



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 Michigan, 9.9% of adults reported having asthma, 9.1% diabetes, 6.7% heart disease, and 3.0% had a stroke. In addition, 22.6% reported a limiting disability and 64.7% 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): ¹ State public health laboratory had a COOP that was tested	
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 ² 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 ³	9 reference labs
Assessing if laboratory emergency contacts could be reached 24/7	LRN laboratories successfully contacted during a non-business hours telephone drill ³	9 out of 9 labs
Evaluating LRN laboratory capabilities	Proficiency tests passed by LRN reference and/or national laboratories ³	9 out of 9 tests
Rapid identification of disease-causing bacteria by PulseNet laboratories	Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA tests (PFGE) ⁴ <ul style="list-style-type: none"> Samples for which state performed tests 	95
	<ul style="list-style-type: none"> Test results submitted to PulseNet database within 4 working days (target: 90%) 	95%
	Rapidly identified <i>L. monocytogenes</i> using advanced DNA tests (PFGE) ⁴ <ul style="list-style-type: none"> Samples for which state performed tests 	14
	<ul style="list-style-type: none"> Test results submitted to PulseNet database within 4 working days (target: 90%) 	100%
Assessing laboratory competency and reporting through exercises	State public health laboratory conducted exercises to assess competency of sentinel laboratories to rule out bioterrorism agents ¹	Yes
	CDC-funded LRN laboratory ability to contact the CDC Emergency Operations Center within 2 hours during LRN notification drill ³ 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.	Passed

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 ⁵ 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 ⁵	6 out of 6 methods
	Additional methods successfully demonstrated by Level 1 and/or Level 2 laboratories to rapidly detect chemical agents ⁵	4 out of 4 methods
Assessing LRN-C laboratory capabilities through exercises	LRN-C laboratory ability to collect, package, and ship samples properly during LRN exercise ⁵	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 ⁶	2 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) ⁵	75 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 ⁷	Yes
	Responded to Health Alert Network (HAN) test message within 30 minutes ⁸	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 ¹	73 times
	Epidemic Information Exchange users responded to system-wide notification test within 3 hours ⁹	52%

¹APHL; 2008 ²CDC, OSELS; 2008 ³CDC, OI (NCEZID); 2008 ⁴CDC, OPHPR (DSLRL); 2008 ⁵CDC, ONDIEH (NCEH); 2009 ⁶CDC, ONDIEH (NCEH); 2008 ⁷State data; 2008 ⁸CDC, OPHPR (DEO); 2009 ⁹CDC, OPHPR (DEO); 2008

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 ¹⁰	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 ^{11, 12}	2007-08: 95
	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: 100
	Cities Readiness Initiative (CRI) location and 2007-08 TAR score ¹¹ *Cohort I: Detroit, MI: 78 *Cohort II: No sites *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 ¹¹	67
<i>Meeting preparedness standards for local health departments</i>	Local health departments meeting voluntary Project Public Health Ready preparedness standards ¹³	1

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 ¹⁴ Note: State must report 2 and could report up to 12 notifications.	4 times
	Pre-identified staff acknowledged notification within the target time of 60 minutes ¹⁴	4 out of 4 times
	Conducted at least one unannounced notification outside of normal business hours ¹⁴	Yes
<i>Activating the emergency operations center (EOC)</i>	Public health EOC activated as part of a drill, exercise, or real incident ¹⁴ Note: State must report 2 and could report up to 12 activations.	4 times
	Pre-identified staff reported to the public health EOC within the target time of 2.5 hours ¹⁴	4 out of 4 times
	Conducted at least one unannounced activation ¹⁴	Yes
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 ¹⁴ Note: State must report 2 and could report up to 12 AAR/IPs.	4 AAR/IPs
	AAR/IPs developed within target time of 60 days ¹⁴	2 out of 4 AAR/IPs
	Re-evaluated response capabilities following approval and completion of corrective actions identified in AAR/IPs ¹⁴	Yes

¹⁰CDC, OSTLTS; 2008 ¹¹CDC, OPHPR (DSNS); 2008 ¹²CDC, OPHPR (DSNS); 2009 ¹³NACCHO; 2008 ¹⁴CDC, OPHPR (DSLRL); 2008

In addition to the activities listed above, CDC supported other projects and activities to enhance preparedness efforts.

Research, Training, Education, and Promising Demonstration Projects		
Project	Location/Project Name	Amount
Centers for Public Health Preparedness ¹⁵	University of Michigan - Center for Public Health Preparedness	\$525,760
Preparedness and Emergency Response Research Centers ¹⁵	—	N/A
Advanced Practice Centers ¹⁶	—	N/A
Centers of Excellence in Public Health Informatics ¹⁷	—	N/A
Pandemic Influenza Promising Practices Demonstration Projects ¹⁴	Collaborative Planning for Delivery of Essential Healthcare Services; Countermeasure and State Immunization Information Systems Integration; Electronic Death Reporting	\$997,324 \$300,000 \$741,124
Additional CDC Resources Supporting Preparedness in States and Localities		
Epidemic Intelligence Service		
▪ Epidemic Intelligence Service Field Officers ¹⁷	1	
▪ Investigations conducted by Epidemic Intelligence Service Field Officers ¹⁷	7	
Deployments		
▪ Type of Incident (number of CDC staff) ¹⁸	Measles Exposure (1)	
Career Epidemiology Field Officers ¹⁵	—	
Quarantine Stations ¹⁹	Detroit Metro Airport, Detroit	

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