

Tennessee Responds to a Rabies Exposure at a Mass Gathering

Broad range communications networks are critical to inform the public about disease risks.



In August 2006, approximately 150,000 people attended the Tennessee Walking Horse National Celebration in Shelbyville,

Tennessee. One of the horses was confirmed to have rabies. Because horses may transmit the rabies virus to people, the Tennessee Department of Health (TDH) responded rapidly to assess public health risks for rabies among people who reportedly had contact with the horse.

Coordination with local, regional, state, and federal public health officials contributed to quick notification of the public regarding rabies transmission risk. TDH immediately initiated an extensive public messaging campaign via print and television to communicate the risks associated with attending the event and contact with the rabid horse. The Tennessee Health Alert Network, CDC Health Alert Network, and Epi-X were used to quickly correspond with regional and local public health departments, emergency departments, and CDC about assessment and treatment for people exposed to the horse.

In addition to media communications, 4,200 attendees were contacted by letter. TDH consulted with 53 people who were exposed to the rabid horse and recommended

boosters or post-exposure treatment as appropriate. The cooperative agreement supported TDH's preparedness infrastructure to effectively mobilize communication networks, including the Public Information Line and the Public Health Emergency Preparedness Program Universal Call Distribution Support Line to handle high call volume.

According to the Tennessee Department of Health, the cooperative agreement is valuable because it has funded salaries, travel, trainings, equipment, and exercises to support public health preparedness. Had Hurricanes Katrina and Rita occurred prior to the cooperative agreement, certain safeguards would not have been in place to aid in those particular responses. Preparedness for threats and emergencies has been enhanced through awareness, training, knowledge, and establishment of a laboratory dedicated to responding to chemical/biological emergencies.

Snapshot of Public Health Preparedness

Below are activities conducted by Tennessee 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



Tennessee



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 Tennessee laboratories in the Laboratory Response Network ¹	4
	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)	16
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	81%
	Rapidly identified <i>Listeria monocytogenes</i> using advanced DNA “fingerprinting” techniques (PFGE): ²	
	- Number of samples received (partial year, 9/06 – 2/07)	7
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	86%
	Had a laboratory information management system that could create, send, and receive messages ³ (8/05 – 8/06)	Yes
	- System complied with CDC information technology standards (PHIN) ³ (8/05 – 8/06)	Yes
Had a rapid method to send urgent messages to frontline laboratories that perform initial screening of clinical specimens ³ (8/05 – 8/06)	Yes	
Crosscutting	Conducted bioterrorism exercise that met CDC criteria ⁴ (8/05 – 8/06)	Yes
	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
	Tennessee SNS plan reviewed by CDC ²	Yes
	- Score on CDC technical assistance review (1-100)	85
	Number of Tennessee cities in the Cities Readiness Initiative ³	2
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
Improve	Activated public health emergency operations center as part of a drill, exercise, or real event* ¹⁶ (partial year, 9/06 – 2/07)	Yes
	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)	Yes
	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.

[†] 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