Minnesota Responds to Interstate Bridge Collapse

Information sharing is critical to effective emergency response.

In August 2007, the Interstate 35W bridge across the Mississippi River in Minneapolis, Minnesota collapsed, leaving 13 people dead and nearly 100 injured. Hospitals, emergency medical services, and state public health staff were alerted within minutes of the incident and began monitoring real-time information on the patients, where they were transported, their condition, and the status of hospital availability. Within hours of the incident, most patients had been rescued, triaged, and transported to hospitals.

After the initial collapse, the Minnesota Department of Health and other state and federal agencies assisted the City of Minneapolis to find potentially harmful substances as a result of the bridge collapse, and also initiated public health protection measures during the cleanup and demolition that followed. Air, water, and bridge materials were sampled or monitored and no public health hazards were detected, providing critical information to responders and the surrounding community.

Multiple communication strategies led to effective information sharing among public health departments, the media, and the public. Local and state public health staff coordinated behavioral health and grief support services using the Medical Reserve Corps and a statewide network of registered and credentialed volunteers. In coordination with the American Red Cross, public health professionals supported families through the recovery phase and planned for long-term support. Prior regional planning and coordination had clarified specific responsibilities and means of communication during an emergency.

According to the Minnesota Department of Health, the cooperative agreement is valuable because it has allowed the state to implement systems and foster partnerships that otherwise would not have been possible. The dedicated funding has allowed Minnesota to develop additional emergency response and preparedness activities and programs.

Snapshot of Public Health Preparedness

Below are activities conducted by Minnesota 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 *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

Minnesota

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 Minnesota 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)	87
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	94%
	Rapidly identified *Listeria monocytogenes* using advanced DNA "fingerprinting" techniques (PFGE):[2]	
	- Number of samples received (partial year, 9/06 – 2/07)	15
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	93%
	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)	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
	Minnesota SNS plan reviewed by CDC[2]	Yes
	- Score on CDC technical assistance review (1-100)	81
	Number of Minnesota 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	No
	- Federal emergency management agencies	No
	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*[†6] (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[†6] (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[†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