Kentucky Deploys Public Health Teams to Support Hurricane Recovery

Local investments in public health preparedness can support nationwide response efforts.

In September 2005, the Kentucky Department for Public Health (KDPH) deployed public health workers to assist the Mississippi Department for Public Health in Hurricane Katrina recovery efforts. Through improvements in infrastructure and training using funds from the cooperative agreement, KDPH strike teams were ready for deployment to a disaster region. Continuing partnerships with emergency management, sanitation, and hospitals allowed KDPH to send six teams over a three-month period through the Emergency Management Assistance Compact system. Teams consisted of public health environmentalists, nurses, pharmacists, and public health preparedness planners from both state and local public health departments. They assisted with food safety, food salvage and disposal, food- and water-related illness, water sampling, clean water sources, special needs shelters, and distribution of medications.

During this critical time, KDPH used newly implemented information technology, such as interactive video conferencing, to allow public health officials to communicate "face-to-face" with response partners across the state and assist in planning for the 6,000 evacuees that were coming to Kentucky. Constant collaboration between state agencies helped connect displaced people with medical and social services. The web-based Health Alert Network and satellite radios were used to share information throughout the response. The online Kentucky Health Emergency Listing of Professionals for Surge was used to register volunteers for assistance, as well as evacuees coming into Kentucky. A toll-free phone center in the newly equipped KDPH Operations Center received calls from evacuees and volunteers.

According to the Kentucky Department for Public Health, the cooperative agreement is valuable because funds have addressed critical needs in Kentucky's capacity to respond to the growing magnitude of public health threats and emergencies. The majority of funds have been placed at the local level since response to disasters occurs first at the local level. In addition, the necessary staff have been available to carry out projects and purchase new technologies.

Snapshot of Public Health Preparedness

Below are activities conducted by Kentucky 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]	Electronic Reporting
	Linked state and local health personnel to share information about disease outbreaks across state lines (through the CDC *Epi-X* 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

Kentucky

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 Kentucky laboratories in the Laboratory Response Network[1]	3
	Rapidly identified *E. coli* O157:H7 using advanced DNA "fingerprinting" techniques (PFGE):[2]	
	- Number of samples received (partial year, 9/06 – 2/07)	36
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	92%
	Rapidly identified *Listeria monocytogenes* 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
	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)	N/A

[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
	Kentucky SNS plan reviewed by CDC[2]	Yes
	- Score on CDC technical assistance review (1-100)	85
	Number of Kentucky 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)	No Response
	Activated public health emergency operations center as part of a drill, exercise, or real event*†[6] (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†[6] (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†[6] (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