

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 rapid detection and 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 use 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 1 for a more detailed description of the data points.

Laboratories: Biological Capabilities		2008	2009	2010
<i>Participation in Laboratory Response Network (LRN) for biological agents</i>	LRN reference and/or national laboratories that could test for biological agents <sup>1</sup>	22 reference labs (includes LAC)	17 reference labs (includes LAC)	20 reference labs (includes LAC)
<i>Evaluating LRN capabilities through proficiency testing</i>	Proficiency tests passed by LRN reference and/or national laboratories <sup>2</sup>	28 out of 30 tests (includes LAC)	25 out of 25 tests (includes LAC)	39 out of 42 tests (includes LAC)
<i>Assessing LRN laboratory competency and reporting through exercises</i>	LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill <sup>3</sup> 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.	1 did not participate, 1 passed (LAC)	Both passed (includes LAC)	Apr: 1 did not pass, 1 passed (LAC) Jun: both 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) <sup>4</sup> <ul style="list-style-type: none"> <li>Samples for which state performed tests</li> <li>Test results submitted to PulseNet database within 4 working days</li> </ul>	180 90% (target: 90%)	210 25% (target: 90%)	234 91% (target: 90%)
	Rapidly identified <i>L. monocytogenes</i> using advanced DNA tests (PFGE) <sup>4</sup> <ul style="list-style-type: none"> <li>Samples for which state performed tests</li> <li>Test results submitted to PulseNet database within 4 working days</li> </ul>	16 94% (target: 90%)	24 25% (target: 90%)	16 88% (target: 90%)

Laboratories: Chemical Capabilities		2009	2010
<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 <sup>5</sup> Note: There are three LRN-C levels, with Level 1 having the most capabilities. See appendix 1.	One Level 1 lab One Level 2 lab (LAC)	One Level 1 lab One Level 2 lab (LAC)
<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 <sup>6</sup> <ul style="list-style-type: none"> <li>Core methods successfully demonstrated (there were six core methods in 2009 and eight core methods in 2010)</li> <li>Additional methods successfully demonstrated (there were up to six additional methods available in 2009 and up to five in 2010)</li> </ul>	<b>Level 1 lab:</b> 10 total methods 6 core 4 additional <b>Level 2 lab (LAC):</b> 4 total methods 4 core 0 additional	<b>Level 1 lab:</b> 13 total methods 8 core 5 additional <b>Level 2 lab (LAC):</b> 7 total methods 7 core 0 additional
<i>Assessing LRN-C laboratory capabilities through exercises</i>	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise <sup>7</sup>	<b>Level 1 lab:</b> passed <b>Level 2 lab (LAC):</b> passed	<b>Level 1 lab:</b> passed <b>Level 2 lab (LAC):</b> 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 <sup>8</sup>	<b>Level 1 lab:</b> Aug: 13 out of 14 agents Oct: 1 out of 1 agent <b>Level 2 lab (LAC):</b> Aug: 14 out of 14 agents Oct: not eligible	<b>Level 1 lab:</b> Sep: 13 out of 17 agents <b>Level 2 lab (LAC):</b> Sep: 17 out of 17 agents
	Hours to process and report on 500 samples by Level 1 laboratory during the LRN Surge Capacity Exercise <sup>9</sup>	<b>Level 1 lab:</b> 112 hours (range: 71 to 126 hours)	<b>Level 1 lab:</b> 49 hours (range: 38 to 86 hours)

<sup>1</sup> CDC, Office of Infectious Diseases (OID), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID); 2008 data: 9/30/08; 2009 data: 12/31/09; 2010 data: 12/31/10

<sup>2</sup> CDC, OID, NCEZID; 2008 data: 1/08-9/08; 2009 data: 1/1/09-12/31/09; 2010 data: 1/1/10-12/31/10

<sup>3</sup> CDC, OID, NCEZID; 2008 data: 3/08; 2009 data: 7/09; 2010 data: 4/10 and 6/10

<sup>4</sup> CDC, Office of Public Health Preparedness and Response, Division of State and Local Readiness; 2008 data: 8/31/07-8/9/08; 2009 data: 8/10/08-8/9/09; 2010 data: 8/10/09-8/9/10

<sup>5</sup> 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

<sup>6</sup> CDC, ONDIEH, NCEH; 2009 data: 1/1/09-9/14/09; 2010 data: 1/1/10-12/31/10

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


<sup>8</sup> CDC, ONDIEH, NCEH; 2009 data: 8/24/09 and 10/5/09; 2010 data: 9/13/10

<sup>9</sup> CDC, ONDIEH, NCEH; 2009 data: 1/13/09-1/18/09; 2010 data: 5/18/10-5/22/10

All states and localities funded by CDC's Public Health Emergency Preparedness cooperative agreement have plans for receiving, distributing, and dispensing assets from CDC's Strategic National Stockpile (SNS). Assets include large quantities of medicine, vaccines, and medical supplies to supplement state and local public health agencies in a large-scale public health emergency. To ensure continued readiness, CDC conducts annual technical assistance reviews (TAR) of state plans. Areas of assessment for the TAR focus on key elements that are regarded as either critical or important planning steps within a variety of functions. State TAR scores for the past three years are listed in the table below. (See scoring note at bottom of page.)

CDC Technical Assistance Review (TAR) State Scores <sup>1</sup>		2007-08	2008-09	2009-10
Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile (SNS)	<b>Overall Score</b>	<b>100</b>	<b>100</b>	<b>100</b>
	• <i>Function:</i> Developing a Plan with SNS Elements	100	100	100
	• <i>Function:</i> Management of SNS	100	100	100
	• <i>Function:</i> Requesting SNS	100	100	100
	• <i>Function:</i> Communications Plan (Tactical)	100	100	100
	• <i>Function:</i> Public Information and Communication	100	100	100
	• <i>Function:</i> Security	100	100	100
	• <i>Function:</i> Receipt, Stage, Store	100	100	100
	• <i>Function:</i> Controlling Inventory	100	100	100
	• <i>Function:</i> Repackaging	100	100	100
	• <i>Function:</i> Distribution	100	100	100
	• <i>Function:</i> Dispensing Prophylaxis	100	100	100
	• <i>Function:</i> Hospital/Alternate Care Facilities Coordination	100	100	100
• <i>Function:</i> Training, Exercise, and Evaluation	100	100	100	

The Cities Readiness Initiative of the Strategic National Stockpile also enhances preparedness in the nation's major metropolitan statistical areas (MSAs) where more than 50% of the U.S. population resides. MSAs can consist of one or more jurisdictions (e.g., counties, cities, and municipalities) and can extend across state borders. TARs are conducted annually in each jurisdiction and those scores are then combined to compute an average score for the entire MSA. TAR scores for the past three years are listed in the table below for each MSA. (See scoring note at bottom of page.) See appendix 2 for a detailed listing of the jurisdictions in each MSA and their individual scores.

	Cities Readiness Initiative Metropolitan Statistical Area TAR Scores <sup>1</sup>	2007-08	2008-09	2009-10
	1. Fresno, CA	22	73	74
2. Los Angeles-Long Beach-Santa Ana, CA	82	91	91	
3. Riverside-San Bernardino-Ontario, CA	73	85	93	
4. Sacramento-Arden-Arcade-Roseville, CA	60	75	94	
5. San Diego-Carlsbad-San Marcos, CA	82	96	96	
6. San Francisco-Oakland-Fremont, CA	74	86	88	
7. San Jose-Sunnyvale-Santa Clara, CA	77	91	91	

<sup>1</sup> CDC, Office of Public Health Preparedness and Response, Division of Strategic National Stockpile; 2007-08 data: 8/10/2007- 8/9/2008 performance period; 2008-09 data: 8/10/2008-8/9/2009 performance period; 2009-10 data: 8/10/2009-8/9/2010 performance period

**Scoring Note:** A score of 69 or higher in 2007-08 and 2008-09 indicated performance in an acceptable range. The acceptable threshold score increased to 79 or higher for 2009-2010.