

Successful planning for and response to public health hazards require protecting the health and safety of all people, especially those who are most vulnerable to the impact of an event.

Children, older adults, and people with certain chronic conditions may require additional care such as specialized medications, equipment, and other assistance. States and localities must consider the unique needs of their own population. In Illinois, 37.3% of households included children and 17.6% included older adults. In addition, 9.4% of adults reported having diabetes, 19% a condition that limits activities, and 7.9% a health problem that required the use of specialized equipment.¹



CDC identified 15 public health preparedness capabilities as the basis for state and local public health preparedness.

The listing to the right reflects the 5 capabilities with the largest Public Health Emergency Preparedness (PHEP) capability-specific investments during 2013.²

- 1. Public Health Laboratory Testing
- 2. Public Health Surveillance and Epidemiological Investigation
- 3. Information Sharing
- 4. Emergency Public Information and Warning
- 5. Community Preparedness

Laboratory Response Network biological (LRN-B) laboratories (labs) and PulseNet labs rapidly identify and notify CDC of potential biological health threats to minimize disease outbreaks.

CDC manages the LRN-B network, a group of 141 labs with testing capabilities to confirm the presence of hazardous biological agents. CDC also coordinates PulseNet, a national network of labs that analyzes and connects foodborne illness cases together to facilitate early identification of outbreak sources. The performance indicators below demonstrate these specific labs' readiness to respond to a biological public health emergency. See Appendix B for a detailed description of each performance indicator.

| Biological Laboratory Testing: LRN-B | 2011 | 2012 | 2013³ |
|--|----------------------|----------------------|----------------------|
| Number of LRN-B labs ⁴ | 4 | 4 | 4 |
| Proportion of LRN-B proficiency tests passed⁵ | 10 / 12 | 7/9 | 1/1 |
| Biological Laboratory Testing: PulseNet | 2011 | 2012 | 2013 |
| Number of PulseNet labs ⁶ | 2 | 2 | 2 |
| Percentage of <i>E. coli</i> -positive tests analyzed and uploaded into PulseNet national database within 4 working days ⁶ | 98% (target: 90%) | 96% (target: 90%) | 92% (target: 90%) |
| Percentage of <i>Listeria</i> -positive tests analyzed and uploaded into PulseNet national database within 4 working days ⁶ | 88% (target: 90%) | 88% (target: 90%) | 87% (target: 90%) |

LRN chemical (LRN-C) laboratories rapidly identify exposure to toxic chemicals, aid diagnosis, and minimize further human exposure.

CDC manages the LRN-C, a group of 57 labs with testing capabilities to confirm the presence of chemical agents. LRN-C labs are designated as Level 1, 2, or 3, with Level 1 labs demonstrating the most advanced capabilities. In 2013, 10 LRN-C labs were designated as Level 1. The performance indicators below demonstrate these specific labs' readiness to respond to a chemical public health emergency. See Appendix B for a detailed description of each performance indicator.

| Chemical Laboratory Testing: LRN-C | 2011 | 2012 | 2013³ |
|---|-----------------------------|-----------------------------|-----------------------------|
| Number of Level 1 LRN-C labs ⁷ | _ | _ | _ |
| Number of Level 2 LRN-C labs ⁷ | _ | _ | _ |
| Number of Level 3 LRN-C labs ⁷ | 3 | 3 | 3 |
| Proportion of core chemical agent detection methods demonstrated by Level 1 and/or Level 2 labs ⁸ | N/A | N/A | N/A |
| Number of additional chemical agent detection methods demonstrated by Level 1 and/or Level 2 labs ⁸ | N/A | N/A | N/A |
| Result of LRN exercise to collect, package, and ship samples ⁸ | Level 3 labs: all passed | Level 3 labs: all passed | Level 3 labs: all passed |
| Proportion of agents correctly identified and quantified from unknown samples during unannounced proficiency testing ⁹ | N/A | N/A | N/A |



Public health agencies deploy resources and personnel to address public health needs arising from emergencies.

The performance indicators below demonstrate the ability to coordinate a response to a public health incident. See Appendix B for a detailed description of each performance indicator.

| Emergency Operations Coordination | 2011 | 2012 | 2013 |
|--|--------------------|-------------------|------|
| Number of minutes for public health staff with incident management lead roles to report for immediate duty ¹⁰ | 25 (target: 60) | 6 (target: 60) | _ |
| Prepared an after-action report and improvement plan following a real or simulated response ¹⁰ | Yes | Yes | Yes |

Administrative preparedness was highlighted as a key challenge during the 2009 H1N1 influenza pandemic.

In response, CDC developed standards and requirements for administrative and fiscal processes, which state and local health departments have now incorporated into their incident action plans. These processes, which differ from normal operations, include emergency procurement, contracting, and hiring processes. See Appendix B for a detailed description of administrative preparedness.

| Administrative Preparedness | 2013 |
|---|------|
| Implemented all or part of administrative preparedness plan ¹¹ | Yes |
| Received legal authority to spend emergency funds ¹¹ | Yes |
| Reduced legal conflicts to implementing emergency use authorizations (EUAs) ¹¹ | Yes |

CDC provides funding and technical assistance to help states, localities, and insular areas build public health preparedness and response capabilities.

CDC provides funding to the 50 states, 4 localities, and 8 insular areas through the PHEP cooperative agreement. In addition to PHEP funding, CDC provides training and personnel to support awardee preparedness and response efforts. See Appendix B for a detailed description of each CDC resource.

| CDC Resources Supporting Preparedness | 2012-2013 |
|--|--------------|
| CDC PHEP cooperative agreement funding provided ¹² | \$17,315,437 |
| CDC preparedness field staff ^{13, 14, 15} | 3 |
| CDC Emergency Management Program activities ¹⁶ | 14 |
| Public health personnel who received CDC Strategic National Stockpile training ¹⁷ | _ |

States, localities, and insular areas ensure medicine, vaccines, and medical supplies are available to the public during large-scale public health emergencies by supplementing local supplies with assets from CDC's Strategic National Stockpile (SNS).

The technical assistance review (TAR) scores below demonstrate readiness to receive, distribute, and dispense SNS assets to the public during an emergency for the state overall and localities in the Cities Readiness Initiative (CRI). See Appendix B for a detailed description of TAR scores.

| State TAR Score | 2010-2011 | 2011–2012 | 2012-2013 |
|---|-----------|-----------|-----------|
| TAR score (out of 100-point scale) ¹⁰ | 99 | 100 | 100 |
| CRI Metropolitan Statistical Area (MSA) TAR Score(s) | 2010-2011 | 2011–2012 | 2012-2013 |
| Chicago-Naperville-Joliet, IL-IN-WI (100-point scale) ¹⁰ | 96 | 95 | 95 |
| Peoria, IL (100-point scale) ¹⁰ | 88 | 93 | 93 |
| St. Louis, MO-IL (100-point scale) ¹⁰ | 89 | 95 | 97 |

 $Note: All\ data\ furnished\ by\ the\ Centers\ for\ Disease\ Control\ and\ Prevention.\ For\ more\ detail\ on\ specific\ data\ sources,\ see\ Appendix\ C.$