

## Arizona Responds to an Influx of Hurricane Katrina Evacuees Partnerships play key roles in comprehensive emergency response.



Phoenix, Arizona received 576 evacuees by plane from New Orleans within one week of Hurricane Katrina's landfall in 2005. Because of

cooperative agreement funding, the Arizona Department of Health Services had the resources to coordinate the sheltering of evacuees, conduct effective infection control and health screening, and implement an on-site clinic at the shelter. Local organizations and the medical community also contributed resources to assist the evacuees over the two weeks of public health and medical operations.

Public health activities included the administration of vaccines, tuberculosis screening, laboratory analyses of patient samples, pharmacy services, emergency medical services transports, hospital referrals, behavioral health services, food safety inspections, and comprehensive infection control and sanitation services.

The clinic served both evacuees housed at the shelter and other evacuees who arrived independently. Medical and epidemiological data were collected at the clinic, and other data also were obtained from various organizations

providing health services to evacuees. In total, 826 patients were seen at the clinic, for a total of 1,427 visits. Because of the comprehensive infection control measures taken at the shelter throughout the operation no outbreaks were detected, although many patients reported symptoms related to infectious diseases.

**According to the Arizona Department of Health Services, the cooperative agreement is valuable because funds have supported all required planning, development, implementation, monitoring activities, and resources to improve Arizona's capability to respond to a public health emergency. Five years prior to the cooperative agreement, no one program was solely dedicated to public health emergency preparedness and response. Since then, the state has consolidated its two public health preparedness and response offices into a single Bureau of Emergency Preparedness and Response.**

## Snapshot of Public Health Preparedness

Below are activities conducted by Arizona 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



# Arizona



## 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 Arizona 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)	22
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	77%
	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)	3
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	67%
	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)	Yes
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	
Crosscutting	Conducted bioterrorism exercise that met CDC criteria <sup>4</sup> (8/05 – 8/06)	Yes
	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
	Arizona SNS plan reviewed by CDC <sup>2</sup>	Yes
	- Score on CDC technical assistance review (1-100)	86
	Number of Arizona 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	Yes
	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
	Activated public health emergency operations center as part of a drill, exercise, or real event* <sup>16</sup> (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 <sup>16</sup> (partial year, 9/06 – 2/07)	Yes	
Improve	Finalized at least one after-action report with an improvement plan following an exercise or real event <sup>16</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.

† 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