



The laboratory testing capability is the ability to conduct rapid and conventional detection, characterization, confirmatory testing, data messaging, official reporting of results, investigative support, and laboratory networking to address actual or potential exposure to all hazards. Laboratories identify and characterize disease agents, toxins, and other health threats found in clinical specimens, food, or other substances. Because the information provided by these laboratories is essential for response to public health threats, these resources play a critical role in emergency response planning and activities. The Laboratory Response Network managed by CDC is a group of local, state, federal, and international laboratories that uses unique testing capabilities to confirm high priority biological and chemical agents. The PulseNet laboratory network coordinated by CDC performs testing to identify common disease-causing bacteria in food. Data related to these laboratory resources are below; see appendix for a more detailed description of the data points.

| Laboratories: Biological Capabilities | | 2009 | 2010 | 2011 |
|--|---|------------------------------|-----------------------------|----------------------------|
| <i>Participation in Laboratory Response Network (LRN) for biological agents</i> | LRN reference and/or national laboratories that could test for biological agents ¹ | 9 reference labs | 9 reference labs | 7 reference labs |
| <i>Evaluating LRN capabilities through proficiency testing</i> | Proficiency tests passed by LRN reference and/or national laboratories ² | 5 out of 5 tests | 8 out of 9 tests | 7 out of 9 tests |
| <i>Assessing LRN laboratory competency and reporting through exercises</i> | LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours of obtaining a significant laboratory result during LRN notification drill ³ Note: One LRN laboratory in DC and in each state is eligible to participate in this drill, with the exception of CA, IL, and NY, where two can participate. | Jul: passed | Apr: passed Jun: passed | Jun: passed Aug: passed |
| <i>Rapid identification of disease-causing bacteria by PulseNet laboratories</i> | Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA tests (PFGE) ⁴ • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days | 114 100% (target: 90%) | 41 100% (target: 90%) | 36 97% (target: 90%) |
| | Rapidly identified <i>L. monocytogenes</i> using advanced DNA tests (PFGE) ⁴ • Samples for which state performed tests • Test results submitted to PulseNet database within 4 working days | 22 100% (target: 90%) | 36 100% (target: 90%) | 55 96% (target: 90%) |

| Laboratories: Chemical Capabilities | | 2009 | 2010 | 2011 |
|---|---|---|--|--|
| <i>Participation in Laboratory Response Network for chemical agents (LRN-C)</i> | LRN-C laboratories with capabilities for responding if the public is exposed to chemical agents ⁵ Note: There are three LRN-C levels, with Level 1 having the most capabilities. See appendix. | One Level 1 lab | One Level 1 lab | One Level 1 lab |
| <i>Evaluating LRN-C laboratory capabilities through proficiency testing</i> | Total number of methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents ⁶ • Core methods successfully demonstrated (there were 6 core methods in 2009, 8 in 2010, and 9 in 2011) • Additional methods successfully demonstrated (there were up to 6 additional methods available in 2009, up to 5 in 2010, and up to 4 in 2011) | 10 total methods 6 core 4 additional | 13 total methods 8 core 5 additional | 13 total methods 9 core 4 additional |
| <i>Assessing LRN-C laboratory capabilities through exercises</i> | LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise ⁷ | Passed | Passed | 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 ⁸ | Aug: 14 out of 14 agents Oct: 1 out of 1 agent | Sep: 17 out of 17 agents | Jul: 1 out of 1 agent |
| | Average number of minutes to process and report on each sample by Level 1 or Level 2 laboratories during the LRN Surge Capacity Exercise ⁹ Note: In 2009 and 2010, only Level 1 labs participated. In 2011, the exercise was expanded to include a selection of Level 2 labs. | 9 minutes | 7 minutes | 2 minutes |

¹ CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID); 2009 data: 12/31/09; 2010 data: 12/31/10; 2011 data: 12/31/2011

² CDC, OID, NCEZID; 2009 data: 1/1/09-12/31/09; 2010 data: 1/1/10-12/31/10; 2011 data: 1/1/11-12/31/11

³ CDC, OID, NCEZID; 2009 data: 7/09; 2010 data: 4/10 and 6/10; 2011 data: 6/11 and 8/11

⁴ CDC, Office of Public Health Preparedness and Response, Division of State and Local Readiness; 2009 data: 8/10/08-8/9/09; 2010 data: 8/10/09-8/9/10; 2011 data: 8/10/10-8/9/11

⁵ CDC, Office of Noncommunicable Diseases, Injury and Environmental Health (ONDIEH), National Center for Environmental Health (NCEH); 2009 data: 9/14/09; 2010 data: 12/31/10; 2011 data: 12/31/2011

⁶ CDC, ONDIEH, NCEH; 2009 data: 1/1/09-9/14/09; 2010 data: 1/1/10-12/31/10; 2011 data: 1/1/11-12/31/11

⁷ CDC, ONDIEH, NCEH; 2009 data: 2/10/09-11/9/09; 2010 data: 1/1/10-12/31/10; 2011 data: 1/1/11-12/31/11

⁸ CDC, ONDIEH, NCEH; 2009 data: 8/24/09 and 10/5/09; 2010 data: 9/13/10; 2011 data: 7/18/11

⁹ CDC, ONDIEH, NCEH; 2009 data: 1/13/09-1/18/09; 2010 data: 5/18/10-5/22/10; 2011 data: 4/4/11-4/8/11

| Emergency Operations Coordination Capability | | 2009 | 2010 | 2011 |
|---|---|------------|------------|------------|
| <i>Activating the emergency operations center</i> | Time for pre-identified staff covering activated public health agency incident management roles to report for immediate duty ¹ Note: In 2009, the data may not be based on the quickest time, but instead may reflect a more complex or comprehensive incident. In 2010 and 2011, the ability to assemble staff in a timely manner was a Department of Health and Human Services Priority Goal for states; quickest times are reported. | 90 minutes | 50 minutes | 41 minutes |
| <i>Ensuring overall response strategy for incident management</i> | Approved Incident Action Plan (IAP) produced before the start of the second operational period ¹ | Yes | Yes | Yes |
| <i>Assessing response capabilities</i> | Drafted an After Action Report (AAR) and Improvement Plan (IP) following an exercise or real incident ¹ | Yes | Yes | Yes |

The emergency operations coordination (EOC) capability is the ability to direct and support an event or incident with public health or medical implications by establishing a standardized, scalable system of oversight, organization, and supervision consistent with jurisdictional standards and practices and with the National Incident Management System. Data related to the EOC capability are above. The emergency public information and warning (EPIW) capability is the ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management responders. Data related to the EPIW capability are below. For both the EOC and EPIW capabilities, the data reflect the state's best demonstration for each data point. States may have submitted data for additional exercises and/or real incidents not reflected in the fact sheet. See appendix for a more detailed description of the data points.



| Emergency Public Information and Warning Capability | | 2009 | 2010 | 2011 |
|--|--|------|------|------|
| <i>Communicating with the public during an emergency</i> | Developed a first risk communication message for the public during an exercise or a real incident ¹ | Yes | Yes | Yes |

¹ CDC, Office of Public Health Preparedness and Response, Division of State and Local Readiness; 2009 data: 8/10/08-8/9/09, 2010 data: 8/10/09-8/9/10; 2011 data: 8/10/10-8/9/11