

## Alabama Responds to Severe Tornadoes

Prepared public health professionals protect community health during emergencies.



In March 2007, numerous tornadoes swept across the state of Alabama.

Two of these tornadoes seriously affected residents, particularly

in the towns of Enterprise and Miller's Ferry which reported fatalities. Hundreds of homes were destroyed or suffered major damage. The Governor activated the state emergency operations center and declared a state of emergency. The Alabama Department of Public Health (ADPH) put its 24 emergency response teams on alert for statewide deployment. Public health nurses and social workers assisted in shelters managed by the American Red Cross. In addition, surveillance nurses investigated emergency room visits made by first responders and tornado victims who presented with burns because of exposure to an unknown chemical at a school.

Throughout the response, ADPH coordinated with local public health departments, emergency management agencies, non-profit organizations, and others to mitigate health threats across Alabama. ADPH provided a mobile unit for those residents who needed tetanus shots, first aid, and masks. ADPH arranged for commercial pharmacies to provide medications to people who had

lost theirs in the tornado. Walking teams of public health nurses and social workers also visited badly-hit neighborhoods to assess for unmet needs. ADPH also issued press releases to warn citizens of the dangers that often follow disasters, including carbon monoxide poisoning when using gasoline powered generators and poor water quality in homes with private wells. Cooperative agreement funds allowed ADPH to provide these critical services to Alabama residents.

**According to the Alabama Department of Public Health, the cooperative agreement is valuable because** health departments have a greater capacity to respond to emergencies than they did prior to the cooperative agreement. The cooperative agreement has provided training to prepare staff to deal with many types of events, equipment such as communication gear, computers, and state-of-the-art tools to detect biological agents, and additional staff that have led ADPH's response to numerous emergencies.

## Snapshot of Public Health Preparedness

Below are activities conducted by Alabama 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 <sup>1</sup>	Yes
	- Primary method for receiving urgent disease reports* <sup>2</sup>	Telephone
	Linked state and local health personnel to share information about disease outbreaks across state lines (through the CDC <i>Epi-X</i> system) <sup>3</sup>	Yes
	Conducted year-round surveillance for seasonal influenza <sup>4</sup>	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.

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



# Alabama



## 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 Alabama laboratories in the Laboratory Response Network <sup>1</sup>	1
	Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA “fingerprinting” techniques (PFGE): <sup>2</sup>	
	- 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
	Rapidly identified <i>Listeria monocytogenes</i> using advanced DNA “fingerprinting” techniques (PFGE): <sup>2</sup>	
	- Number of samples received (partial year, 9/06 – 2/07)	1
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	100%
	Had a laboratory information management system that could create, send, and receive messages <sup>3</sup> (8/05 – 8/06)	Yes
	- System complied with CDC information technology standards (PHIN) <sup>3</sup> (8/05 – 8/06)	No
Crosscutting	Had a rapid method to send urgent messages to frontline laboratories that perform initial screening of clinical specimens <sup>3</sup> (8/05 – 8/06)	Yes
	Conducted bioterrorism exercise that met CDC criteria <sup>4</sup> (8/05 – 8/06)	No
	Conducted exercise to test chemical readiness that met CDC criteria <sup>4</sup> (8/05 – 8/06)	Yes

<sup>1</sup> CDC, DBPR; 2007; <sup>2</sup> CDC, DSLR; 2007; <sup>3</sup> APHL, Public Health Laboratory Issues in Brief: Bioterrorism Capacity; May 2007; <sup>4</sup> 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) <sup>1,2</sup>	Yes
	Alabama SNS plan reviewed by CDC <sup>2</sup>	Yes
	- Score on CDC technical assistance review (1-100)	92
	Number of Alabama cities in the Cities Readiness Initiative <sup>3</sup>	1
Crosscutting	Developed roles and responsibilities for a multi-jurisdictional response (ICS) with: <sup>1</sup> (8/05 – 8/06)	
	- Hospitals	Yes
	- Local/regional emergency management agencies	Yes
	- Federal emergency management agencies	No
	Public health department staff participated in training to support cooperative agreement activities <sup>4</sup>	Yes
	Public health laboratories conducted training for first responders <sup>5</sup> (8/05 – 8/06)	No response
	Activated public health emergency operations center as part of a drill, exercise, or real event <sup>6</sup> (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 <sup>6</sup> (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 <sup>6</sup> (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.

<sup>1</sup> 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.

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