Background

The terrorist attacks of September 11, 2001 and the subsequent anthrax attacks brought to light key weaknesses in the United States (U.S.) public health infrastructure. Lack of integrated communications and unified commands hampered response, while limited coordination among public health laboratories reduced overall laboratory capacity.

In response, the U.S. government increased its efforts to ensure that public health was not only part of emergency responses, but also part of emergency preparedness. Increased cooperation among responders, including state and local public health officials, has helped shape the nation to be better prepared to respond to such attacks. Health departments are now recognized as essential partners in emergency response, and have increased their capacity to identify and communicate public health threats.

Innovative approaches to challenges and resource maximization are critical to continuously improving emergency preparedness and response. This report highlights how CDC strengthens the nation's health security to save lives and protect against public health threats within the context of CDC's three overarching priorities:

- 1. Improving health security at home and around the world,
- 2. Protecting people from public health threats, and
- 3. Strengthening public health through collaboration.

Legislative Authority

National health security preparedness is a shared responsibility. When states are prepared to respond, communities are better protected and more resilient in the face of threats. Multiple components of the U.S. Department of Health and Human Services (HHS) provide guidance, support, coordination, and resources to states and localities to strengthen their public health preparedness and response activities.

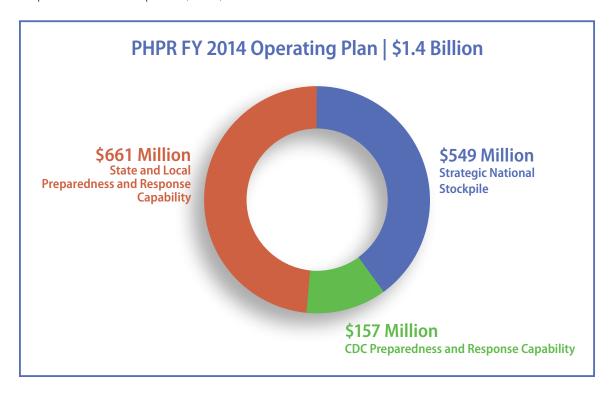
Under the Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA), HHS is the lead agency for the National Response Framework (NRF) Emergency Support Function 8 (ESF 8). The NRF guides how the United States conducts all-hazards response. It is intended to define specific authorities and best practices for managing incidents that range from serious local emergencies to large-scale terrorist attacks or catastrophic natural disasters. ESF 8 is the emergency support function that outlines federal actions to supplement state, local, and tribal resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated federal response, or developing health and medical emergencies.

HHS public health preparedness and response activities, including implementing ESF 8 responses to emergencies and disasters, are coordinated by the Assistant Secretary for Preparedness and Response (ASPR). ASPR is the principal advisor to the HHS Secretary on all matters related to public health emergencies, and provides leadership in preventing, preparing for, and responding to the adverse health effects of public health emergencies and disasters. ASPR focuses on preparedness planning, response, and recovery; building federal emergency medical operational capabilities; countermeasures research, advance development, and procurement; establishing healthcare coalitions; and funding grants to strengthen the response capabilities of hospitals and healthcare systems during emergencies and disasters that impact health and medical infrastructure.

- ASPR's Hospital Preparedness Program (HPP) supports the development of a comprehensive national preparedness and response healthcare system that is scalable and coordinated to meet local, state, and national needs through leadership, funding, evaluation, and technical assistance.
- Through the National Disaster Medical System, ASPR provides federal support, including healthcare professionals, to augment state and local capabilities during an emergency or disaster response.
- ASPR also leads the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE), a coordinated federal effort to enhance preparedness for chemical, biological, radiological, and nuclear threats and emerging infectious diseases from a medical countermeasure perspective. CDC is a key HHS partner in PHEMCE, as are the Food and Drug Administration and the National Institutes of Health.

Preparedness Investments and Capabilities

CDC strategically invests in public health preparedness to improve the ability of federal, state, and local public health agencies to prepare for and respond to all types of public health threats. In fiscal year 2014, Congress appropriated approximately \$1.4 billion to CDC's Office of Public Health Preparedness and Response (PHPR).^{1,2}



Through the Public Health Emergency Preparedness Cooperative Agreement (PHEP), CDC funds the State and Local Preparedness and Response Capability. PHEP "awardees" — 50 states, 4 localities, and 8 insular areas (consisting of territories and freely associated states) — participate in emergency preparedness activities, as do Academic Centers for Public Health Preparedness. Since 2001, the PHEP cooperative agreement has provided \$10 billion to public health departments across the nation to upgrade their ability to effectively respond to a wide range of public health threats. State and Local Preparedness and Response Capability funding also supports training, technical expertise, and consultation to state and local public health departments.

The Strategic National Stockpile (SNS) program manages and delivers life-saving medical countermeasures (MCMs) during a public health emergency. The SNS is the largest federally-owned repository of pharmaceuticals, vaccines, critical medical supplies, and medical equipment available for rapid delivery to support federal, state, and local response to health security threats. If a biological, chemical, or nuclear event happened tomorrow and threatened U.S. public health

¹ The federal fiscal year begins on October 1 and ends on September 30 of the following year. Fiscal year 2014 began October 1, 2013, and ended on September 30, 2014.

²The fiscal year 2014 amount reflects the realignment of CDC's Business Services Support appropriation.

security, the SNS is the only federal resource readily available to provide MCMs once local supplies are depleted.

The CDC Preparedness and Response Capability supports critical infrastructure and crosscutting research to facilitate rapid response to public health emergencies. These funds maintain programs such as the Emergency Management Program (EMP), Laboratory Response Network (LRN), and regulation of select agents and toxins.

PHEP awardees protect their communities by implementing a framework of capabilities based on national standards. This framework, developed by PHPR, assists state and local health

departments with their all-hazards planning. PHPR prioritized these into two tiers, with an emphasis on those that provide a strong basic foundation for public health preparedness (Tier 1).



Using the SNS, CDC can provide emergency medicines to protect the nation against the highest-risk threats for under \$2 per person, per year.

PHEP awardees are encouraged to develop the Tier 1 capabilities prior to significantly investing in Tier 2 public health preparedness capabilities. The 15 public health preparedness capabilities noted below (grouped below in their corresponding domains) are the basis for state and local public health preparedness.³

15 Public Health Preparedness Capabilities

Biosurveillance

- Public Health Laboratory Testing (Tier 1)
- Public Health Surveillance and Epidemiological Investigation (Tier 1)

Community Resilience

- Community Preparedness (Tier 1)
- Community Recovery (Tier 2)

Countermeasures and Mitigation

- Medical Countermeasure Dispensing (Tier 1)
- Medical Materiel Management and Distribution (Tier 1)
- Non-Pharmaceutical Interventions (Tier 2)
- Responder Safety and Health (Tier 2)

Incident Management

Emergency Operations Coordination (Tier 1)

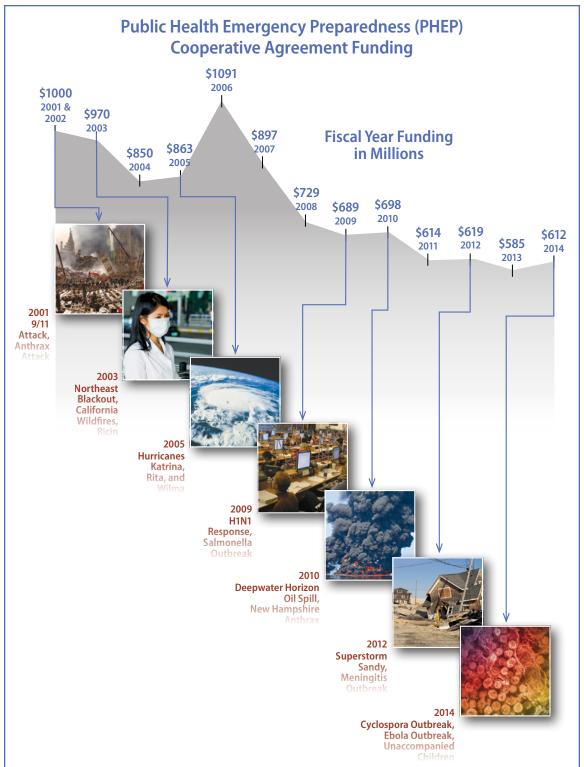
Information Management

- Emergency Public Information and Warning (Tier 1)
- Information Sharing (Tier 1)

Surge Management

- Fatality Management (Tier 2)
- Mass Care (Tier 2)
- Medical Surge (Tier 2)
- Volunteer Management (Tier 2)

³ Public Health Preparedness Capabilities: National Standards for State and Local Planning, March 2011. Accessed on June 13, 2014 at URL http://www.cdc.gov/phpr/capabilities/DSLR_capabilities_July.pdf.



Source: CDC, PHPR, Division of State and Local Readiness

Totals include the following: PHEP Base Funding, Cities Readiness Initiative, Chemical Laboratory Capacity, Early Warning Infectious Disease Surveillance (EWIDS), Real-Time Disease Detection, Risk Funding, Smallpox, Pan Flu Supplement—Phase I, Pan Flu Supplement—Phase II, and Pan Flu Supplement—Phase III Funding. The FY2008 totals include \$24 million for pandemic influenza preparedness projects that were from a different funding opportunity announcement.