

New Mexico Responds to an Imported Measles Case

Epidemiological investigations and public information campaigns are key to disease outbreak response.



An international participant at a 2007 science and engineering fair in New Mexico was hospitalized with symptoms of measles, later confirmed by the state public health laboratory. Measles, though eradicated in the United States and other countries, still exists in many parts of the world. The teenage girl was likely infectious while traveling and at the science and engineering fair. Since the teenage girl had traveled from India to Atlanta and then to Albuquerque, the New Mexico Department of Health (NMDOH) was concerned about possible exposure at airports, hotels where the teenage girl stayed, and at the science and engineering fair which had approximately 5,000 attendees and 1,200 judges.

NMDOH immediately began working with CDC to identify people who might have been exposed during plane flights or at airports. NMDOH also held a vaccination clinic for fair attendees and a separate clinic

for other members of the public who thought they might have been exposed. Effective risk communication managed the public perception of the measles case, educated the public about the disease, and encouraged people to get vaccinated. These rapid responses by state public health officials and epidemiologists and the use of quick communication strategies helped reduce the chance that measles would spread in the communities.

According to the New Mexico Department of Public Health, the cooperative agreement is valuable because it has contributed to overall improvements in New Mexico's public health system by allowing the state to increase its planning and exercise capabilities as well as reach out to local populations.

Snapshot of Public Health Preparedness

Below are activities conducted by New Mexico in the area of public health preparedness. They support CDC preparedness goals in the areas of detection and reporting, control, and improvement; crosscutting activities help prepare for all stages of an event. These data are not comprehensive and do not cover all preparedness activities.

Disease Detection and Investigation

The sooner public health professionals can detect diseases or other health threats and investigate their causes and effects in the community, the more quickly they can minimize population exposure.

Detect & Report	Could receive and investigate urgent disease reports 24/7/365 ¹	Yes
	- Primary method for receiving urgent disease reports* ²	Telephone
	Linked state and local health personnel to share information about disease outbreaks across state lines (through the CDC <i>Epi-X</i> system) ³	Yes
	Conducted year-round surveillance for seasonal influenza ⁴	Yes

* Telephone, fax, and electronic reporting are all viable options for urgent disease reporting, as long as the public health department has someone assigned to receive the reports 24/7/365.

¹ CDC, DSLR; 2005; ² CDC, DSLR; 2006; ³ CDC, *Epi-X*; 2007; ⁴ HHS, OIG; 2007



New Mexico



Public Health Laboratories

Public health laboratories test and confirm agents that can threaten health. For example, advanced DNA “fingerprinting” techniques and subsequent reporting to the CDC database (PulseNet) are critical to recognize nationwide outbreaks from bacteria that can cause severe illness, such as *E. coli* O157:H7 and *Listeria monocytogenes*.

Detect & Report	Number of New Mexico laboratories in the Laboratory Response Network ¹	1
	Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA “fingerprinting” techniques (PFGE): ²	
	- Number of samples received (partial year, 9/06 – 2/07)	9
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	0%
	Rapidly identified <i>Listeria monocytogenes</i> using advanced DNA “fingerprinting” techniques (PFGE): ²	
	- Number of samples received (partial year, 9/06 – 2/07)	None
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	N/A
	Had a laboratory information management system that could create, send, and receive messages ³ (8/05 – 8/06)	No
	- System complied with CDC information technology standards (PHIN) ³ (8/05 – 8/06)	N/A
Crosscutting	Had a rapid method to send urgent messages to frontline laboratories that perform initial screening of clinical specimens ³ (8/05 – 8/06)	Yes
	Conducted bioterrorism exercise that met CDC criteria ⁴ (8/05 – 8/06)	No
	Conducted exercise to test chemical readiness that met CDC criteria ⁴ (8/05 – 8/06)	Yes

¹ CDC, DBPR; 2007; ² CDC, DSLR; 2007; ³ APHL, Public Health Laboratory Issues in Brief: Bioterrorism Capacity; May 2007; ⁴ CDC, DSLR; 2006

Response

Planning provides a framework for how a public health department will respond during an emergency. The plans can be tested through external reviews, exercises, and real events. After-action reports assess what worked well during an exercise or real event and how the department can improve.

Control	Developed a public health response plan, including pandemic influenza response, crisis and emergency risk communication, and Strategic National Stockpile (SNS) ^{1, 2}	Yes
	New Mexico SNS plan reviewed by CDC ²	Yes
	- Score on CDC technical assistance review (1-100)	67
	Number of New Mexico cities in the Cities Readiness Initiative ³	1
Crosscutting	Developed roles and responsibilities for a multi-jurisdictional response (ICS) with: ¹ (8/05 – 8/06)	
	- Hospitals	Yes
	- Local/regional emergency management agencies	Yes
	- Federal emergency management agencies	Yes
	Public health department staff participated in training to support cooperative agreement activities ⁴	Yes
	Public health laboratories conducted training for first responders ⁵ (8/05 – 8/06)	Yes
	Activated public health emergency operations center as part of a drill, exercise, or real event ^{*16} (partial year, 9/06 – 2/07)	No
Conducted a drill or exercise for key response partners to test communications when power and land lines were unavailable ¹⁶ (partial year, 9/06 – 2/07)	No	
Improve	Finalized at least one after-action report with an improvement plan following an exercise or real event ¹⁶ (partial year, 9/06 – 2/07)	Yes

* Activation means rapidly staffing all eight core ICS functional roles in the public health emergency operations center with one person per position. This capability is critical to maintain in case of large-scale or complex incidents, even though not every incident requires full staffing of the ICS.

¹ States were expected to perform these activities from 9/1/2006 to 8/30/2007. These data represent results from the first half of this period only.

¹ CDC, DSLR; 2006; ² CDC, DSNS; 2007; ³ CDC, DSNS CRI; 2007; ⁴ CDC, DSLR; 1999-2005; ⁵ APHL, Chemical Terrorism Preparedness; May 2007; ⁶ CDC, DSLR; 2007