

Section 1: Improving Health Security

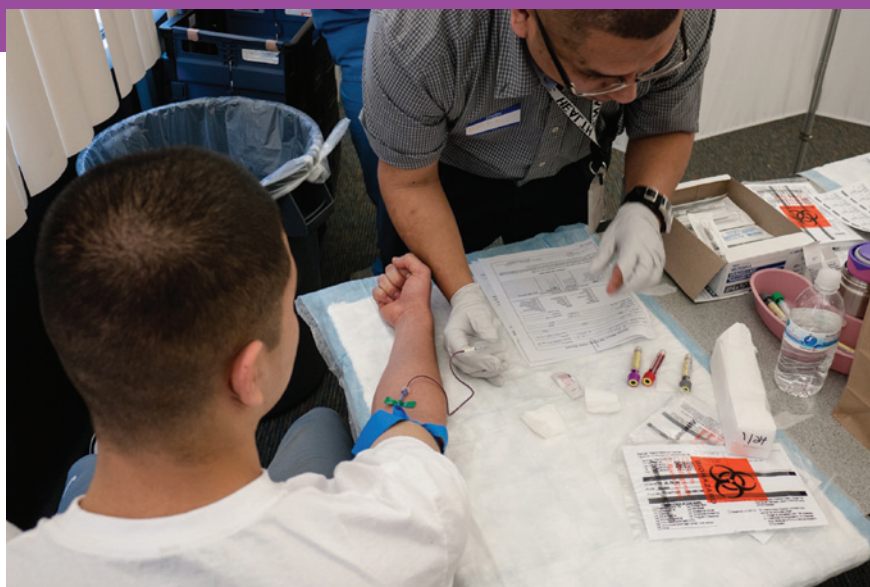
Preparing the country to be resilient against a steady stream of health threats improves health security and minimizes negative health consequences when emergencies do arise. CDC continuously monitors these threats – from severe weather to infectious disease outbreaks or the possibility of chemical terrorism – and mobilizes essential resources to affected communities. PHPR's EOC serves as the command center for monitoring and coordinating CDC's response to public health emergencies. In addition, PHPR improves the nation's health security by regulating and monitoring threats related to dangerous biological materials.

Planning, communicating, and mobilizing

PHPR's work builds a foundation of preparedness and ensures communities receive needed response assistance during emergencies. PHPR develops response plans, conducts exercises, and evaluates CDC's ability to respond to exercises, threats, or real public health emergencies. The plans range from an all-hazards plan that outlines core roles and responsibilities for all types of responses, to plans for specific scenarios (e.g., hurricanes) and specific public health emergency responses (e.g., Japan earthquake of 2011). In addition, PHPR trains agency staff to be ready to respond should the need arise.

Did You Know?

NEARLY 4,000 STATE AND LOCAL PUBLIC HEALTH PREPAREDNESS STAFF POSITIONS NATIONWIDE WERE FUNDED BY THE PHEP COOPERATIVE AGREEMENT DURING 2012.



CDC played a pivotal role in identifying and mitigating a deadly meningitis outbreak during late 2012. Training efforts, communications to clinical providers, and support from the EOC contributed to the successful response to this public health crisis.

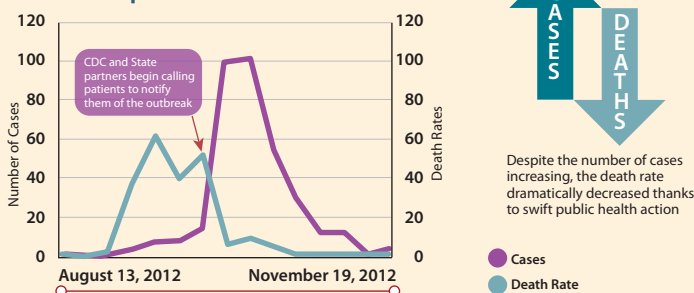
OUTBREAK: FUNGAL MENINGITIS

EXPOSURE



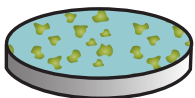
Patients at Risk
13,534

Number of meningitis cases compared with death rate



LABS

1,019 → **182**
Specimens processed by CDC Specimens positive for *E. rostratum*

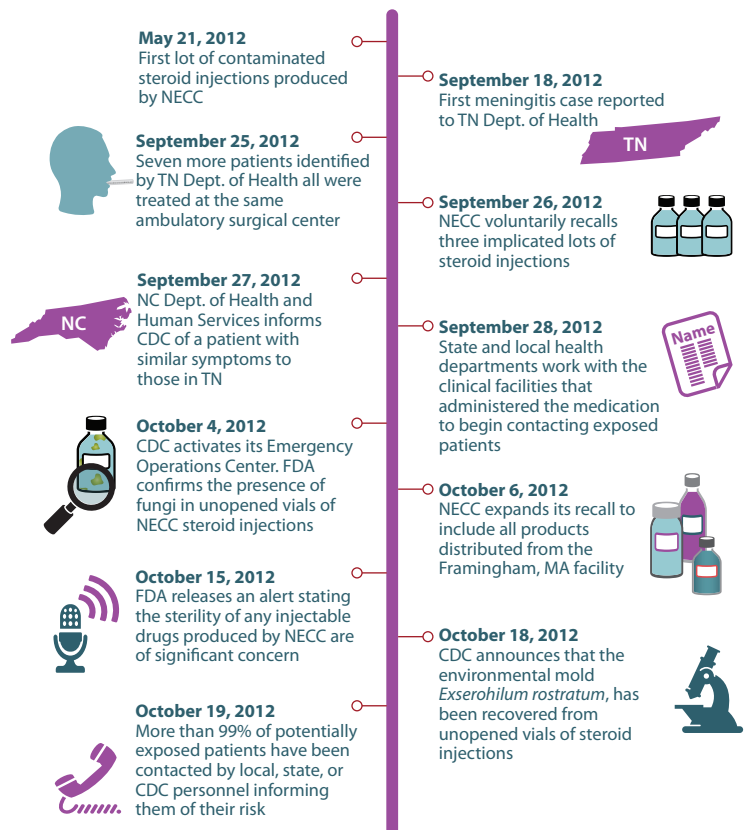


2 Days

Many states have reduced their capacity for laboratory testing, relying on CDC instead.

CDC's fungal lab developed a new detection test to help diagnose possible cases in the outbreak in just **2 days**.

TIMELINE



99% of patients warned of the need to seek immediate care in less than one month

PHPR's EOC enhances CDC preparedness by continuously monitoring and managing both incoming and outgoing communication. During 2012, more than 18,000 incoming calls were directed to the appropriate scientific or technical subject matter experts, such as epidemiologists or laboratorians, across CDC. The EOC located and connected the appropriate subject matter experts within an average of six minutes from receipt of the call. PHPR's successes in communicating with public health officials and healthcare providers in 2012 include:

- providing requested guidance to healthcare clinicians on topics such as influenza prevention and treatment, improving disaster planning in nursing homes, and West Nile Virus; and
- issuing Health Alert Network messages about urgent public health events to key contacts.⁷

Communication and staff response happens quickly at the state and local level as well. In 2012, lead state responders reported for immediate duty within 27 minutes of receiving notification of a potential public health emergency – 9 minutes faster than the national average during 2011.

SMALL CITY, BIG RESPONSE-ABILITY



The City of Nashua, New Hampshire, and the Greater Nashua Public Health Region (population of 206,000), activated six times in 2012, making it the busiest year for Incident Response Team (IRT) activations in recent history.⁸ Incidents ranging from extreme heat to “Snowtober” (a record-breaking October snowstorm) to West Nile and Hepatitis C outbreaks stretched the public health system. However, Nashua’s Division of Public Health was ready and able to respond. The six IRT activations in 2012 included activating their EOC four times, establishing temporary shelters stocked with PHEP-funded supplies for two responses, incorporating a PHEP media advisory group into its preparedness infrastructure, and coordinating closely with hospitals and

doctors. Nashua’s IRT activation for “Snowtober” was their largest ever, including housing their largest shelter population to date. A major factor in the city’s successful response to a myriad of emergencies was their PHEP planning, which fostered cohesion among public health, emergency preparedness, and clinical healthcare sectors.

⁷ CDC’s Health Alert Network is CDC’s primary method of sharing cleared information about urgent public health incidents with public information officers; federal, state, territorial, and local public health practitioners; clinicians; and public health laboratories. CDC, Health Alert Network. Accessed on April 25, 2013 at URL <http://emergency.cdc.gov/han/>.

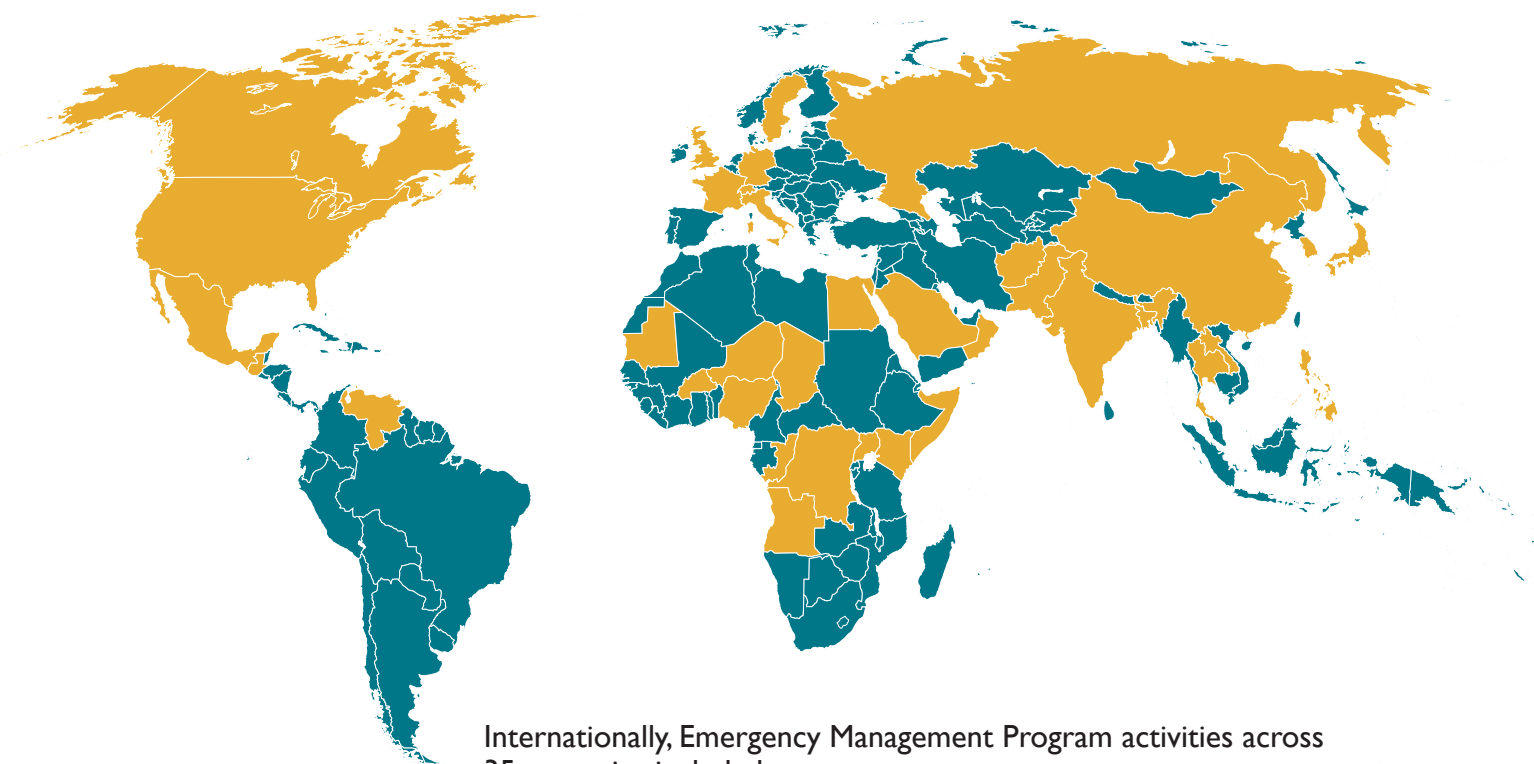
⁸ Activations include a variety of activities such as initiating a preliminary assessment team, developing incident objectives and an Incident Action Plan, activating the incident management structure, and deploying personnel. Activations normally include opening the EOC.

Figure 1: Global PHEPR Emergency Management Program Activities, 2012

■ Countries with Emergency Management Program activities

Across the 62 PHEP awardees in the U.S., including the 4 localities and 8 insular areas, Emergency Management Program activities included:

- 185 engagements
- 204 exercises



Internationally, Emergency Management Program activities across 35 countries included:

- 15 activations
- 19 engagements
- 12 exercises

Note: For a list of all Emergency Management Program activities, and definitions of activations, engagements, and exercises, see Appendix A.

Overseeing use of select agents and toxins

Regulating and monitoring the ownership, usage, and transfer of dangerous biological agents and toxins is another essential component of improving the country's health security. Through its Select Agent Program, PHEPR oversees and inspects the entities that house dangerous materials, such as anthrax, that cause disease in humans and pose a severe

threat to public health and safety. A fundamental aspect of the Select Agent Program is preventing access to or possession of select agents and toxins by individuals who intend to misuse them. CDC's Select Agent Program currently regulates 44 select agents and toxins.

In regulating select agents and toxins during 2012, PPHR monitored 309 facilities registered to own these agents and tracked more than 11,300 individuals with access. PPHR inspected 239 of these facilities to ensure that they comply with regulations and laboratory safety and security measures. These in-depth assessments allow inspectors to confirm that registered facilities have the appropriate plans and protocols in place to prevent theft, loss, or release of select agents and toxins. Demonstrating the success of this oversight, there were no reported thefts, losses, or releases during 2012.⁹ PPHR also updated select agent regulations during 2012.¹⁰ These updates resulted in reclassification and reduction of agents and toxins on the select agent list and established standards for individuals with access to select agents and toxins and improved physical and information security standards.

In addition to its routine oversight activities, PPHR published the first analysis of select agent and toxin incident data, covering potential thefts, losses, and releases reported to PPHR between 2004 and 2010. This information will help to prevent laboratory incidents involving select agents and toxins and improve biosafety and biosecurity in the nation's laboratories.



⁹ CDC, Division of Select Agents and Toxins (DSAT), March 27, 2013.

¹⁰ CDC, DSAT, Legislation, Regulation, and Guidelines FAQ. Accessed on June 5, 2013 at URL http://www.selectagents.gov/FAQ_Legislature.html.

