North Dakota

http://www.ndhealth.gov/epr

North Dakota Responds to Northwood Tornado

Incident Command System ensures a well-coordinated and effective response.

In August 2007, the town of Northwood, North Dakota was hit by a tornado with sustained winds ranging from 165 to 200 miles per hour. Nearly every building was damaged in the town of about 1,000 people. The tornado's path was five miles long and nearly one mile in width. One person was killed and eighteen others were injured.

In the early morning after the tornado struck, the North Dakota Department of Health (NDDoH) emergency operations center (EOC) was activated and in contact with both the state EOC and Grand Forks Public Health Department. Throughout the week, the NDDoH responded to requests for assistance from the city of Northwood, Grand Forks Public Health Departments, and the North Dakota Division of Emergency Services. One system that proved useful during the response was the WebEOC, which linked local and state EOCs and allowed others to keep abreast of the latest activities.

The utilization of the Incident Command System (ICS) to organize public health and medical response under state emergency operations procedures allowed for a coordinated and effective response. Many divisions and NDDoH employees contributed to the response efforts. The ICS enabled multiple agencies and individuals to participate in the coordinated efforts at state and local levels.

According to the North Dakota Department of Health, the cooperative agreement is valuable because it has enabled North Dakota to build a substantial public health and preparedness response capacity that would not have existed through any other means. A public health response system has been built at state and local levels and consists of many major components.

Snapshot of Public Health Preparedness

Below are activities conducted by North Dakota 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

North Dakota

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 North Dakota laboratories in the Laboratory Response Network[1]	1
	Rapidly identified *E. coli* O157:H7 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	100%
	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)	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
	North Dakota SNS plan reviewed by CDC[2]	Yes
	- Score on CDC technical assistance review (1-100)	77
	Number of North Dakota 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)	Yes
	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