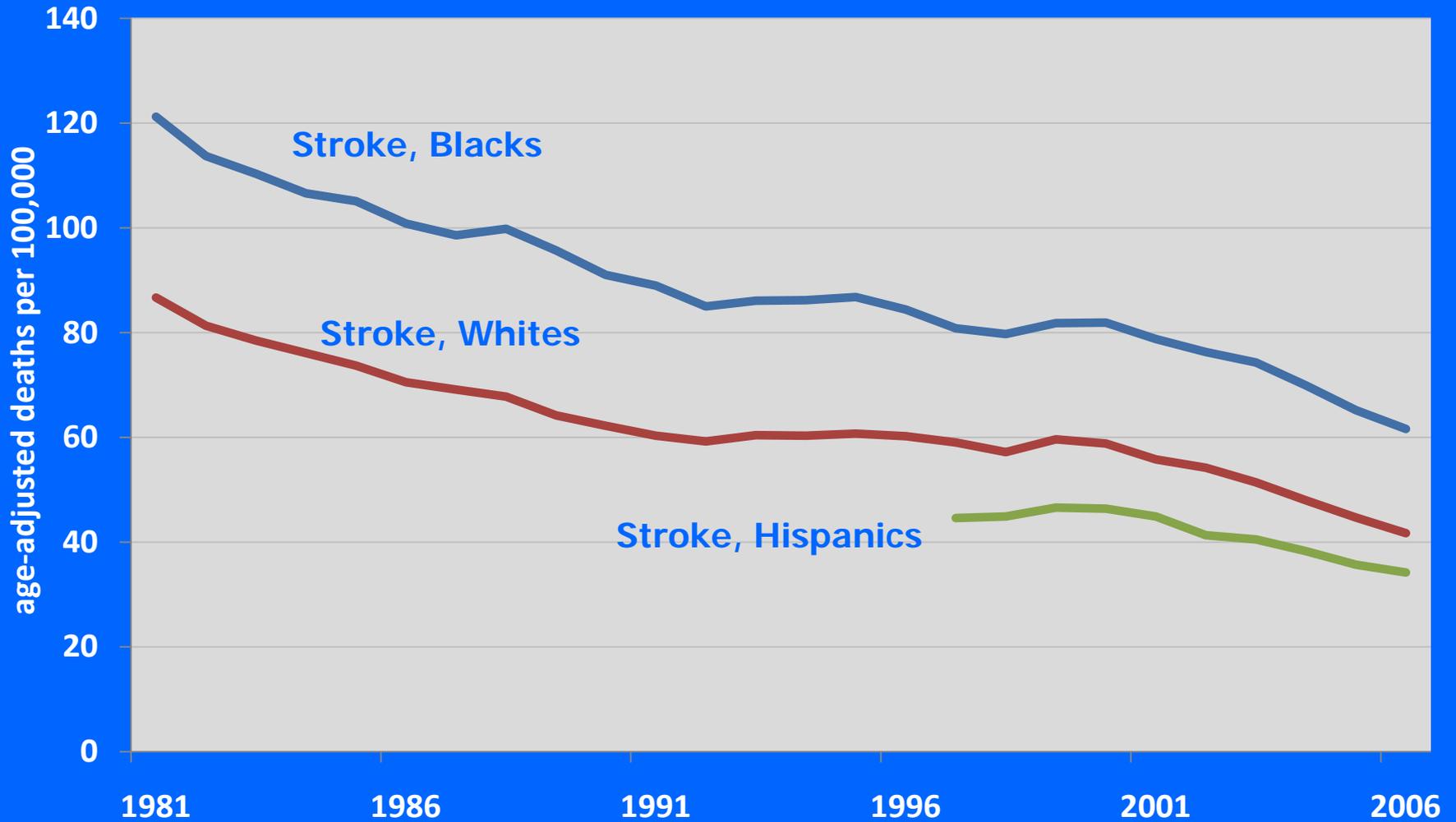
- Vital statistics
- Quality improvement
- Disparities
- Levels of geography
- Health outcomes
- Oral health
- National health indicators

# Uninsured Rates for Persons Under Age 65, By Poverty Status and Age, 1997 and 2008

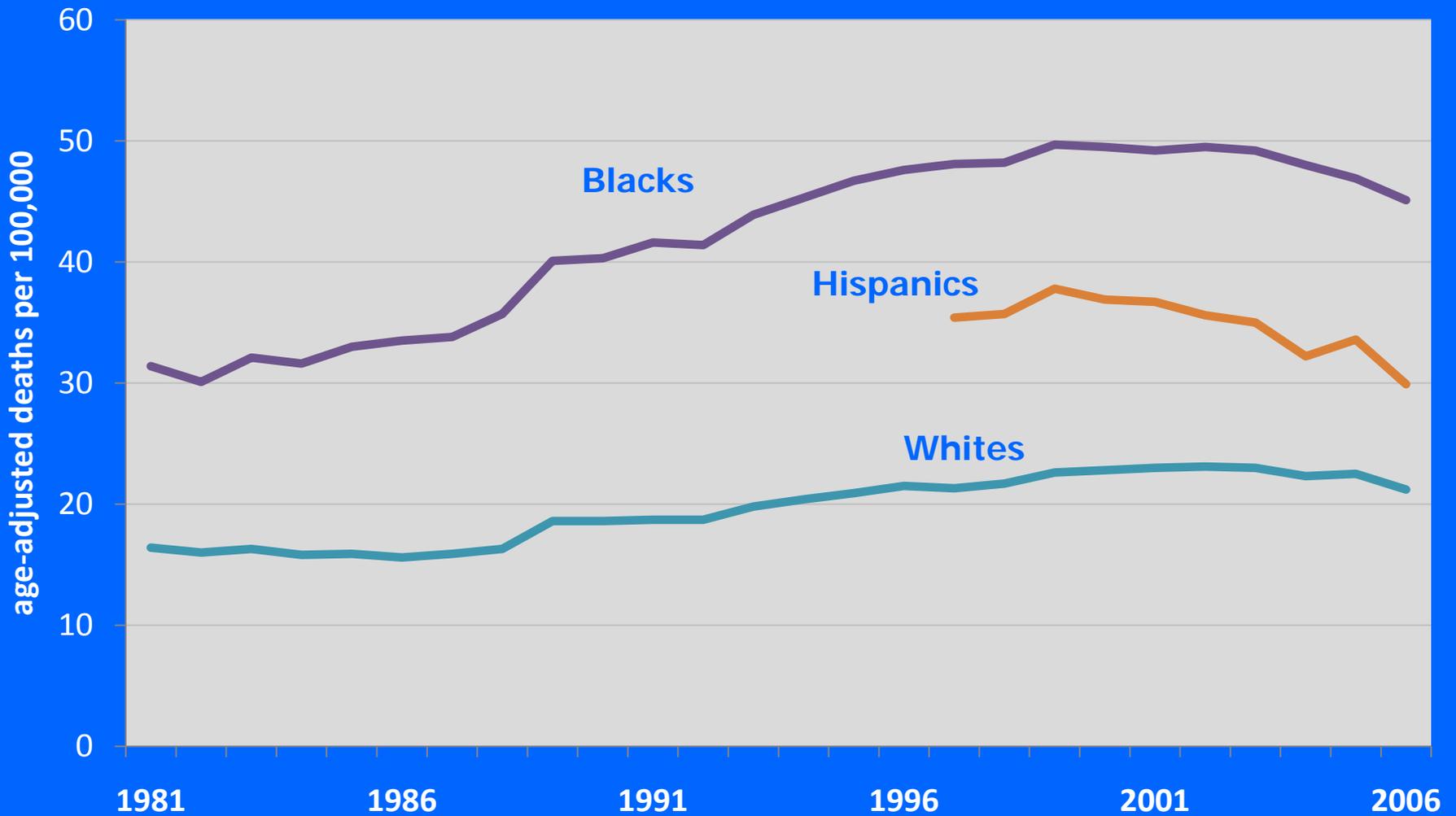
Percent uninsured



# Trends in Stroke Mortality, By Race and Ethnicity, 1981-2006



# Trends Diabetes Mortality, By Race and Ethnicity, 1981-2006



# Affordable Care Act Evaluation

## Assessing change over time in ...

- Coverage and access to care
  - Low and middle-income families and childless adults
  - Dependents up to age 26
- Barriers to primary care
- Access to care for chronic conditions
- State variation in coverage and access
- Use of clinical preventive services (no longer subject to cost sharing)
- Population health and health disparities
- Electronic Health Records: Adoption and meaningful use

# Affordable Care Act

- Requires data on health status and access to care by sub-populations
  - Race and ethnicity (*and underserved rural and frontier populations*)
  - Primary Language
  - Sex
  - Disability status
  - Plus (possibly) other factors
- Collected at the lowest geographic level—
  - *Data for local level decision-making*

# **NCHS Challenge: With Limited Resources to Navigate Competing Priorities**

- Which data are most critical for setting baselines and measuring impact of programs and policies?
- What are the most important new data elements and for which populations?
  - **Geographic detail**
  - **Which sub-populations?**

# **NCHS Program Changes to Meet Affordable Care Act/ARRA**

# Program Changes...

## Affordable Care Act: New survey questions

- For example — new questions on the NHIS about **health insurance coverage**
- Adding new questions to long-term care surveys to respond to anticipated direct care **workforce** shortages
- Developmental work on questions about **delivery of clinical preventive services**
- Assessing adoption and meaningful use of **Electronic Health Records**

# Program Changes...

**Expanding sample size** of our surveys to provide more data for subpopulations

- **Selected state-level estimates** from the NAMCS on primary care visits
- Surveying **new provider settings** including community health centers and residential care places

**NAMCS = National Ambulatory Medical Care Survey**

# NCHS Continuing Priorities ...

- **Timeliness**
- **Research to improve quality**
- **Data access for confidential and non-confidential data**
- **Targeted dissemination for research and policy [National and Community]**
- **And support of joint agency efforts ...**

# A Word About Timeliness

- Two Examples:
- Health Interview Survey
  - Key indicators quarterly
  - Full year within 6 months of close
- NHANES
  - Full year of data within 8 months of close

# Timeliness

- Future expansion of **electronic registration systems** for birth and death (with NAPHSIS)
- **NAMCS mail survey** supplement on use of Electronic Medical Records
- **Continuous interviewing** design for National Survey of Family Growth

# Quality

- Scientific review of all NCHS programs by our **Board of Scientific Counselors**
- Improved interviewer **training** for Census interviewers for NHIS
- Use **paradata** to improve management and quality of data collection
- Research to assess impact of **cell phones** and response rates

# Access

- New publications, including *Data Briefs* series and *Health US in Brief*
- Advances to NCHS website including award-winning NHANES tutorial, tools such as *Health Data Interactive* and *VitalStats* and development of Indicators Warehouse
- Expansion of network of Research Data Centers
- Work to expand data linkages across agencies, and .....

# Dissemination

# Health, United States, 2009

With Special Feature on Medical Technology



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for Health Statistics

## Publications and Information Products



**Publications & Information Products**

- Browse/Search Publications
- New Releases
- Information Sheets
- Errata List
- Listservs

[NCHS Home](#) > [Publications & Information Products](#) > [NCHS Data Briefs](#)

### NCHS Data Brief

Number 39, May 2010

## Are Preterm Births on the Decline in the United States? Recent Data From the National Vital Statistics System

[PDF Version](#) (1.1 MB)

Joyce A. Martin, M.P.H.; Michelle J.K. Osterman, M.H.S.; and Paul D. Sutton, Ph.D.

#### Key findings

- Following a long period of fairly steady increase, the U.S. preterm birth rate declined for the second straight year in 2008 to 12.3 percent, from 12.8 percent in 2006.
- This marks the first 2-year decline in the preterm birth rate in nearly three decades.

#### On this Page

- [Key findings](#)
- [The U.S. preterm rate declines for the second straight year—the first 2-year decline in nearly three decades.](#)
- [Preterm births are down for women of all age groups under age 40.](#)
- [From 2006 to 2008, preterm birth rates dropped 5 percent among non-Hispanic white and non-Hispanic black infants.](#)

Text size: S M L X

- [Email page](#)
- [Print page](#)
- [Bookmark and share](#)

#### Download page:

[PDF \[1.1 MB\]](#)

#### Contact Us:

- [National Center for Health Statistics](#)  
3311 Toledo Rd  
Hyattsville, MD 20
- 1 (800) 232-4636
- [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

#### Ordering Information

- [Printed Publications](#)
- [Birth, Death, Marriage and Divorce Certificates](#)
- [Government Printing Office Bookstore](#)
- [How to Order from the National Technical Information Service](#)

#### Data and Statistics

[FastStats](#)



Department of Health and Human Services

Centers for Disease Control and Prevention

[CDC en Español](#)Search:  National Center for Health Statistics...*Monitoring the Nation's Health*

## Health Data Interactive

**Our Links**

- > [HDI Home](#)
- > [What's New](#)
- > [Getting Started](#)
- > [Data Sources](#)
- > [Related Resources](#)
- > [FAQs](#)

**Email HDI**

- > [RSS Feed](#)
- > [Learn about RSS](#)
- > [More CDC RSS](#)

Welcome! Health Data Interactive presents tables with national health statistics for infants, children, adolescents, adults, and older adults. Tables can be customized by age, gender, race/ethnicity, and geographic location to explore different trends and patterns.

- [Email this page](#)
- [Printer-friendly version](#)
- [PDF reader](#)
- [PowerPoint viewer](#)

### Table Topics

[Health and functional status](#)  
[Health care use and expenditures](#)  
[Health conditions](#)  
[Health insurance and access](#)

[Mortality and life expectancy](#)  
[Pregnancy and birth](#)  
[Risk factors and disease prevention](#)



Department of Health and Human Services  
Centers for Disease Control and Prevention

CDC en Español

Search:  Go

# National Center for Health Statistics...Monitoring the Nation's Health

## Current NHANES Web Tutorial

- > [NCHS Home](#)
- > [NHANES Home](#)
- > [All Tutorials](#)

- Tutorial Home**
- > [Introduction](#)
  - > [Objectives](#)
  - > [Jump Start Guide](#)

- Survey Orientation**
- > [Survey Overview](#)
  - > [Navigate NHANES Website](#)
  - > [Data Structure & Contents](#)

### Tutorial Home

- ✉ [Email this page](#)
- 🖨 [Printer-friendly version](#)



**Jump Start Guide**

Use this guide to discover key features in the tutorial and optimize your experience.

[▶ more](#)



**Objectives**

Review the learning objectives for each module in the tutorial.

[▶ more](#)



**Need Help?**

Use these troubleshooting tips if you encounter problems while using the tutorial.

[▶ more](#)



**Collaborators**

[National Center for Health Statistics](#)

[National Cancer Institute](#)

# Census and NCHS Research Data Centers



# NCHS Continuing Priorities ...

- Timeliness
- Research to improve quality
- Data access for confidential and non-confidential data
- Targeted dissemination for research and policy [National and Community]
- **And support of joint agency efforts ...**



# Tracking Healthy People 2010



About NCHS ▶

STATS A to Z ▶

Surveys and Data ▶

Information Systems ▶

NHANES ▶

NHCS ▶

NHIS ▶

NIS ▶

LSOAs ▶

NSFG ▶

HAITS ▶

Statistics ▶

Information ▶

Publications ▶

Other ▶

Help ▶

Feedback ▶



## National Center for Health Statistics

Monitoring  
the Nation's  
Health

Healthy People ... tracking the Nation's health

[NCHS Home](#) | [Healthy People 2000](#) | [Healthy People 2010](#)  
[Related Links](#) | [CDC/NCHS Privacy Policy Notice](#) | [Accessibility](#)  
[Search NCHS](#)

# DATA2010

...the Healthy People 2010 Database



## About DATA 2010

- [What is DATA2010?](#)
- [How to access DATA2010](#)
- [Information included in data tables](#)
- [How to construct data tables](#)
- [Advanced Selection Options](#)
- [Information on web browser characteristics](#)

[Go to DATA2010](#)

[What is DATA2010?](#)



SAFER • HEALTHIER • PEOPLE™

About DATA2010

Definitions

Web-browser  
Specific  
Information

Contact  
DATA2010 Staff

## CDC WONDER

WONDER Home

FAQ

Help

Contact Us

# DATA2010

...the Healthy People 2010 Database



Database updated May 2009. Next database update schedule is Summer 2009 ([click here for more info](#)).

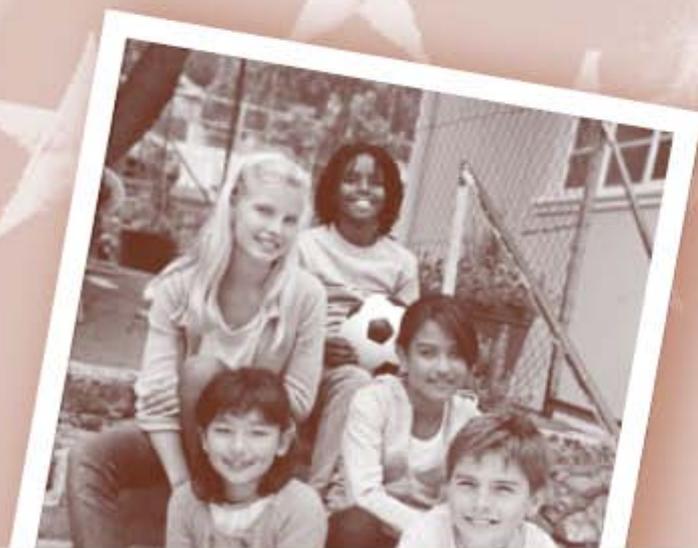
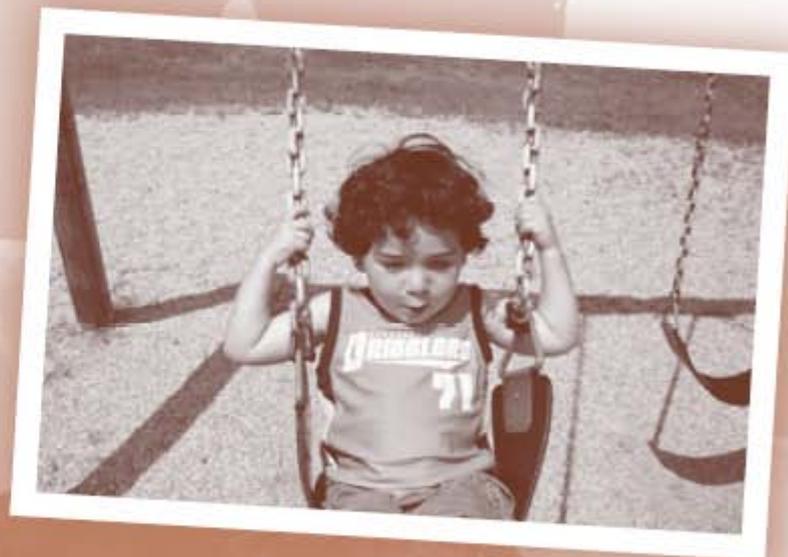
Note: If SUBMIT table generation fails, select Excel focus area data spreadsheets (last option) below.

Data by [focus area](#) (including Steps to a HealthierUS (measures), and Leading Health Indicators

[More Info](#)

[More Info](#)

America's Children in Brief:  
Key National Indicators  
of Well-Being, 2010





# OLDER AMERICANS 2010

*Key Indicators of Well-Being*



You are here: [Products & Services](#) / [What We Eat In America, NHANES](#)

## Products & Services



### WHAT WE EAT IN AMERICA

... source of data on food and nutrient intakes of Americans

[Data  
Tables](#)

[Data  
Briefs](#)

[Research  
Articles](#)

[Overview  
FAQs](#)

[Documentation  
Data Sets](#)

[Dietary Data  
Tutorial](#)

[Links](#)

### Search

This site only

[Advanced Search](#)

### Browse By Subject

- ▶ [Home](#)
- ▶ [About Us](#)
- ▶ [Research](#)
- ▶ [Products & Services](#)
  - [Publications](#)
  - [What We Eat In America, NHANES](#)
  - [What's In The Foods You Eat Search Tool, 4.0](#)
  - [USDA Food and Nutrient Database for Dietary Studies](#)
  - [MyPyramid Equivalents Database](#)
  - [USDA Automated](#)

### Overview

[An Integrated Federal Food Survey](#)

[Fact Sheets \(2005-2006\)](#)   [2003-2004](#)   [2001-2002](#)

[Data Collection](#)

[Information Collected During Interview](#)

[Data Processing](#)

[WWEIA/NHANES Data Release](#)

[Dietary Intake Data Files](#)

[Dietary Data Web Tutorial](#)

[Suggested Citations](#)

# CDC's Winnable Battles

- Tobacco use
- Nutrition/obesity
- HIV
- Healthcare associated infections
- Motor vehicle accidents
- Teen pregnancy

# Demand for Data at The Community Level

# **Data at The Community Level**

## **Health Indicators Warehouse**

# Health Indicators Warehouse

- Aims
  - Wider dissemination and application of health indicators and HHS data
  - Harmonize and improve data quality
- Warehouse is the core of the HHS Community Health Data Initiative under Open.gov



*Home • The Administration • Open Government Initiative*

# Open Government Initiative

TRANSPARENCY ♦ PARTICIPATION ♦ COLLABORATION

[About Open Government](#) | [Open Gov Blog](#) | [Around the Gov](#)

My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government.

– PRESIDENT OBAMA, 01/21/09

WEDNESDAY, JULY 28, 2010

# HHS.gov/Open

Search  
Font Size  
OPEN G

## EXPLORE. ENGAGE. ENLIGHTEN.

**Data Sets**

**Tools**

**Our Plan**

**Discuss**

### Spotlight on

#### Hospital Compare

Comparison data for hospitals that includes process of care, mortality, and readmission quality measures.  
[More details...](#)



>Home Data Sets Tools Our Plan FOIA Records Management Get Involved Discuss Leadership Contacts

## Strategic Plan

Posted July 21, 2010 | Sherry Glied, Assistant Secretary for Planning and Evaluation



*"The Strategic Plan describes our work to address complex and evolving health, public health, research, and human services issues."*

### Strategic Plan 2010 - 2015 (Draft)



- [HOME](#)
- [DATA ▾](#)
- [TOOLS](#)
- [COMMUNITY](#)
- [METRICS](#)
- [DIALOGUE](#)

## Data.gov Catalogs

Use the Data.gov catalog below to access U.S. Federal Executive Branch datasets. Click on the name of a dataset to view additional metadata for that dataset. By accessing the data catalogs, you agree to the [Data Policy](#). Data.gov offers data in three ways: through the "raw" data catalog, using tools and through the geodata catalog. The "Raw" Data Catalog provides an instant download of machine readable, platform-independent datasets while the Tools Catalog provides hyperlinks which may lead to agency tools or agency web pages that allow you to mine datasets.

"RAW" DATA CATALOG
TOOL CATALOG
GEODATA CATALOG

### Search "raw" data by keywords

### Search "raw" data by file type

 XML  CSV/Text  KML/KMZ  Shapefile  RDF  Other 

### Search "raw" data by single/multiple category

- All Categories
- Agriculture
- Arts, Recreation, and Travel
- Banking, Finance, and Insurance

### Search "raw" data by single/multiple agency

- All Agencies
- Agency for Healthcare Research and Quality (HHS/AHRQ)
- Agricultural Research Service (USDA/ARS)
- Antitrust Division (DOJ/ATR)



Page 1 of 1 (2 records)

« < 1 > »

Results per page: 25 | 50

Name (click for metadata and to rate dataset)	Rating	Agency	XML	CSV/TXT	KML/KMZ	Shapefile	RDF
<b>2009 VHA Facility Quality and Safety Report - Hospital Settings</b> The 2008 Hospital Report Card was mandated by the FY08 Appropriations Act, and focused on Congressionally-mandated metrics applicable to general patient populations. The ...	 (5 votes)	VA		CSV 18K			RDF 33 KB
<b>Community Health Status Indicators (CHSI) to Combat Obesity, Heart Disease and Cancer</b> Community Health Status Indicators (CHSI) to combat obesity, heart disease, and cancer are major components of the Community Health Data Initiative. This dataset provide...	 (0 votes)	HHS/CDC		CSV 5 MB			

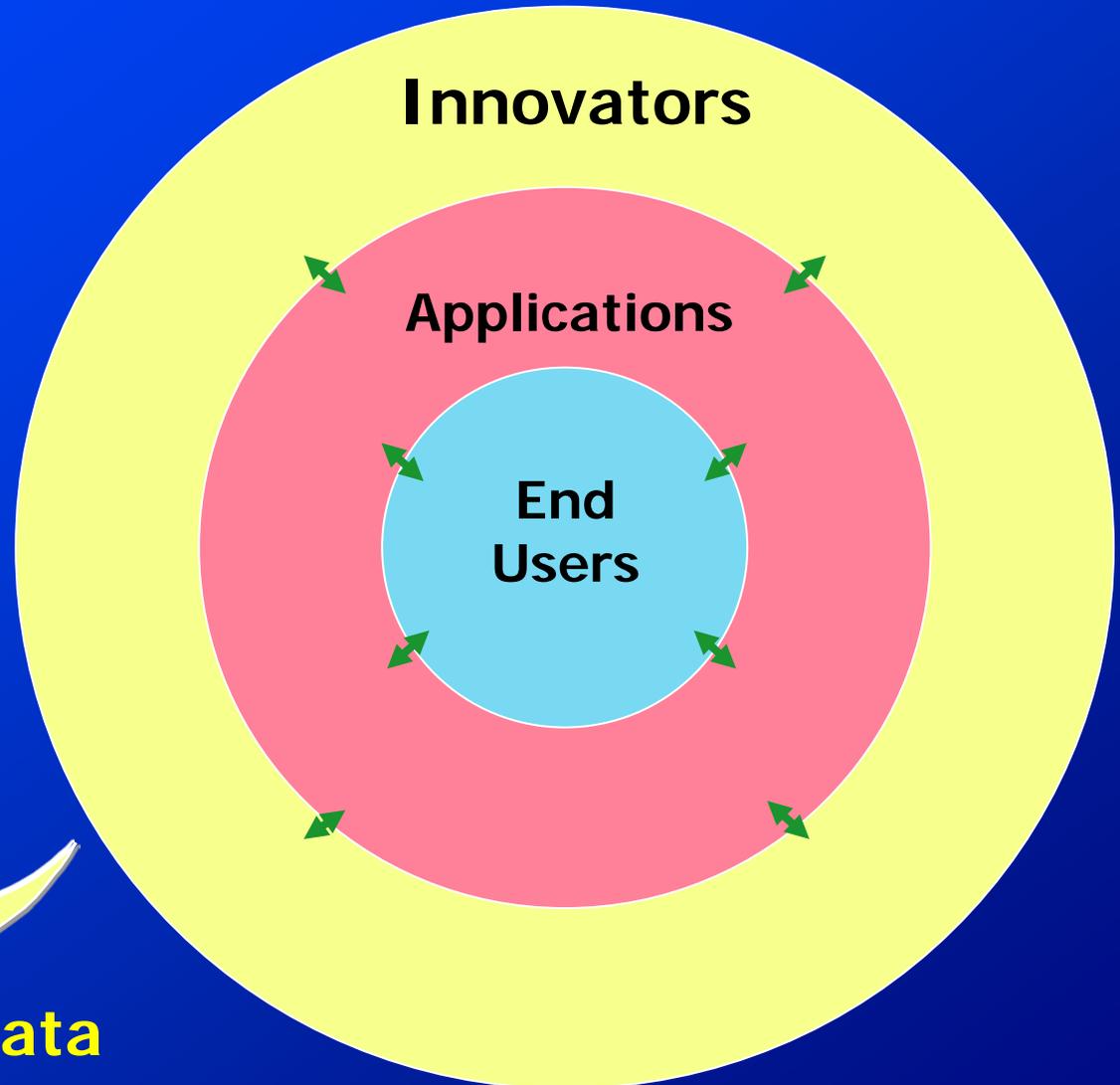
# Health Indicators Warehouse

- Phase I (2011) will include:
  - Healthy People 2020
  - Community Health Status Indicators
  - CMS data
  - MATCH indicators
  - State of the USA

# Community Health Data Initiative

## Data Sources

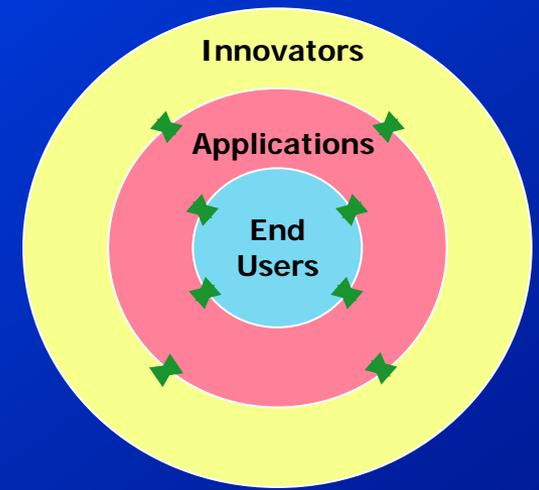
- Health Indicators Warehouse (HIW)
- Other federal data sets
- State and local governments
- Private sector data suppliers
- Others



**Feedback on data**

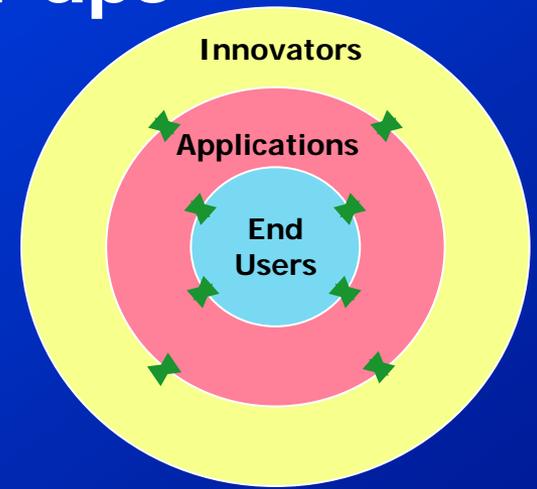
# Innovators

- Data analytics firms
- Social networking providers
- Web search providers
- Tech companies
- Nonprofits / philanthropy
- Media / journalism
- Real estate information providers
- Industries developing health-related products or services



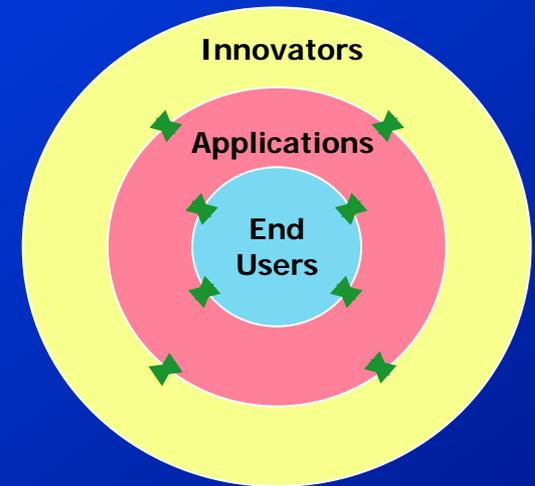
# Applications

- Interactive health maps. “mash-ups”
- Applications
- Networking apps
- Challenges
- Enhanced web search
- “Best places to live” ratings and rankings
- Games



# End Users

- Patients
- Consumers
- Providers
- Community leaders
- Policymakers
- Researchers
- Corporations



# 1960 Data Challenges

## (National Health Survey Act)

- Number and characteristics of persons suffering from heart disease, cancer, diabetes, arthritis and rheumatism, and other diseases, injuries and handicapping conditions...
- Need for reasonably current periodic inventories
  - For appraising true state of health
  - For adequate planning to improve health
  - For research in the field of chronic diseases
  - For measurement of the numbers of persons in working ages so disabled as to be unable to perform gainful work

# Vision for 21<sup>st</sup> Century Health Statistics Influences on the Population's Health

## Place & Time

### Context

### Community Attributes

Natural Environment

Biological Characteristics

Social

Built Environment

Health Services

The Population's Health  
Level Distribution

Cultural Context

Economic

Disease  
Functioning  
Well-being

Political Context

Population-based  
Health Programs

Collective  
Lifestyles  
and Health  
Practices

# More Than Just Numbers

## NATIONAL CENTER FOR HEALTH STATISTICS

As the Nation's principal health statistics agency, we compile statistical information to guide actions and policies to improve the health of our people. We are a unique public resource for health information - a critical element of public health and health policy. Our health statistics allow us to: document the health status of the population and of important subgroups, identify disparities in health status and use of health care by race or ethnicity, socioeconomic status, region, and other population characteristics, describe our experiences with the health care system, monitor trends in health status and health care delivery, identify health problems, support biomedical and health services research, provide information for making changes in public policies and programs, evaluate the impact of health policies and programs. Working with partners throughout the health community, we use a variety of approaches to efficiently obtain information from the sources most able to provide information. We collect data from birth and death records, medical records, interview surveys, and through direct physical exams and laboratory testing. NCHS is a key element of our national public health infrastructure, providing important surveillance information that helps identify and address critical health problems. Here at NCHS, information is at the core of our mission, and our website is a vital part of our effort to make this information work for you.

# 1960-2010

## CELEBRATING 50 YEARS