Public Health Preparedness:

Strengthening the Nation's Emergency Response State by State

A Report on CDC-funded Preparedness and Response Activities
in 50 States, 4 Cities, and 8 U.S. Insular Areas

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Preface

Public Health Preparedness: Strengthening the Nation's Emergency Response State by State presents data on preparedness activities taking place at state and local health departments in 50 states, 4 localities (Chicago, the District of Columbia, Los Angeles County, and New York City), and 8 U.S. insular areas located in the Atlantic and Pacific oceans.[1] All are funded by the Centers for Disease Control and Prevention's (CDC) Public Health Emergency Preparedness (PHEP) cooperative agreement.

Reports on public health preparedness are an important part of CDC's overall focus on demonstrating results, driving program improvements, and increasing accountability for the nation's investment in public health preparedness.

Reports on public health preparedness are an important part of CDC's overall focus on demonstrating results, driving program improvements, and increasing accountability for the nation's investment in public health preparedness. CDC has now released three preparedness reports; this is CDC's second report with state-by-state data on preparedness activities. It includes updates (when available) to data presented in CDC's first state preparedness report, *Public Health Preparedness: Mobilizing State by State (2008)*,[2] as well as new data on state and local preparedness activities. In 2009, Congress expressed its desire for CDC to continue to report state-by-state data.[3]

Section 1 of this report focuses on core public health functions and provides national-level data on preparedness activities in laboratories and response readiness. Section 2 includes 54 data fact sheets for each of the 50 states and 4 localities, followed by a description of preparedness progress and challenges in the 8 U.S. insular areas.

Also included in this report are snapshots of preparedness and response activities and accomplishments occurring during the 2009 H1N1 influenza pandemic. Activities conducted in 2008 and 2009, the primary timeframes for data in this report, helped build and strengthen capabilities in the states and at CDC that were essential for responding to the pandemic.

All reported activities were supported by CDC's Terrorism Preparedness and Emergency Response funding (which includes PHEP). This report does not describe all preparedness activities conducted at CDC or in states and localities. For a description of the broader range of CDC preparedness and response activities, see CDC's second preparedness report, *Public Health Preparedness: Strengthening CDC's Emergency Response (2009)*.[4]

How Different Audiences Can Use This Report

This report was written for a variety of audiences. States and localities can use this information to broaden their knowledge about progress and gaps in preparedness across their jurisdictions and throughout the nation.

Congress and other policymakers can gauge national public health preparedness as they read about many of the activities that states, localities, and insular areas have undertaken to improve public health preparedness.

Other federal departments and agencies and CDC partners (e.g., key public health associations) may gain a greater understanding of the scope of federally funded preparedness activities. This may help to generate new ideas for collaboration.

Within CDC, programs can use the report to gain a broader understanding of how states, localities, and U.S. insular areas are preparing for public health emergencies, their capabilities and gaps, and the challenges they face. This information can also be used as a tool to guide CDC's technical assistance to recipients of PHEP funds.

Executive Summary

Public health threats are always present. They include natural disasters; biological, chemical, and radiological incidents; and explosions. The impact of these threats can range from local outbreaks to incidents with national or global ramifications. The 2009 H1N1 influenza pandemic underscored the importance of communities being prepared for potential threats. Being prepared to prevent, respond to, and rapidly recover from public health threats can protect the health and safety of the public and emergency responders.

Public health preparedness is ongoing. Preparing adequately for public health emergencies requires continual and coordinated efforts that involve every level of government, the private sector, non-governmental organizations, and individuals. The Centers for Disease Control and Prevention (CDC) plays a pivotal role in efforts to prepare our nation for all types of public health threats.[5]

CDC's mission is to collaborate to create the expertise, information, and tools that people and communities need to protect their health. CDC seeks to accomplish this mission in preparedness by building and strengthening capabilities that can be used broadly for all types of hazards and tailored to particular incidents. Critical core public health capabilities include surveillance and epidemiology, laboratories, and response readiness activities that include communicating, planning, exercising, and evaluating.

CDC support to states, localities, and U.S. insular areas.[6] CDC works with public health departments by providing funding, technical assistance, and coordination of activities for responding to public health threats. For severe emergencies, states, localities, and U.S. insular areas can request additional public health resources from CDC to assist with a response.

Preparedness funding. Congress has supported CDC public health preparedness and response activities by appropriating approximately $1.5 billion per year since 2002. CDC's Office of Public Health Preparedness and Response (OPHPR; formerly the Coordinating Office for Terrorism Preparedness and Emergency Response)[7] manages these funds, which support a wide variety of activities at CDC and at state and local levels. Congress appropriates three-quarters of this funding for two programs, the Public Health Emergency Preparedness (PHEP) cooperative agreement and the Strategic National Stockpile. OPHPR allocates the remainder of the funding to preparedness programs across CDC. In 2009, Congress also provided emergency supplemental funding in response to the 2009 H1N1 influenza pandemic.

Reporting on preparedness. To demonstrate how these federal investments are improving the nation's ability to respond to public health emergencies, CDC has published three preparedness reports.[8] This is CDC's second report focusing on state preparedness activities, including capability-based performance measures for states and localities receiving PHEP funding. Fact sheets in this report cover activities occurring primarily from October 1, 2007 to September 30, 2008 (fiscal year 2008). In addition, some data from 2009 are included.

The Centers for Disease Control and Prevention plays a pivotal role in efforts to prepare our nation for all types of public health threats.

States, localities, and U.S. insular areas received supplemental funding to prepare for and respond to the 2009 H1N1 influenza pandemic. Funds were used to assess response capabilities and address remaining gaps in vaccination; antiviral drug distribution and dispensing; and laboratory, epidemiology, and surveillance activities.

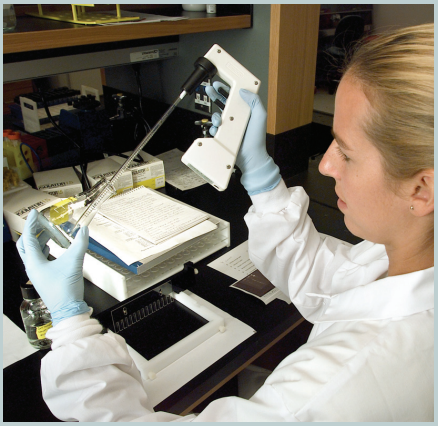
Photo source: Boston Public Health Commission

While these data do not represent all preparedness activities occurring in states, localities, and U.S. insular areas, they significantly expand on the information provided in CDC's first state preparedness report published in 2008.[9] All three CDC reports provide the most comprehensive picture available on the breadth of public health preparedness and response efforts across the nation.[10]

Strengthening Preparedness

Much progress has been made to build and strengthen national public health preparedness and response capabilities. Accomplishments highlighted in this report include the following:

- Biological laboratory capabilities and capacities were strong in most states and localities. Most laboratories in the Laboratory Response Network (LRN) could be reached 24/7, rapidly identified certain disease-causing bacteria and sent reports to CDC, and passed proficiency tests for detecting other biological agents. (See Table 3 on page 26.)
- A majority of LRN chemical laboratories demonstrated proficiency in core methods for detecting and measuring exposure to chemical agents, and some were proficient in one or more additional methods identified by CDC as important for responding to chemical emergencies. (See Table 3 on page 26.)
- All states and localities could receive urgent disease reports 24/7, and most states used rapid methods to communicate with other laboratories for outbreaks, routine updates, and other needs. (See Table 8 on page 34.)
- All states received acceptable CDC review scores for their plans to receive, distribute, and dispense medical assets from CDC's Strategic National Stockpile and other sources. (See 2008-2009 data in Table 8 on page 34.)
- Most states and localities demonstrated the ability to activate and rapidly staff their emergency operations centers for drills, exercises, or real incidents, and developed after action reports and improvement plans following these activities. (See Table 8 on page 34.)



CDC manages the Laboratory Response Network, a group of local, state, federal, and international laboratories that can detect and characterize health threats.

Photo source: CDC

Moving Forward

CDC has identified the areas listed below for improving state and local preparedness.

Maintain preparedness gains and resolve gaps. Important gains have been made since CDC's 2008 state preparedness report in the areas of laboratory and response readiness. Data presented in this report show improvement in rapid laboratory testing for biological agents and readiness to receive, distribute, and dispense assets from CDC's Strategic National Stockpile. CDC will continue to work with state and local health departments to maintain these improvements and to identify and resolve gaps in these and other core capabilities important for preparedness and response. Improvements are needed in continuity of operations plans for state public health laboratories.

Build on the successes and lessons learned from the response to the 2009 H1N1 influenza pandemic. The first influenza pandemic in 40 years provided a real world test of our response capabilities. CDC is working with all levels and sectors of the public health and medical communities toward systematically assessing this response, developing plans to address identified gaps and challenges, and incorporating needed changes.

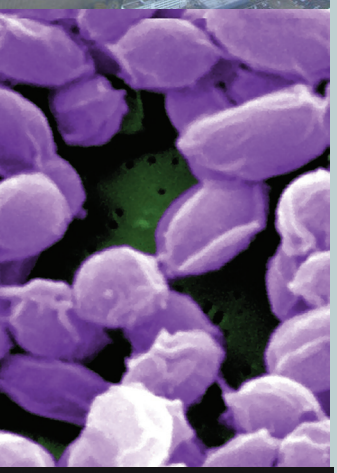
Ensure continuous funding to build and maintain a skilled state and local public health workforce. The surge in effort needed to respond to the 2009 H1N1 influenza pandemic placed an increased strain on a system already weakened by workforce shortages and budget shortfalls. The response revealed that the combination of the continued erosion of the general all hazards preparedness capacities, infrastructure, and staffing, along with the fiscal issues facing state and local governments proved to be challenging for public health departments. Preparing adequately for future outbreaks – and other public health emergencies that are inevitable and may occur simultaneously – requires predictable and adequate long-term funding to improve infrastructure, staffing, and training in the areas of surveillance, epidemiology, laboratories, and response readiness.

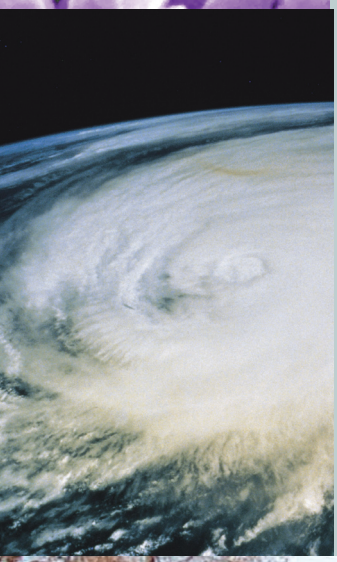
Expand performance measurement to assess and monitor preparedness activities and to drive program improvement and accountability. CDC will continue to work with state and local partners to develop performance measures that are indicators of preparedness and response capabilities and align with the objectives of the National Health Security Strategy[11] as well as the Pandemic and All-Hazards Preparedness Act.[12] Major gaps exist for measuring preparedness in the areas of surveillance and epidemiology. New performance measures are being piloted for these areas as well as for laboratory activities.

All 62 PHEP-funded states, localities and U.S. insular areas have plans to receive, distribute, and dispense medical assets from CDC's Strategic National Stockpile and other sources.

Photo source: Indiana State Department of Health

Promote health and prevent disease, injury, and disability in communities. Healthy populations are more resilient to new health threats. State and local health departments must continue to strengthen their collaboration with individuals, families, and communities as essential partners in building resilience to all types of public health hazards. Building healthier communities also helps provide greater protection to populations who are more vulnerable during emergencies and supports broader CDC health protection goals and national health reform efforts.





Protecting the Nation from Public Health Threats

Whether caused by natural, accidental, or intentional means, public health threats are always present. Being prepared to prevent, respond to, and recover rapidly from these events can save lives and protect the health and safety of the public, including emergency responders.

What are public health threats?

Biological threats can be natural, accidental, or deliberate. They include viruses, bacteria, parasites, and fungi (or their toxins) that can cause illness or death in people, animals, or plants, and are spread through air, water, or food.

Natural disasters include extended heat waves, severe snow or ice storms, earthquakes, catastrophic hurricanes, and extensive floods. Other environmental threats include exposure to chemicals that pose carcinogenic, reproductive, developmental, and neurological risks.

Chemical and radiological materials released accidentally or intentionally could create large-scale public health emergencies, especially in densely populated areas.

Explosions – by far the most common cause of casualties associated with terrorism[13] – can result in large numbers of casualties with complex injuries not commonly seen after natural disasters such as floods or hurricanes.

Who is responsible for responding to public health emergencies?

All response begins at the local level. State and local health departments are first responders for public health emergencies, regardless of whether they are local outbreaks or incidents with global ramifications, such as pandemics. Since 1999, CDC's Public Health Emergency Preparedness cooperative agreement has helped build and strengthen state and local capabilities that help ensure an effective emergency response, but significant challenges remain. Core public health functions needed for preparedness and response include surveillance, epidemiology, laboratories, and response readiness.

Individuals, families, and communities are essential partners for building community resilience to public health hazards. Community resilience is a goal of the National Health Security Strategy published in December 2009.[14] A resilient community has the sustained ability to withstand and recover – in both the short and long term – from adversity, such as an influenza pandemic or terrorist attack.[15] Vulnerable populations[16] and those with chronic conditions, such as asthma and obesity, may require additional care during emergencies such as specialized medications, equipment, and other assistance.

Background

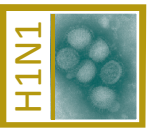
> Preparedness continues to be a core focus for CDC. The best approach to preparedness is the best approach for public health – identify the problems you can do something about, develop and implement programs, rigorously evaluate their effectiveness, and look for ways to improve them.

- Thomas Frieden, MD, MPH
CDC Director

Public health threats are always present. They include natural disasters; biological, chemical, and radiological incidents; and explosions. The impact of these threats can range from local outbreaks to incidents with national or global ramifications. The 2009 H1N1 influenza pandemic underscored the importance of communities preparing for potential threats to the public's health. Being prepared to prevent, respond to, and rapidly recover from public health threats can protect the health and safety of the public and emergency responders. The Centers for Disease Control and Prevention (CDC) plays a pivotal role in preparing our nation for all types of public health threats.[17]

This report was developed as the nation was responding to the 2009 H1N1 influenza pandemic. Preparedness activities conducted in 2008 and 2009, the primary timeframes reflected in this report, helped strengthen state and CDC capabilities for responding to the outbreak and increased the resiliency of communities across the nation. Text boxes on state and local response to the pandemic appear throughout this report.

Pandemic Planning Helps States Respond Rapidly to the 2009 H1N1 Influenza Pandemic



In April 2009, CDC and the public health workforce faced the first influenza pandemic in 40 years. As the initial cases of H1N1 influenza began to emerge in the United States, local, state, and federal public health entities quickly took measures to understand the patterns of the illness, slow its spread, and mitigate its effects.

States began to implement their pandemic plans as the number of 2009 H1N1 influenza cases increased throughout the spring in the United States, Mexico, and other countries. At the time, its course was far from certain, with the possibility of multiple waves of outbreaks throughout the fall and winter.

Federal investments in pandemic planning (see page 11) helped states lessen the impact of the pandemic through increased disease monitoring, ongoing communication updates to keep the public informed, more effective use of existing resources, appropriate use of mitigation measures, implementation of H1N1 vaccination campaigns, and coordination of response efforts with new and established partners nationwide and in other countries. Also critically important were the expansion of state laboratory capabilities for detecting and confirming the virus, and, when necessary, activation of processes for states and localities to receive medical supplies such as antiviral drugs and respirators from CDC's Strategic National Stockpile. Pandemic planning also allowed time for thoughtful deliberation and identification of challenging decision points, all of which supported accelerated decision making during real events.

Response to public health emergencies begins at the local level. Pictured is an H1N1 vaccination clinic in Calistoga, California. Federal investments in pandemic planning helped states lessen the impact of the pandemic.

Photo source: California Department of Public Health

Many lessons from the 2009 H1N1 influenza pandemic are being identified. An overarching lesson is the need for a sustained commitment to continued planning, training, and exercising to help ensure rapid and effective responses to future challenges that may threaten the public's health.

Preparedness and Response Efforts Require Work at All Levels

While response begins at the local level, public health preparedness requires a coordinated effort involving every level of government, the private sector, non-governmental organizations, and individuals. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states improve their capabilities in the core public health functions of surveillance and epidemiology, laboratories, and response readiness.

Federal response to public health emergencies. Lead federal responsibility for emergency response lies with the U.S. Department of Homeland Security (DHS), whose National Response Framework established a single, comprehensive structure for responding to all types of hazards.[18] In addition, the DHS National Preparedness Guidelines provide the vision, capabilities, and priorities for national preparedness.

Under the National Response Framework, the U.S. Department of Health and Human Services (HHS) coordinates federal assistance supplementing state, tribal, and local resources in response to public health and medical disasters.[19] The Assistant Secretary for Preparedness and Response (ASPR) is the principal advisor to the HHS Secretary on all matters related to bioterrorism and other public health emergencies. ASPR works with other federal departments and agencies and is charged with the overall coordination and oversight of emergency preparedness and response activities within HHS. ASPR responsibilities include the coordination of public health response activities related to CDC, which is an operating division of HHS.

CDC is working collaboratively to implement the National Health Security Strategy (NHSS).[20] The NHSS is a comprehensive strategy established to galvanize efforts to minimize the health consequences associated with significant health incidents. National health security is a state in which the nation and its people are prepared for, protected from, and resilient in the face of health threats or incidents with potentially negative health consequences. The NHSS' vision for health security is based on a foundation of community resilience – healthy individuals, families, and communities with access to health care and with the knowledge and resources to know what to do to care for themselves and others in both routine and emergency situations. The vision also emphasizes strong and sustainable public health, health care, and emergency response systems.

CDC mission and preparedness. CDC's mission is to collaborate to create the expertise, information, and tools that people and communities need to protect their health. CDC seeks to accomplish this mission in preparedness by building and strengthening capabilities that can be used broadly for all types of hazards, whether they are biological agents, natural disasters, environmental exposures, chemical and radiological materials, or explosions. In addition, CDC develops capabilities that are tailored to particular hazardous incidents.

Public Health Preparedness

The capability of the public health system, communities, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those in which scale, timing, or unpredictability threatens to overwhelm routine capabilities.[21]

CDC support to states, localities, and U.S. insular areas. CDC also works with state, local, and U.S. insular area public health departments by providing funding, technical assistance, and coordination of activities for responding to public health threats. For severe emergencies, states, localities, and U.S. insular areas[22] can request additional public health resources from CDC to assist with a response.

To examine how this federal investment is improving the nation's ability to respond to public health emergencies, CDC has been developing and implementing capability-based performance measures. The passage of the Pandemic and All-Hazards Preparedness Act (PAHPA, 2006)[23] by Congress highlighted the

CDC's mission is to collaborate to create the expertise, information, and tools that people and communities need to protect their health.

Photo source: CDC

Background

importance of CDC's work in developing such metrics. PAHPA requires the development of measurable preparedness benchmarks and objective standards for recipients of CDC Public Health Emergency Preparedness (PHEP) cooperative agreement funding. Funding to state and local agencies was linked to their performance in these standards beginning in fiscal year (FY) 2009.[24] (For more information on performance measures, see page 12.)

Partnering to improve emergency response. CDC and public health departments work with multiple partners from a variety of sectors. Key partners include the American Red Cross, Association of Public Health Laboratories, Association of Schools of Public Health, Association of State and Territorial Health Officials, Council of State and Territorial Epidemiologists, National Association of County and City Health Officials, and National Emergency Management Association. These organizations share promising practices, conduct research, and provide training to public health professionals to improve preparedness and emergency response.

CDC's PHEP cooperative agreement funds 62 state, locality, and U.S. insular area public health departments to build and strengthen their abilities to respond effectively to public health emergencies.

Funding Supporting Public Health Preparedness and Response

Congress has supported CDC public health preparedness and response activities by appropriating approximately $1.5 billion per year since 2002. This Terrorism Preparedness and Emergency Response funding supports a wide variety of activities at CDC and at state and local levels.

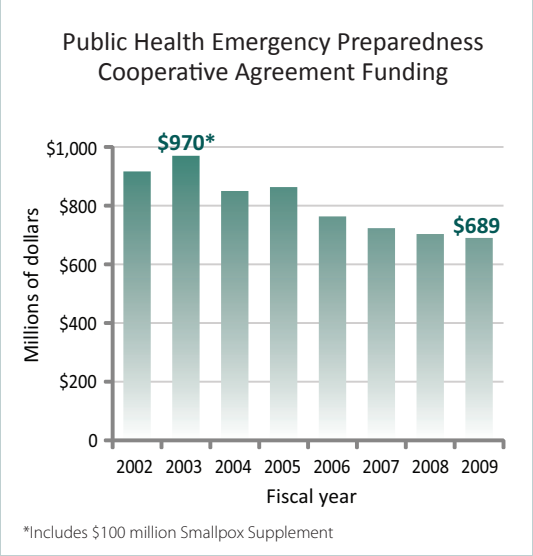
CDC's Office of Public Health Preparedness and Response (OPHPR; formerly the Coordinating Office for Terrorism Preparedness and Emergency Response)[25] is responsible for managing these funds. Congress appropriates over three-quarters of this funding for two CDC programs, the PHEP cooperative agreement and the Strategic National Stockpile. OPHPR allocates the remainder of this funding to preparedness programs across CDC. (See appendices 3 and 4 for more details on funding levels.)

Congress has also provided emergency supplemental funding to address preparedness needs related to specific health threats such as pandemic influenza.

PHEP cooperative agreement. CDC's PHEP cooperative agreement funds 62 state, locality, and U.S. insular area public health departments to build and strengthen their abilities to respond effectively to public health emergencies.[26] PHEP funding has declined from $970 million in FY 2003 to $689 million in FY 2009. (See box below and appendix 4 for historical PHEP funding levels.)

PHEP-funded emergency preparedness and response efforts support the National Response Framework and are targeted specifically for the development of emergency-ready public health departments that are flexible and adaptable. The Division of State and Local Readiness within OPHPR manages the PHEP cooperative agreement, provides direction on preparedness activities, and coordinates technical assistance.

Included in the PHEP cooperative agreement funding is support for the Cities Readiness Initiative of CDC's Strategic National Stockpile. This program focuses on enhancing



PHEP funding has declined from $970 million in FY 2003 to $689 million in FY 2009.

Source: HHS and CDC

Supplemental funding was used to provide additional resources for mass vaccination planning and implementation, and to support the 2009 H1N1 vaccination campaign. Pictured is an H1N1 vaccination clinic in Cambridge, Massachusetts.

Photo source: Cambridge Public Health Department

preparedness for responding to a large-scale bioterrorist event within 48 hours in the nation's largest cities and metropolitan statistical areas, where more than half of the U.S. population resides.[27]

Strategic National Stockpile. CDC's Strategic National Stockpile is a national repository of critical medical supplies designed to supplement state and local public health departments in the event of a large-scale public health emergency. Funds are also used to support technical assistance at state and local levels to receive, distribute, and dispense the supplies. Stockpile assets help ensure that key medical supplies are available to prepare for and respond to emergencies. Stockpile funding averaged approximately $495 million for FY 2002-2009. (See appendix 3 for Stockpile funding levels.)

Additional funding for pandemic influenza. Recognizing the need to prepare for a possible influenza pandemic, Congress appropriated two other sources of funding specifically for pandemic influenza preparedness activities. Beginning in 2005 and continuing through 2008, CDC awarded approximately $524 million in Pandemic Influenza Supplement funds to the 62 PHEP-funded states, localities, and U.S. insular areas for program operations to prepare for and respond to an influenza pandemic. (See appendix 4 for Pandemic Influenza Supplement funding levels.)

Subsequently, as the nation faced the 2009 H1N1 influenza pandemic, Congress provided funding through the 2009 Supplemental Appropriations Act[28] for the Public Health and Social Services Emergency Fund to prepare for and respond to an influenza pandemic. Since July 2009, CDC has administered $1.4 billion from this fund through the Public Health Emergency Response (PHER) grant specifically for the 2009 H1N1 pandemic influenza response. (See appendix 5 for PHER funding levels.) PHER funds were used for assessing response capabilities and addressing remaining gaps in vaccination; antiviral drug distribution/dispensing; and laboratory, epidemiology, and surveillance activities. Funds were also used to provide additional resources for mass vaccination planning and implementation, and to support the implementation of 2009 H1N1 vaccination campaign.

Cutbacks in state public health investments. The 2008-2009 economic crisis had a negative impact on state investments in public health programs. As states faced sharp downturns in tax revenues, many cut budgets and reduced services, including those affecting the public health system. A survey of 57 state and U.S. insular area health agencies conducted

by the Association of State and Territorial Health Officials reported that 76% of health departments made cuts to the FY 2009 budget and 61% reported FY 2010 budgets smaller than FY 2009.[29] Nationwide, a 2010 survey of local health departments conducted by the National Association of County and City Health Officials reported that between January 2008 and December 2009 health departments lost 23,000 jobs to layoffs and attrition, roughly 15% of their entire workforce. In 2009, an additional 25,000 local health department employees were subjected to reduced hours or mandatory furloughs.[30] These cutbacks have significant implications for public health and preparedness.

The 2008-2009 economic crisis had a negative impact on state investments in public health programs.

Measuring Preparedness

CDC has developed and continues to design additional capability-based performance measures to monitor how well federal investments have improved the nation's ability to prepare for and respond to public health emergencies. This report presents 2008 data (the most current available) on the performance measures listed below. The data were submitted to CDC by state, locality, and U.S. insular area public health departments that received PHEP cooperative agreement funding.

Laboratory testing performance measure. States must be able to detect and determine the extent and scope of potential outbreaks to minimize their impact. The intent of the laboratory testing performance measure is to determine if a laboratory can rapidly receive, test, and report disease-causing bacteria (*Escherichia coli O157:H7* and *Listeria monocytogenes*) within a specified timeframe.

Response performance measure. A state, locality, or U.S. insular area's emergency operations center serves as the central command and control facility for carrying out strategic preparedness, planning, and management of emergency situations, including ensuring continuity of operations.

The intent of the response performance measures is to demonstrate capabilities for response activities related to the following areas:

- Notification of emergency operations center staff
- Activation of the emergency operations center
- Assessment of response capabilities through after action reports and improvement plans (AAR/IPs)
- Re-evaluation of response capabilities following the approval and completion of corrective actions identified in a AAR/IPs

Additional performance measures are currently being implemented as well as pilot tested. Performance measures being implemented address the capabilities of crisis and emergency risk communication with the public, incident management, and laboratory services. Performance measures for epidemiological investigation, environmental exposure investigations, surveillance, and additional laboratory services are currently being pilot tested and will be implemented in the near future.

About This Report

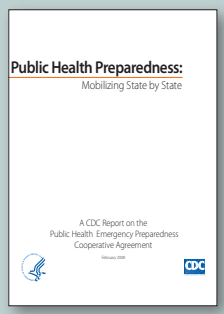
This report presents a snapshot of public health preparedness based on available information on state, locality, and U.S. insular area activities receiving Terrorism Preparedness and Emergency Response funding. Data included in the fact sheet section of the report are from CDC (i.e., data related to the PHEP cooperative agreement and data from other CDC programs) as well as from the Association of Public Health Laboratories and the National Association of County and City Health Officials. CDC data were confirmed by both CDC subject matter experts and the PHEP-funded states and localities.

While these data do not represent all preparedness activities occurring in states,

localities, and U.S. insular areas, they significantly expand on the information provided in CDC's first state preparedness report.[31] Both reports provide the most comprehensive picture available on the breadth of state public health preparedness and response efforts. Fact sheets in this report cover activities occurring primarily from October 1, 2007 to September 30, 2008 (FY 2008). In addition, some data from 2009 are included in this report. All data sources and timeframes are described in appendix 7.

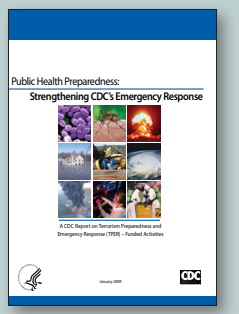
CDC has now released three preparedness reports; this is CDC's second report featuring state-by-state data. It includes updates (when available) to data presented in CDC's first state report, *Public Health Preparedness: Mobilizing State by State (2008)*[32] as well as new data on state and local preparedness activities. CDC's 2009 report, *Public Health Preparedness: Strengthening CDC's Emergency Response*[33] broadly described CDC activities supported by Terrorism Preparedness and Emergency Response funding. CDC, ASPR, and public health partners continue to work together to better define and measure national public health preparedness to ensure that federal funds are invested wisely in ensuring our national readiness to prevent, mitigate, and respond to all types of public health emergencies.

CDC Preparedness Reports



2008

CDC preparedness reports demonstrate results, drive program improvements, and increase accountability for federal investments.



2009

This report is organized into two main sections and seven appendices:

Section 1 begins with a description of surveillance and epidemiology activities and their importance to emergency preparedness. Following that are descriptions and national-level data on laboratories and response readiness activities critical to preparedness in states and localities. Section 1 concludes with information on additional preparedness activities funded by CDC that enhance preparedness at state and local levels.

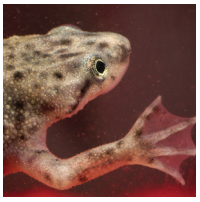
Section 2 presents fact sheets with information on a broad range of preparedness activities in the 50 PHEP-funded states and the 4 localities of Chicago, the District of Columbia, Los Angeles County, and New York City. The fact sheets also include data on the prevalence of several chronic conditions in the state or locality, which should be considered when developing effective response plans, and information on additional CDC-funded projects and activities located in those areas.

Section 2 concludes with a discussion of preparedness activities and challenges in the eight PHEP-funded U.S. insular areas. These areas include the three territories of American Samoa, Guam, and the U.S. Virgin Islands; the two commonwealths of the Northern Mariana Islands and Puerto Rico; and three freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

Appendices 1-7 provide explanations of the fact sheet data points in the report and their significance, an overview of CDC organizations involved in preparedness activities, funding tables, technical assistance review scores for the Cities Readiness Initiative of CDC's Strategic National Stockpile, and data sources.

Public Health in Action: Responding to Emergencies Across the Nation

Selected Biological Incidents



SALMONELLA

*December 2009, Multiple states – **Salmonella Typhimurium outbreak linked to frogs.*** Public health officials investigated infections and determined source of outbreak.

ANTHRAX

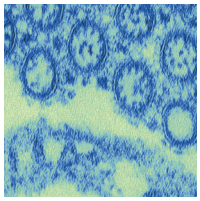
*December 2009, New Hampshire – **Anthrax linked to animal hides.*** State health departments determined that a case of gastrointestinal anthrax was linked to hides used in drum making and a drumming circle.

MUMPS

*August 2009-Spring 2010,[34] New Jersey and New York – **Mumps outbreak.*** Investigations and testing led to identification of thousands of cases, most in religious communities.

E. COLI

*June-July 2009, Multiple states – **E.coli O157:H7 outbreaks linked to raw prepackaged cookie dough and to beef.*** Public health officials and federal agencies investigated outbreaks and identified associations with food sources.



H1N1

Spring 2009, Multiple states - **2009 H1N1 Influenza Pandemic.** In April 2009, states began to implement their pandemic plans. Activities included disease monitoring, ongoing communication updates, appropriate use of mitigation measures, implementation of H1N1 vaccination campaigns, and the coordination of response efforts with partners.

SALMONELLA

*February 2009, Nebraska – **Salmonella Saintpaul outbreak linked to alfalfa sprouts.*** 235 persons from 14 states were infected; initial investigation by Nebraska health department led to investigations in 13 additional states.

SALMONELLA

*January 2009, Multiple states – **Salmonella Typhimurium outbreak linked to peanut butter.*** Public health epidemiologists, sanitarians, and laboratorians led investigations for product recalls that stopped the spread of outbreaks.

While state and local agencies devoted a significant amount of their time, energy, and resources to respond to the 2009 H1N1 influenza pandemic, many other events also required their attention and expertise. Support from CDC's Public Health Emergency Preparedness cooperative agreement helped state and local public health departments build and strengthen their abilities to respond effectively. Below are examples of biological incidents and natural disasters – including H1N1 – to which state and local health departments responded.

Selected Natural Disasters

December 2009, Northeast U.S. – **Severe Winter Weather.** Public health officials issued guidance for staying safe and healthy during severe snow storms. Guidance included protection against hypothermia, carbon monoxide poisoning from indoor heaters, and preparations for extended periods of confinement.

SEVERE WINTER WEATHER

September 2009, American Samoa – **Tsunami Response.** A magnitude 8.0 earthquake generated three separate tsunami waves. Public health and partners worked together to ensure appropriate medical response.

TSUNAMI

September 2009, Multiple states – **Southeast U.S. Floods.** Public health officials provided guidance on sanitation, hygiene, and safety to protect against disease and injury to the thousands affected by floods.

FLOODS

April-May 2009, Multiple states – **Wildfires.** Public health officials issued guidance about air quality and care and services for evacuees, evacuation centers, at-risk populations, and responders. The health department also issued guidance that addressed exposures, clean up from fires, and subsequent response.

WILDFIRES

February 2009, Kentucky – **Ice Storm.** Severe storm caused 36 deaths and left 770,000 residents without power. State health department secured equipment for shelters, provided prescription medications to individuals in shelters, and issued guidance on food safety and other public health issues related to power outages.

ICE STORMS

March 2009, Alaska – **Volcano.** Mt. Redoubt eruption cloud estimated at 50,000 feet. Public health officials monitored ash plume and issued air quality assessments, evacuation recommendations, and instructions for at-risk persons.

VOLCANO

March 2009, North Dakota – **Floods.** Public health officials coordinated evacuations, temporary housing, healthcare for acute injuries and other long-term health risks including hypothermia, bacteria, and mold.

FLOODS

Note: Information on pages 14-15 is adapted from a fact sheet from the Association of State and Territorial Health Officials.[35]

Section 1: A National Snapshot of Public Health Preparedness Activities

- Surveillance and Epidemiology: Monitoring and Investigating Health Threats
- Laboratories: Identifying and Understanding Emerging Public Health Threats
- Response Readiness: Communicating, Planning, Exercising, and Evaluating
- Additional CDC Resources Supporting Preparedness in States and Localities
- Moving Forward

Surveillance and Epidemiology: Monitoring and Investigating Health Threats

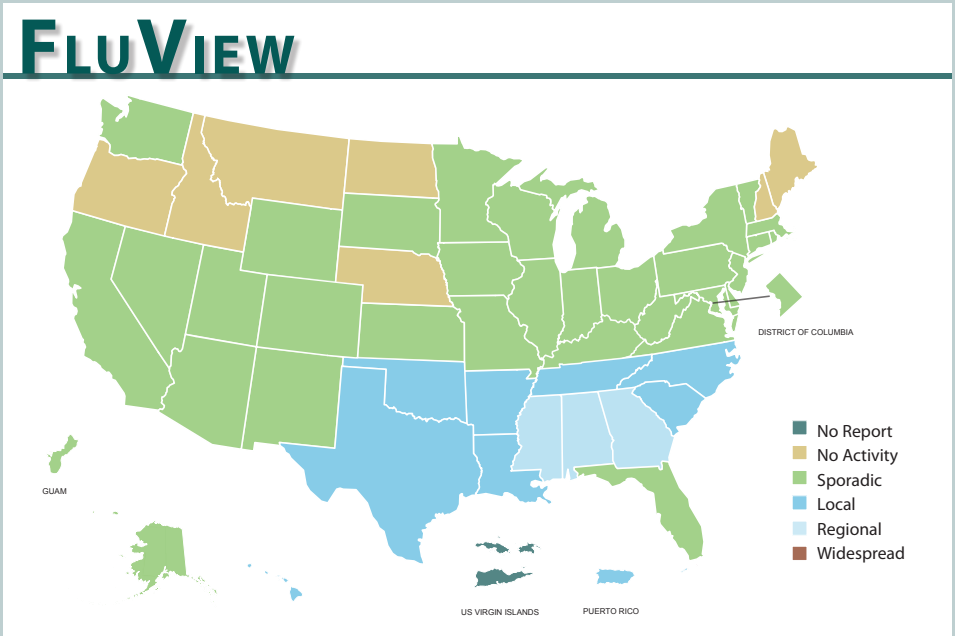
Surveillance and epidemiology are core public health functions that detect community health threats, investigate their sources and patterns of distribution, and monitor their impacts. These data are used to help in making decisions on actions meant to control or prevent disease or injury.

Surveillance: Data for Monitoring Health Threats

Public health surveillance is the ongoing, systematic collection, analysis, and interpretation of health data, and the dissemination of this information to those who need to know. Surveillance data may describe health problem trends, detect epidemics, provide details about disease patterns, monitor changes in disease agents like viruses (through working with laboratorians), help determine the most effective mitigation strategies, and evaluate the effects of control and prevention measures.

Public health officials use different types of surveillance data as a basis for decision making to protect the public's health. One of the first examples of a public health action stemming from the use of surveillance data likely occurred during the bubonic plague in the 14th century, when authorities boarded ships to prevent passengers with plague symptoms from coming ashore. Many early surveillance systems were based on identifying and reporting cases of disease.

In the United States, surveillance systems are a collaborative effort between CDC and its many partners in state, local and territorial health departments; public health and clinical laboratories; vital statistics offices; healthcare providers; clinics; and emergency departments. These surveillance systems resources helped support decision making by public health officials during the 2009 H1N1 influenza pandemic response (see boxes below and on next page).



Surveillance resources such as FluView, CDC's report on influenza disease activity, help support decision making by public health officials during outbreaks, including the 2009 H1N1 influenza pandemic.

Source: CDC

Supporting the 2009 H1N1 Influenza Pandemic Response

CDC supported numerous resources that were critical for responding rapidly to the 2009 H1N1 influenza pandemic. Resources included support for domestic and global laboratory and surveillance systems; epidemiological and laboratory capacity and expertise; vaccine distribution and monitoring of the vaccination program; and communications, partnerships, and pandemic preparedness activities. These resources supported decisions at international, federal, state, and local levels aiming to slow the rapid spread of illness and limit morbidity and mortality.

Surveillance data and epidemiological investigations from the 2009 H1N1 influenza pandemic revealed that certain health conditions increased the risk of being hospitalized from 2009 H1N1 influenza. These conditions included lung diseases like asthma or chronic obstructive pulmonary disease, diabetes, heart disease, neurologic disease and pregnancy. Knowledge about these risks helped decision makers prioritize groups who would receive the first vaccines. The data also helped public health officials establish guidelines on antiviral treatment; how long people should stay home while ill; and the steps healthcare personnel, schools, businesses, community- and faith-based organizations, parents, and others needed to take to prevent infection.

Current surveillance systems at the local, state, national, and international levels need to improve to meet the nation's growing challenge to manage and integrate data from a variety of different sources, ensure that decision makers have access to the data, and exchange data with other federal agencies and with public health partners. In 2007, Homeland Security Presidential Directive 21 called for the development of a nationwide approach to enhance the United States' ability to detect and respond to health-related threats. The National Biosurveillance Strategy for Human Health, an effort coordinated by CDC for the U.S. Department of Health and Human Services, provides a plan for building a nationwide, next-generation capability designed to generate timely, comprehensive, and accessible information for public health and clinical decision making.[36] The Strategy established six priority areas: electronic health information exchange, electronic laboratory information exchange, unstructured data, integrated biosurveillance information, global disease detection and collaboration, and biosurveillance workforce.

Epidemiology: Investigating Health Threats

Epidemiologists – known as "disease detectives" – work closely with laboratorians to identify health threats, determine their patterns in a community, and estimate their effects. They might identify contaminated food causing illness, assess the number and locations of people injured and types of injuries resulting from a disaster, or determine causes of a sudden onset of fever in a community. Epidemiologists also work to minimize the negative effects of community health threats.

Detection depends on accurate and complete surveillance data. Problems can arise if data are not available, especially for state and local health agencies. In particular, health problems may not be identified early and public health interventions (e.g., the provision of treatments or vaccines) may be delayed.

Epidemiologists conduct targeted investigations and surveys that complement surveillance to validate and identify the causes and effects of a health event. Analyses of these data can produce criteria (e.g., specific symptoms) for determining whether a person should be counted as affected by the particular event, the characteristics of those affected

Table 1: Epidemiological Capacity in the 50 States and the District of Columbia Health Departments; 2004-2009

	2004	2009	Percent Decrease
Number of epidemiologists working in state health departments	2,498	2,193	12%
Number of state health departments reporting substantial-to-full capacity in bioterrorism/emergency response	41	37	10%

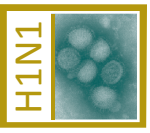
Source: Council of State and Territorial Epidemiologists

(e.g., age, medication use, socioeconomic status), and the geographic extent of the event. Further studies help identify populations at increased risk for the disease or other health event.

CDC epidemiological support to states and localities for FY 2008 included 26 Career Epidemiology Field Officers (CEFOs) located in states and localities supported through state Public Health Emergency Preparedness (PHEP) funding. CDC also deployed 71 field officers from its Epidemic Intelligence Service (EIS) to conduct 319 investigations in the same year. EIS is a two-year epidemiology training program modeled on a traditional medical fellowship. Officers in this program support states during responses to routine public health incidents and large-scale national emergencies. CEFOs are experienced, full-time epidemiologists located in state and local public health departments to enhance and build epidemiologic capacity for public health preparedness and response.

State epidemiological capacity continues to decline. A 2009 assessment[37] by the Council of State and Territorial Epidemiologists reports that national epidemiological capacity has been eroding since 2004 (see Table 1). This trend contrasts with the significant increase in the number of epidemiologists that took place during 2001–2004, when emergency response and preparedness funds fueled rapid growth in the number of new and replacement epidemiologists in the public health workforce. The 2009 assessment also suggests that nearly 20% of current public health epidemiologists anticipate retiring or changing careers in the next 5 years and recommends that federal, state, and local agencies develop a strategy to address these projected downward trends and major gaps.

Enhancing Surveillance in Kansas to Assess Impact of the 2009 H1N1 Influenza Pandemic



The Kansas Department of Health and Environment strengthened its surveillance capabilities to provide comprehensive state-level, regional, and local information on the impact of 2009 H1N1 influenza. Using resources from CDC's Public Health Emergency Response funding, Kansas increased the number of sites in the Influenza-like Illness Surveillance Network statewide from 22 to 73. This one-time funding also supported the development of a hospital-based reporting system assessing hospitalization rates, a school absenteeism surveillance system, and comprehensive weekly surveillance and epidemiology reports that updated responders on the ongoing situation.

Source: Association of State and Territorial Health Officials (2010)

Tracking the Impact of Hazardous Substance Incidents

The Hazardous Substances Emergency Event Surveillance system* works to reduce injury and death among first responders, employees, and the general public that result from releases of hazardous substances. By collecting data on hazardous substance releases and tracking subsequent health effects, it allows state public health officials to assess vulnerabilities and proactively plan for prevention and timely response. In FY 2008, this program tracked 8,150 hazardous substance incidents, 2,290 injuries, and 67 fatalities sustained in hazardous substance incidents, and 606 incidents that led to ordered evacuations of 48,464 people in 14 states.**

** As of September 30, 2009, the name of this program changed to the National Toxic Substance Incident Program. Seven states will be funded under the FY 2010 program announcement.*

*** The number of people evacuated does not include evacuees in incidents where a precise number is unavailable.*

Source: CDC, Office for State, Tribal, Local and Territorial Support (2008)

Assessing Capabilities for Surveillance and Epidemiology

CDC is developing performance measures related to surveillance and epidemiological capabilities. PHEP-funded states, localities, and U.S. insular areas will be required to report on measures that address the following:

- Timely recognition of a potential health emergency through disease reports submitted to public health agencies
- Ability to investigate an outbreak or exposure, summarize findings, and make improvements to the investigative process
- Timeliness of initiating interventions to limit the spread of disease

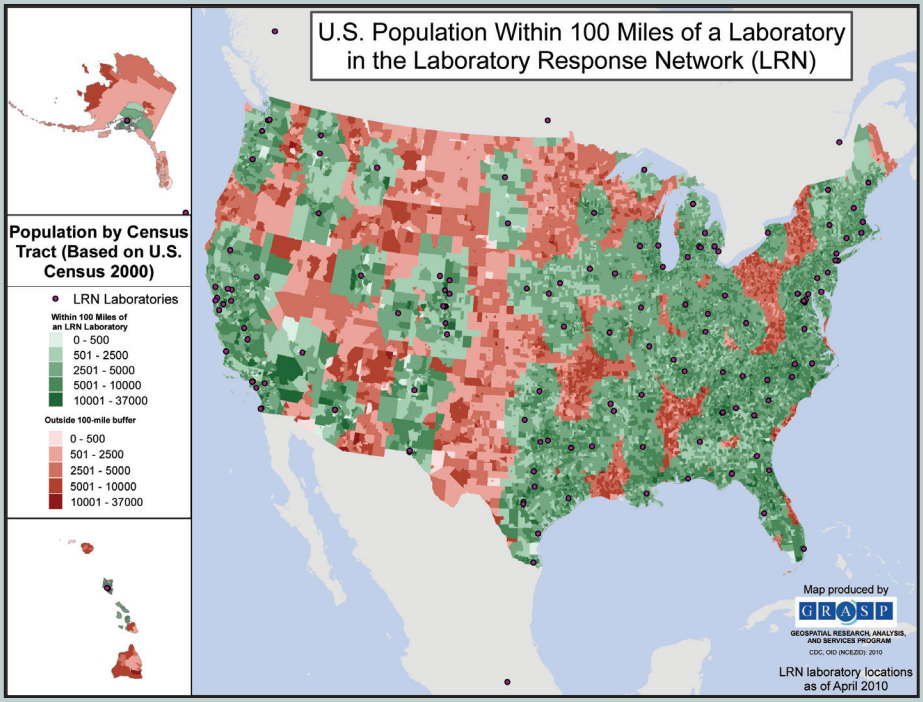
The intent of these new measures is to demonstrate an ability to turn data into actionable information that supports decision making in a public health emergency. For more information on new performance measures, see the Moving Forward section on page 38.

Laboratories: Identifying and Understanding Emerging Public Health Threats

Laboratories identify disease agents, toxins, and other health threats found in tissue, food, or other substances. Rapid detection and characterization of health threats is essential for implementing appropriate control measures. Identification of the bacterium *Salmonella* Typhimurium in some peanut butter products in 2008-2009, for example, led to product recalls that stopped the spread of illness due to this bacterium.[38] The ability to detect and characterize health threats relies on the availability of laboratory resources (including personnel), accurate and consistent methods, and quick data exchange systems.

CDC manages the Laboratory Response Network (LRN), a group of local, state, federal, and international laboratories with unique testing capabilities for confirming high priority biological and chemical agents. Located strategically across the United States and abroad, LRN member laboratories play a critical role in their state or locality's overall emergency response plan to detect, characterize, and communicate about confirmed threat agents. Members perform standardized tests yielding reliable results within hours. Approximately 90% of the U.S. population lives within 100 miles of an LRN laboratory, decreasing the time needed to begin the response to a terrorist attack or naturally occurring outbreak.

Highlights of state and locality laboratory activities related to preparedness appear on the following pages. See the summary table on page 26 for national-level data on laboratory activities (Table 3).



The Laboratory Response Network is a group of local, state, federal, and international laboratories with unique testing capabilities for confirming high priority biological and chemical agents. Approximately 90% of the U.S. population lives within 100 miles of a laboratory in the Laboratory Response Network.

Source: CDC

Nationwide Testing for Responding to Biological Threats

The LRN was established in 1999 to create national laboratory capacity for testing biological threat agents and dangerous toxins. Specific examples of biological threats include anthrax, smallpox, plagues, and botulism.[39]

LRN biological laboratories are designated as national, reference, or sentinel laboratories.

- National laboratories, including those at CDC, have the most advanced capabilities. These laboratories are responsible for specialized strain characterizations, bioforensics, select agent activity, and handling highly infectious agents.
- Reference laboratories perform tests to detect and confirm the presence of a threat agent.
- Sentinel laboratories are primarily hospital-based and can test samples to determine whether they should be shipped to other laboratories for further testing.

In FY 2008, a total of 151 LRN laboratories in the United States could test for biological agents; 148 of these were reference laboratories and 3 were national laboratories. These laboratories maintain relationships with numerous sentinel laboratories in their jurisdictions that refer suspicious specimens to them for more advanced testing.

CDC funded 54 LRN public health laboratories in FY 2008, one in every state and one in the District of Columbia (with the exception of California, Illinois, and New York, which have two laboratories) as part of the Public Health Emergency Preparedness (PHEP) cooperative agreement. Additional laboratories that participate in the LRN include state and locally funded public health laboratories as well as federal, military, international, university, agricultural, veterinary, food, and environmental testing laboratories.

LRN laboratories could be reached 24/7. Because emergencies can happen day or night, emergency contacts for LRN member laboratories must be accessible 24 hours a day. In FY 2008, CDC successfully contacted 135 out of 151 LRN biological laboratories during a non-business hours telephone drill.

Laboratories improved their abilities to rapidly identify disease-causing bacteria. States must be able to detect and determine the extent and scope of potential outbreaks and minimize their impacts. PHEP-funded states must report on their ability to test for two bacteria and report results within a target timeframe of 4 working days (a CDC performance measure; see page 12). Laboratories in the PulseNet network[40] (coordinated by CDC and consisting of public health and food regulatory agency laboratories) use CDC's pulsed-field gel electrophoresis (PFGE) protocols to rapidly identify specific strains of *Escherichia coli O157:H7* and *Listeria monocytogenes*.

States are improving their abilities to rapidly identify these bacteria. The number of states that submitted at least 90% of *Escherichia coli* and *Listeria monocytogenes* test results to CDC within 4 working days increased from 2007 to 2008 (Table 2).

A scientist at a state public health laboratory tests a tomato sample during an investigation into a multistate *Salmonella* outbreak.

Photo source: New Mexico Department of Health

Table 2: Rapid Identification of Disease-Causing Bacteria by PulseNet Laboratories; 2007-2008

Disease-Causing Bacteria	Number of states submitting at least 90% of test results to CDC's PulseNet database within 4 working days		
	2007*	2008**	Percent Increase
Escherichia coli O157:H7	22 out of 48 (46%)	29 out of 50 (58%)	26%
Listeria monocytogenes	10 out of 30 (33%)	18 out of 32 (56%)	70%

**Data for the 50 states from the PHEP cooperative agreement Budget Period 7 (August 31, 2006 to August 30, 2007)*
***Data for the 50 states from the PHEP cooperative agreement Budget Period 8 (August 31, 2007 to August 9, 2008)*
Source: CDC, OPHPR (DSLR)

Most laboratories passed proficiency tests for detecting biological agents. CDC conducts proficiency testing to evaluate LRN reference and national biological laboratories' abilities to receive, test, and report one or more suspected biological agents. If a laboratory is unable to successfully test for an agent within a specified period of time and report results, it will not pass the proficiency test. In FY 2008, LRN biological reference and national laboratories passed 261 out of 277 tests (94%) to identify biological agents in unknown samples.

Nationwide Testing for Responding to Chemical Threats

In 2003, the LRN started testing clinical specimens to measure human exposure to toxic chemicals. LRN laboratories that can test for chemical agents are designated as Level 1, 2, or 3.

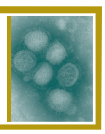
- Level 1 laboratories have the most advanced capabilities. These are surge-capacity laboratories that can test for an expanded number of agents, including nerve agents, mustard agents, and toxic industrial chemicals. They also maintain the capabilities of Level 2 laboratories.
- Level 2 laboratories test for a limited panel of toxic chemical agents. They also maintain the capabilities of Level 3 laboratories.
- Level 3 laboratories work with hospitals and other first responders to maintain competency in clinical specimen collection, storage, and shipment.

In 2009, a total of 56 LRN laboratories in the United States could handle and/or test for chemical agents; 10 of these were Level 1 laboratories, 37 were Level 2 laboratories, and 9 were Level 3 laboratories.

A majority of LRN chemical laboratories demonstrated proficiency in core methods to rapidly detect and measure chemical agents. Level 1 and Level 2 chemical laboratories undergo proficiency testing to determine if they can use six core methods to rapidly detect and measure chemical agents that can cause severe health effects. These methods can help determine the scope of an incident, identify those requiring long-term treatment, assist with non-emergency medical guidance, and help law enforcement officials determine the origin of the agent. Laboratories are tested annually to evaluate ongoing proficiency in the six methods.

In 2009, 34 out of 47 Level 1 and/or Level 2 LRN chemical laboratories were able to demonstrate proficiency in all six core methods (an additional seven laboratories demonstrated capabilities in four or five core methods). It should be noted that the states and localities with Level 1 and/or Level 2 laboratories that are not proficient in all six core methods may have completed extensive work in the two steps that precede proficiency testing: training and validation in the core methods.

Budget and Workforce Cuts, Virus Uncertainties Strain State Response to 2009 H1N1 Influenza Pandemic



Health officials anticipated and prepared for an influenza pandemic. The identification of a novel H1N1 influenza virus in April 2009, however, still stressed the response capabilities of the public health system. Although every state had laboratories with pandemic response plans in place, many were operating with a reduced workforce. Additional challenges to a rapid response included obtaining approved testing equipment and supplies, and training staff on the new testing protocols. Despite these difficulties, every state and the District of Columbia had at least one public health laboratory that could test for the 2009 H1N1 influenza virus by early June.

While public health staff across the nation met these challenges by working long hours for several months, the response placed increased and unsustainable strain on a system already weakened by workforce shortages. Preparing adequately for future public health responses requires predictable and adequate long-term funding to improve infrastructure, staffing, and training in public health laboratories. In his May 2009 testimony to Congress, Daniel Sosin, MD, MPH, Acting Director of CDC's Office of Public Health Preparedness and Response, noted that "with stronger laboratory capacity in states, we could accelerate the detection and study of new viruses such as the 2009 H1N1 virus, helping us to better understand and respond to emerging health threats."

Source: Association of Public Health Laboratories, On the Brink: H1N1 Drains Labs Hit by Cuts (2009)

Some LRN laboratories also demonstrated proficiency in additional methods. Proficiency in additional methods – required for Level 1 laboratories and optional for Level 2 laboratories – demonstrates a more advanced level of preparedness capability. CDC's LRN program for assessing proficiency in detecting and measuring chemical agents continues to evolve through the ongoing incorporation of additional methods. Because the list of additional methods continues to increase, state and local laboratories are not expected to be proficient in all additional methods. (As of September 2009, there were six additional methods.)

In 2009, 26 out of 47 Level 1 and/or Level 2 LRN chemical laboratories demonstrated proficiency in at least one additional method to rapidly detect chemical agents.

CDC continues to work with public health laboratories to assist them in expanding their chemical laboratory capacity to prepare for and respond to chemical terrorism incidents or other emergencies involving chemicals. CDC also partners with the Association of Public Health Laboratories to ensure support for public health laboratories involved in responding to chemical-exposure events from all sources, including those related to terrorism.

Maintaining Core Laboratory Functions During An Emergency

Improvements are needed in continuity of operations plans, which ensure that core functions of state public health laboratories are not disrupted during emergencies. In FY 2008, 23 of the 51 state public health laboratories and the District of Columbia had

continuity of operations plans, 15 had state plans that included laboratory operations, and 13 were developing plans. More work is needed to ensure that laboratories can withstand emergencies.

National Snapshot of Laboratory Activities

A summary table of national-level data on laboratory activities in 2008 and 2009 appears on the following page (Table 3). Note that these items represent available data for preparedness activities and do not fully represent all state and locality laboratory efforts. For individual state and locality information in the area of laboratory activities, see Section 2 starting on page 42. See appendix 1 for an explanation of data points.

States Facing Challenges in Maintaining Laboratorian Workforce

Laboratorians provide critical expertise to effectively identify and respond to public health emergencies. Their responsibilities during a public health event include testing to identify known agents and providing timely laboratory information to response agencies.

According to a 2008 national survey, public health laboratories across the country are experiencing significant difficulties maintaining the highly skilled workforce of laboratorians necessary to ensure an effective response. State public health laboratory directors reported that the factors most severely impacting their workforce were hiring (41%) and retention (28%). For those reporting hiring as a primary concern, 36% identified lack of funding and 31% cited hiring freezes as impacting their ability to hire staff.

Sources: Association of Public Health Laboratories (APHL), Summary on Standards Needed for Preparedness Education for Epidemiologists, Public Health Laboratorians, Public Health Nurses, and Environmental Health Specialists/Sanitarians (2007). APHL, State Public Health Laboratories: Sustaining Preparedness in an Unstable Environment (2008).

Table 3: National Snapshot of Laboratory Activities

Laboratories: General	
Maintaining core laboratory functions during an emergency	Status of laboratory continuity of operations plan (COOP) for 50 states and DC: • **23 out of 51** had a state public health laboratory COOP • **15 out of 51** had a state COOP that included laboratory operations • **13 out of 51** had a COOP that was under development *APHL; 8/31/2007-8/30/2008*
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	**53 out of 54** states and localities had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC *CDC, OSELS; as of 9/30/2008*
Laboratories: Biological Capabilities	
Participation in LRN for biological agents	**148 out of 151** LRN laboratories were reference laboratories that could test for biological agents The remaining **3** LRN laboratories were national laboratories that could test for biological agents *CDC, OID (NCEZID); as of 9/30/2008*
Assessing if laboratory emergency contacts could be reached 24/7	**135 out of 151** LRN laboratories were successfully contacted during a non-business hours telephone drill *CDC, OID (NCEZID); 8/2008*
Evaluating LRN laboratory capabilities	**261 out of 277** proficiency tests were passed by LRN reference and/or national laboratories *CDC, OID (NCEZID); 1/2008-9/2008*
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE): • **50 out of 50** states performed tests on *E.coli 0157:H7* samples • **29 out of 50** of the states that performed tests submitted at least 90% of test results to the PulseNet database within 4 working days *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE): • **32 out of 50** states performed tests on *L.monocytogenes* samples • **18 out of 32** of the states that performed tests submitted at least 90% of test results to the PulseNet database within 4 working days *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
Assessing laboratory competency and reporting through exercises	**49 out of 51** public health laboratories in 50 states and DC conducted exercises to assess the competency of sentinel laboratories to rule out bioterrorism agents *APHL; 8/31/2007-8/30/2008*
	Ability of CDC-funded LRN laboratories* to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill: • **35 out of 54** laboratories passed • **15 out of 54** laboratories did not participate • **4 out of 54** laboratories did not pass **There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL and NY, which have two.* *CDC, OID (NCEZID); 3/2008*
Laboratories: Chemical Capabilities	
Participation in LRN for chemical agents (LRN-C)	56 LRN-C laboratories in states and localities could respond if the public was exposed to chemical agents: • **10 out of 56** are Level 1 laboratories (most advanced testing capabilities) • **37 out of 56** are Level 2 laboratories (testing capabilities for limited panel of agents) • **9 out of 56** are Level 3 laboratories (specimen collection, storage, and shipment) *CDC, ONDIEH (NCEH); as of 9/14/2009*
Evaluating LRN-C laboratory capabilities through proficiency testing	**34 out of 47** Level 1 and/or Level 2 LRN-C laboratories successfully demonstrated all six core methods to rapidly detect chemical agents **26 out of 47** Level 1 and/or Level 2 LRN-C laboratories successfully demonstrated at least one additional method to rapidly detect chemical agents *CDC, ONDIEH (NCEH); as of 9/14/2009*
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratories ability to collect, package, and ship samples properly during LRN exercise: • **49 out of 56** laboratories passed • **3 out of 56** laboratories did not participate • **4 out of 56** laboratories did not pass *CDC, ONDIEH (NCEH); as of 11/9/09*
	25 out of 31 Level 1 and/or Level 2 LRN-C laboratories successfully demonstrated the ability to detect 2 chemical agents in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise* **Not all Level 1 and Level 2 laboratories are eligible to participate in this exercise.* *CDC, ONDIEH (NCEH); as of 8/31/2008*
	Level 1 LRN-C laboratories took an **average of 98.3 hours** to process and report on 500 samples during the LRN Surge Capacity Exercise (range was 71 to 126 hours) *CDC, ONDIEH (NCEH); 1/9/2009*

Response Readiness: Communicating, Planning, Exercising, and Evaluating

While all response to public health emergencies begins at the local level, preparing for a response requires coordination among all levels of government as well as a clear understanding of expected roles and responsibilities. State and local public health departments continue to improve their response to threats by developing, exercising, and improving emergency response plans and responding to real incidents. Strengthening response capabilities and capacities also entails improving situational awareness through monitoring and communicating emerging health information.

Highlights of state and locality activities to enhance response readiness follow. See the summary table on page 34 for national-level response readiness data (Table 8).

Communicating Emerging Health Information

Rapid detection and communication of health threats allows public health officials to identify disease patterns and implement measures to lessen their spread and impact.

States and localities used rapid electronic methods to monitor and communicate emerging health information. All state and locality public health departments could receive urgent disease reports 24/7. In addition, state public health laboratories in 47 states and the District of Columbia used rapid methods to communicate with sentinel laboratories and other partners for outbreaks, routine updates, and training events.

Participation in testing helped ensure that states received electronic information rapidly. The ability of state and local public health staff to receive urgent emerging health information from CDC helps ensure that local problems are mitigated and national events are detected sooner. CDC conducts tests to identify and address problems in its Health Alert Network (HAN) and Epidemic Information Exchange (*Epi-X*) systems. These tests ensure that the systems will be fully operational during a real event.

The HAN system, a component of CDC's Public Health Information Network, transmits health alerts, advisories, and updates on urgent health events to more than one million recipients, including state and local public health practitioners, clinicians, and laboratories. The number of PHEP-funded areas responding to HAN test messages within 30 minutes increased from 2007 to 2009 (see Table 4).

Epi-X, a secure, CDC web-based communication system, enables state and local health departments, poison control centers, and other public health professionals to access and share preliminary health surveillance information quickly. *Epi-X* scientific staff are available 24/7 to provide assistance in editing

Table 4: Communicating Emerging Health Information; 2007-2009

	2007*	2009**	Percent Increase
State Public Health Departments Responding to HAN Test Message within 30 Minutes	39 out of 50 (78%)	48 out of 50 (96%)	23%

*Data for the 50 states as of August 2007 (District of Columbia also participated and passed)
** Data for the 50 states as of July 2009
Source: CDC, OPHPR (DEO)

and posting reports on the secure website. Staff also notify users routinely (by email) or as incidents arise (by pager, telephone, and email) about acute health events. To protect the sensitive nature of this information, access is limited to designated officials engaged in identifying, investigating, and responding to health threats. In FY 2008, 48% of approximately 5,500 active *Epi-X* users in the 50 states and the District of Columbia responded to a system-wide notification test that entailed logging into the system and viewing a report within the 3-hour targeted time frame.

Preparing for Rapid Response to Radiological Incidents

Many states are pre-positioning treatments for radiological exposures to reduce the estimated response time should an incident occur. Calcium and zinc DTPA (diethylene triamine pentaacetic acid) are agents to treat people with internal contamination from plutonium, curium, or americium exposure. As of March 2010, 89% of the 62 PHEP-funded state, locality, and U.S. insular area public health departments received 78,880 doses of calcium and zinc DTPA from CDC's Strategic National Stockpile.

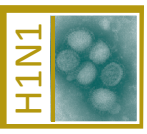
Source: CDC, Office of Public Health Preparedness and Response, Division of Strategic National Stockpile (2010)

Planning

Responding to a public health emergency often requires complex logistical planning for activities such as the distribution of medicines or other supplies to a community. Because these activities involve many different community agencies, everyone involved in emergency response must plan strategies and regularly exercise them together. All 62 states, localities, and U.S. insular areas funded by the Public Health Emergency Preparedness (PHEP) cooperative agreement have plans for receiving, distributing, and dispensing medical assets from CDC's Strategic National Stockpile and other sources. Assets include antibiotics, chemical antidotes, antitoxins, life-supporting medications, and medical supplies.

States can request these assets when local supplies are depleted or commercially unavailable. These assets, in combination with federal, state, and local technical expertise to manage and distribute them efficiently, help ensure the availability of key medical supplies during emergencies.

Planning and Training Critical to California's Rapid Response to the H1N1 Influenza Pandemic



All states, localities, and insular areas receiving PHEP funding develop and exercise plans to receive, store, distribute, and dispense supplies from the Strategic National Stockpile in the event of a public health emergency. Comprehensive planning and extensive training and testing prepared the California Department of Public Health to respond rapidly to the 2009 H1N1influenza pandemic. The state health department established an emergency operations center and activated the state warehouse. Operating on a 24/7 schedule, the state warehouse deployed about two million courses of antiviral drugs to local health departments in the first month of the pandemic alone, with the majority of shipments received by local health departments within 24 hours of request. Like the state health department, California's local health departments report that previous Stockpile planning made efficient receipt, distribution, and dispensing of antiviral drugs possible.

Source: Association of State and Territorial Health Officials (2010)

Table 5: CDC Technical Assistance Review of State Strategic National Stockpile Plans; 2006-2009

	2006-2007	2007-2008	2008-2009
Acceptable (score of 69 to 100)	37 out of 50 (74%)	46 out of 50 (92%)	50 out of 50 (100%)
Unacceptable (score of 0 to 68)	13 out of 50 (26%)	4 out of 50 (8%)	–

Source: CDC, OPHPR (DSNS)

Ability of states to receive, distribute, and dispense medical assets improved. CDC conducts annual technical assistance reviews (TAR) to assess Stockpile plans and works closely with state and local agencies to identify and address gaps. Areas of assessment include the public health department's coordination with traditional and nontraditional community partners; the state's ability to receive, store, stage, distribute, and dispense medical assets; the state's legal statutes that aid rapid dispensing of assets; and the type and frequency of trainings and exercises.

The number of states performing within an acceptable range in their plans to receive, stage, distribute, and dispense medical assets received from the Stockpile or other sources increased from 37 to 50 between 2006 and 2009 (Table 5). (On a scale of zero to 100, a score of 69 or higher indicates that a state performed within an acceptable range.[41]) See individual fact sheets in Section 2 for state-specific scores.

Major metropolitan statistical area scores improved over time. The Cities Readiness Initiative (CRI) of CDC's Strategic National Stockpile focuses on enhancing preparedness in the nation's largest cities and metropolitan statistical areas (MSAs), where more than 50% of the U.S. population resides. Through CRI, state and large metropolitan public health departments have developed plans to respond to a large-scale bioterrorist event within 48 hours. CRI has also enhanced communication and collaboration among state and local public health departments, resulting in optimal use of shared resources.

The CRI project began in 2004 with 21 cities and expanded to a total of 72 MSAs, with at least one CRI MSA in every state.

- 2004: CDC funded 21 cities (Cohort I)
- 2005: CDC funded 15 additional MSAs (Cohort II), for a total of 36 MSAs
- 2006: CDC funded an additional 36 MSAs (Cohort III), for a total of 72 MSAs

MSAs can consist of one or more jurisdictions (e.g., counties, cities, and municipalities) and can extend across state borders, resulting in the representation of several states within one MSA. Reviews are conducted annually in each local jurisdiction to ensure continued readiness. Scores (ranging from 0 to 100) for each planning jurisdiction are combined to compute an average score for the CRI MSA. A score of 69 or higher indicates that the CRI location performed in an acceptable range in its plan to receive, distribute, and dispense medical assets from the Stockpile or other sources. Average scores for each CRI cohort demonstrate that scores improve the longer MSAs are in the program. The average scores for each CRI cohort are presented in Table 6. (See appendix 6 for individual jurisdiction scores.)

Table 6: CDC Technical Assistance Reviews of Strategic National Stockpile Plans for Cities Readiness Initiative Locations; 2008

Average scores for each CRI cohort demonstrate that scores improve the longer MSAs are in the program.

	Cohort I (established in 2004)	Cohort II (established in 2005)	Cohort III (established in 2006)
Acceptable (score of 69 to 100)	18 out of 21 (86%)	10 out of 15 (67%)	17 out of 36 (47%)
Unacceptable (score of 0 to 68)	3 out of 21 (14%)	5 out of 15 (33%)	17 out of 36 (47%)
Did not report scores	-	-	2 out of 36 (6%)

Source: CDC, OPHPR (DSNS)

Exercises and Incidents

State emergency operations centers (EOCs) conduct exercises and drills to practice response to emergency incidents. These hands-on sessions educate responders about response plans and their roles during an incident and identify needed improvements. Exercises help organizations assess their capabilities objectively, so that strengths and areas for improvement are identified, corrected, and shared as appropriate before a real incident. Exercises also help build working relationships across disciplines that do not work together routinely.

During a real incident, the state EOC serves as a facility for carrying out response planning and management of emergency situations, including ensuring continuity of operations. The common functions of all EOCs are to collect, gather, and analyze data; make decisions that protect life and property; maintain continuity of the organization and disseminate decisions to all concerned agencies and individuals.

One of the most critical components of an EOC is its staff. They must be properly trained and have the authority to carry out actions necessary to respond to an emerging disaster. All 50 states and 4 localities must comply with National Incident Management System requirements, which includes training for staff in their roles and responsibilities during

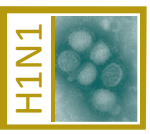
Operation "Cache-Out" Exercise

With funding from the Cities Readiness Initiative, two local health departments in Utah collaborated with community partners to conduct exercises that tested the ability to use bank and credit union drive-through windows for dispensing antibiotic or antiviral drugs to the public during an emergency.

These exercises required coordination by public health, the private sector, law enforcement, fire and emergency medical services, search and rescue, emergency management, and public information groups.

Photo source: Utah Department of Health

New Mexico and Illinois Ensure Availability of Drugs for the 2009 H1N1 Influenze Pandemic



To ensure that local providers could respond rapidly to the 2009 H1N1 influenza pandemic, the New Mexico Department of Health pre-positioned (placed ahead of need) antiviral drugs with 178 public and private organizations that agreed to receive, distribute, and dispense the drugs. These arrangements helped ensure that their population, especially high-risk groups, had quick access to the medications. The state provided assets to acute care hospitals, health centers and clinics, pharmacies, and the Indian Health Service.

Illinois pre-positioned both antiviral drugs and personal protective equipment with local health departments and hospitals as it anticipated an increase in 2009 H1N1 influenza during the holidays and winter. The state also developed a backup transportation plan that did not rely on state-owned trucks – often needed for plowing snow – to resupply and pre-position the medical countermeasures.

Source: CDC, Office of Public Health Preparedness and Response, Division of Strategic National Stockpile (2009)

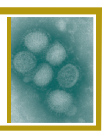
an emergency as outlined by the Incident Command System (ICS). The ICS specifies that states and localities have a pre-identified list of personnel required to cover eight core ICS functional roles: Incident Commander, Public Information Officer, Safety Officer, Liaison Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

All of the functional areas may or may not be used based on incident needs. The widespread use of ICS by all levels of government – federal, state, local, and tribal – as well as by many nongovernmental organizations and the private sector, enables personnel to work together using common terminology, procedures, and organizational structures.

CDC's EOC supports state response by serving as the point of contact for state agencies reporting potential public health threats. This centralized facility organizes the agency's scientific experts in one location during an emergency, allowing efficient information exchange and connection with local, state, federal, and international partners. For multistate or severe emergencies, CDC can provide additional public health resources and coordinate response efforts across multiple jurisdictions. To support state and local efforts during an emergency, CDC's EOC also coordinates deployment of CDC staff and equipment.

States and localities demonstrated abilities to ensure rapid response. To ensure timely and effective coordination within the public health agency and with key response partners in a complex incident, PHEP-funded states and localities must demonstrate the capability to rapidly notify staff to report for EOC duty. They must also track staff responses to this notification to ensure that each of the eight ICS functional roles can be filled. Rapid notification of staff depends, in part, on maintaining accurate contact information for pre-identified public health agency staff to fill each ICS functional role.

Activation of Emergency Plan Speeds New York Response to the 2009 H1N1 Influenza Pandemic



When the 2009 H1N1 influenza pandemic struck in spring 2009, New York activated the state's public health emergency preparedness response plan. This action focused attention on the imminent public health threat and streamlined processes expediting successive emergency responses. A number of measures were implemented that enabled state, city, and county health departments to keep close surveillance of emerging cases and to react quickly to reduce the transmission rates and impact of the disease. Measures included developing a testing protocol to ensure identification of severe illness; monitoring resources for the most efficient use of medicines, masks, and other supplies; and implementing rapid internet reporting of suspected illness to provide complete, real time understanding of the unfolding situation. The Department of Health also maintained ongoing communication with counties, hospitals, other health care providers, and schools across the state to assure the most up-to-date information was available.

Source: New York State Office of the Governor (2009)

In 2008, 53 out of 54 states and localities conducted or responded to a minimum of two drills, exercises, or real incidents to demonstrate rapid notification of pre-identified staff that the EOC was activated.

States and localities activated public health EOCs. An activation is defined as rapidly staffing all eight core ICS functional roles[42] in the public health EOC with one person per position. PHEP-funded states and localities activated and staffed EOCs and evaluated response performance through after action reports.

The number of states and localities that activated their public health EOC at least twice as part of a drill, exercise, or real incident (a CDC performance measure – see page 12) increased from 2007 to 2008 (see Table 7). In addition, 47 out of 54 states and localities conducted at least one unannounced activation.

In a related performance measure, in 52 out of 54 states and localities, pre-identified staff reported to the public health EOC within the target time of 2.5 hours at least once.[43] Although not every incident requires full staffing of the ICS, this capability is critical to maintain in case of large-scale or complex incidents.

Table 7: Activation of State and Locality Emergency Operations Centers; 2007-2008

	2007*	2008**	Percent Increase
Public health EOC activated at least twice as part of a drill, exercise, or real incident	46 out of 54 (85%)	48 out of 54 (89%)	5%

**Data for the 50 states and 4 localities of Chicago, the District of Columbia, Los Angeles County, and New York City from the PHEP cooperative agreement Budget Period 7 (August 31, 2006 to August 30, 2007)*

***Data for the 50 states and 4 localities of Chicago, the District of Columbia, Los Angeles County, and New York City from the PHEP cooperative agreement Budget Period 8 (August 31, 2007 to August 9, 2008)*

Source: CDC, OPHPR (DSLR)

Evaluating Response Capabilities

States and localities evaluate their actions during both exercises and real incidents, identify needed improvements, and prepare plans for making improvements by developing after action reports and improvement plans (AAR/IPs). AAR/IPs should include how response operations did and did not meet objectives, recommendations for correcting gaps or weaknesses, and a plan for improving response operations.

In 2008, 52 out of 54 states and localities developed AAR/IPs at least twice following an exercise or real incident. In addition, 51 out of 54 states and localities re-evaluated response capabilities following the approval and completion of corrective actions identified in AAR/IPs.

National Snapshot of Response Readiness Activities

A summary table of national-level data on response readiness activities in 2008 and 2009 appears on the following page (Table 8). Note that these items represent available data for preparedness activities and do not fully represent all state and locality response efforts. For individual state and locality information in the area of response readiness, see Section 2 starting on page 42. See appendix 1 for an explanation of data points.

Table 8: National Snapshot of Response Readiness Activities

Response Readiness: Communication	
Communicating emerging health information	**54 out of 54** state and locality public health departments had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day *State and locality data; 10/1/2007- 9/30/2008*
	48 out of 50 states responded to Health Alert Network (HAN) test message within 30 minutes *CDC, OPHPR (DEO); 7/2009*
	47 out of 51 state public health laboratories and DC used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications *APHL; 8/31/2007-8/30/2008*
	48% of approximately 5,500 Epidemic Information Exchange users in 50 states and DC responded to a system-wide notification test within 3 hours *CDC, OPHPR (DEO); 4/3/2008*
Improving public health information exchange	**53 out of 54** states and localities participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange *CDC, OSTLTS; as of 9/30/2008*
Response Readiness: Planning	
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	States with acceptable* CDC technical assistance review scores: • **50 out of 50** states for 2008-2009 • **46 out of 50** states for 2007-2008 *A score of 69 or higher (out of 100) indicates state performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See state fact sheets for individual scores. *CDC, OPHPR (DSNS); 2007-2008 scores are associated with funding from the PHEP cooperative agreement Budget Period 8 (8/13/2007-8/9/2008); 2008-2009 scores are associated with funding from Budget Period 9 (8/10/2008-8/9/2009)*
	Cities Readiness Initiative (CRI) locations with acceptable* scores: • **18 out of 21** locations in CRI Cohort I (MSAs that enrolled in 2004) • **10 out of 15** locations in CRI Cohort II (MSAs that enrolled in 2005) • **17 out of 36** locations in CRI Cohort III (MSAs that enrolled in 2006) *A score of 69 or higher (out of 100) indicates CRI location performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See appendix 6 for individual scores. *CDC, OPHPR (DSNS); as of 7/30/2008*
Enhancing response capability for chemical events	**1,941** CHEMPACK nerve-agent antidote containers placed in the 50 states and 4 localities *CDC, OPHPR (DSNS); as of 7/30/2008*
Meeting preparedness standards for local health departments	**150** local health departments in 24 states met voluntary Project Public Health Ready preparedness standards *NACCHO; as of 9/30/2008*
Response Readiness: Exercises and Incidents	
Notifying emergency operations center staff	**53 out of 54** states and localities notified pre-identified staff to fill all eight Incident Command System core functional roles at least twice due to a drill, exercise, or real incident Note: States and localities must report 2 and could report up to 12 notifications. *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	53 out of 54 states and localities had pre-identified staff acknowledge notification at least once within the target time of 60 minutes *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	52 out of 54 states and localities conducted at least one unannounced notification outside of normal business hours *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
Activating the emergency operations center (EOC)	**48 out of 54** states and localities activated their public health emergency operations center (EOC) at least twice as part of a drill, exercise, or real incident Note: States and localities must report 2 and could report up to 12 activations. *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	52 out of 54 states and localities had pre-identified staff report to the public health EOC at least once within the target time of 2.5 hours *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	47 out of 54 states and localities conducted at least one unannounced activation *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
Response Readiness: Evaluation	
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	**52 out of 54** states and localities developed AAR/IPs at least twice following an exercise or real incident Note: States and localities must report 2 and could report up to 12 AAR/IPs. *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	52 out of 54 states and localities developed at least one AAR/IPs within the target time of 60 days *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*
	51 out of 54 states and localities re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs *CDC, OPHPR (DSLR); 8/31/2007-8/9/2008*

Additional CDC Resources Supporting Preparedness in States and Localities

CDC supports a variety of other programs and resources in the states and localities to enhance preparedness. These activities are described below and summarized in Table 9.

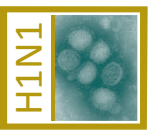
Research, Training, Education, and Promising Demonstration Projects

Centers for Public Health Preparedness (CPHP). The CPHP program strengthens preparedness by linking academic expertise to state and local health agency needs. This program is an important resource for the development, delivery, and evaluation of preparedness education. CPHPs collaborate with state and other health agencies to develop, deliver, and evaluate preparedness education based on community need. In FY 2008, 28 colleges and universities within the CPHP program provided preparedness education to public health workers, healthcare providers, and students.

Preparedness and Emergency Response Research Centers (PERRC). PERRCs conduct research to evaluate the structure, capabilities, and performance of preparedness and emergency response activities in federal, state, and local public health systems. PERRC scientists must connect with multiple partners within the public health infrastructure to incorporate diverse perspectives into their research. In FY 2008, CDC awarded funding to seven accredited schools of public health for establishing PERRCs.[44]

Advanced Practice Centers (APC). This network of local health departments develops resources and training that enhance the capabilities of all local health departments

Centers for Public Health Preparedness Respond to the 2009 H1N1 Influenza Pandemic



Academic-based Centers for Public Health Preparedness (CPHPs) provide learning opportunities to the public health workforce to strengthen their capabilities for responding to a crisis. During the 2009 H1N1 influenza pandemic, CPHPs provided subject matter expertise as well as training and technical assistance, and even helped enhance the state and local workforce capacity.

- Faculty from several CPHPs were called upon to advise college and university campuses on the 2009 H1N1 influenza response, provide counsel on risk communication efforts in disadvantaged populations, and conduct numerous interviews with television, radio, web-based, and print media.
- CPHPs developed free 2009 H1N1 influenza trainings for the public health workforce, and advised state and local health departments on continuity of operations planning and point-of-distribution site operations for flu vaccines.
- Graduate students across the country volunteered their services to staff information hotlines and help investigate possible cases.

Source: Association of Schools of Public Health, H1N1 Report: Centers for Public Health (2009)

and the public health system to prepare for, respond to, and recover from public health emergencies. In FY 2008, there were seven APCs nationwide.

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 healthcare 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. In FY 2008, there were five Centers.

Pandemic Influenza Promising Practices Demonstration Projects. In FY 2008, selected state and local public health departments received Public Health Emergency Preparedness (PHEP) cooperative agreement pandemic influenza supplemental funding through a competitive process for 55 projects serving as innovative approaches for pandemic influenza preparedness. The goal was to develop promising practices or effective approaches that can be replicated nationally to improve national, regional, and local public health detection and response to an influenza pandemic.

Other CDC Resources Available to States and Localities

Epidemic Intelligence Service (EIS) Field Officers. The EIS program expands the epidemiology workforce through a two-year epidemiology training program modeled on a traditional medical fellowship. EIS officers (epidemiologists) serve as a critical component to CDC's support of states and localities during responses to routine public health incidents and large-scale national emergencies. In FY 2008, 71 officers were assigned to state and local public health departments, where they conducted 319 epidemiologic investigations (e.g., public health response, research, and surveillance system evaluations) and functioned as an integral part of the health department.

Deployments of CDC staff to states. CDC personnel are deployed routinely for emergency response operations and EPI-AID investigations. For EPI-AID investigations, CDC's EIS officers, along with other CDC staff, provide technical support to state health agencies requesting assistance for epidemiologic field investigations of disease outbreaks or other health emergencies. In FY 2008, there were 84 incidents with a total of 381 CDC staff deployed.

CDC's Public Health Advisors and Career Epidemiology Field Officers Facilitate Preparedness Activities at State and Local Levels

Since 2002, CDC has placed public health advisors (PHAs) and Career Epidemiology Field Officers (CEFOs) in state and local health departments. (States use PHEP funds to support CEFO positions.) PHAs serve as liaisons for CDC and provide on-site program technical assistance, guidance, and coordination. Examples of their activities include building epidemiologic capacity; building partnerships with other agencies and stakeholders; leading or participating in state and/or local emergency response exercises; supporting planning and response for preparedness activities, including pandemic influenza; and providing substantive and strategic program advice and assistance.

Source: CDC, Office of Public Health Preparedness and Response

Table 9: Additional CDC Projects and Activites Enhancing Preparedness in States and Localities; 2008

Research, Training, Education, and Promising Demonstration Projects		Number
Centers for Public Health Preparedness	*CDC, OPHPR (OD); FY 2008*	28
Preparedness and Emergency Response Research Centers	*CDC, OPHPR (OD); FY 2008*	7
Advanced Practice Centers	*NACCHO; FY 2008*	7
Centers of Excellence in Public Health Informatics	*CDC, OSELS; FY 2008*	5
Pandemic Influenza Promising Practices Demonstration Projects	*CDC, OPHPR (DSLR); FY 2008*	55
Additional CDC Resources Supporting Preparedness in States and Localities		**Number**
Epidemic Intelligence Service	*CDC, OSELS; FY 2008*	
• Epidemic Intelligence Service Field Officers		71
• Investigations conducted by Epidemic Intelligence Service Field Officers		319
Deployments	*CDC, OPHPR (DEO); FY 2008*	
• Total number of incidents with deployments		84
• Total number of CDC staff deployed		381
Career Epidemiology Field Officers	*CDC, OPHPR (OD); as of 9/30/2008*	26*
Quarantine Stations	*CDC, OID (NCEZID); FY 2008*	19**

**One additional CEFO is located in American Samoa*
***One additional quarantine station is located in Puerto Rico*

Career Epidemiology Field Officers (CEFOs). CDC places experienced, full-time epidemiologists in state and local public health departments to enhance and build epidemiologic capacity for public health preparedness and response. (States use PHEP funds to support CEFO positions.) CEFOs also serve as liaisons and consultants between CDC and public health departments, and as mentors for state and local public health department staff and EIS officers assigned to state or local health departments. In FY 2008, 26 CEFOs were located in 21 states and one CEFO was located in American Samoa.

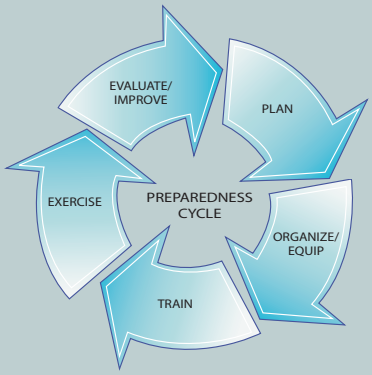
Quarantine Stations. In FY 2008, CDC's 19 domestic quarantine stations (one additional quarantine station is located in Puerto Rico), strategically located at U.S. ports of entry where the majority of international travelers arrive in the United States, helped detect and respond to diseases of public health significance.

Moving Forward

State and local health departments are first responders for public health emergencies and CDC remains committed to strengthening their preparedness. Since 1999, CDC's Public Health Emergency Preparedness (PHEP) cooperative agreement has helped strengthen state and local public health functions that are critical for preventing, responding to, and recovering from health threats.

Much progress has been made to build and strengthen national public health preparedness and response capabilities. Accomplishments highlighted in this report include the following:

- Biological laboratory capabilities and capacities in place were strong in most states and localities. Most laboratories in the Laboratory Response Network (LRN) could be reached 24/7, rapidly identified certain disease-causing bacteria and sent reports to CDC, and passed proficiency tests for detecting other biological agents. (See Table 3 on page 26.)
- A majority of LRN chemical laboratories demonstrated proficiency in core methods for detecting and measuring exposure to chemical agents, and some were proficient in one or more additional methods identified by CDC as important for responding to chemical emergencies. (See Table 3 on page 26.)
- All states and localities could receive urgent disease reports 24/7, and most states used rapid methods (blast email or fax) to communicate with other laboratories for outbreaks, routine updates, and other needs. (See Table 8 on page 34.)
- All states and localities received acceptable CDC review scores for their plans to receive, distribute, and dispense medical assets from CDC's Strategic National Stockpile and other sources. (See Table 8 on page 34.)
- Most states and localities demonstrated the ability to activate and rapidly staff their emergency operations centers for drills, exercises, or real incidents, and developed after action reports/improvement plans following these activities. (See Table 8 on page 34.)



Preparedness is a continuous cycle of planning, organizing, equipping, training, exercising, evaluating, and taking corrective action to ensure effective coordination during incident response.

Image source: Federal Emergency Management Agency

CDC has identified the areas listed below for improving state and local preparedness.

Maintain preparedness gains and resolve gaps. Important gains have been made since CDC's 2008 preparedness report in the areas of laboratory and response readiness. Data presented in this report show improvement in rapid laboratory testing for biological agents; and readiness to receive, distribute, and dispense assets from CDC's Strategic National Stockpile. CDC will continue to work with state and local health departments to maintain these improvements and to identify and resolve gaps in these and other core capabilities important for preparedness and response. Improvements are needed in continuity of operations plans for state public health laboratories.

Build on the successes and lessons learned from the response to the 2009 H1N1 influenza pandemic. The first influenza pandemic in 40 years provided a real world test of our response capabilities. CDC is working with all levels and sectors of the public health and medical communities toward systematically assessing this response, developing plans to address gaps and challenges, and incorporating needed changes. Assessments will include tools such as after action reports/improvement plans.

Ensure continuous funding to build and maintain a skilled state and local public health workforce. The surge in effort needed to respond to the 2009 H1N1 influenza pandemic placed an increased strain on a system already weakened by workforce shortages and budget shortfalls. The response revealed that the combination of the continued erosion of the general all hazards preparedness capacities, infrastructure, and staffing, along with fiscal issues facing state and local governments proved to be challenging for public health departments. Preparing adequately for future outbreaks – and other public health emergencies that are inevitable and may occur simultaneously – requires predictable and adequate long-term funding to improve infrastructure, staffing, and staff training in the areas of surveillance, epidemiology, laboratories, and response readiness.

Expand performance measurement to assess and monitor preparedness activities and to drive program improvement and accountability. CDC will continue to work with state and local partners to develop new performance measures that are indicators of preparedness and response capabilities and align with the objectives of the National Health Security Strategy[45] as well as the Pandemic and All-Hazards Preparedness Act.[46] The goal of these efforts is to implement measures that address short-term activities and outcomes that can impact core preparedness functions in the long term.

CDC is working collaboratively to implement the National Health Security Strategy that was established to galvanize efforts to minimize the health consequences associated with significant health incidents.

Major gaps exist for measuring preparedness in the areas of surveillance and epidemiology. Draft performance measures in these areas, as well as in laboratory activities are being pilot tested and will be refined based on results obtained and input from partners.

While this report relied on available performance measurement data, future reports will provide information on more robust data generated from planned improvements in the new five-year PHEP program announcement that will go into effect in August 2011. As part of the development and implementation of the new program announcement, CDC is developing a PHEP capabilities model to better define the strategic focus and priorities of the PHEP program and a related planning tool to be used by states, localities, and territories to inform their program planning and priority setting. The PHEP planning tool also will be used to monitor progress in achieving PHEP objectives and capabilities annually and progressively over the course of the five-year cooperative agreement, driving program improvement and accountability.

Since 1999, CDC's PHEP cooperative agreement has helped strengthen state and local public health functions that are critical for preventing, responding to, and recovering from health threats.

Promote health and prevent disease, injury, and disability in communities. Healthy populations are more resilient to new health threats. State and local health departments must continue to strengthen their collaboration with individuals, families, and communities as essential partners in building resilience to all types of public health hazards. Building healthier communities also helps provide greater protection to populations who are more vulnerable during emergencies and supports broader CDC health protection goals and national health reform efforts.

Section 2: Public Health Preparedness and Response Activities in States, Localities, and U.S. Insular Areas

- Fact Sheets for 50 States and the 4 Localities of Chicago, the District of Columbia, Los Angeles County, and New York City

- Overview of Preparedness in the U.S. Insular Areas: Territories, Commonwealths, and Freely Associated States

Alabama

adph.org/CEP

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Alabama, 7.8% of adults reported having asthma, 11.2% diabetes, 8.1% heart disease, and 4.3% had a stroke. In addition, 25.1% reported a limiting disability and 67.9% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations and the COOP was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	58 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	25 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	61%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 92 2008-09: 86
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Birmingham, AL: 32 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	32
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	7 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	7 out of 7 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	8 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 8 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Alabama at Birmingham - South Central Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	— —	
Deployments • Type of Incident (number of CDC staff)[18]	—	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Alaska

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

hss.state.ak.us/prepared

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Alaska, 9.6% of adults reported having asthma, 6.7% diabetes, 4.3% heart disease, and 2.1% had a stroke. In addition, 21.9% reported a limiting disability and 65.5% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	5 out of 5 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	9 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Did not pass
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	12 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	44%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	No

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 80 2008-09: 70
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Anchorage, AK: 74 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	2
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 8
Deployments • Type of Incident (number of CDC staff)[18]	Post Op Infections (2)
Career Epidemiology Field Officers[15]	None
Quarantine Stations[19]	Ted Stevens Anchorage International Airport, Anchorage

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Arizona

azdhs.gov/phs/edc/edrp

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Arizona, 9.8% of adults reported having asthma, 7.8% diabetes, 6.7% heart disease, and 2.5% had a stroke. In addition, 21.6% reported a limiting disability and 61.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	30 93%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	4 75%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	0 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	90 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	61%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 83 2008-09: 85
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Phoenix, AZ: 72 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	37
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	6 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	6 out of 6 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	5 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	5 out of 5 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Arizona - College of Public Health	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 13	
Deployments • Type of Incident (number of CDC staff)[18]	Salmonella Saintpaul (1); STD Testing False Negatives (2); Measles Outbreak (5); Drug Resistant Bacteria (2); Legionnaire's Disease (1); Salmonella Montenvideo (3); Hazardous Drinking Water (4)	
Career Epidemiology Field Officers[15]	1	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Arkansas

healthyarkansas.com

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Arkansas, 8.3% of adults reported having asthma, 9.5% diabetes, 8.2% heart disease, and 3.5% had a stroke. In addition, 25.0% reported a limiting disability and 65.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	20 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	1 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	10 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	49%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 97
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Little Rock, AR: 51; Memphis, TN: 72 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	17
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	7 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	6 out of 7 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations	$220,000
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	— —	
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Gustav (1); Creutzfeldt-Jakob Disease (2); Neurological Illness (2)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

California

Laboratory data includes Los Angeles County (LAC); see separate fact sheet for LAC-specific data.

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All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In California, 8.4% of adults reported having asthma, 8.5% diabetes, 4.9% heart disease, and 2.2% had a stroke. In addition, 18.8% reported a limiting disability and 61.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	22 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	17 out of 22 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	28 out of 30 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	180 90%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	16 94%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	1 passed (LAC), 1 did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab One Level 2 lab (LAC)
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Level 1 lab: passed Level 2 lab (LAC): passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Level 1 lab: 2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	Level 1 lab: 112 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	0 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	52%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score[11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 100 2008-09: 100
	Cities Readiness Initiative (CRI) Metropolitan Statistical Area (MSA) and 2007-08 TAR score[11] *Cohort I: Los Angeles, CA: 82; San Diego, CA: 82; San Francisco, CA: 74 *Cohort II: Riverside, CA: 73; Sacramento, CA: 60; San Jose, CA: 77 *Cohort III: Fresno, CA: 22 See Scoring Note above. CRI MSAs can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the MSA was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	165
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	5

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	9 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	8 out of 9 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	10 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	10 out of 10 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for Los Angeles County-specific data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of California at Berkeley; Loma Linda University	$525,760 $525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	Santa Clara County Advanced Practice Center	$250,000
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange	$800,627

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	6 29
Deployments • Type of Incident (number of CDC staff)[18]	Dermopathy (1); Post Operation Infections (2); Measles Outbreak (1)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	San Francisco International Airport; San Francisco; Rosecrans Street, San Diego.

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Los Angeles County

See separate fact sheet for California state data.

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All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Los Angeles County, 7.8% of adults reported having asthma, 9.9% diabetes, 4.4% heart disease, and 1.5% had a stroke. In addition, 16.4% reported a limiting disability and 60.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] No data collected	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	Locality had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts can be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercise(s) to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	—
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drills[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, NY, and IL, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	Locality public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	—
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	—
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	—

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]Locality data; 2008
[8]CDC. OPHPR (DEO): 2009 [9]CDC. OPHPR (DEO): 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	Cities Readiness Initiative (CRI) jurisdiction 2007-2008 technical assistance review (TAR) score[11,12] Los Angeles County: 81 (part of Cohort 1, which was established in 2004) Scoring Note: A score of 69 or higher indicates a CRI jurisdiction performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See appendix 6 for the average TAR score for the metropolitan statistical area of Los Angeles, CA, which has multiple contributing jurisdictions in addition to Los Angeles County.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	65
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 notifications.	10 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	10 out of 10 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: Locality must report 2 and could report up to 12 AAR/IPs.	9 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	9 out of 9 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]See California fact sheet for CDC TAR state score [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for California state data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of California at Los Angeles - Center for Public Health and Disasters	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 5
Deployments ▪ Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	Tom Bradley International Airport, Los Angeles

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Colorado

cdphe.state.co.us/epr

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All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Colorado, 8.1% of adults reported having asthma, 6.0% diabetes, 4.0% heart disease, and 1.9% had a stroke. In addition, 19.0% reported a limiting disability and 55.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	9 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	8 out of 9 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 5 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	86 99%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	6 33%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	2 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	53%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 94 2008-09: 96
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Denver, CO: 90 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	27
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerability in Populations; Countermeasure and State Immunization Information Systems Integration; Electronic Laboratory Data Exchange	$94,000 $352,693 $354,269

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 6
Deployments ▪ Type of Incident (number of CDC staff)[18]	Salmonella (3); Salmonella (5); Aspergillus Infections (3); Liver failure (4)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Connecticut

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All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Connecticut, 8.8% of adults reported having asthma, 6.8% diabetes, 5.0% heart disease, and 2.1% had a stroke. In addition, 18.8% reported a limiting disability and 59.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	33 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	15 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	44 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	58%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 84 2008-09: 94
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Hartford, CT: 42; New Haven, CT: 70 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	25
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	19

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	12 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	12 out of 12 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Yale University - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations	$370,000

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 9
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Delaware

dhss.delaware.gov/dhss/dph

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Delaware, 9.6% of adults reported having asthma, 8.3% diabetes, 6.8% heart disease, and 2.9% had a stroke. In addition, 20.3% reported a limiting disability and 63.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	7 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	5 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	9 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	50%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 96 2008-09: 98
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Philadelphia, PA: 75 *Cohort II: No sites *Cohort III: Dover, DE: 97 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	6
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	1 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	1 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	— —
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

District of Columbia

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

bioterrorism.doh.dc.gov/biot/site

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In the District of Columbia, 9.6% of adults reported having asthma, 8.0% diabetes, 3.8% heart disease, and 2.7% had a stroke. In addition, 17.4% reported a limiting disability and 55.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	Locality had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	3 reference labs
Assessing if laboratory emergency contacts can be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 3 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	1 out of 1 test
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
Assessing laboratory competency and reporting through exercises	Locality public health laboratory conducted exercise(s) to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drills[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Did not participate
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	Locality public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	—
	Locality public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	3 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	29%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]Locality data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	Cities Readiness Initiative (CRI) jurisdiction 2007-2008 technical assistance review (TAR) score[11] District of Columbia: 94 (part of Cohort 1, which was established in 2004) Scoring Note: A score of 69 or higher indicates a CRI jurisdiction performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See appendix 6 for the average TAR score for the metropolitan statistical area of the National Capitol Region, which has multiple contributing jurisdictions in addition to the District of Columbia.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	5
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[12]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[13] Note: Locality must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[13]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[13]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[13] Note: Locality must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[13]	4 out of 4 times
	Conducted at least one unannounced activation[13]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[13] Note: Locality must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[13]	3 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[13]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]NACCHO; 2008 [13]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[14]	—	N/A
Preparedness and Emergency Response Research Centers[14]	—	N/A
Advanced Practice Centers[15]	—	N/A
Centers of Excellence in Public Health Informatics[16]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[13]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[16] • Investigations conducted by Epidemic Intelligence Service Field Officers[16]	1 1
Deployments • Type of Incident (number of CDC staff)[17]	Hurricane Gustav (2); HIV Investigation (3)
Career Epidemiology Field Officers[14]	—
Quarantine Stations[18]	Dulles International Airport, Washington, District of Columbia

[13]CDC, OPHPR (DSLR); 2008 [14]CDC, OPHPR (OD); 2008 [15]NACCHO; 2008 [16]CDC, OSELS; 2008 [17]CDC, OPHPR (DEO); 2008 [18]CDC, OID (NCEZID); 2008

Florida

doh.state.fl.us/demo/php

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Florida, 6.6% of adults reported having asthma, 9.5% diabetes, 7.9% heart disease, and 3.2% had a stroke. In addition, 19.2% reported a limiting disability and 60.2% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	5 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	4 out of 5 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	12 out of 15 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	19 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	9 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Level 1 lab: passed Level 3 lab: did not participate
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Level 1 lab: 2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	Level 1 lab: 123 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	19 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	46%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score[11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 95 2008-09: 98
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Miami, FL: 87 *Cohort II: Orlando, FL: 81; Tampa, FL: 87 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	108
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	17

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	12 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	12 out of 12 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	10 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	10 out of 10 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of South Florida - Florida Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Death Reporting; Electronic Laboratory Data Exchange	$562,828 $729,970

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 16
Deployments ▪ Type of Incident (number of CDC staff)[18]	Hurricane Gustav (2)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	Miami International Airport, Miami

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Georgia

health.state.ga.us/programs/emerprep

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Georgia, 8.5% of adults reported having asthma, 9.9% diabetes, 6.0% heart disease, and 2.5% had a stroke. In addition, 18.5% reported a limiting disability and 64.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	5 reference labs, 1 national lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	6 out of 6 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	49 84%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	22 77%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	0 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	28 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	32%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 73 2008-09: 90
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Atlanta, GA: 59 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	58
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	14

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	12 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	12 out of 12 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Emory University - Emory Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	Emory University - Create and Maintain Sustainable Preparedness and Response Systems	$1,562,676
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Collaborative Planning for Delivery of Essential Healthcare Services	$777,671

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	3 11
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Gustav (15); Rabies (1); MRSA Control Measures (1)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	Hartsfield-Jackson Atlanta International Airport, Atlanta

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Hawaii

hawaii.gov/health/emergencyprep

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Hawaii, 9.6% of adults reported having asthma, 8.2% diabetes, 4.8% heart disease, and 2.6% had a stroke. In addition, 16.8% reported a limiting disability and 57.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	3 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	3 out of 3 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	2 out of 2 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 32 78%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 6 83%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	No
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	6 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	51%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 74 2008-09: 84
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Honolulu, HI: 51 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	6
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	1 time
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	1 out of 1 time
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Countermeasure and State Immunization Information Systems Integration; Distribution and Dispensing of Antiviral Drugs to Self-isolated/quarantined Persons; Electronic Laboratory Data Exchange; Public Engagement	$350,374 $136,255 $718,000 $178,112

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 4
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	2
Quarantine Stations[19]	Honolulu International Airport, Honolulu

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Idaho

healthandwelfare.idaho.gov

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Idaho, 8.9% of adults reported having asthma, 7.0% diabetes, 5.7% heart disease, and 2.3% had a stroke. In addition, 22.6% reported a limiting disability and 62.2% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	31 68%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	7 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	59%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 90 2008-09: 70
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Boise, ID: 75 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	10
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	7

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	10 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	10 out of 10 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	7 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	7 out of 7 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	12 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	12 out of 12 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 5	
Deployments • Type of Incident (number of CDC staff)[18]	Waterborne Illness (3)	
Career Epidemiology Field Officers[15]	1	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Illinois

See separate fact sheet for Chicago-specific data.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

idph.state.il.us/Bioterrorism/default.htm

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A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Illinois, 7.9% of adults reported having asthma, 8.3% diabetes, 6.2% heart disease, and 2.7% had a stroke. In addition, 18.2% reported a limiting disability and 63.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	3 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	3 out of 3 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	5 out of 5 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	111 92%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	11 64%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY , which have two.	1 passed, 1 did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab Two Level 3 labs
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 2 lab: 6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 2 lab: 0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Level 2 lab: did not pass Level 3 labs: 1 passed, 1 did not partici-pate
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Level 2 lab: 2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	10 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	53%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score[11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 96 2008-09: 99
	Cities Readiness Initiative (CRI) Metropolitan Statistical Area (MSA) and 2007-08 TAR score[11] *Cohort I: Chicago, IL: 80; St. Louis, MO: 76 *Cohort II: No sites *Cohort III: Peoria, IL: 59 See Scoring Note above. CRI MSAs can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the MSA was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	66
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	8

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	7 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	6 out of 7 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for Chicago-specific data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Collaborative Planning for Delivery of Essential Healthcare Services; Countermeasure and State Immunization Information Systems Integration	$578,000 $218,358
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 5	
Deployments • Type of Incident (number of CDC staff)[18]	Neurological Illness (1); HIV by Organ Transplant (2)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Chicago

See separate fact sheet for Illinois state data.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

cityofchicago.org/city/en/depts/cdph/provdrs/emerg.html

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Chicago, 7.5% of adults reported having asthma, 9.2% diabetes, 6.1% heart disease, and 2.7% had a stroke. In addition, 16.4% reported a limiting disability and 64.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] The lab located in Chicago is operated by the state of Illinois. See Illinois fact sheet.	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	Locality had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	—

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	The lab located in Chicago is operated by the state of Illinois. See Illinois fact sheet.
Assessing if laboratory emergency contacts can be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	—
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	—
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercise(s) to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	—
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drills[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	—

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	The lab located in Chicago is operated by the state of Illinois. See Illinois fact sheet.
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	—
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	—
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	—
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	—
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	—

Response Readiness: Communication

Communicating emerging health information	Locality public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	—
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	—
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	—

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]Locality data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	Cities Readiness Initiative (CRI) jurisdiction 2007-2008 technical assistance review (TAR) score [11,12] City of Chicago: 94 (part of Cohort 1, which was established in 2004) Scoring Note: A score of 69 or higher indicates a CRI jurisdiction performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See appendix 6 for the average TAR score for the metropolitan statistical area of Chicago, IL, which has multiple contributing jurisdictions in addition to the City of Chicago.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	23
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 notifications.	8 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 8 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 4 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: Locality must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]See Illinois fact sheet for CDC TAR state scores [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for Illinois state data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Illinois at Chicago - Illinois Public Health Preparedness Center	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange	$619,172
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 1	
Deployments • Type of Incident (number of CDC staff)[18]	MRSA Control Measures (2); Influenza (3)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	O'Hare International Airport, Chicago	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Indiana

in.gov/isdh/17855.htm

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Indiana, 9.2% of adults reported having asthma, 9.6% diabetes, 6.9% heart disease, and 2.8% had a stroke. In addition, 20.0% reported a limiting disability and 63.6% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	49 69%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 50%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	10 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	42%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 96 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Chicago, IL: 80 *Cohort II: Cincinnati, OH: 62; Indianapolis, IN: 83 *Cohort III: Louisville, KY: 68 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	38
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations; Collaborative Planning for Delivery of Essential Healthcare Services	$275,000 $523,719

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 2
Deployments • Type of Incident (number of CDC staff)[18]	Neurological Illness (4); Neuropathy (1)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Iowa

ProtectIowaHealth.org

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Iowa, 7.7% of adults reported having asthma, 7.0% diabetes, 6.2% heart disease, and 2.7% had a stroke. In addition, 17.0% reported a limiting disability and 64.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	2 out of 2 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	77 22%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	131 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	68%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 95
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Des Moines, IA: 54; Omaha, NE: 44 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	19
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Iowa - Upper Midwest Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange	$258,978
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	2 4	
Deployments • Type of Incident (number of CDC staff)[18]	Iowa Floods (11); Disease Investigation (1); Histoplasmosis (3)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Kansas

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

kdheks.gov/cphp

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Kansas, 8.7% of adults reported having asthma, 8.1% diabetes, 5.5% heart disease, and 2.5% had a stroke. In addition, 20.8% reported a limiting disability and 65.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	1 out of 2 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	20 50%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Did not pass
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	No
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	18 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	65%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 94
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Kansas City, MO: 73 *Cohort III: Witchita, KS: 59 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	13
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 7
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Kentucky

chfs.ky.gov/dph/epi/preparedness

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Kentucky, 9.7% of adults reported having asthma, 9.9% diabetes, 8.1% heart disease, and 3.6% had a stroke. In addition, 25.5% reported a limiting disability and 66.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	3 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 3 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	80 94%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	2 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	56%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 86 2008-09: 83
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Cincinnati, OH: 62 *Cohort III: Louisville, KY: 68 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	29
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	9

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	9 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 9 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 6
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Gustav (2); Influenza (3)
Career Epidemiology Field Officers[15]	2
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Louisiana

dhh.louisiana.gov/offices/?ID=218

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Louisiana, 8.0% of adults reported having asthma, 10.7% diabetes, 8.2% heart disease, and 3.8% had a stroke. In addition, 20.9% reported a limiting disability and 63.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	2 out of 2 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	3 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	70%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 94 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: No score See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	30
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	6 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	6 out of 6 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	5 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	5 out of 5 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Tulane University - South Central Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations	$397,885
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 1	
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Ike (7); Hurricane Gustav (64); FEMA trailer-formaldehyde (27)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Maine

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

maine.gov/dhhs/boh

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Maine, 10.3% of adults reported having asthma, 8.3% diabetes, 7.2% heart disease, and 2.8% had a stroke. In addition, 22.2% reported a limiting disability and 61.9% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	16 50%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	5 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	1 out of 1 method
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	0 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	59%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 51 2008-09: 90
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Portland, ME: 25 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	10
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	0 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	0 out of 0 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Death Reporting; Electronic Laboratory Data Exchange	$943,020 $508,567

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 12
Deployments • Type of Incident (number of CDC staff)[18]	Pneumonia Cluster (3)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Maryland

bioterrorism.dhmh.state.md.us

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Maryland, 9.4% of adults reported having asthma, 8.7% diabetes, 6.1% heart disease, and 2.6% had a stroke. In addition, 20.5% reported a limiting disability and 63.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	6 reference labs, 2 national labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	6 out of 8 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	9 out of 9 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	22 95%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	14 93%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	1 out of 1 method
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	6 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	41%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 96
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: National Capitol Region: 82; Philadelphia, PA: 75 *Cohort II: Baltimore, MD: 77 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	36
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	2

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Johns Hopkins University - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	Johns Hopkins University, Baltimore - Preparedness to Address the Risks of Vulnerable Populations	$1,495,398
Advanced Practice Centers[16]	Montgomery County Advanced Practice Center	$450,000
Centers of Excellence in Public Health Informatics[17]	Johns Hopkins University	$1,145,675
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 9
Deployments • Type of Incident (number of CDC staff)[18]	Salmonella Saintpaul (2); Hospital Infection Control (2); Dialysis Deaths (2); Acinetobacter Outbreak (2)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Massachusetts

mass.gov/dph/emergencyprep

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Massachusetts, 9.6% of adults reported having asthma, 7.2% diabetes, 5.5% heart disease, and 1.9% had a stroke. In addition, 17.5% reported a limiting disability and 58.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	5 out of 5 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	83 84%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	59 39%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 3 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	1 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	126 hours*

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	9 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	45%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008 *Massachusetts experienced issues with CDC's reporting system, which impacted this result.

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 91 2008-09: 93
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Boston, MA: 76 *Cohort II: Providence, RI: 89 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	40
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	28

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	0 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	0 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	0 out of 0 times
	Conducted at least one unannounced activation[14]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	7 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	6 out of 7 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	No

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Harvard University - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	Harvard School of Public Health, Boston - Generate Criteria and Metrics to Measure Effectiveness and Efficiency	$1,717,286
Advanced Practice Centers[16]	Cambridge Advanced Practice Center	$400,000
Centers of Excellence in Public Health Informatics[17]	Harvard Pilgrim Health Care, Inc.	$1,467,018
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange; Public Engagement	$384,889 $176,365

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 0 0
Deployments ▪ Type of Incident (number of CDC staff)[18]	Transplant Associated Virus (1)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	Logan International Airport, Boston

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Michigan

michigan.gov/mdch

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Michigan, 9.9% of adults reported having asthma, 9.1% diabetes, 6.7% heart disease, and 3.0% had a stroke. In addition, 22.6% reported a limiting disability and 64.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	9 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	9 out of 9 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	9 out of 9 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 95 95%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 14 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	75 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	73 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	52%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 95 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Detroit, MI: 78 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	67
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Michigan - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Collaborative Planning for Delivery of Essential Healthcare Services; Countermeasure and State Immunization Information Systems Integration; Electronic Death Reporting	$997,324 $300,000 $741,124

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 7
Deployments • Type of Incident (number of CDC staff)[18]	Measles Exposure (1)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	Detroit Metro Airport, Detroit

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Minnesota

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

health.state.mn.us/oep

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Minnesota, 7.8% of adults reported having asthma, 5.9% diabetes, 6.1% heart disease, and 2.2% had a stroke. In addition, 19.9% reported a limiting disability and 62.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 158 98%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 22 95%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 3 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	78 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	24 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	49%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 84 2008-09: 88
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Minneapolis, MN: 79 *Cohort II: No sites *Cohort III: Fargo, ND: 70 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	34
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	8 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 8 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Minnesota - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	University of Minnesota, Minneapolis	$1,470,307
Advanced Practice Centers[16]	Twin Cities Metro Advanced Practice Center	$400,000
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Countermeasure and Immunization Systems Integration; Delivery of Healthcare Services; Public Engagement; Distribution and Dispensing of Antiviral Drugs to Self-isolated/quarantined Persons; Electronic Laboratory Date Exchange	$299,992 $872,249 $161,524 $200,000 $680,343

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 6
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	Minnesota-Saint Paul International Airport, Minneapolis

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Mississippi

msdh.ms.gov

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Mississippi, 7.0% of adults reported having asthma, 11.3% diabetes, 6.5% heart disease, and 4.0% had a stroke. In addition, 24.2% reported a limiting disability and 67.5% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	6 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	15 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	61%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 95 2008-09: 99
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Jackson, MS: 88; Memphis, TN: 72 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	14
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	9 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	8 out of 9 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	11 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 11 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 — —	
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Gustav (4); FEMA trailer - formaldehyde (6); Shigella Outbreak (2); HIV Investigation (2); Respiratory Illness (3); TB Outbreak (3); Infant Mortality (1); HIV Investigation (8)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Missouri

dhss.mo.gov/BT_Response

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Missouri, 8.4% of adults reported having asthma, 9.1% diabetes, 7.2% heart disease, and 3.4% had a stroke. In addition, 25.0% reported a limiting disability and 65.5% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 123 89%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 — N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	18 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	51%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 96 2008-09: 89
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: St. Louis, MO: 76 *Cohort II: Kansas City, MO: 73 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	38
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	2

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Saint Louis University - Saint Louis University Heartland Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 — —	
Deployments • Type of Incident (number of CDC staff)[18]	Hemodialysis Reactions (1)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Montana

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

dphhs.mt.gov/PHSD

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Montana, 9.6% of adults reported having asthma, 6.5% diabetes, 6.0% heart disease, and 2.8% had a stroke. In addition, 22.9% reported a limiting disability and 61.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	18 67%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	85 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	73%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 91 2008-09: 96
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Billings, MT: 80 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	8
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 4
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Nebraska

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

dhhs.ne.gov/emergency_preparedness

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Nebraska, 7.1% of adults reported having asthma, 7.8% diabetes, 5.8% heart disease, and 2.2% had a stroke. In addition, 18.3% reported a limiting disability and 64.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	38 76%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	104 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	57%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 81 2008-09: 85
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Omaha, NE: 44 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	12
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	5 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	5 out of 5 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations (2 Projects); Electronic Laboratory Data Exchange (2 Projects); Public Engagement	$215,000 and $270,000 $103,887 and $222,513 $162,995

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 5
Deployments • Type of Incident (number of CDC staff)[18]	Neurological Illness (1)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Nevada

health.nv.gov

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Nevada, 8.6% of adults reported having asthma, 8.6% diabetes, 6.3% heart disease, and 2.2% had a stroke. In addition, 20.3% reported a limiting disability and 62.6% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	6 out of 6 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	13 77%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	5 60%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	1 out of 1 method
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	0 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	64%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 55 2008-09: 89
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Las Vegas, NV: 82 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	15
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	8 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	7 out of 8 times
	Conducted at least one unannounced activation[14]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	8 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 8 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 — —
Deployments • Type of Incident (number of CDC staff)[18]	Ricin Incident (2); Hepatitis C Infections (3); Strep Infections (2); TB Outbreak (3); Hepatitis C Infections (2)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

New Hampshire

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

dhhs.state.nh.us/dhhs/cdcs/ppcc.htm

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In New Hampshire, 10.4% of adults reported having asthma, 7.2% diabetes, 5.7% heart disease, and 2.4% had a stroke. In addition, 21.4% reported a limiting disability and 63.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	15 67%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	7 71%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	100 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	58%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 86 2008-09: 81
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Boston, MA: 76 *Cohort II: No sites *Cohort III: Manchester, NH: 75 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	10
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	No

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Collaborative Planning for Delivery of Essential Healthcare Services	$864,497

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 6
Deployments ▪ Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

New Jersey

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

state.nj.us/health/er

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In New Jersey, 8.6% of adults reported having asthma, 8.4% diabetes, 6.2% heart disease, and 2.3% had a stroke. In addition, 17.1% reported a limiting disability and 62.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	108 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	405 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	61%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 98 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: New York City, NY: 86; Philadelphia, PA: 75 *Cohort II: No sites *Cohort III: Trenton, NJ: 78 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	58
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	12 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	12 out of 12 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	12 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	12 out of 12 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	1 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Medicine and Dentistry of New Jersey - New Jersey Center for Public Health Preparedness at UMDNJ	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 4
Deployments ▪ Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	Newark Liberty International Airport, Newark

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

New Mexico

health.state.nm.us/ohem

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In New Mexico, 8.5% of adults reported having asthma, 7.9% diabetes, 5.5% heart disease, and 2.6% had a stroke. In addition, 22.2% reported a limiting disability and 59.9% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	12 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not pass

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	71 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	No
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	34 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	51%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 71 2008-09: 78
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Albuquerque, NM: 26 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	12
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	1 time
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	1 out of 1 time
	Conducted at least one unannounced notification outside of normal business hours[14]	No
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	No
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	No

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange	$532,853
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	2 6	
Deployments • Type of Incident (number of CDC staff)[18]	Strep Infections (3)	
Career Epidemiology Field Officers[15]	1	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

New York

Laboratory data includes New York City (NYC); see separate fact sheet for NYC-specific data.

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health.state.ny.us/environmental/emergency

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In New York, 8.8% of adults reported having asthma, 8.4% diabetes, 5.6% heart disease, and 2.6% had a stroke. In addition, 19.4% reported a limiting disability and 60.3% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	5 reference labs (includes NYC)
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	5 out of 5 labs (includes NYC)
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	13 out of 13 tests (includes NYC)
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 129 73%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 40 78%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Both passed (includes NYC)

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab One Level 3 lab (NYC)
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	Level 1 lab: 4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Level 1 lab: passed Level 3 lab (NYC): passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Level 1 lab: 1 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	Level 1 lab: 73 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	59 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	41%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score[11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 97 2008-09: 100
	Cities Readiness Initiative (CRI) Metropolitan Statistical Area (MSA) and 2007-08 TAR score[11] *Cohort I: New York City, NY: 86 *Cohort II: No sites *Cohort III: Albany, NY: 92; Buffalo, NY: 85 See Scoring Note above. CRI MSAs can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the MSA was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	94
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	9

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for New York City-specific data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Albany, State University of New York-University at Albany Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	Western New York Public Health Alliance, Inc. Advanced Practice Center	$350,000
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 18	
Deployments • Type of Incident (number of CDC staff)[18]	—	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

New York City

See separate fact sheet for New York state data.

U.S. Department of Health and Human Services
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nyc.gov/html/doh/html/bt/bt.shtml

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In New York City, 7.5% of adults reported having asthma, 6.9% diabetes, 4.7% heart disease, and 2.4% had a stroke. In addition, 17.4% reported a limiting disability and 55.0% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] No data collected	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	Locality had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts can be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— —
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercise(s) to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	—
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drills[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	Locality public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	—
	Public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	—
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	—

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]Locality data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	Cities Readiness Initiative (CRI) jurisdiction 2007-2008 technical assistance review (TAR) score[11,12] New York City: 99 (part of Cohort 1, which was established in 2004) Note: A score of 69 or higher indicates a CRI jurisdiction performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. See appendix 6 for the average TAR score for the metropolitan statistical area of New York City, NY, which has multiple contributing jurisdictions in addition to New York City.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	55
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center (EOC) staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: Locality must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: Locality must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]See New York State fact sheet for CDC TAR state scores [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below. Also see separate fact sheet for New York state data.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Columbia University - Mailman Center for Public Health	$525,674
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	New York City Department of Health and Mental Hygiene	$930,959
Pandemic Influenza Promising Practices Demonstration Projects[14]	Collaborative Planning for Delivery of Essential Healthcare Services; Countermeasure and State Immunization Information Systems Integration	$850,681 $387,082

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	3 8
Deployments • Type of Incident (number of CDC staff)[18]	Bacillus Infections (3)
Career Epidemiology Field Officers[15]	2
Quarantine Stations[19]	JFK International Airport, New York City

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

North Carolina

epi.state.nc.us/epi/phpr

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In North Carolina, 7.6% of adults reported having asthma, 9.3% diabetes, 6.2% heart disease, and 3.0% had a stroke. In addition, 21.3% reported a limiting disability and 65.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	5 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	5 out of 5 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	11 out of 12 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 35 89%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 14 57%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not pass

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	115 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	52%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 98
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Virginia Beach, VA: 86 *Cohort III: Charlotte, NC: 63 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	57
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of North Carolina - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	University of North Carolina, Chapel Hill - Create and Maintain Sustainable Preparedness and Response Systems	$1,695,189
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 1	
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Gustav (1); Salmonella Saintpaul (3); Hospital Infection Control (1); Hepatitis C Infections (1)	
Career Epidemiology Field Officers[15]	1	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

North Dakota

ndhealth.gov/epr

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In North Dakota, 7.9% of adults reported having asthma, 7.6% diabetes, 5.6% heart disease, and 2.4% had a stroke. In addition, 17.0% reported a limiting disability and 67.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	7 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab*
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 6 methods*
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods*
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	7 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	69%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008 *North Dakota elected to acquire elemental analysis capabilities reflected in only three core methods.

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 77 2008-09: 83
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Fargo, ND: 70 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	6
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Countermeasure and State Immunization Information Systems Integration	$180,348

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 — —
Deployments ▪ Type of Incident (number of CDC staff)[18]	Wild Game Contamination (3); Resistant Meningococcus (2)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Ohio

prepareohio.com

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Ohio, 9.6% of adults reported having asthma, 9.9% diabetes, 7.2% heart disease, and 2.9% had a stroke. In addition, 21.5% reported a limiting disability and 63.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	114 97%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	14 93%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	4 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	55%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 90 2008-09: 89
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Cleveland, OH: 71 *Cohort II: Cincinnati, OH: 62; Columbus, OH: 52 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	76
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	3 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	3 out of 3 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	The Ohio State University - Ohio Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Public Engagement	$144,120

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 4
Deployments • Type of Incident (number of CDC staff)[18]	Burkholderia (1)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Oklahoma

ok.gov/health/

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Oklahoma, 8.9% of adults reported having asthma, 10.1% diabetes, 7.9% heart disease, and 4.1% had a stroke. In addition, 26.1% reported a limiting disability and 66.6% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	29 97%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	6 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	No
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	10 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	64%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 97 2008-09: 98
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Oklahoma City, OK; 79 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	24
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	1 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	9 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	4 out of 9 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Oklahoma - Southwest Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 6
Deployments • Type of Incident (number of CDC staff)[18]	Infection Control (1); *E. coli* Infections (3)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Oregon

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

oregon.gov/DHS/ph/preparedness

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Oregon, 8.6% of adults reported having asthma, 6.9% diabetes, 5.4% heart disease, and 2.4% had a stroke. In addition, 23.9% reported a limiting disability and 61.7% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	53 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	16 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	61%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 85 2008-09: 86
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Portland, OR: 58 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	23
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	3 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations; Collaborative Planning for Delivery of Essential Health Services; Electronic Laboratory Data Exchange	$260,371 $1,034,334 $251,453

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 5
Deployments ▪ Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Pennsylvania

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

dsf.health.state.pa.us

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Pennsylvania, 9.3% of adults reported having asthma, 8.8% diabetes, 7.2% heart disease, and 2.6% had a stroke. In addition, 21.1% reported a limiting disability and 64.4% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	2 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	77 81%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	13 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 2 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	6 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	55%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 60 2008-09: 82
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: New York City, NY: 86; Philadelphia, PA: 75; Pittsburgh, PA: 42 *Cohort II: No sites *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	82
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	2

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Pittsburgh - Center for Public Health Practice	$525,760
Preparedness and Emergency Response Research Centers[15]	University of Pittsburgh - Create and Maintain Sustainable Preparedness and Response Systems	$1,701,845
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Population Vulnerabilities; Distribution and Dispensing of Antiviral Drugs to Self-isolated/quarantined Persons	$310,000 $140,753

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 3 22
Deployments • Type of Incident (number of CDC staff)[18]	Hepatitis B Infections (2)
Career Epidemiology Field Officers[15]	3
Quarantine Stations[19]	Philadelphia International Airport, Philadelphia

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Rhode Island

www.health.ri.gov/cepr

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Rhode Island, 10.6% of adults reported having asthma, 7.4% diabetes, 6.1% heart disease, and 2.3% had a stroke. In addition, 18.9% reported a limiting disability and 60.0% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	7 71%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	2 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	40 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	63%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 99
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: Providence, RI: 89 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	8
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	0 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	0 out of 0 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations; Electronic Laboratory Data Exchange	$370,000 $303,415

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	— —
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

South Carolina

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

scdhec.net/administration/ophp

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In South Carolina, 8.3% of adults reported having asthma, 10.1% diabetes, 6.4% heart disease, and 3.2% had a stroke. In addition, 21.7% reported a limiting disability and 65.9% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 22 86%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	 7 29%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Did not pass
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	0 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	100 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	4 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	79%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 87 2008-09: 93
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Charlotte, NC; 63; Columbia, SC: 83 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	27
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	1 time
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	1 out of 1 time
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	8 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	8 out of 8 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of South Carolina - Center for Public Health Preparedness	$525,760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	2 8	
Deployments • Type of Incident (number of CDC staff)[18]	TB Outbreak (4)	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

South Dakota

doh.sd.gov

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In South Dakota, 7.2% of adults reported having asthma, 6.6% diabetes, 6.6% heart disease, and 2.7% had a stroke. In addition, 19.0% reported a limiting disability and 64.9% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	49 43%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	18 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	64%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 87 2008-09: 91
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Sioux Falls, SD: 74 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	8
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	No
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	1 time
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	1 out of 1 time
	Conducted at least one unannounced activation[14]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 — —
Deployments • Type of Incident (number of CDC staff)[18]	Suicides (4)
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Tennessee

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

health.state.tn.us/ceds/bioterrorism.htm

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Tennessee, 9.0% of adults reported having asthma, 10.4% diabetes, 8.4% heart disease, and 3.4% had a stroke. In addition, 22.8% reported a limiting disability and 68.0% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	4 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	4 out of 4 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	10 out of 11 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	55 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	14 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	3 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	14 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	62%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 89 2008-09: 89
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Memphis, TN: 72; Nashville, TN: 56 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	38
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	2 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	1 time
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	1 out of 1 time
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service ▪ Epidemic Intelligence Service Field Officers[17] ▪ Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 3
Deployments ▪ Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Texas

dshs.state.tx.us/preparedness

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Texas, 7.3% of adults reported having asthma, 9.7% diabetes, 6.1% heart disease, and 2.5% had a stroke. In addition, 19.2% reported a limiting disability and 66.2% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	14 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	11 out of 14 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	23 out of 25 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	74 89%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	36 86%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not pass

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	7 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	44%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 97 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Dallas, TX: 91; Houston, TX: 79 *Cohort II: San Antonio, TX: 55 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	140
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	2

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	1 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	0 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	0 out of 0 times
	Conducted at least one unannounced activation[14]	No

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	7 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	7 out of 7 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	Texas A & M - Center for Rural Public Health Preparedness; University of Texas - Center for Biosecurity and Public Health Preparedness	$525,760 $525, 760
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	Tarrant County Advanced Practice Center	$450,000
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Laboratory Data Exchange	$799,798

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	2 7
Deployments • Type of Incident (number of CDC staff)[18]	Hurricane Ike (61); Hurricane Gustav (12); Tropical Storm Dolly (1); Hemodialysis Reactions (3); Salmonella (7); Cryptosporidiosis (2); Typhus (2); Infusion Center Infections (1)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	DFW International Airport, Dallas; George Bush Intercontinental Airport, Houston; Sunland Park Drive, El Paso

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Utah

health.utah.gov

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Utah, 8.4% of adults reported having asthma, 6.1% diabetes, 4.9% heart disease, and 2.0% had a stroke. In addition, 19.5% reported a limiting disability and 58.2% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	34 94%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	13 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	59%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 85 2008-09: 88
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Salt Lake City, UT: 68 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	16
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	1 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	University of Utah	$1,276,079
Pandemic Influenza Promising Practices Demonstration Projects[14]	Electronic Death Reporting	$281,117

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 3
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Vermont

healthvermont.gov/e_ready.aspx

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Vermont, 9.9% of adults reported having asthma, 6.4% diabetes, 5.8% heart disease, and 2.1% had a stroke. In addition, 21.3% reported a limiting disability and 58.5% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State had a COOP that included laboratory operations	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	3 out of 3 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	8 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	3 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	1 out of 1 method
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	0 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	3 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	36%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 93 2008-09: 98
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Burlington, VT: 70 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	6
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	2 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	1 out of 2 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	1 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 3	
Deployments • Type of Incident (number of CDC staff)[18]	—	
Career Epidemiology Field Officers[15]	1	
Quarantine Stations[19]	—	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Virginia

vdh.state.va.us/epr

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Virginia, 9.3% of adults reported having asthma, 7.9% diabetes, 5.9% heart disease, and 2.6% had a stroke. In addition, 19.3% reported a limiting disability and 61.6% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	4 out of 4 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	83 98%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	17 94%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	103 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	13 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	39%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 100 2008-09: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: National Capitol Region: 82 *Cohort II: Virginia Beach, VA: 86 *Cohort III: Richmond, VA: 89 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	50
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	1

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	2 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 2 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	Addressing Vulnerabilities in Populations; Collaborative Planning for Delivery of Essential Healthcare Services	$365,000 $1,000,000

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	1 13
Deployments • Type of Incident (number of CDC staff)[18]	Vaccinia Virus Infection (2)
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Washington

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

doh.wa.gov/phepr

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Washington, 9.3% of adults reported having asthma, 6.9% diabetes, 4.8% heart disease, and 2.3% had a stroke. In addition, 23.9% reported a limiting disability and 61.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	6 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	5 out of 6 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	7 out of 8 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	72 96%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	6 83%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	20 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	51%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes
Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 94 2008-09: 97
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Seattle, WA: 68 *Cohort II: Portland, OR: 58 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	40
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	2

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	4 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes
Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	3 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	2 out of 3 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	University of Washington - Northwest Center for Public Health Practice	$525,760
Preparedness and Emergency Response Research Centers[15]	University of Washington, Seattle - Improve Communications in Preparedness and Response	$1,270,632
Advanced Practice Centers[16]	Seattle-King County Advanced Practice Center	$450,000
Centers of Excellence in Public Health Informatics[17]	University of Washington	$1,274,502
Pandemic Influenza Promising Practices Demonstration Projects[14]	Public Engagement	$180,699
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	3 6	
Deployments • Type of Incident (number of CDC staff)[18]	—	
Career Epidemiology Field Officers[15]	—	
Quarantine Stations[19]	Seattle-Tacoma International Airport, Seattle	

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

West Virginia

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

wvdhhr.org/healthprep

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In West Virginia, 9.6% of adults reported having asthma, 11.9% diabetes, 11.5% heart disease, and 4.3% had a stroke. In addition, 29.5% reported a limiting disability and 68.8% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	1 out of 1 test
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	2 0%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not pass

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 2 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	0 out of 0 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	Not eligible
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	0 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	50%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008 [8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 61 2008-09: 83
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: National Capitol Region: 82 *Cohort II: No sites *Cohort III: Charleston, WV: 50 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	14
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	2 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	2 out of 2 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	7 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	6 out of 7 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 2 3
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Wisconsin

dhfs.wisconsin.gov/preparedness

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Wisconsin, 9.4% of adults reported having asthma, 7.2% diabetes, 6.4% heart disease, and 2.1% had a stroke. In addition, 18.2% reported a limiting disability and 63.6% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] State public health laboratory had a COOP that was tested	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	3 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	3 out of 3 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	6 out of 6 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	133 94%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] ▪ Samples for which state performed tests ▪ Test results submitted to PulseNet database within 4 working days (target: 90%)	7 100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Passed

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 1 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	2 out of 2 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	122 hours

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	60 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	55%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 86 2008-09: 92
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: Chicago, IL: 80; Minneapolis, MN: 79 *Cohort II: Milwaukee, WI: 79 *Cohort III: No sites See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	37
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	14

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	5 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	5 out of 5 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	5 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	5 out of 5 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	6 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	6 out of 6 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 4
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	—
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Wyoming

wdh.state.wy.us/sho/hazards

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

All response begins at the local level. Being prepared to prevent, respond to, and recover from all types of public health threats requires that states and localities improve their capabilities in surveillance, epidemiology, laboratories, and response readiness. Facts on laboratories and response readiness activities appear below. See appendices 1 and 7 for a more detailed description of data points and data sources.

A healthy population is more resilient in public health emergencies. People with chronic conditions may require additional care such as specialized medications, equipment, and other assistance. To develop an effective response plan, a state or locality must consider the unique needs of its own population. In Wyoming, 9.2% of adults reported having asthma, 7.4% diabetes, 5.7% heart disease, and 2.2% had a stroke. In addition, 20.6% reported a limiting disability and 62.1% were overweight or obese.*

*CDC, ONCDIEH (NCCDPHP) Behavioral Risk Factor Surveillance System, 2008

Laboratories: General

Maintaining core laboratory functions during an emergency	Status of continuity of operations plan (COOP):[1] COOP was under development	
Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making	State had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC[2] Note: For a description of LRN laboratories, see appendix 1.	Yes

Laboratories: Biological Capabilities

Participation in LRN for biological agents	LRN reference and/or national laboratories that could test for biological agents[3]	1 reference lab
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill[3]	1 out of 1 lab
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories[3]	1 out of 1 test
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified *E. coli O157:H7* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	8 100%
	Rapidly identified *L. monocytogenes* using advanced DNA tests (PFGE)[4] • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days (target: 90%)	— N/A
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents[1]	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill[3] Note: There is one CDC-funded LRN laboratory in DC and in each state, with the exception of CA, IL, and NY, which have two.	Did not participate

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)	LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents[5] Note: There are three levels, with Level 1 having the most advanced capabilities. See appendix 1.	One Level 3 lab
Evaluating LRN-C laboratory capabilities through proficiency testing	Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents[5]	N/A
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise[5]	Passed
	Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise[6]	N/A
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)[5]	N/A

Response Readiness: Communication

Communicating emerging health information	State public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day[7]	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes[8]	Yes
	State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications[1]	262 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours[9]	54%

[1]APHL; 2008 [2]CDC, OSELS; 2008 [3]CDC, OID (NCEZID); 2008 [4]CDC, OPHPR (DSLR); 2008 [5]CDC, ONDIEH (NCEH); 2009 [6]CDC, ONDIEH (NCEH); 2008 [7]State data; 2008
[8]CDC, OPHPR (DEO); 2009 [9]CDC, OPHPR (DEO); 2008

Response Readiness: Communication (continued)		
Improving public health information exchange	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange[10]	Yes

Response Readiness: Planning		
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources	CDC technical assistance review (TAR) state score [11, 12] Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2007-08: 80 2008-09: 80
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score[11] *Cohort I: No sites *Cohort II: No sites *Cohort III: Cheyenne, WY: 49 See Scoring Note above. CRI locations can consist of multiple jurisdictions, some located in more than one state. See appendix 6. *Cohort I, II or III refers to the year when the location was added to CRI. See appendix 1.	
Enhancing response capability for chemical events	CHEMPACK nerve-agent antidote containers[11]	5
Meeting preparedness standards for local health departments	Local health departments meeting voluntary Project Public Health Ready preparedness standards[13]	0

Response Readiness: Exercises and Incidents		
Notifying emergency operations center staff	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 notifications.	3 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes[14]	3 out of 3 times
	Conducted at least one unannounced notification outside of normal business hours[14]	Yes
Activating the emergency operations center (EOC)	Public health EOC activated as part of a drill, exercise, or real incident[14] Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours[14]	4 out of 4 times
	Conducted at least one unannounced activation[14]	Yes

Response Readiness: Evaluation		
Assessing response capabilities through after action report/ improvement plans (AAR/IPs)	AAR/IPs developed following an exercise or real incident[14] Note: State must report 2 and could report up to 12 AAR/IPs.	5 AAR/IPs
	AAR/IPs developed within target time of 60 days[14]	5 out of 5 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs[14]	Yes

[10]CDC, OSTLTS; 2008 [11]CDC, OPHPR (DSNS); 2008 [12]CDC, OPHPR (DSNS); 2009 [13]NACCHO; 2008 [14]CDC, OPHPR (DSLR); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts. Snapshots of these CDC efforts are provided below.

Research, Training, Education, and Promising Demonstration Projects		
Project	**Location/Project Name**	**Amount**
Centers for Public Health Preparedness[15]	—	N/A
Preparedness and Emergency Response Research Centers[15]	—	N/A
Advanced Practice Centers[16]	—	N/A
Centers of Excellence in Public Health Informatics[17]	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects[14]	—	N/A

Additional CDC Resources Supporting Preparedness in States and Localities	
Epidemic Intelligence Service • Epidemic Intelligence Service Field Officers[17] • Investigations conducted by Epidemic Intelligence Service Field Officers[17]	 1 13
Deployments • Type of Incident (number of CDC staff)[18]	—
Career Epidemiology Field Officers[15]	1
Quarantine Stations[19]	—

[14]CDC, OPHPR (DSLR); 2008 [15]CDC, OPHPR (OD); 2008 [16]NACCHO; 2008 [17]CDC, OSELS; 2008 [18]CDC, OPHPR (DEO); 2008 [19]CDC, OID (NCEZID); 2008

Overview of Preparedness in the U.S. Insular Areas: Territories, Commonwealths, and Freely Associated States

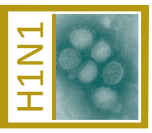
The United States has strategic and economic pacts with two jurisdictions in the Atlantic Ocean and six in the Pacific Basin. Jointly referred to as insular areas, they include territories, commonwealths, and freely associated states. The pacts between the United States and these islands include the provision of federal assistance. CDC's Public Health Emergency Preparedness (PHEP) cooperative agreement provides funding for preparedness activities to health departments on these islands, many of which face diverse challenges related to their isolated geographical locations and socioeconomic conditions.

The U.S. insular areas receiving PHEP preparedness funding are the territories of American Samoa, Guam, and U.S. Virgin Islands; the commonwealths of the Northern Mariana Islands and Puerto Rico; and the three

Micronesia residents queue up to receive H1N1 vaccines in fall 2009. Public health workers traveled for two weeks by boat to deliver the first vaccine shipments to the dispersed islands.

Photo source: Ministry of Health, Yap, Federated States of Micronesia

Guam Responds to the 2009 H1N1 Influenza Pandemic



The 2009 H1N1 influenza pandemic provided a real world opportunity for Guam to activate its plans to receive medical assets from CDC's Strategic National Stockpile. Guam has limited laboratory capacity for confirming infectious diseases such as H1N1 pandemic influenza, but plans to increase that capacity. In the future, Guam may be able to serve as a reference laboratory for the broader Pacific region as well as its own growing population. Guam's population is expected to increase exponentially with the planned relocation of 40,000 U.S. Marines and their dependents from Okinawa to Guam, where the central U.S. military base in the Pacific is located.

Source: CDC, Office of Public Health Preparedness and Response, Division of State and Local Readiness (2009)

freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.[47]

These areas also received funding specifically for pandemic influenza preparedness through the pandemic influenza supplement in 2006-2008 and, more recently, through the Public Health Emergency Response grant in response to the 2009 H1N1 influenza pandemic.

Preparedness Challenges and Focus

Public health preparedness efforts in the insular areas differ from the U.S. mainland due to their isolation. Methods for communicating about preparedness range from word of mouth and distributing flyers door-to-door to the use of telephones, cell phones with solar chargers, and HAM radios. Internet connectivity is limited and costly. PHEP funds are used primarily for building and maintaining basic capabilities. The current focus is on obtaining equipment, planning, and exercising emergency response plans, with some emphasis on training.

A Range of Surveillance Systems

Disease surveillance and reporting methods in the islands range from well developed, electronic systems connected to CDC's secure Epidemic Information Exchange (*Epi-X*) system and the Health Alert Network (HAN) to more basic, paper-based systems that can be effective in smaller, more remote island communities where electricity may not be available. As of July 2009, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands all responded to HAN test messages within the target time of 30 minutes. The ability of public health staff to receive urgent emerging health information helps ensure that local problems are contained and national events are detected sooner.

Limited Laboratory Capability

Laboratory capability – the ability to analyze biological and chemical specimens – is very limited in the islands. Challenges include large travel distances, slow or little communication between the islands, difficulties in transporting specimens, and lack of training and resources. Another important challenge is the lack of physical infrastructure to support laboratory requirements such as controlled environments and stable power sources. Most of the islands send specimens for confirmatory testing to reference laboratories in the United States and Australia, a practice that is time-consuming; receiving results can take from a week to more than a month.

Improved Planning for Emergencies

PHEP cooperative agreement funding has been instrumental in supporting the development and exercising of emergency response plans for all insular areas. This has resulted in greater preparedness of the public health workforce as well as the communities they serve.

As with states and localities, insular areas receiving PHEP funding are required to report on exercising and improving their response plans. Table 10 presents FY 2008 data submitted by the eight U.S. insular areas. (For a fuller explanation of these data points, see appendix 1.)

Table 10: Public Health Preparedness Activities in U.S. Insular Areas; 2007-2008

	Activating the Emergency Operations Center (EOC)			Notifying Emergency Operations Center Staff			Assessing Response Capabilities through After Action Reports/Improvement Plans (ARR/IPs)		
	EOC activated as part of a drill, exercise, or real incident*	Pre-identified staff reported to the EOC within the target time of 2.5 hours	Conducted at least one unannounced activation	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident*	Pre-identified staff acknowledged notification within the target time of 60 minutes	Conducted at least one unannounced notification outside of normal business hours	AAR/IPs developed following an exercise or real incident*	AAR/IPs developed within target time of 60 days	Re-evaluated response capabilities following approval and completion of corrective actions identified in an AAR/IP
American Samoa	1 time	1 out of 1 times	Yes	1 time	0 out of 1 times	No	4	4 out of 4 times	Yes
Guam	2 times	2 out of 2 times	Yes	2 times	2 out of 2 times	Yes	2	2 out of 2 times	Yes
Marshall Islands	3 times	3 out of 3 times	Yes	2 times	2 out of 2 times	Yes	2	2 out of 2 times	Yes
Micronesia	1 time	1 out of 1 times	Yes	0 times	0 out of 0 times	No	3	3 out of 3 times	No
N.Mariana Islands	2 times	2 out of 2 times	Yes	2 times	2 out of 2 times	No	2	2 out of 2 times	No
Puerto Rico	4 times	3 out of 4 times	Yes	4 times	4 out of 4 times	No	9	9 out of 9 times	Yes
Palau	0 times	0 out of 0 times	No	2 times	2 out of 2 times	Yes	4	3 out of 4 times	Yes
U.S.Virgin Islands	2 times	2 out of 2 times	Yes	2 times	2 out of 2 times	Yes	4	4 out of 4 times	Yes

**Minimum of 2*
Source: CDC, OPHPR (DSLR)

Preparing Children for Emergencies in Palau

In the Republic of Palau, residents feel strongly that they must pass the skills and culture of their traditional heritage to future generations, and preparing for emergencies is no exception. One of the activities funded by the PHEP cooperative agreement is an annual summer camp conducted by the Ministry of Health called Ak Ready ("Are You Ready"). In this camp, children aged 8-12 are taught how to prepare for public health emergencies that threaten their health and their island. Children learn from elders traditional Palauan resiliency strategies, such as how to make baskets from leaves, how to make spears for fishing, how to build a canoe, and how to catch rainwater for drinking. Learning these skills enhances the children's confidence in being able to survive during and after a disaster while learning cultural skills that can be handed down to future generations.

Photo source: Ministry of Health, PW (Palau)

Snapshots of Island Preparedness

American Samoa

American Samoa consists principally of five volcanic islands and two coral atolls covering some 76.2 square miles. (An atoll is an island of coral that encircles a lagoon.) It is located approximately 2,300 miles southwest of Hawaii and about 2,700 miles northeast of Australia. The capital of American Samoa is Pago Pago.

- Emergency plans and equipment funded by the PHEP cooperative agreement supported critical response operations following the tsunami that struck the shores of American Samoa in fall 2009.
- To compensate for the lack of formal public health training available in American Samoa, the Department of Health is working to provide practical training in basic epidemiology and public health for the existing and future workforce, the majority of whom are now recruited from clinical programs.

Guam

The U.S. territory of Guam is the largest and southernmost of the Mariana Islands in the Micronesian region of the western Pacific. It encompasses 212 square miles and is located some 3,800 miles southwest of Honolulu and 1,500 miles south of Tokyo. Hagatna is the capital of Guam.

- PHEP funding supported the development of emergency response plans used to prepare the public health community and the public for a predicted strike by super typhoon Melor on Guam and the Northern Mariana Islands in fall 2009. Super typhoons have winds of at least 115 mph (185 km/h).
- Guam is planning to upgrade their current laboratory to a BSL-2 facility for work involving agents of moderate potential hazard to personnel and the environment. The establishment of this laboratory will eliminate the traditional week-long wait for confirmatory results from California.

Republic of the Marshall Islands (RMI)

The RMI is part of the larger geographic region known as Micronesia, or "Little Islands," and is made up of 29 coral atolls, each comprising many smaller islets, and 5 single islands. The total land area of the approximately 1,225 islands and islets is about 70 square miles, which are spread across a sea area of over 750,000 square miles. RMI's capital, Majuro, lies some 2,300 miles southwest of Honolulu and nearly 2,000 miles southeast of Guam.

- Due to the lack of electricity in some areas and a recent energy crisis in the capital, RMI adopted the use of solar power as a main power source for communications equipment, lighting, and water treatment, in not only remote island atolls but within the main capital as well.
- Emergency plans, training, and equipment funded by the PHEP cooperative agreement has supported critical response operations following the many events hitting RMI on an annual basis. Of particular note in 2009 were floods, the H1N1 pandemic influenza response, and the tsunami warning.

Snapshots of Island Preparedness

Federated States of Micronesia (FSM)

The FSM is a grouping of 607 small islands in the Western Pacific lying just above the Equator and about 2,500 miles southwest of Hawaii. While the country's total land area amounts to only 270 square miles, it occupies more than one million square miles of the Pacific Ocean, and spans over 1,700 miles from east to west. The FSM capital, Palikir, is located on the island of Pohnpei.

- In fall 2009, public health workers traveled for two weeks by boats to deliver the first shipment of H1N1 vaccine to the dispersed islands.
- FSM is focusing on training for first responders and obtaining a better radio communication system for emergencies, including the use of solar-powered systems on remote islands where electricity is unavailable for regular use.

Commonwealth of the Northern Mariana Islands (CNMI)

Located just north of Guam, the CNMI is a 300-mile archipelago consisting of 14 islands, with a total land area of 183.5 square miles. The principal inhabited islands are Saipan (the capital), Rota and Tinian; the northern islands are largely uninhabited. Saipan is 3,300 miles from Honolulu; 5,625 from San Francisco; 1,272 miles from Tokyo; and 3,090 miles from Sydney.

- CNMI is working toward enhancing surveillance by increasing the workforce and implementing an electronic disease reporting system.
- Emergency response plans supported by the PHEP cooperative agreement enabled the CNMI public health community to prepare their workforce and the public for a threatened strike by super typhoon Melor in fall 2009. Super typhoons have winds of at least 115 mph (185 km/h).

Republic of Palau

The Palau archipelago consists of more than 500 islands in the Pacific Ocean stretching over 150 miles, with a total land area of 188 square miles. Only eight of the islands are permanently inhabited. The capital of Palau, Koror, lies 3,997 miles west/southwest of Honolulu; 813 miles south of Guam; and 530 miles from Manila.

- Palau is working to address gaps in emergency preparedness knowledge and skills identified for health care workers, emergency response personnel, staff, volunteers, and targeted populations in the general public.
- The public health community in Palau is using geographic information system coordinates to identify vulnerable populations.

Snapshots of Island Preparedness

Puerto Rico

Puerto Rico consists of one main island and several smaller islands with a total land area of 3,435 square miles between the Atlantic Ocean and the Caribbean Sea. It is located approximately 1000 miles southeast of Florida and 50 miles west of the U.S. Virgin Islands. The capital of Puerto Rico is San Juan.

- Puerto Rico is planning to establish a biological (BSL-2 and 3) and chemical (Level 2) emergency laboratory to serve its own population and those of its Caribbean neighbors.
- Puerto Rico uses global positioning and geographic information systems to ensure better preparedness for identified special populations such as the elderly, children, and tourists. In addition, Puerto Rico has developed an electronic reporting system for emergency management that is compliant with CDC's Public Health Information Network.

U.S. Virgin Islands (USVI)

The USVI are located between the Atlantic Ocean and the Caribbean Sea, some 1100 miles southeast of Florida and 50 miles east of Puerto Rico. USVI consists of 4 larger islands and some 50 smaller islands for a total of about 133 square miles. The USVI capital, Charlotte Amalie, is located on the island of St. Thomas.

- The USVI are conducting trainings in the National Incident Management System and the National Response Plan.
- In fall 2009, H1N1 vaccination campaigns were conducted in all schools on the islands of St. Thomas, St. Croix, and St. John.

Appendices

- Appendix 1: Explanation of Fact Sheet Data Points
- Appendix 2: Overview of CDC Organizations Involved in Preparedness Activities
- Appendix 3: Terrorism Preparedness and Emergency Response Funding
- Appendix 4: Public Health Emergency Preparedness Cooperative Agreement Funding
- Appendix 5: Public Health Emergency Response Grant Funding
- Appendix 6: Cities Readiness Initiative Technical Assistance Review Scores for 2007-2008
- Appendix 7: Data Sources

Appendix 1: Explanation of Fact Sheet Data Points

The data points included in the national summary tables on pages 26 and 34 and the individual fact sheets beginning on page 42 are bulleted below, followed by an explanation of its significance.

Laboratories: General

Maintaining core laboratory functions during an emergency

- *Status of continuity of operations plan (COOP)*

  A COOP is critical in an emergency situation to ensure that core functions of state public health laboratories are not disrupted.

Ensuring availability of Laboratory Response Network (LRN) laboratory results for decision making

- *State and locality had a standardized electronic data system capable of messaging laboratory results between LRN laboratories and also to CDC*

  States need the capability to manage and share laboratory data related to their LRN testing, and it is critical that all LRN laboratories use the same data standards and vocabulary. An electronic messaging system allows data to flow between laboratories and to CDC through a reliable mechanism using consistent data standards, ensuring that data are available quickly for decision making.

Laboratories: Biological Capabilities

Participation in LRN for biological agents

CDC manages the LRN, a group of local, state, federal, and international laboratories. CDC funds one biological LRN public health laboratory in every state and in the District of Columbia as part of the Public Health Emergency Preparedness (PHEP) cooperative agreement (with the exception of California, Illinois, and New York, which have two laboratories). Additional laboratories that participate in the LRN include state and locally funded public health laboratories as well as federal, military, international, university, agricultural, veterinary, food, and environmental testing laboratories. LRN provides a critical laboratory infrastructure to detect, characterize, and communicate about confirmed threat agents, decreasing the time needed to begin the response to an intentional act or naturally occurring outbreak.

- *LRN reference and/or national laboratories that could test for biological agents*

  LRN biological laboratories are designated as national, reference, or sentinel laboratories. National laboratories, including those at CDC, are responsible for specialized strain characterizations, bioforensics, select agent activity, and handling highly infectious agents. Reference laboratories perform tests to detect and confirm the presence of a threat agent. Sentinel laboratories are primarily hospital-based and can test samples to determine whether they should be shipped to reference or national laboratories for further testing.

Assessing if laboratory emergency contacts could be reached 24/7

- *LRN laboratories successfully contacted during a non-business hours telephone drill*

  The LRN emergency contacts telephone drill tests CDC's ability to reach biological laboratory emergency contacts 24 hours a day, seven days a week.

Evaluating LRN laboratory capabilities

- *Proficiency tests passed by LRN reference and/or national laboratories*

  CDC proficiency tests are composed of a number of unknown samples that are tested in order to evaluate the abilities of LRN reference and/or national biological laboratories to receive, test, and report on one or more suspected biological agents. If a laboratory is unable to successfully test for an agent within a specified period of time and report results, then the laboratory will not pass the proficiency test.

Rapid identification of disease-causing bacteria by PulseNet laboratories

States must be able to detect and determine the extent and scope of potential outbreaks and to minimize their impacts. The intent of this performance measure is to determine if a laboratory can rapidly receive, test, and report disease-causing bacteria within a specified timeframe. Laboratories in the PulseNet network use CDC's pulsed-field gel electrophoresis (PFGE) protocols to rapidly identify specific strains *Escherichia coli* O157:H7 and *Listeria monocytogenes*.

The 4 working-day timeframe of the performance measure allows states to demonstrate their ability to analyze samples and submit to the PulseNet database. This database is used by the PulseNet network (consisting of local, state and federal public health and food regulatory agency laboratories), which is coordinated by CDC.

- *Rapidly identified E. coli O157:H7 using advanced DNA tests (PFGE)*
  - *Samples for which state performed tests*
  - *Test results submitted to PulseNet database within 4 working days (target: 90%)*
- *Rapidly identified L. monocytogenes using advanced DNA tests (PFGE)*
  - *Samples for which state performed tests*
  - *Test results submitted to PulseNet database within 4 working days (target: 90%)*

Assessing laboratory competency and reporting through exercises

- *State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents*

  These exercises assess the competency of sentinel clinical laboratories to rule out bioterrorism agents. Sentinel laboratories represent the thousands of hospital-based, clinical institutions, and commercial diagnostic laboratories that have direct contact with patients. Some but not all sentinel laboratories are part of CDC's LRN. Sentinel laboratories provide routine diagnostic services, rule-out testing, and referral steps in the identification process and can play a key role in the early detection of biological agents by referring a suspicious sample to the right reference lab.

- *CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill. (Note: There is one CDC-funded LRN laboratory in the District of Columbia and in each state, with the exception of California, Illinois, and New York, which have two.)*

  LRN notification drills ensure that biological laboratories can contact the CDC Emergency Operations Center (EOC) to report results to EOC watch staff and duty officers within 2 hours of obtaining a result. Only laboratories funded through CDC's Public Health Emergency Preparedness cooperative agreement participate in this drill. These drills are associated with participation in a specific proficiency test; CDC-funded laboratories that

cannot participate in the test are excluded from this drill. Reasons for non-participation in the proficiency test include the following: laboratory does not test for agent, facility renovations or permit issues prevent laboratory from accepting samples, and laboratory has equipment issues.

Laboratories: Chemical Capabilities

Participation in Laboratory Response Network for chemical agents (LRN-C)

CDC manages the LRN, a group of local, state, federal, and international laboratories. The LRN provides a critical public health laboratory infrastructure to detect, characterize, and communicate about confirmed threat agents, decreasing the time needed to begin the response to an intentional act or accidental exposure.

- *LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents (Note: There are three levels, with Level 1 having the most advanced capabilities.)*
  - Level 1 laboratories are national surge capacity laboratories that maintain the capabilities of Level 2 and Level 3 laboratories, can test for an expanded number of agents using highly automated analysis methods, maintain an adequate supply of materials to analyze 1,000 patient samples for each method, and can operate 24/7 for an extended period of time.
  - Level 2 laboratories maintain the capabilities of Level 3 laboratories, can test for a limited panel of toxic chemical agents, and stock materials and supplies for the analysis of at least 500 patient samples for each qualified analysis method.
  - Level 3 laboratories work with hospitals, poison control centers, and first responders within their jurisdictions to maintain competency in clinical specimen collection, storage, and shipment.

Evaluating LRN-C laboratory capabilities through proficiency testing

- *Core methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents*

  LRN methods can help determine how widespread an incident was, identify who does/does not need long-term treatment, assist with non-emergency medical guidance, and help law enforcement officials determine the origin of the agent. Level 1 and Level 2 laboratories undergo proficiency testing to determine if they can rapidly detect and measure chemical agents that can cause severe health effects. CDC has identified six core methods for detecting and measuring these agents, and conducts testing to determine a laboratory's proficiency in these methods. This report presents final proficiency testing results as the number of these core methods successfully demonstrated by the laboratories in each state or locality. The maximum number is 6 core methods. However, it should be noted that the states and localities with Level 1 and Level 2 laboratories that are not proficient in all six core methods may have completed extensive work in the two steps that precede proficiency testing: training and validation in the core methods.

- *Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents*

  In addition to proficiency in core methods, certain LRN laboratories demonstrate proficiency in up to six additional methods. Level 1 laboratories are required to gain

proficiency in these additional methods, while Level 2 laboratories may choose to do so or not. There are currently six additional methods in which Level 1 laboratories must demonstrate proficiency, and five additional methods in which Level 2 laboratories may choose to become proficient. A successful demonstration in the testing indicates ongoing proficiency. The figures presented in the fact sheets represent the number of additional methods for which laboratories in the state or locality demonstrated proficiency relative to the number of tests they undertook. Because the list of additional methods continues to increase, state and local laboratories are not expected to be proficient in all additional methods. Laboratories may have trained in additional methods, and/or undergone validation for additional methods, which are steps that precede proficiency testing.

Assessing LRN-C laboratory capabilities through exercises

- *LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise*

  This annual exercise evaluates the ability of a laboratory to collect relevant samples for clinical chemical analysis and ship those samples in compliance with International Air Transport Association regulations. Multiple sites in Florida and Illinois have the opportunity to participate in this exercise. For these two states, all results are reported.

- *Chemical agents detected by Level 1 and/or Level 2 laboratories in unknown samples during the LRN Emergency Response Pop Proficiency Test (PopPT) Exercise*

  This annual exercise tests a laboratory's emergency response capabilities, focusing on the detection and measurement of specific agents. To participate in a PopPT exercise, the laboratory must have attained a "Qualified" status for the method. To attain "Qualified" status, a laboratory must have completed training, the validation exercise, and passed at least one scheduled PT exercise. Laboratories participating in the PopPT exercise are called the day before the exercise, are sent a minimum of 10 unknown samples, and must test these samples within a certain number of hours (depending on the methods needed). The August 2008 exercise tested a lab's ability to detect, identify, and quantify two unknown agents. The exercise also tested the laboratory's emergency contact process and its ability to report results to the LRN.

- *Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise (range was 71 to 126 hours)*

  This exercise demonstrates the ability of each Level 1 laboratory to test and report on 500 samples (a total of 5000 samples) on a 24/7 basis as would be required by a large scale chemical incident. The response time was determined from the delivery of the 500 samples until the time the last sample was reported to CDC.

Response Readiness: Communication

Communicating emerging health information

- *State and locality public health department had a 24/7 reporting capacity system that could receive urgent disease reports any time of the day*

  State and locality public health departments with a 24/7 reporting capacity system are able to receive urgent disease reports any time of the day instead of just during regular business hours.

- *Responded to Health Alert Network (HAN) test message within 30 minutes*

  As a component of CDC's Public Health Information Network, HAN provides information to state and local public health practitioners, clinicians, and public health laboratories about urgent health events. Responding to a HAN test message within 30 minutes demonstrates that state and locality public health staff are able to receive urgent messages quickly.

- *State public health laboratory used HAN or other rapid method (blast email or fax) to communicate with sentinel laboratories and other partners for outbreaks, routine updates, training events, and other applications*

  This number demonstrates the frequency with which state public health laboratories used rapid methods to communicate with sentinel laboratories and other partners. See page 157 for a definition of sentinel, reference, and national laboratories.

- *Epidemic Information Exchange (Epi-X) users responded to system-wide notification test within 3 hours*

  Epi-X is a secure, CDC web-based communication system that enable CDC officials, state and local health departments, poison control centers, and other public health professionals to access and share preliminary health surveillance information quickly. *Epi-X* provides rapid reporting, immediate notification, editorial support, and coordination of health investigations for public health professionals about disease outbreaks and other public health events that potentially involve multiple jurisdictions. To protect the sensitive nature of the preliminary information it provides, access is limited to designated officials who are engaged in identifying, investigating, and responding to health threats. To determine the effectiveness of *Epi-X* as a rapid communication and notification system, users were tested on their ability to log into the system and view a test report within 3 hours. The test, which was conducted in April 2008, was designed to identify and address problems that could occur before a real event.

Improving public health information exchange

- *Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange*

  The Public Health Information Network is a national CDC-sponsored initiative to improve public health use and exchange of information by promoting the use of standard and technical requirements. Communities of practice provide a forum for members to work together to identify and leverage best practices and standards for public health information technology and informatics. The goal is to enhance preparedness through improved public health information exchange.

Response Readiness: Planning

Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources.

The CDC Strategic National Stockpile has large quantities of medicine, vaccines, and medical supplies placed in strategic locations around the nation to supplement state and local public health agencies in the event of a large-scale public health emergency.

- *CDC technical assistance review (TAR) state score*

  All 62 PHEP-funded states, localities and U.S. insular areas have plans for receiving, distributing, and dispensing medical assets from the Stockpile. State technical assistance reviews to access these plans are conducted by CDC on an annual basis to ensure continued readiness. Using a scale from zero to 100, a CDC TAR score of 69 or higher indicates that a state performed in an acceptable range in its plan to receive, distribute, and dispense medical assets. (The acceptable threshold score has increased to 79 or higher for 2009-2010.)

- *Cities Readiness Initiative (CRI) Location and 2007-08 TAR score*

  CRI focuses on enhancing preparedness in the nation's major population centers, where more than half of the U.S. population resides. A CRI location is a metropolitan statistical area (MSA) composed of multiple counties based on Census Bureau data. Through CRI, state and large metropolitan public health departments have developed plans to respond to a large-scale bioterrorist event within 48 hours.

  The first CRI cohort started in 2004 with 21 cities; the second cohort added 15 MSAs in 2005; the third cohort added 36 MSAs in 2006, for a total of 72 and at least one CRI MSA in every state. MSAs can be composed of one or more jurisdictions (e.g., counties, cities, and municipalities) and can extend across state borders, resulting in the representation of several states within one MSA. To ensure continued readiness, TARs are conducted annually in each local jurisdiction. CDC is responsible for conducting 25% of the TARs while the state is responsible for the other 75%. The TAR scores (ranging from 0 to 100) for each planning jurisdiction are combined to compute an average score for the CRI MSA.

Enhancing response capability for chemical events

- *CHEMPACK nerve-agent antidote containers*

  CHEMPACK is a nationwide program to place containers of nerve-agent antidotes at state and local levels, which increases the capability to respond quickly to a chemical event.

Meeting preparedness standards for local health departments

- *Local health departments meeting voluntary Project Public Health Ready preparedness standards*

  The vision for this voluntary project is to fully integrate local health departments and the response community. This competency-based project assesses preparedness and assists local health departments or groups of departments working collaboratively to respond to emergencies. Participating local health departments work through a set of criteria for preparedness planning and workforce competency goals, and conduct exercises to test and identify gaps in their preparedness plans.

Response Readiness: Exercises and Incidents

Notifying emergency operations center (EOC) staff

Rapid notification of EOC staff is critical for an effective response. To ensure timely and effective coordination within the public health agency and with key response partners in a complex incident, states and localities must demonstrate the capability to rapidly notify staff to report for EOC duty. They must also track responses to ensure that eight core Incident Command System (ICS) functional roles can be staffed with one person per position.

The ICS specifies that states and localities have a pre-identified list of personnel required to cover eight core ICS functional roles: Incident Commander, Public Information Officer, Safety Officer, Liaison Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief. This capability is critical to maintain even though not every incident requires full staffing of the ICS.

All of the ICS functional roles may or may not be used based on incident needs. The widespread use of ICS by all levels of government – federal, state, tribal, and local – as well as by many nongovernmental organizations and the private sector, enables personnel to work together using common terminology, procedures, and organizational structures.

- *Pre-identified staff notified to fill all eight Incident Command System (ICS) core functional roles due to a drill, exercise, or real incident*

  The intent of this performance measure is to demonstrate the capability to rapidly notify staff with incident management functional responsibilities that the EOC is being activated (see Activations below). States and localities are required to report details on a minimum of two notification drills, exercises, or real incidents. States and localities can report an unlimited number of drills, exercises, or real incidents, but can only provide details for a maximum of 12 for the entire year (a maximum of six for each of the two reporting periods within the entire year). This CDC report provides information on the detailed notification drills, exercises, or incidents. States and localities may have conducted additional notifications.

- *Pre-identified staff acknowledged notification within the target time of 60 minutes*

  This performance measure, related to the measure above, considers the time for staff with public health agency ICS functional responsibilities to acknowledge the notification.

- *Conducted at least one unannounced notification outside of normal business hours*

  States and localities must be able to demonstrate that all eight core ICS functional roles can be staffed rapidly outside of normal business hours without advance warning.

Activating the emergency operations center (EOC)

Activation is defined as rapidly staffing all eight core Incident Command System (ICS) functional roles in the public health emergency operations center with one person per position. This capability is critical to maintain even though not every incident requires full staffing of the ICS.

- *Public health EOC activated as part of a drill, exercise, or real incident*

  The intent of this performance measure is to demonstrate the capability for all eight staff having core ICS functional responsibilities to report for duty at the public health EOC. States and localities are required to report a minimum of two activations. States and localities can report an unlimited number of activations, but can only provide details for a maximum of 12 for the entire year (a maximum of six for each of the two reporting periods within the entire year). This CDC report provides information on the detailed activations. States and localities may have conducted additional activations.

- *Pre-identified staff reported to the public health EOC within the target time of 2.5 hours*

  This performance measure, related to the measure above, considers the time for staff with public health agency Incident Command System functional responsibilities to report for duty at the public health agency's EOC.

- *Conducted at least one unannounced activation*

  States and localities must be able to demonstrate that all eight core ICS functional roles can be staffed rapidly outside of normal business hours without advance warning.

Response Readiness: Evaluation

Assessing response capabilities through after action report/improvement plans (AAR/IPs)
AAR/IPs help assess what worked well during an exercise or real event and what can be improved. States and localities evaluate their actions during both exercises and real incidents, identify needed improvements, and prepare a plans for making improvements by developing after action reports and improvement plans (AAR/IPs). These should include how response operations did and did not meet objectives, recommendations for correcting gaps or weaknesses, and a plan for improving response operations.

- *AAR/IPs developed following an exercise or real incident*

  The intent of this performance measure is to demonstrate the capability to analyze response actions, describe needed improvements, and prepare a plan for making improvements. States and localities are required to report details on a minimum of two AAR/IPs. States and localities can report an unlimited number of AAR/IPs, but can only provide details for a maximum of 12 for the entire year (a maximum of six for each of the two reporting periods within the entire year). This CDC report provides information on the detailed AAR/IPs. States and localities may have developed additional AAR/IPs.

- *AAR/IPs developed within target time of 60 days*

  Development of an AAR/IP within 60 days is calculated using the date following the end of the exercise or public health emergency response operations as determined by the incident commander, and the date the draft AAR/IP was submitted for clearance within the public health agency.

- *Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs*

  The systematic reevaluation of response capabilities is critical for providing evidence that planned corrective actions have been effective in improving response.

Research, Training, Education, and Promising Demonstration Projects

In addition to the state activities listed above, CDC supported projects and additional activities to enhance state preparedness efforts. Snapshots of these CDC efforts are provided below.

- *Centers for Public Health Preparedness (CPHP)*

  This program is an important resource for the development, delivery, and evaluation of preparedness education. Colleges and universities within the CPHP program provide preparedness education to public health workers, healthcare providers, and students. CPHPs collaborate with state, local and tribal health agencies to develop, deliver, and evaluate preparedness education based on community need. (CPHPS will be known as Preparedness and Emergency Response Learning Centers in FY 2011.)

- *Preparedness and Emergency Response Research Centers (PERRC)*

  PERRCs conduct research to evaluate the structure, capabilities, and performance of preparedness and emergency response activities in federal, state, and local public health systems. Scientists in the PERRCs at schools of public health must connect with multiple partners within the public health infrastructure to incorporate diverse perspectives into their research.

- *Advanced Practice Centers (APC)*

  This network of local health departments develops resources and training that enhance the capabilities of all local health departments and the public health system to prepare for, respond to, and recover from public health emergencies.

- *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 healthcare 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.

- *Pandemic Influenza Promising Practices Demonstration Projects*

  Selected state and local public health departments received PHEP cooperative agreement and pandemic influenza supplemental funding through a competitive application process for projects serving as innovative approaches for pandemic influenza preparedness. These projects will provide promising practices or effective approaches that can be replicated nationally to improve national, regional, and local public health detection and response to an influenza pandemic.

Additional CDC Resources Supporting Preparedness in States and Localities

- *Epidemic Intelligence Service (EIS)*

  The EIS program expands the epidemiology workforce through a two-year epidemiology training program modeled on a traditional medical fellowship. EIS officers (epidemiologists) serve as a critical component to CDC's support of states during responses to routine public health incidents and large-scale national emergencies. Officers are assigned to CDC or to state and local health departments.

- *Deployments*

  CDC personnel are deployed routinely for emergency response operations and EPI-AID investigations. For EPI-AID investigations, CDC's Epidemic Intelligence Service officers, along with other CDC staff, provide technical support to state health agencies requesting assistance for epidemiologic field investigations of disease outbreaks or health emergencies. Data points include the type of incident and number of CDC staff deployed.

- *Career Epidemiology Field Officers (CEFOs)*

  CDC places experienced, full-time epidemiologists in state and local public health departments to enhance and build epidemiologic capacity for public health preparedness and response. (States use PHEP funds to support CEFO positions.) CEFOs also serve as liaisons and consultants between CDC and public health departments as well as mentors for state and local public health department staff and EIS officers assigned to state or local health departments.

- *Quarantine Stations*

  CDC's domestic quarantine stations, strategically located at U.S. ports of entry where the majority of international travelers arrive in the United States, are essential for detecting and responding to diseases of public health significance. The public health officials who operate these stations implement measures to prevent the spread of infectious diseases.

Appendix 2: Overview of CDC Organizations Involved in Preparedness Activities

The Centers for Disease Control and Prevention (CDC) builds and strengthens systems at local, state, and federal levels to respond to all hazards. For more information, see CDC's Emergency Preparedness and Response website (emergency.cdc.gov).

CDC's emergency preparedness and response is a collective effort among the different offices and national centers. The Office of Public Health Preparedness and Response (OPHPR) provides strategic direction, support, and coordination for CDC's preparedness and emergency response activities that receive Terrorism Preparedness and Emergency Response funding. In addition to the programs that OPHPR manages directly, other CDC organizations and programs make significant contributions to emergency preparedness and response and are also listed below. (Please note: the listing below reflects the new structure developed as part of CDC's 2009 organizational improvement process. For more information see www.cdc.gov/about/organization/cio.htm.)

Preparedness

The **Office of Public Health Preparedness and Response (OPHPR)** *(formerly the Coordinating Office for Terrorism Preparedness and Emergency Response*) coordinates terrorism preparedness and emergency response activities across CDC and strategically distributes funds that support a range of activities at CDC and state and local public health departments. OPHPR manages the following divisions and offices:

- The **Division of State and Local Readiness (DSLR)** manages the Public Health Emergency Preparedness (PHEP) cooperative agreement, which funds state and local efforts to strengthen response to a public health emergency and provides technical assistance to promote these efforts. In response to the 2009 H1N1 influenza pandemic, DSLR also administered funds through the Public Health Emergency Response (PHER) grant to upgrade pandemic influenza preparedness and response capacity.
- The **Division of Strategic National Stockpile (DSNS)** operates and maintains the Strategic National Stockpile, a national repository of antibiotics, chemical antidotes, antitoxins, life-support medications, and medical supplies. During a public health emergency, state and local public health systems may become overwhelmed. The Stockpile is designed to supplement state and local public health departments in the event of such an emergency. DSNS also provides technical assistance to local officials to help ensure that local, state, and federal agencies can work together to receive, stage, store, distribute, and dispense medical assets from the Stockpile as well as other sources.
- The **Division of Emergency Operations (DEO)** coordinates CDC's preparedness, assessment, response, recovery, and evaluation prior to and during public health emergencies. DEO has overall responsibility for the CDC Emergency Operations Center (EOC), which maintains situational awareness of potential health threats 24 hours a day and is the centralized location for event management when activated. The EOC is equipped with state-of-the-art communications technologies to support information pipelines with state, federal, and international partners.
- The **Division of Select Agents and Toxins (DSAT)** through the Select Agent Program regulates the possession, use, and transfer of biological agents and toxins (select agents) that have the potential to pose a severe threat to public health and safety. This program is designed to ensure compliance with the select agent regulations by providing guidance and evaluating and inspecting registered entities.
- The **Office of the Director (OD)** manages strategy, budget, policy, workforce and career planning,

communication, research, and science for terrorism preparedness and emergency response activities. In addition, OD manages the Career Epidemiology Field Officer program, which recruits and supports skilled epidemiologists in state and local public health departments. Through this program, state public health departments can choose to spend PHEP cooperative agreement funds to support a field officer in their agencies. OD also manages the Centers for Public Health Preparedness program (will be known as Preparedness and Emergency Response Learning Centers in FY 2011), a national network of colleges and universities that collaborates with state and local public health departments and other community partners to provide preparedness education and training resources to the public health workforce, healthcare providers, students, and others based on community need.

Global Health

The **Center for Global Health (CGH)** (*formerly the Coordinating Office for Global Health*) provides leadership and works with global partners to increase life expectancy and years of quality of life, and also to increase global preparedness to prevent and control natural and manmade threats to health. CDC's global health presence includes more than 200 CDC staff assigned to more than 50 countries and international organizations.

CGH coordinates international response with the CDC Emergency Operations Center during international emergency response events and serves as the principal CDC point of contact for CDC programs, federal agencies, foreign governments, and other organizations concerned with international terrorism preparedness and response. CGH also works to build global public health capacity to identify, investigate, and contain outbreaks and other major public health emergencies. In addition, CGH provides epidemic aid and epidemiologic consultation and reference diagnostic services to state and local health departments, other federal agencies, and national and international health organizations.

Infectious Diseases

The **Office of Infectious Diseases (OID)** (*formerly the Coordinating Center for Infectious Diseases*) strives to protect the public's health by preventing and controlling infectious diseases. OID's ongoing public health preparedness activities include developing vaccine, improving diagnostic methods for select bioterrorism agents, and improving the Laboratory Response Network. Their mission is to lead, promote, and facilitate science, programs, and policies to reduce the burden of infectious diseases in the United States and globally.

- The **Influenza Coordination Unit (ICU)** is responsible for all aspects of CDC's pandemic influenza preparedness, from strategy through implementation. The ICU coordinates and synchronizes all pandemic influenza-related activities within CDC to ensure preparedness for a possible pandemic. These activities include setting priorities and promoting science, policies for the programs related to CDC's pandemic influenza activities, exercising readiness plans, and facilitating community preparedness.
- The **National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)** (*formerly the National Center for Zoonotic, Vector-Borne, and Enteric Diseases and the National Center for Preparedness, Detection, and Control of Infectious Diseases*) aims to detect, prevent, and control infectious diseases from spreading, whether they are naturally occurring, unintentional, or the result of terrorism. NCEZID manages the biological testing component of the Laboratory Response Network, an integrated network of national, reference or sentinel laboratories whose goal is to detect, characterize, and communicate about confirmed biological agents, decreasing the time needed

to begin the response to an intentional act or accidental exposure. In addition, NCEZID tests the continuing effectiveness of existing drugs against bioterrorism agents and prepares U.S. ports of entry to reduce the risk of natural or intentional introduction of infectious diseases into the country.

- The **National Center for Immunization and Respiratory Diseases (NCIRD)** works to prevent disease, disability, and death through immunization and by control of respiratory and related diseases. During the 2009 H1N1 influenza pandemic, NCIRD provided leadership; laboratory, epidemiology, and clinical subject matter expertise; and vaccine delivery expertise. To prepare against natural and intentional outbreaks, the center also conducts surveillance and laboratory activities for vaccine-preventable diseases and viral and bacterial respiratory diseases. As part of the Anthrax Vaccine Research Program, NCIRD has recently completed a large-scale human clinical trial of the anthrax vaccine and immunological studies in animals. NCIRD is also evaluating the use of anthrax immunoglobulin for severe systemic anthrax.

Noncommunicable Diseases, Injury and Environmental Health

The **Office of Noncommunicable Diseases, Injury and Environmental Health's (ONDIEH)** (*new office established as part of CDC's 2009 organizational improvement*) mission is to increase the potential for full, satisfying, and productive living across the lifespan for all people in all communities. ONCDIEH preparedness activities include providing technical expertise in epidemiology, surveillance, and communications during emergencies for populations with physical and developmental disabilities and chronic diseases as well as at-risk populations.

- The **National Center on Birth Defects and Developmental Disabilities (NCBDDD)** is conducting ongoing projects to develop and strengthen intramural research and surveillance capacity related to emergency preparedness for at-risk populations.
- The **National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)** has produced a number of publications addressing issues surrounding persons with chronic diseases following natural disasters.
- The **National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR)** conducts ongoing projects to improve surveillance systems, laboratory capacity, and emergency response. NCEH/ATSDR manages the chemical testing component of the Laboratory Response Network, an integrated network of state and national laboratories whose goal is to detect, characterize, and communicate about confirmed chemical agents, decreasing the time needed to begin the response to an intentional act or accidental exposure. In addition, NCEH/ATSDR is improving various surveillance systems for chemical exposures, hazardous substance spills, and morbidity following disasters. NCEH/ATSDR also works with state and local public health departments to improve response to chemical, nuclear, and radiologic terrorism.
- The **National Center for Injury Prevention and Control (NCIPC)** links to the injury care community to decrease morbidity and mortality from injuries caused by explosions. NCIPC is moving toward this goal through curriculum development for healthcare providers, development of clinical guidance resources for management of blast injuries, and translation of lessons learned from international and U.S. military experience. NCIPC is also working to improve surveillance systems for blast injuries due to bombings and behavioral/mental health outcomes associated with disasters and incidents of mass violence and is providing educational materials to prevent or reduce the impact of these events on mental health and behavioral health outcomes.

Occupational Safety and Health

The **National Institute for Occupational Safety and Health (NIOSH)** provides leadership to prevent work-related illness, injury, disability, and death through information gathering, scientific research, and translation of knowledge into products and services.

The mission of the NIOSH Emergency Preparedness and Response program is to advance research and collaborations to protect the health and safety of emergency response providers and recovery workers by preventing diseases, injuries, and fatalities when responding to emergencies.

State, Tribal, Local and Territorial Support

The **Office for State, Tribal, Local and Territorial Support's** (OSTLTS) (*new office established as part of CDC's 2009 organizational improvement*) vision is to improve the health of America by supporting state, local, tribal, and territorial public health agencies to expand and develop their capacity in programs and policies related to the improvement of the health status of the nation. OSTLTS' activities will focus on public health systems (government relations, partners and strategic alliances, workforce development, and information technology and management which includes the Public Health Information Network), public health practice (Public Health Law program, technical assistance, and capacity development and improvement), and performance and accountability (public health standards and accreditation as well as program review, assessment and analysis).

Surveillance, Epidemiology and Laboratory Services

The **Office of Surveillance, Epidemiology, and Laboratory Services's (OSELS)** (*new office established as part of CDC's 2009 organizational improvement*) mission is to provide scientific service, expertise, skills, and tools in support of CDC's national efforts to promote health; prevent disease, injury and disability; and prepare for emerging health threats. OSELS will lead the development, adoption, and integration of sound national and international public health surveillance and epidemiological practices, based on advances in informatics, epidemiology, laboratory science, and public health research.

- The **National Center for Health Statistics (NCHS)** conducts and supports statistical, methodological, and epidemiological activities that will provide the data needed to improve the effectiveness, efficiency, and quality of health services in the United States.

  Among the surveys fielded by NCHS is the National Hospital Ambulatory Medical Care Survey. The survey is used annually to monitor emergency department crowding and has occasionally included supplements that help illustrate if emergency departments have the necessary training to recognize and treat patients suffering from diseases such as exposure to anthrax, and have formal plans to respond to mass casualty events. These data provide important context for planning and evaluating emergency preparedness programs at the national level, and may be used as benchmarks for individual states.

Appendix 3: Terrorism Preparedness and Emergency Response Funding

Table 1: CDC's Terrorism Preparedness and Emergency Response Funding; FY 2002-2009

Terrorism- Budget Authority Budget Activity/ Description	FY 2002 Appropriation	FY 2003 Appropriation	FY 2004 Appropriation	FY 2005 Appropriation	FY 2006 Appropriation	FY 2007 Appropriation	FY 2008 Appropriation	FY 2009 Appropriation
State and Local Preparedness and Response Capability*	$940,174,000	$1,038,858,000	$918,454,000	$919,148,000	$823,099,000	$766,660,000	$746,039,000	$746,596,000
CDC Preparedness and Response Capability**	$161,849,000	$196,566,000	$191,117,000	$236,909,000	$283,735,000	$209,545,000	$181,907,000	$197,754,000
Strategic National Stockpile	$645,000,000	$298,050,000	$397,640,000	$466,700,000	$524,339,000	$496,348,000	$551,509,000	$570,307,000
Total Terrorism Preparedness and Emergency Response Funding	**$1,747,023,000**	**$1,533,474,000**	**$1,507,211,000**	**$1,622,757,000**	**$1,631,173,000**	**$1,472,553,000**	**$1,479,455,000**	**$1,514,657,000**

**Includes Public Health Emergency Preparedness (PHEP) cooperative agreement, Centers for Public Health Preparedness, Advanced Practice Centers (FY 2004-09), Health Alert Network (FY 2002-03), Cities Readiness Initiative, U.S. Postal Service Costs (FY 2004), All Other State and Local Capacity, and Smallpox Supplement (FY 2003)*

***Includes Upgrading CDC Capacity, Anthrax, BioSense (FY 2004-09), Quarantine (FY 2004-09), and Real Time Lab Reporting (FY 2005-09)*

Source: Annual Labor, Health and Human Services, Education, and Related Agency Appropriation Bills and Reports (FY 2002–2009)

Note: All funding appropriation levels have been made comparable to reflect realignments, transfers, and/or reprogramming.

Appendix 4: Public Health Emergency Preparedness Cooperative Agreement Funding

Table 1: Public Health Emergency Preparedness Cooperative Agreement Funding for States, Localities, and U.S. Insular Areas; FY 2002-2009[1]

	FY 2002	FY 2003[2]	FY 2004	FY 2005	FY 2006
Alabama	$14,900,443	$15,598,792	$12,910,651	$12,809,991	$11,332,549
Alaska	$6,395,720	$6,502,762	$5,205,459	$5,210,372	$5,176,673
American Samoa	$544,481	$576,463	$444,499	$447,789	$483,221
Arizona	$16,422,170	$17,586,381	$16,470,314	$17,067,370	$15,468,991
Arkansas	$10,951,709	$11,390,938	$9,339,265	$9,302,434	$8,513,998
California	$60,816,245	$64,203,968	$59,319,441	$61,339,288	$54,396,954
Chicago	$11,447,312	$11,378,246	$12,563,491	$12,816,598	$11,685,667
Colorado	$14,575,766	$15,508,850	$13,654,314	$13,937,566	$12,343,549
Connecticut	$12,581,705	$13,145,748	$10,828,647	$10,801,849	$9,872,607
Delaware	$6,744,505	$6,889,271	$5,518,506	$5,596,144	$5,511,936
District of Columbia	$11,273,558	$11,360,917	$11,985,069	$11,931,316	$6,702,385
Florida	$40,581,081	$43,832,162	$37,583,527	$39,221,056	$34,945,845
Georgia	$23,225,251	$24,935,506	$21,575,121	$22,321,610	$19,557,241
Guam	$777,788	$679,585	$515,976	$550,696	$658,616
Hawaii	$7,697,208	$7,910,098	$6,384,925	$6,381,328	$6,130,741
Idaho	$7,880,688	$8,131,994	$6,588,258	$6,629,932	$6,389,623
Illinois	$26,201,381	$28,315,621	$23,718,971	$24,044,099	$20,613,241
Indiana	$18,536,799	$19,530,623	$16,262,765	$16,461,162	$14,502,083
Iowa	$11,514,786	$11,953,663	$9,816,873	$9,725,489	$8,810,613
Kansas	$10,985,143	$11,408,553	$9,354,215	$9,296,532	$8,724,480
Kentucky	$13,998,067	$14,649,896	$12,105,282	$12,048,544	$10,860,671
Los Angeles County	$24,591,171	$27,856,971	$27,069,695	$27,933,032	$24,180,809
Louisiana	$14,949,145	$15,602,245	$12,913,581	$12,790,121	$11,478,386
Maine	$7,838,322	$8,046,341	$6,600,682	$6,606,543	$6,321,437
Marshall Islands	$306,025	$561,544	$434,158	$446,412	$485,107
Maryland	$16,791,405	$17,774,011	$14,756,853	$15,290,917	$13,970,953
Massachusetts	$19,134,801	$20,181,459	$17,640,158	$17,872,452	$15,512,606
Michigan	$27,125,655	$28,731,577	$26,896,854	$27,105,748	$23,221,202
Micronesia	$446,522	$653,415	$497,837	$496,736	$562,809
Minnesota	$15,952,086	$16,821,680	$14,701,780	$15,003,826	$13,134,147
Mississippi	$11,332,975	$11,782,347	$9,671,470	$9,608,208	$8,738,914
Missouri	$17,456,448	$18,369,845	$15,952,563	$16,321,799	$14,402,196

	FY 2007	Total Pandemic Influenza Supplemental Funding[3] (FY 2006-2008)	FY 2008	FY 2009	TOTAL FY 2002-2009
Alabama	$10,228,438	$7,799,356	$10,241,093	$9,984,931	$105,806,244
Alaska	$5,015,000	$2,415,422	$5,015,000	$5,015,000	$45,951,408
American Samoa	$419,594	$380,155	$386,338	$383,368	$4,065,908
Arizona	$14,284,449	$9,638,285	$14,227,671	$13,658,394	$134,824,025
Arkansas	$7,533,982	$5,556,599	$7,435,489	$7,279,503	$77,303,917
California	$52,023,574	$38,435,457	$50,161,370	$49,341,755	$490,038,052
Chicago	$13,806,684	$6,085,093	$11,382,673	$10,699,574	$101,865,338
Colorado	$11,234,142	$8,733,589	$11,141,885	$10,637,403	$111,767,064
Connecticut	$9,112,072	$6,726,042	$8,927,705	$8,704,406	$90,700,781
Delaware	$5,000,000	$2,662,104	$5,000,000	$5,000,000	$47,922,466
District of Columbia	$9,129,492	$2,264,267	$6,698,743	$6,461,359	$77,807,106
Florida	$33,289,391	$27,239,262	$32,940,501	$32,906,612	$322,539,437
Georgia	$18,230,415	$14,746,750	$18,689,009	$18,146,190	$181,427,093
Guam	$589,529	$532,250	$555,484	$546,695	$5,406,619
Hawaii	$5,296,353	$4,642,440	$5,228,184	$5,144,507	$54,815,784
Idaho	$5,439,853	$3,464,188	$5,405,739	$5,330,380	$55,260,655
Illinois	$19,245,542	$15,979,832	$19,912,211	$19,985,919	$198,016,817
Indiana	$13,406,349	$10,967,717	$13,335,867	$12,979,201	$135,982,566
Iowa	$7,832,164	$5,861,390	$7,702,063	$7,540,433	$80,757,474
Kansas	$7,709,812	$5,296,518	$7,598,339	$7,446,545	$77,820,137
Kentucky	$9,905,373	$7,266,687	$9,750,535	$9,510,505	$100,095,560
Los Angeles County	$25,365,277	$15,245,029	$22,852,470	$22,522,771	$217,617,225
Louisiana	$10,536,471	$8,155,767	$9,998,186	$9,756,363	$106,180,265
Maine	$5,381,949	$4,778,863	$5,271,144	$5,183,337	$56,028,618
Marshall Islands	$421,421	$381,169	$390,307	$387,201	$3,813,344
Maryland	$12,815,412	$9,235,049	$13,038,391	$12,690,042	$126,363,033
Massachusetts	$14,418,081	$10,928,690	$14,805,770	$14,323,704	$144,817,721
Michigan	$21,555,319	$17,546,352	$20,453,241	$20,123,542	$212,759,490
Micronesia	$496,704	$449,734	$461,346	$455,796	$4,520,899
Minnesota	$12,587,653	$10,806,282	$12,616,406	$12,055,280	$123,679,140
Mississippi	$7,797,260	$5,536,310	$7,629,747	$7,467,891	$79,565,122
Missouri	$13,236,793	$9,513,634	$13,029,088	$12,475,814	$130,758,180

Source: CDC (FY 2002-2003 and FY 2009) and HHS Press Office (FY 2004-2008)

[1] *Funding categories include: base population funding, Cities Readiness Initiative funding, chemical laboratory funding and Early Warning Infectious Disease Surveillance (EWIDS) funding.*

[2] *Includes $100 million Smallpox Supplement*

[3] *Pandemic influenza supplemental funding was awarded in phases over three years.*

Appendix 4: (continued)

Table 1: Public Health Emergency Preparedness Cooperative Agreement Funding for States, Localities, and U.S. Insular Areas; FY 2002-2009[1]

	FY 2002	FY 2003[2]	FY 2004	FY 2005	FY 2006
Montana	$7,008,529	$7,147,269	$5,775,627	$5,751,801	$5,616,551
Nebraska	$8,809,733	$9,079,368	$7,377,335	$7,346,564	$6,897,069
Nevada	$9,448,659	$9,975,108	$8,927,588	$9,267,629	$8,660,838
New Hampshire	$7,751,193	$7,986,786	$6,465,014	$6,526,889	$6,252,371
New Jersey	$23,732,611	$25,185,572	$21,047,364	$21,953,336	$18,894,214
New Mexico	$9,049,687	$9,342,376	$8,803,295	$8,810,432	$8,351,763
New York	$29,418,122	$31,675,790	$28,493,781	$28,293,465	$24,409,091
New York City	$22,828,585	$23,586,023	$25,874,757	$26,069,578	$22,942,162
North Carolina	$22,919,940	$24,462,186	$20,433,395	$20,547,098	$17,877,794
North Dakota	$6,429,710	$6,509,688	$5,223,458	$5,193,519	$5,147,111
N. Mariana Islands	$314,371	$585,043	$450,446	$465,583	$518,846
Ohio	$30,275,149	$32,012,830	$27,626,951	$27,902,321	$24,190,050
Oklahoma	$12,682,086	$13,228,697	$10,899,049	$10,840,379	$9,732,169
Oregon	$12,616,956	$13,237,862	$10,906,827	$11,154,657	$10,251,502
Palau	$192,061	$521,761	$406,583	$410,687	$423,673
Pennsylvania	$32,340,936	$34,178,922	$30,735,407	$30,976,767	$26,235,793
Puerto Rico	$13,478,640	$14,103,331	$11,641,389	$11,573,929	$10,109,253
Rhode Island	$7,333,840	$7,513,164	$6,048,030	$6,240,298	$5,981,291
South Carolina	$13,931,820	$14,634,027	$12,091,813	$12,108,891	$10,852,835
South Dakota	$6,680,506	$6,798,496	$5,441,461	$5,425,710	$5,339,585
Tennessee	$17,665,877	$18,635,684	$15,488,192	$15,459,458	$13,759,228
Texas	$51,421,771	$55,684,954	$51,803,533	$53,589,709	$46,595,417
Utah	$9,971,636	$10,404,357	$8,501,910	$8,560,504	$8,023,438
Vermont	$6,355,413	$6,453,782	$5,198,685	$5,186,880	$5,144,876
Virgin Islands (U.S.)	$419,235	$639,297	$488,051	$497,389	$563,765
Virginia	$20,758,682	$22,068,328	$19,924,893	$20,475,283	$18,466,632
Washington	$18,121,902	$19,214,353	$16,978,969	$17,350,613	$15,353,518
West Virginia	$9,025,861	$9,271,321	$7,540,254	$7,498,508	$6,994,949
Wisconsin	$16,940,986	$17,821,131	$14,811,846	$14,975,480	$13,246,911
Wyoming	$6,099,142	$6,171,022	$4,908,897	$4,906,684	$4,917,055
TOTAL	**$918,000,000**	**$970,000,000**	**$849,596,000**	**$862,777,000**	**$766,440,000**

	FY 2007	Total Pandemic Influenza Supplemental Funding[3] (FY 2006-2008)	FY 2008	FY 2009	TOTAL FY 2002-2009
Montana	$5,026,488	$2,791,633	$5,022,876	$5,019,036	$49,159,810
Nebraska	$5,966,406	$4,905,111	$5,877,064	$5,774,382	$62,033,032
Nevada	$7,662,442	$4,802,505	$7,652,253	$7,292,961	$73,689,983
New Hampshire	$5,308,479	$4,173,584	$5,317,054	$5,244,492	$55,025,862
New Jersey	$17,584,884	$13,555,855	$18,788,803	$18,247,856	$178,990,495
New Mexico	$7,249,926	$4,691,526	$7,054,780	$6,853,141	$70,206,926
New York	$22,935,076	$16,937,570	$22,518,790	$22,171,004	$226,852,689
New York City	$24,369,122	$13,957,427	$22,371,459	$20,674,333	$202,673,446
North Carolina	$16,570,173	$13,462,457	$16,696,497	$16,224,492	$169,194,032
North Dakota	$5,028,972	$2,561,342	$5,023,132	$5,023,393	$46,140,325
N. Mariana Islands	$454,109	$410,271	$423,185	$418,947	$4,040,801
Ohio	$22,745,252	$17,515,265	$21,838,104	$21,312,180	$225,418,102
Oklahoma	$8,871,195	$6,403,704	$8,740,269	$8,536,905	$89,934,453
Oregon	$9,192,614	$8,070,317	$9,100,217	$8,884,916	$93,415,868
Palau	$361,900	$327,977	$330,743	$329,686	$3,305,071
Pennsylvania	$24,743,362	$19,151,304	$23,758,643	$22,975,362	$245,096,496
Puerto Rico	$9,036,997	$6,909,836	$8,867,670	$8,665,828	$94,386,873
Rhode Island	$5,048,931	$3,663,898	$5,012,619	$5,000,000	$51,842,071
South Carolina	$9,972,754	$7,367,377	$9,968,869	$10,097,336	$101,025,722
South Dakota	$5,000,000	$2,571,976	$5,000,000	$5,000,000	$47,257,734
Tennessee	$13,009,292	$9,729,989	$12,844,807	$12,495,537	$129,088,064
Texas	$44,570,881	$33,776,583	$43,355,376	$42,816,952	$423,615,176
Utah	$7,174,066	$5,172,897	$7,162,839	$7,018,990	$71,990,637
Vermont	$5,039,717	$2,362,016	$5,041,316	$5,042,969	$45,825,654
Virgin Islands (U.S.)	$497,630	$450,585	$462,244	$456,664	$4,474,860
Virginia	$17,109,122	$13,296,679	$17,222,047	$16,613,973	$165,935,639
Washington	$14,168,202	$10,351,119	$14,012,182	$13,561,976	$139,112,834
West Virginia	$6,026,051	$4,015,006	$5,933,288	$5,839,235	$62,144,473
Wisconsin	$12,667,934	$9,152,514	$12,188,297	$12,177,579	$123,982,678
Wyoming	$5,000,000	$2,203,619	$5,000,000	$5,000,000	$44,206,419
TOTAL	**$721,736,525**	**$524,012,224**	**$704,867,418**	**$688,914,546**	**$7,006,343,713**

Source: CDC (FY 2002-2003 and FY 2009) and HHS Press Office (FY 2004-2008)

[1] *Funding categories include: base population funding, Cities Readiness Initiative funding, chemical laboratory funding and Early Warning Infectious Disease Surveillance (EWIDS) funding.*

[2] *Includes $100 million Smallpox Supplement*

[3] *Pandemic influenza supplemental funding was awarded in phases over the years.*

Appendix 5: Public Health Emergency Response Grant Funding

Table 1: Public Health Emergency Response Grant Funding; 2009

	FY 2009 Phase I[1]	FY 2009 Phase II[2]	FY 2009 Phase III[3]	FY 2009 Phase IV[4]	TOTAL FY 2009
Alabama	$3,934,220	$3,981,585	$13,144,433	-	$21,060,238
Alaska	$573,193	$1,861,553	$3,623,681	$320,000.00	$6,378,427
American Samoa	$49,441	$531,185	$640,047	-	$1,220,673
Arizona	$5,274,949	$4,827,276	$16,942,309	-	$27,044,534
Arkansas	$2,404,548	$3,016,715	$8,811,345	-	$14,232,608
California	$22,677,408	$15,804,211	$66,238,117	$18,027,241.00	$122,746,977
Chicago	$2,423,752	$2,528,828	$7,865,743	-	$12,818,323
Colorado	$4,066,256	$4,064,869	$13,518,450	-	$21,649,575
Connecticut	$2,998,173	$3,391,156	$10,492,903	-	$16,882,232
Delaware	$730,103	$1,960,526	$4,068,155	-	$6,758,784
District of Columbia	$497,467	$1,313,787	$2,409,172	-	$4,220,426
Florida	$15,474,914	$11,261,100	$45,835,672	-	$72,571,686
Georgia	$8,010,341	$6,552,677	$24,690,834	-	$39,253,852
Guam	$146,297	$592,280	$914,416	-	$1,652,993
Hawaii	$1,099,673	$2,193,640	$5,115,037	-	$8,408,350
Idaho	$1,254,481	$2,291,288	$5,553,559	$352,561.00	$9,451,889
Illinois	$8,553,300	$6,895,159	$26,228,868	-	$41,677,327
Indiana	$5,400,873	$4,906,704	$17,299,011	-	$27,606,588
Iowa	$2,551,012	$3,109,100	$9,226,230	$550,000.00	$15,436,342
Kansas	$2,364,516	$2,991,464	$8,697,946	-	$14,053,926
Kentucky	$3,598,068	$3,769,550	$12,192,218	-	$19,559,836
Los Angeles County	$8,510,041	$6,367,873	$25,106,330	-	$39,984,244
Louisiana	$3,667,952	$3,813,631	$12,390,180	-	$19,871,763
Maine	$1,130,535	$2,213,106	$5,202,457	-	$8,546,098
Marshall Islands	$51,713	$532,619	$646,486	-	$1,230,818
Maryland	$4,803,949	$4,530,183	$15,608,109	$2,774,069.00	$27,716,310
Massachusetts	$5,506,668	$4,973,437	$17,598,697	-	$28,078,802
Michigan	$8,636,273	$6,947,495	$26,463,905	$2,796,574.00	$44,844,247
Micronesia	$92,392	$558,278	$761,717	-	$1,412,387
Minnesota	$4,420,173	$4,288,110	$14,520,992	$4,261,776.00	$27,491,051
Mississippi	$2,489,808	$3,070,495	$9,052,862	-	$14,613,165
Missouri	$4,998,123	$4,652,662	$16,158,145	-	$25,808,930
Montana	$808,081	$2,009,713	$4,289,046	$746,655.00	$7,853,495

	FY 2009 Phase I[1]	FY 2009 Phase II[2]	FY 2009 Phase III[3]	FY 2009 Phase IV[4]	TOTAL FY 2009
Nebraska	$1,512,711	$2,454,172	$6,285,045	-	$10,251,928
Nevada	$2,134,789	$2,846,559	$8,047,201	-	$13,028,549
New Hampshire	$1,124,821	$2,209,503	$5,186,272	-	$8,520,596
New Jersey	$7,463,387	$6,207,674	$23,141,477	$3,912,690.00	$40,725,228
New Mexico	$1,672,053	$2,554,680	$6,736,412	-	$10,963,145
New York	$9,488,395	$7,484,987	$28,877,702	$3,621,731.00	$49,472,815
New York City	$7,026,995	$5,432,412	$20,905,313	$6,715,863.00	$40,080,583
North Carolina	$7,576,259	$6,278,870	$23,461,208	-	$37,316,337
North Dakota	$543,949	$1,843,107	$3,540,842	-	$5,927,898
N. Mariana Islands	$70,539	$544,494	$699,816	-	$1,314,849
Ohio	$9,818,808	$7,693,403	$29,813,666	$2,670,107.00	$49,995,984
Oklahoma	$3,061,821	$3,431,303	$10,673,197	$621,206.00	$17,787,527
Oregon	$3,165,797	$3,496,887	$10,967,729	$1,087,668.00	$18,718,081
Palau	$17,605	$511,104	$549,867	-	$1,078,576
Pennsylvania	$10,642,275	$8,212,819	$32,146,289	-	$51,001,383
Puerto Rico	$3,359,999	$3,619,384	$11,517,842	-	$18,497,225
Rhode Island	$913,283	$2,076,070	$4,587,048	-	$7,576,401
South Carolina	$3,696,593	$3,831,697	$12,471,312	-	$19,999,602
South Dakota	$668,889	$1,921,915	$3,894,757	-	$6,485,561
Tennessee	$5,165,868	$4,758,470	$16,633,313	-	$26,557,651
Texas	$20,109,629	$14,184,535	$58,964,392	-	$93,258,556
Utah	$2,181,440	$2,875,985	$8,179,349	$1,320,501.00	$14,557,275
Vermont	$533,720	$1,836,654	$3,511,863	-	$5,882,237
Virgin Islands (U.S)	$92,905	$558,602	$763,173	-	$1,414,680
Virginia	$6,538,072	$5,624,014	$20,520,344	-	$32,682,430
Washington	$5,471,257	$4,951,101	$17,498,388	-	$27,920,746
West Virginia	$1,555,603	$2,481,226	$6,406,542	-	$10,443,371
Wisconsin	$4,753,288	$4,498,228	$15,464,604	-	$24,716,120
Wyoming	$440,557	$1,777,890	$3,247,965	-	$5,466,412
TOTAL	**$260,000,000**	**$248,000,000**	**$846,000,000**	**$49,778,642.00**	**$1,403,778,642**

[1] PHER grant funding was distributed in phases. Phase I funding was awarded to help assess current capabilities in pandemic influenza response and to address remaining gaps in vaccination, antiviral distribution/dispensing and administration, and community mitigation activities as well as laboratory, epidemiology, and surveillance activities.

[2] Phase II funding was awarded to provide additional resources for mass vaccination planning and implementation preparedness activities. Phase II funding also could be used for vaccine delivery, vaccine administration, and related communications planning and implementation.

[3] Phase III funding was awarded for implementation of the 2009 H1N1 influenza mass vaccination campaign.

[4] Phase IV funding was awarded to 15 states and localities to complete their H1N1 vaccination programs, specifically targeting high-risk populations, minority and hard-to-reach populations, and underserved and vulnerable populations that may have been unable to access vaccination services previously.

Source: CDC, OPHPR (DSLR)

Appendix 6: Cities Readiness Initiative Technical Assistance Review Scores for 2007-2008

The Cities Readiness Initiative (CRI) of CDC's Strategic National Stockpile focuses on enhancing preparedness in the nation's major metropolitan statistical areas (MSAs) where more than 50% of the U.S. population resides. Through CRI, state and large metropolitan public health departments have developed plans to respond to a large-scale bioterrorist event within 48 hours. The initial CRI planning scenario was based on a response to a large-scale anthrax attack. Through continued analysis and lessons learned, it became apparent that CRI MSAs needed to be better prepared to also respond to other public health emergencies. The Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006 (P.L. 109-417) emphasizes an all-hazards approach to public health preparedness planning.

The CRI project began in 2004 with 21 cities and expanded to a total of 72 MSAs, with at least one MSA in every state. Occasionally, MSAs extend across state borders, resulting in the representation of several states within one MSA.

MSAs can be composed of one or more jurisdictions (e.g., counties, cities, and municipalities). Annual technical assistance reviews (TARs) are conducted in each jurisdiction to ensure continued readiness. CDC is responsible for conducting 25% of the TARs (see scores with asterisks) while the state is responsible for the other 75%. On a scale of 0 to 100, a TAR score of 69 or higher indicates that a jurisdiction performed within an acceptable range. The scores for each jurisdiction are combined to compute an average score for the entire MSA. The average MSA scores and individual jurisdiction scores for 2007-2008 are provided in Table 1 for each of the 72 MSAs.

For more information on CRI, including TAR scores for 2008-09, see www.emergency.cdc.gov/cri.

Table 1: CRI Technical Assistance Review (TAR) Scores by Metropolitan Statistical Area (MSA); 2007-2008

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Alabama (AL) **Birmingham: 32**	Bibb County, AL: 32*
	Blount County, AL: 32*
	Chilton County, AL: 33*
	Jefferson County, AL: 33*
	St. Clair County, AL: 31*
	Shelby County, AL: 30*
	Walker County, AL: 33*
Alaska (AK) **Anchorage: 74**	Anchorage Municipality, AK: 74*
	Matanuska-Susitna Borough, AK: No Score
Arizona (AZ) **Phoenix: 72**	Maricopa County, AZ: 92*
	Pinal County, AZ: 52*
Arkansas (AR) **Little Rock: 51**	Faulkner County, AR: 36*
	Grant County, AR: 69
	Lonoke County, AR: 43
	Perry County, AR: 34
	Pulaski County, AR: 63*
	Saline County, AR: 59
California (CA) **Fresno: 22**	Fresno County, CA: 22*
California (CA) **Los Angeles: 82**	Los Angeles County, CA: 81*
	Orange County, CA: 82
California (CA) **Riverside: 73**	Riverside County, CA: 91
	San Bernardino County, CA: 54
California (CA) **Sacramento: 60**	El Dorado County, CA: 81
	Placer County, CA: 38
	Sacramento County, CA: 40*
	Yolo County, CA: 80
California (CA) **San Diego: 82**	San Diego County, CA: 82
California (CA) **San Francisco: 74**	Alameda County, CA: 91
	Contra Costa County, CA: 68
	Marin County, CA: 71
	San Francisco County, CA: 69
	San Mateo County, CA: 73

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
California (CA) **San Jose: 77**	San Benito County, CA: 81
	Santa Clara County, CA: 73*
Colorado (CO) **Denver: 90**	Boulder County, CO: 89
	Adams County, CO: 87*
	Arapahoe County, CO: 87*
	Broomfield County, CO: 87
	Clear Creek County, CO: 95
	Denver County, CO: 90*
	Douglas County, CO: 87*
	Elbert County, CO: 91
	Gilpin County, CO: 96
	Jefferson County, CO: 96
	Park County, CO: 79
Connecticut (CT) **Hartford: 42**	Hartford County, CT: 42
	Middlesex County, CT: 42
	Tolland County, CT: 42
Connecticut (CT) **New Haven: 70**	New Haven County, CT: 70
Delaware (DE) **Dover: 97**	Kent County, DE: 97*
Florida (FL) **Miami: 87**	Broward County, FL: 78*
	Miami-Dade County, FL: 93*
	Palm Beach County, FL: 91
Florida (FL) **Orlando: 81**	Lake County, FL: 89
	Orange County, FL: 86*
	Osceola County, FL: 71
	Seminole County, FL: 77*
Florida (FL) **Tampa: 87**	Hernando County, FL: 90*
	Hillsborough County, FL: 89
	Pasco County, FL: 81*
	Pinellas County, FL: 86
Georgia (GA) **Atlanta: 59**	Barrow County, GA: 40*
	Bartow County, GA: 100
	Butts County, GA: 24*
	Carroll County, GA: 24*
	Cherokee County, GA: 78
	Clayton County, GA: 82
	Cobb County, GA: 92
	Coweta County, GA: 24*
	Dawson County, GA: 88
	DeKalb County, GA: 56*
	Douglas County, GA: 92
	Fayette County, GA: 24*

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
(continued) Georgia (GA) **Atlanta: 59**	Forsyth County, GA: 88
	Fulton County, GA: 27*
	Gwinnett County, GA: 89
	Haralson County, GA: 100
	Heard County, GA: 24*
	Henry County, GA: 24*
	Jasper County, GA: 93
	Lamar County, GA: 24*
	Meriwether County, GA: 24*
	Newton County, GA: 89
	Paulding County, GA: 100
	Pickens County, GA: 78
	Pike County, GA: 24*
	Rockdale County, GA: 89
	Spalding County, GA: 24*
	Walton County, GA: 40*
Hawaii (HI) **Honolulu: 51**	Honolulu County, HI: 51*
Idaho (ID) **Boise: 75**	Ada County, ID: 75*
	Boise County, ID: 75*
	Canyon County, ID: 75
	Gem County, ID: 75
	Owyhee County, ID: 75
Illinois (IL) **Chicago: 80**	City of Chicago, IL: 94*
	Cook County, IL: 77*
	DeKalb County, IL: 77
	DuPage County, IL: 92*
	Grundy County, IL: 64
	Kane County, IL: 93*
	Kendall County, IL: 71
	Lake County, IL: 95
	McHenry County, IL: 80
	Will County, IL: 99
	Jasper County, IN: 66
	Lake County, IN: 52
	Newton County, IN: 64
	Porter County, IN: 91
	Kenosha County, WI: 78
Illinois (IL) **Peoria: 59**	Marshall County, IL: 52
	Peoria County, IL: 46*
	Stark County, IL: 75
	Tazewell County, IL: 69
	Woodford County, IL: 54

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Indiana (IN) **Indianapolis: 83**	Boone County, IN: 69
	Brown County, IN: 91
	Hamilton County, IN: 89*
	Hancock County, IN: 86
	Hendricks County, IN: 86
	Johnson County, IN: 86
	Marion County, IN: 95*
	Morgan County, IN: 68
	Putnam County, IN: 74
	Shelby County, IN: 89
Iowa (IA) **Des Moines: 54**	Dallas County, IA: 67
	Guthrie County, IA: 48
	Madison County, IA: 35
	Polk County, IA: 85
	Warren County, IA: 33
Kansas (KS) **Wichita: 59**	Butler County, KS: 53*
	Harvey County, KS: 51
	Sedgwick County, KS: 80
	Sumner County, KS: 51
Kentucky (KY) **Louisville: 68**	Bullitt County, KY: 54
	Henry County, KY: 75
	Jefferson County, KY: 53*
	Meade County, KY: 75
	Nelson County, KY: 75
	Oldham County, KY: 61*
	Shelby County, KY: 75
	Spencer County, KY: 75
	Trimble County, KY: 75
	Clark County, IN: 91
	Floyd County, IN: 56
	Harrison County, IN: 43
	Washington County, IN: 70
Louisiana (LA) **Baton Rouge: No Score**	Ascension Parish, LA: No Score
	East Baton Rouge Parish, LA: No Score
	East Feliciana Parish, LA: No Score
	Iberville Parish, LA: No Score
	Livingston Parish, LA: No Score
	Pointe Coupee Parish, LA: No Score
	St. Helena Parish, LA: No Score
	West Baton Rouge Parish, LA: No Score
	West Feliciana Parish, LA: No Score

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Louisiana (LA) **New Orleans: No Score**	Jefferson Parish, LA: No Score
	Orleans Parish, LA: No Score
	Plaquemines Parish, LA: No Score
	St. Bernard Parish, LA: No Score
	St. Charles Parish, LA: No Score
	St. John the Baptist Parish, LA: No Score
	St. Tammany Parish, LA: No Score
Maine (ME) **Portland: 25**	Cumberland County, ME: 25*
	Sagadahoc County, ME: 25*
	York County, ME: 25*
Maryland (MD) **Baltimore: 77**	Anne Arundel County, MD: 86
	Baltimore County, MD: 74*
	Carroll County, MD: 85
	Harford County, MD: 79
	Howard County, MD: 75
	Queen Anne's County, MD: 81
	Baltimore City, MD: 58*
National Capitol Region: 82	Calvert County, MD: 81
	Charles County, MD: 80
	Frederick County, MD: 96
	Montgomery County, MD: 86*
	Prince George's County, MD: 79*
	Arlington County, VA: 86
	Clarke County, VA: 82
	Fairfax County, VA: 94*
	Fauquier County, VA: 77
	Loudoun County, VA: 91
	Prince William County, VA: 62
	Spotsylvania County, VA: 94*
	Stafford County, VA: 94*
	Warren County, VA: 82
	Alexandria City, VA: 94
	Fairfax City, VA: 94*
	Falls Church City, VA: 94*
	Fredericksburg City, VA: 94*
	Manassas City, VA: 62
	Manassas Park City, VA: 62
	Jefferson County, WV: 29

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Massachusetts (MA) **Boston: 76**	Essex County, MA: 72
	Norfolk County, MA: 76
	Plymouth County, MA: 83
	Suffolk County, MA: 84*
	Middlesex County, MA: 76
	Rockingham County, NH: 48
	Strafford County, NH: 90
Michigan (MI) **Detroit: 78**	City of Detroit, MI: 78*
	Wayne County, MI: 46*
	Lapeer County, MI: 76
	Livingston County, MI: 86
	Macomb County, MI: 80*
	Oakland County, MI: 93
	St. Clair County, MI: 90
Minnesota (MN) **Minneapolis: 79**	City of Minneapolis, MN: 89*
	Anoka County, MN: 92
	Carver County, MN: 74
	Chisago County, MN: 69
	Dakota County, MN: 86
	Hennepin County, MN: 94*
	Isanti County, MN: 50
	Ramsey County, MN: 79*
	Scott County, MN: 80
	Sherburne County, MN: 65
	Washington County, MN: 74
	Wright County, MN: 85
	Pierce County, WI: 87
	St. Croix County, WI: 82
Mississippi (MS) **Jackson: 88**	Copiah County, MS: 88*
	Hinds County, MS: 88*
	Madison County, MS: 88*
	Rankin County, MS: 88*
	Simpson County, MS: 88*
Missouri (MO) **Kansas City: 73**	Kansas City Proper, MO: 80*
	Bates County, MO: 74
	Caldwell County, MO: 87
	Cass County, MO: 77
	Clay County, MO: 78*
	Clinton County, MO: 88
	Jackson County, MO: 48*
	Lafayette County, MO: 84
	Platte County, MO: 77
	Ray County, MO: 80
	Franklin County, KS: 47
	Johnson County, KS: 71*
	Leavenworth County, KS: 76
	Linn County, KS: 67

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
(continued) Missouri (MO) **Kansas City: 73**	Miami County, KS: 43
	Wyandotte County: 87*
Missouri (MO) **St. Louis: 76**	Crawford County, MO: No Score
	Franklin County, MO: 78
	Jefferson County, MO: 84
	Lincoln County, MO: 79
	St. Charles County, MO: 77*
	St. Louis County, MO: 85*
	Warren County, MO: 67
	Washington County, MO: 91
	St. Louis city, MO: 75*
	Bond County, IL: 89
	Calhoun County, IL: 78
	Clinton County, IL: 88
	Jersey County, IL: 70
	Macoupin County, IL: 47
	Madison County, IL: 57*
	Monroe County, IL: 78
	St. Clair County, IL: 73*
Montana (MT) **Billings: 80**	Carbon County, MT: No Score
	Yellowstone County, MT: 80*
Nebraska(NE) **Omaha: 44**	Cass County, NE: 33
	Dodge County, NE: 41
	Douglas County, NE: 51*
	Sarpy County, NE: 33
	Saunders County, NE: 41
	Washington County, NE: 41
	Harrison County, IA: 58
	Mills County, IA: 49
	Pottawattamie County, IA: 49
Nevada (NV) **Las Vegas: 82**	Clark County, NV: 82*
New Hampshire (NH) **Manchester: 75**	Hillsborough County, NH: 75*
New Jersey (NJ) **Trenton: 78**	Mercer County, NJ: 78
New Mexico (NM) **Albuquerque: 26**	City of Albuquerque, NM: No Score
	Bernalillo County, NM: 26*
	Sandoval County, NM: 26*
	Torrance County, NM: 26*
	Valencia County, NM: 26*
New York (NY) **Albany: 92**	Albany County, NY: 99*
	Rensselaer County, NY: 81*
	Saratoga County, NY: 91
	Schenectady County, NY: 96
	Schoharie County, NY: 91

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
New York (NY) **Buffalo: 85**	Erie County, NY: 91
	Niagara County, NY: 79*
New York (NY) **New York City: 86**	Bronx County, NY: 99*
	Kings County, NY: 99*
	New York County, NY: 99*
	Queens County, NY: 99*
	Richmond County, NY: 99*
	Nassau County, NY: 98
	Putnam County, NY: 95
	Rockland County, NY: 88*
	Suffolk County, NY: 91
	Westchester County, NY: 77*
	Bergen County, NJ: 82
	Essex County, NJ: 76
	Hudson County, NJ: 89
	Hunterdon County, NJ: 86
	Middlesex County, NJ: 89*
	Monmouth County, NJ: 83*
	Morris County, NJ: 87
	Ocean County, NJ: 74
	Passaic County, NJ: 71
	Somerset County, NJ: 76
	Sussex County, NJ: 98
	Union County, NJ: 82*
	Pike County, PA: 40
North Carolina (NC) **Charlotte: 63**	Anson County, NC: 83
	Cabarrus County, NC: 85
	Gaston County, NC: 46
	Mecklenburg County, NC: 60*
	Union County, NC: 42
	York County, SC: 60*
North Dakota (ND) **Fargo: 70**	Cass County, ND: 78*
	Clay County, MN: 62*
Ohio (OH) **Cincinnati: 62**	City of Cincinnati, OH: 94
	Brown County, OH: 71
	Butler County, OH: 56*
	Clermont County, OH: 76*
	Hamilton County, OH: 66
	Warren County, OH: 37*

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
(continued) Ohio (OH) **Cincinnati: 62**	Boone County, KY: 58
	Bracken County, KY: 52
	Campbell County, KY: 58
	Gallatin County, KY: 43
	Grant County, KY: 58
	Kenton County, KY: 58
	Pendleton County, KY: 43
	Dearborn County, IN: 89
	Franklin County, IN: 61
	Ohio County, IN: 75
Ohio (OH) **Cleveland: 71**	City of Cleveland, OH: 92
	Cuyahoga County, OH: 81
	Geauga County, OH: 69
	Lake County, OH: 67*
	Lorain County, OH: 68*
	Medina County, OH: 46*
Ohio (OH) **Columbus: 52**	Delaware County, OH: 24*
	Fairfield County, OH: 54*
	Franklin County, OH: 78
	Licking County, OH: 36*
	Madison County, OH: 57
	Morrow County, OH: 54
	Pickaway County, OH: 56
	Union County, OH: 56
Oklahoma (OK) **Oklahoma City: 79**	Canadian County, OK: 90
	Cleveland County, OK: 91*
	Grady County, OK: 79
	Lincoln County, OK: 86
	Logan County, OK: 86
	McClain County, OK: 91*
	Oklahoma County, OK: 35*
	Pottawatomie County, OK: 77
Oregon (OR) **Portland: 58**	Clackamas County, OR: 37*
	Columbia County, OR: 50
	Multnomah County, OR: 65*
	Washington County, OR: 68
	Yamhill County, OR: 65
	Clark County, WA: 59*
	Skamania County, WA: 59*

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Pennsylvania (PA) **Philadelphia: 75**	Bucks County, PA: 82
	Chester County, PA: 49
	Delaware County, PA: 89
	Montgomery County, PA: 35*
	Philadelphia County, PA: 98*
	New Castle County, DE: 97*
	Cecil County, MD: 58*
	Burlington County, NJ: 81
	Camden County, NJ: 77
	Gloucester County, NJ: 88*
	Salem County, NJ: 76
Pennsylvania (PA) **Pittsburgh: 42**	Allegheny County, PA: 42*
	Armstrong County, PA: 42*
	Beaver County, PA: 42*
	Butler County, PA: 42*
	Fayette County, PA: 42*
	Washington County, PA: 42*
	Westmoreland County, PA: 42*
Rhode Island, (RI) **Providence: 89**	Bristol County, RI: 89*
	Kent County, RI: 89*
	Newport County, RI: 89*
	Providence County, RI: 89*
	Washington County, RI: 89*
	Bristol County, MA: 89*
South Carolina (SC) **Columbia: 83**	Calhoun County, SC: 83*
	Fairfield County, SC: 83*
	Kershaw County, SC: 83*
	Lexington County, SC: 83*
	Richland County, SC: 83*
	Saluda County, SC: 83*
	Newberry County, SC: No Score
South Dakota (SD) **Sioux Falls: 74**	Lincoln County, SD: 74*
	McCook County, SD: 74*
	Minnehaha County, SD: 74*
	Turner County, SD: 74*
Tennessee (TN) **Memphis: 72**	Fayette County, TN: 60
	Shelby County, TN: 59*
	Tipton County, TN: 60
	Crittenden County, AR: 47
	DeSoto County, MS: 87*
	Marshall County, MS: 87*
	Tate County, MS: 87*
	Tunica County, MS: 87*

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Tennessee (TN) **Nashville: 56**	Cannon County, TN: 56*
	Cheatham County, TN: 56*
	Davidson County, TN: 56*
	Dickson County, TN: 56*
	Hickman County, TN: 56*
	Macon County, TN: 56*
	Robertson County, TN: 56*
	Rutherford County, TN: 56*
	Smith County, TN: 56*
	Sumner County, TN: 56*
	Trousdale County, TN: 56*
	Williamson County, TN: 56*
	Wilson County, TN: 56*
Texas (TX) **Dallas: 91**	Collin County, TX: 95*
	Dallas County, TX: 100*
	Delta County, TX: 91
	Denton County, TX: 98*
	Ellis County, TX: 79
	Hunt County, TX: 91
	Johnson County, TX: 84
	Kaufman County, TX: 87
	Parker County, TX: 93
	Rockwall County, TX: 87
	Tarrant County, TX: 98*
	Wise County, TX: 89
Texas (TX) **Houston: 79**	City of Houston, TX: 70*
	Austin County, TX: 67
	Brazoria County, TX: 83
	Chambers County, TX: 86
	Fort Bend County, TX: 83*
	Galveston County, TX: 82
	Harris County, TX: 93*
	Liberty County, TX: 65
	Montgomery County, TX: 86*
	San Jacinto County, TX: 94
	Waller County, TX: 65
Texas (TX) **San Antonio: 55**	Atascosa County, TX: 43
	Bandera County, TX: 43
	Bexar County, TX: 85*
	Comal County, TX: 85
	Guadalupe County, TX: 45*
	Kendall County, TX: 43
	Medina County, TX: 56
	Wilson County, TX: 43

*CDC conducted the TAR

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
Utah (UT) **Salt Lake City: 68**	Salt Lake County, UT: 68*
	Summit County, UT: No Score
	Tooele County, UT: No Score
Vermont (VT) **Burlington: 70**	Chittenden County, VT: 70*
	Franklin County, VT: 70*
	Grand Isle County, VT: 70*
Virginia (VA) **Richmond: 89**	Amelia County, VA: 89
	Caroline County, VA: 94*
	Charles City County, VA: 88
	Chesterfield County, VA: 95*
	Cumberland County, VA: 89
	Dinwiddie County, VA: 87
	Goochland County, VA: 88
	Hanover County, VA: 88
	Henrico County, VA: 88
	King and Queen County, VA: 96*
	King William County, VA: 96*
	Louisa County, VA: 70
	New Kent County, VA: 88
	Powhatan County, VA: 95*
	Prince George County, VA: 87
	Sussex County, VA: 87
	Colonial Heights City, VA: 95*
	Hopewell City, VA: 87
	Petersburg City, VA: 87
	Richmond City, VA: 85
Virginia (VI) **Virginia Beach: 86**	Accomack County, VA: 90*
	Gloucester County, VA: 96*
	Isle of Wight County, VA: 69

MSA and MSA TAR Score	Jurisdiction(s) within MSA and Individual Jurisdiction TAR Score
(continued) Virginia (VI) **Virginia Beach: 86**	James City County, VA: 91*
	Mathews County, VA: 96
	Northampton County, VA: 90*
	Surry County, VA: 87
	York County, VA: 91*
	Chesapeake City, VA: 89
	Hampton City, VA: 77
	Newport News City, VA: 91*
	Norfolk City, VA: 76
	Poquoson City, VA: 91*
	Portsmouth City, VA: 82
	Suffolk City, VA: 69
	Virginia Beach City, VA: 92
	Williamsburg City, VA: 91*
	Currituck County, NC: 77
Washington (WA) **Seattle: 68**	King County, WA: 87*
	Snohomish County, WA: 44*
	Pierce County, WA: 73
West Virginia (WV) **Charleston: 50**	Boone County, WV: 36
	Clay County, WV: 41*
	Kanawha County, WV: 70*
	Lincoln County, WV: 60
	Putnam County, WV: 43
Wisconsin (WI) **Milwaukee: 79**	City of Milwaukee, WI: 72*
	Milwaukee County, WI: 72*
	Ozaukee County, WI: 89
	Washington County, WI: 88
	Waukesha County, WI: 73
Wyoming (WY) **Cheyenne: 49**	Laramie County, WY: 49*

*CDC conducted the TAR

Directly Funded Localities and Locality Scores
Chicago (City of), IL: 94*
District of Columbia: 94*
Los Angeles County, CA: 81*
New York City, NY: 99* **(includes Bronx, Kings, New York, Queens and Richmond County)**

Appendix 7: Data Sources

Data presented in this report come from a variety of sources. The purpose of this appendix is to provide additional details about data sources for the programs and/or activities referenced in this report. For ease of use, the data sources are listed within the categories used in the tables and fact sheets. Please see appendix 2 for additional background information on the CDC organizations listed in the sources below.

CDC

Chronic Conditions

Behavioral Risk Factor Surveillance System (BRFSS) state data, 2008; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONCDIEH), National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Heart disease data includes two BRFSS cardiovascular disease questions: Ever told you had a heart attack OR Ever told you had angina or coronary heart disease.

Behavioral Risk Factor Surveillance System (BRFSS) data for selected Metropolitan/Micropolitan Area Risk Trends (SMART), 2008; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONCDIEH), National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Heart disease data includes two BRFSS SMART cardiovascular disease questions: Ever told you had a heart attack OR Ever told you had angina or coronary heart disease.

Laboratories: General

Laboratory Response Network (LRN) standard electronic data mechanism for messaging data, as of 9/30/2008; CDC, Office of Surveillance, Epidemiology, and Laboratory Services (OSELS)

Laboratories: Biological Capabilities

Laboratory Response Network (LRN) biological laboratory CDC Emergency Operations Center contact drill data, 3/2008; CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

Laboratory Response Network (LRN) biological laboratory testing performance measure data, 8/31/2007-8/9/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of State and Local Readiness (DSLR)

Laboratory Response Network (LRN) biological laboratory proficiency testing data, 1/2008-9/2008; CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

Laboratory Response Network (LRN) biological laboratory testing capability data, as of 9/30/2008; CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

Laboratory Response Network (LRN) non-business hours telephone contact drill data, 8/2008; CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

Laboratories: Chemical Capabilities

Laboratory Response Network (LRN) chemical laboratory capabilities and proficiency testing data, as of 9/14/2009; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONDIEH), National Center for Environmental Health (NCEH)

Laboratory Response Network (LRN) chemical laboratory collect, package, and ship samples exercise data, as of 11/9/2009; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONDIEH), National Center for Environmental Health (NCEH)

Laboratory Response Network (LRN) chemical laboratory Emergency Response Pop Proficiency Test (PopPT) exercise data, as of 8/31/2008; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONDIEH), National Center for Environmental Health (NCEH)

Laboratory Response Network (LRN) chemical laboratory Surge Capacity exercise data, 1/9/2009; CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONDIEH), National Center for Environmental Health (NCEH)

Response Readiness: Communication

Epi-X data, 4/3/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Emergency Operations (DEO)

Health Alert Network data, 7/2009; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Emergency Operations (DEO)

Public Health Information Network forum (community of practice) data, as of 9/30/2008; CDC, Office for State, Tribal, Local and Territorial Support (OSTLTS)

Reporting capacity system data, 10/1/2007-9/30/2008; state and locality data

Response Readiness: Planning

CHEMPACK data, as of 7/30/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Strategic National Stockpile (DSNS)

Cities Readiness Initiative (CRI) 2007-2008 technical assistance review score data, as of 8/9/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Strategic National Stockpile (DSNS).

State technical assistance review score data, 2006-2007 scores as of 12/2007; 2007-2008 scores are associated with funding from the PHEP cooperative agreement Budget Period 8 (8/31/07-8/9/08), and 2008-2009 scores are associated with funding from the PHEP cooperative agreement Budget Period 9 (8/10/2008-8/9/2009); CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Strategic National Stockpile (DSNS)

Response Readiness: Exercises and Incidents

Emergency operations center staff notification and activation performance measure data, 8/31/2007-8/9/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of State and Local Readiness (DSLR)

Response Readiness: Evaluation

After action report/improvement plan performance measure data, 8/31/2007-8/9/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of State and Local Readiness (DSLR)

Research, Training, Education, and Promising Demonstration Projects

Centers for Public Health Preparedness (CPHP) data, fiscal year 2008 awards for activities/projects conduced in fiscal year 2009; CDC, Office of Public Health Preparedness and Response (OPHPR), Office of the Director (OD)

Centers of Excellence in Public Health Informatics data, fiscal year 2008 awards for activities/projects conducted in fiscal year 2009; CDC, Office of Surveillance, Epidemiology, and Laboratory Services (OSELS)

Pandemic Influenza Promising Practices Demonstration Project(s) data, fiscal year 2008 awards for activities/projects conducted in fiscal year 2009; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of State and Local Readiness (DSLR)

Preparedness and Emergency Response Research Center (PERRC) data, fiscal year 2008 awards for activities/projects conducted in fiscal year 2009; CDC, Office of Public Health Preparedness and Response (OPHPR), Office of the Director (OD)

Additional CDC Resources Supporting Preparedness in States and Localities

Career Epidemiology Field Officer (CEFO) data, as of 9/30/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Office of the Director (OD)

Epidemic Intelligence Service (EIS) data, 10/1/2007-9/30/2008; CDC, Office of Surveillance, Epidemiology, and Laboratory Services (OSELS)

Deployment data, 10/1/2007-9/30/2008; CDC, Office of Public Health Preparedness and Response (OPHPR), Division of Emergency Operations (DEO)

Quarantine and Migration Health System data, 10/1/2007-9/30/2008; CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

Association of Public Health Laboratories (APHL)

Biological laboratory competency assessment exercise data, 8/31/2007-8/30/2008; Association of Public Health Laboratories

Continuity of operations plan (COOP) for state public health laboratories data, 8/31/2007-8/30/2008; Association of Public Health Laboratories

Laboratory usage of HAN or other rapid communication methods data, 8/31/2007-8/30/2008; Association of Public Health Laboratories

National Association of County and City Health Officials (NACCHO)

Advanced Practice Center (APC) data, fiscal year 2008 awards for activities/projects conducted in fiscal year 2009; National Association of County and City Health Officials

Project Public Health Ready data, as of 9/30/2008; National Association of County and City Health Officials

Endnotes

1 The U.S. insular areas as defined by the U.S. Department of the Interior/Office of Insular Affairs are comprised of the three territories of American Samoa, Guam, and the U.S. Virgin Islands; the two commonwealths of the Northern Mariana Islands and Puerto Rico; and three freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau. More information on insular areas is available at www.doi.gov/oia/index.html.

2 The two previous CDC preparedness reports are the following:

Public Health Preparedness: Mobilizing State By State; CDC, Office of Public Health Preparedness and Response (formerly the Coordinating Office for Terrorism Preparedness and Emergency Response), Published in 2008, this report highlights progress and identifies challenges in state and local preparedness and response, and presents national data and state-specific snapshots for 50 states and 4 localities: Chicago, Los Angeles County, New York City, and Washington, DC. Available at www.emergency.cdc.gov/publications/feb08phprep/.

Public Health Preparedness: Strengthening CDC's Emergency Response; CDC, Office of Public Health Preparedness and Response (formerly the Coordinating Office for Terrorism Preparedness and Emergency Response). Published in 2009, this report describes all activities supported by the Terrorism Preparedness and Emergency Response funding, which includes the Public Health Emergency Preparedness (PHEP) cooperative agreement. Available at www.emergency.cdc.gov/publications/jan09phprep/.

3 CDC's 2009 preparedness report (see note 2) was commended by the House and Senate Appropriations committees for FY 2010. U.S. House. Committee on Appropriations. *Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriation Bill, 2010*. 111th Cong., 1st sess., 2009. H. Rept. 111-220. U.S. Senate. Committee on Appropriations. *Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriation Bill, 2010*. 111th Cong., 1st sess., 2009. S. Rept. 111-66. Both available at thomas.loc.gov/home/LegislativeData.php?&n=Reports&c=111.

4 See note 2.

5 References to CDC also apply to the Agency for Toxic Substances and Disease Registry (ATSDR) and the National Institute for Occupational Safety and Health (NIOSH).

6 See note 1.

7 Originally established in 2002 as the Office for Terrorism Preparedness and Emergency Response (OTPER) and renamed the Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) in 2005 during a CDC reorganization. In 2009, the name of the office was changed to Office of Public Health Preparedness and Response (OPHPR) as part of CDC's organizational improvement.

8 See note 2.

9 The number of data points on each state fact sheet increased from 26 in CDC's 2008 preparedness report to 42 in this report, in addition to state-specific information on an additional 10 CDC-funded resources and projects to support state and local preparedness.

10 CDC preparedness reports do not discuss broader national disaster management or medical response activities conducted by the Federal Emergency Management Agency, the Office of the Assistant Secretary for Preparedness and Response (e.g., Hospital Preparedness Program), and others.

11 National Health Security Strategy (2009). More information available at www.hhs.gov/aspr/opsp/nhss/strategy.html.

12 Pandemic and All-Hazards Preparedness Act, Pub. L. No. 109–417, 120 Stat. 2831 (December 19, 2006). Available at www.hhs.gov/aspr/omsph/nbsb/publiclaw109417.pdf.

13 Institute of Medicine. *The Future of Emergency Care in the United States Health System: Emergency Medical Services at the Crossroad*.Washington DC: The National Academies Press; 2006. Available at www.nap.edu/catalog.php?record_id=11629 (p.180).

14 See Note 11.

15 See note 12.

16 Drawing on the definition provided in the Pandemic and All-Hazards Preparedness Act (see note 12), HHS has adopted the following definition of at-risk individuals. The term "at-risk individuals" is interchangeable with terms like "special needs populations" and "vulnerable populations." Before, during, and after an incident, members of at-risk populations may have additional needs in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. In addition to those individuals specifically recognized as at-risk in the statute, i.e., children, senior citizens, and pregnant women, individuals who may need additional response assistance include those who have disabilities, live in institutionalized settings, are from diverse cultures, have limited English proficiency or are non-English speaking, are transportation-disadvantaged, have chronic medical disorders, or have pharmacological dependency.

17 See note 5.

18 The National Response Framework, which replaced the National Response Plan in 2008, establishes a comprehensive, national, all-hazards approach to domestic incident response (www.fema.gov/emergency/nrf/about NRF.htm). In addition, the National Preparedness Guidelines provide vision, capabilities, and priorities for national preparedness. These two documents constitute the core of the nation's preparedness policies.

19 As specified in Emergency Support Function #8 (ESF #8) – Public Health and Medical Services Annex of the National Response Framework.

20 See note 11.

21 Institute of Medicine. *Research Priorities in Emergency Preparedness and Response for Public Health Systems. A Letter Report*. Washington, DC: The National Academies Press, 2008. Available at www.iom.edu/CMS/3740/48812/50685.aspx.

22 See note 1.

23 See note 12.

24 The timeframe for fiscal year 2009 is October 1, 2008, through September 30, 2009.

25 See note 7.

26 The 62 state, locality, and U.S. insular areas funded by the PHEP cooperative agreement include all 50 states; the 4 localities of Chicago, District of Columbia, Los Angeles County, and New York City; and 8 U.S. insular areas (see note 1). Recipients of PHEP funds must demonstrate that a majority of all American Indian/Alaska Native tribes within their jurisdictions concur with the priorities and plans described in annual PHEP-funding applications. This helps ensure that tribal preparedness and response capacity needs are included in state plans. PAHPA has no provisions for direct funding to tribal nations.

27 Metropolitan statistical areas (MSAs) are composed of multiple counties and are defined by the U.S. Office of Management and Budget. More information is available at www.census.gov/population/www/metroareas/metrodef.html.

28 Supplemental Appropriations Act, 2009. Available at www.gpo.gov/fdsys/pkg/PLAW-111-publ32/content-detail.html.

29 Association of State and Territorial Health Officials, Job and Program Cuts Accelerate, Threaten the Public's Health (2009). Available at www.astho.org/Display/AssetDisplay.aspx?id=2780.

30 National Association of County and City Health Officials, Local Health Department Job Losses and Program Cuts: Overview of Survey Findings from January/February 2010 Survey (March 2010). Available at www.naccho.org/topics/infrastructure/lhdbudget/index.cfm.

31 See note 10.

32 See note 2.

33 See note 2.

34 As of 5/28/10, over 3000 mumps cases had been identified and efforts continued to contain the outbreak.

35 Association of State and Territorial Health Officials, *Response to Incidents* (2010). Available at www.astho.org/Advocacy/2010-Advocacy-Materials/Preparedness_Response_to_incidents/.

36 National Biosurveillance Strategy for Human Health (February 2010). Available at www.cdc.gov/osels/pdf/NBSHH_V2_FINAL.PDF.

37 Council of State and Territorial Epidemiologists Epidemiology Capacity Assessment 2009. Available at www.cste.org. In addition, an article on this assessment is available in *Morbidity and Mortality Weekly Report 2009*; 58 (49):1373-1377.

38 See note 35.

39 The possession, use, and transfer of biological agents and toxins that could pose a severe threat to public health and safety are regulated by CDC's Select Agent Program.

40 CDC coordinates PulseNet, a national network of laboratories at state health departments, local health departments, and federal agencies. PulseNet is on the alert for both common bacteria that cause disease outbreaks (e.g., Salmonella), as well as agents that can be used in a bioterrorist attack through the food supply (e.g., Francisella). PulseNet member laboratories submit DNA fingerprints electronically to a dynamic database at CDC. Members can use the database to evaluate if outbreaks are natural or intentional and to help trace outbreaks to the source.

41 The acceptable threshold score increased to 79 or higher for 2009-2010.

42 The eight core ICS functional roles are Incident Commander, Public Information Officer, Safety Officer, Liaison Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

43 In 2010, CDC established a 60 minute target for staff to assemble during an unannounced activation. CDC will report this measure to HHS and the President's Office of Management and Budget as a high priority performance goal.

44 In 2009, CDC awarded another $2.7 million over 4 years to two additional schools of public health to establish Preparedness and Emergency Response Research Centers.

45 See note 11.

46 See note 12.

47 See note 1 for general information on U.S. insular areas. Definitions of commonwealths, freely associated states, and territories are available at www.doi.gov/oia/Islandpages/political_types.htm.

ACRONYMS

AAR/IP	After Action Report/Improvement Plans
APC	Advanced Practice Centers
APHL	Association of Public Health Laboratories
ASPR	Assistant Secretary for Preparedness and Response
CDC	Centers for Disease Control and Prevention
CEFO	Career Epidemiology Field Officers
COOP	Continuity of operations plan
CPHP	Centers for Public Health Preparedness
CRI	Cities Readiness Initiative
DHS	U.S. Department of Homeland Security
EIS	Epidemic Intelligence Service
EOC	Emergency operations center
Epi-X	Epidemic Information Exchange
FY	Fiscal year
HAN	Health Alert Network
HHS	U.S. Department of Health and Human Services
ICS	Incident Command System
LRN	Laboratory Response Network
MSA	Metropolitan statistical area
OPHPR	Office of Public Health Preparedness and Response
PAHPA	Pandemic and All-Hazards Preparedness Act
PERRC	Preparedness and Emergency Response Research Center
PHA	Public health advisor
PFGE	Pulsed-field gel electrophoresis
PHEP	Public Health Emergency Preparedness cooperative agreement
PHER	Public Health Emergency Response grant
PopPT	LRN Emergency Response Pop Proficiency Test
TAR	Technical assistance reviews
TPER	Terrorism Preparedness and Emergency Response funding