



**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): <sup>1</sup> 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 <sup>2</sup>  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 <sup>3</sup>	2 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill <sup>3</sup>	2 out of 2 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories <sup>3</sup>	5 out of 5 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA tests (PFGE) <sup>4</sup>	83
	<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 (target: 90%)</li> </ul>	84%
	Rapidly identified <i>L. monocytogenes</i> using advanced DNA tests (PFGE) <sup>4</sup>	59
Assessing laboratory competency and reporting through exercises	<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 (target: 90%)</li> </ul>	39%
	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents <sup>1</sup>	Yes
Assessing laboratory competency and reporting through exercises	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill <sup>3</sup>	Passed
	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 <sup>5</sup>  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 <sup>5</sup>	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents <sup>5</sup>	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 <sup>5</sup>	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>6</sup>	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) <sup>5</sup>	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 <sup>7</sup>	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes <sup>8</sup>	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 <sup>1</sup>	9 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours <sup>9</sup>	45%

<sup>1</sup>APHL; 2008 <sup>2</sup>CDC, OSELS; 2008 <sup>3</sup>CDC, OI (NCEZID); 2008 <sup>4</sup>CDC, OPHPR (DSLRL); 2008 <sup>5</sup>CDC, ONDIEH (NCEH); 2009 <sup>6</sup>CDC, ONDIEH (NCEH); 2008 <sup>7</sup>State data; 2008 <sup>8</sup>CDC, OPHPR (DEO); 2009 <sup>9</sup>CDC, OPHPR (DEO); 2008 \*Massachusetts experienced issues with CDC's reporting system, which impacted this result.

Response Readiness: Communication (continued)		
<i>Improving public health information exchange</i>	Participated in a Public Health Information Network forum (community of practice) to leverage best practices for information exchange <sup>10</sup>	Yes
Response Readiness: Planning		
<i>Assessing plans to receive, distribute, and dispense medical assets from the Strategic National Stockpile and other sources</i>	CDC technical assistance review (TAR) state score <sup>11, 12</sup>	2007-08: 91
	Scoring Note: A score of 69 or higher indicates performance in an acceptable range in plans to receive, distribute, and dispense medical assets.	2008-09: 93
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score <sup>11</sup>  *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.	
<i>Enhancing response capability for chemical events</i>	CHEMPACK nerve-agent antidote containers <sup>11</sup>	40
<i>Meeting preparedness standards for local health departments</i>	Local health departments meeting voluntary Project Public Health Ready preparedness standards <sup>13</sup>	28

Response Readiness: Exercises and Incidents		
<i>Notifying emergency operations center staff</i>	Pre-identified staff notified to fill all eight Incident Command System core functional roles due to a drill, exercise, or real incident <sup>14</sup> 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 <sup>14</sup>	0 out of 2 times
<i>Activating the emergency operations center (EOC)</i>	Conducted at least one unannounced notification outside of normal business hours <sup>14</sup>	Yes
	Public health EOC activated as part of a drill, exercise, or real incident <sup>14</sup> 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 <sup>14</sup>	0 out of 0 times
	Conducted at least one unannounced activation <sup>14</sup>	No
Response Readiness: Evaluation		
<i>Assessing response capabilities through after action report/improvement plans (AAR/IPs)</i>	AAR/IPs developed following an exercise or real incident <sup>14</sup> 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 <sup>14</sup>	6 out of 7 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs <sup>14</sup>	No

<sup>10</sup>CDC, OSTLTS; 2008 <sup>11</sup>CDC, OPHPR (DSNS); 2008 <sup>12</sup>CDC, OPHPR (DSNS); 2009 <sup>13</sup>NACCHO; 2008 <sup>14</sup>CDC, OPHPR (DSLRL); 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 <sup>15</sup>	Harvard University - Center for Public Health Preparedness	\$525,760
Preparedness and Emergency Response Research Centers <sup>15</sup>	Harvard School of Public Health, Boston - Generate Criteria and Metrics to Measure Effectiveness and Efficiency	\$1,717,286
Advanced Practice Centers <sup>16</sup>	Cambridge Advanced Practice Center	\$400,000
Centers of Excellence in Public Health Informatics <sup>17</sup>	Harvard Pilgrim Health Care, Inc.	\$1,467,018
Pandemic Influenza Promising Practices Demonstration Projects <sup>14</sup>	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 <sup>17</sup>	0	
▪ Investigations conducted by Epidemic Intelligence Service Field Officers <sup>17</sup>	0	
Deployments		
▪ Type of Incident (number of CDC staff) <sup>18</sup>	Transplant Associated Virus (1)	
Career Epidemiology Field Officers <sup>15</sup>	—	
Quarantine Stations <sup>19</sup>	Logan International Airport, Boston	

<sup>14</sup>CDC, OPHPR (DSLRL); 2008 <sup>15</sup>CDC, OPHPR (OD); 2008 <sup>16</sup>NACCHO; 2008 <sup>17</sup>CDC, OSELS; 2008 <sup>18</sup>CDC, OPHPR (DEO); 2008 <sup>19</sup>CDC, OI (NCEZID); 2008