

Alaska Exercises Pandemic Influenza Plan during a Real Outbreak

Exercising response plans during real events improves preparation for future large-scale events.



The Alaska Division of Public Health (DPH) seized an opportunity in 2007 to exercise response to an outbreak that was similar to an

influenza pandemic scenario, which could potentially overwhelm public health, emergency response, and health care systems. In late January, a northern Alaskan hospital in the town of Barrow started receiving pediatric patients suffering with respiratory syncytial virus (RSV), the most common cause of respiratory tract infection among children younger than 1 year old. Within one month, the town had already seen triple their annual number of RSV cases. With cases occurring across Alaska, patients quickly filled all of the available pediatric intensive care units in the state and necessitated the use of adult ICU beds for overflow. DPH activated its Emergency Operations Center (EOC) and coordinated an inter-agency teleconference to share outbreak information with all partner agencies and to address the immediate needs of medical communities in affected cities. The teleconference included representatives from public health and emergency response agencies at the local and state levels, hospitals, and the Alaska Native Tribal Health Consortium.

In addition, epidemiologists started a statewide program to track the spread of RSV and other respiratory illnesses. The EOC used this information to track possible hot spots in an attempt to stem any other outbreaks similar in size and scope to the one in Barrow. The EOC was able to train DPH staff in their roles in an emergency and engage partner agencies in their expected roles during a large-scale event. The public information team was able to practice developing and disseminating risk communication and public education materials for a statewide event.

According to the Alaska Division of Public Health, the cooperative agreement is valuable because funds have been critical in connecting important stakeholders for an all-hazards approach to preparedness. Bringing together hospitals, environmental health organizations, tribal health organizations, homeland security, local emergency management, and first responders is crucial in all-hazards preparedness.

Snapshot of Public Health Preparedness

Below are activities conducted by Alaska 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 <i>Epi-X</i> 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



Alaska



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 Alaska laboratories in the Laboratory Response Network ¹	2
	Rapidly identified <i>E. coli</i> O157:H7 using advanced DNA “fingerprinting” techniques (PFGE): ²	
	- Number of samples received (partial year, 9/06 – 2/07)	2
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	100%
	Rapidly identified <i>Listeria monocytogenes</i> 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
Crosscutting	Had a rapid method to send urgent messages to frontline laboratories that perform initial screening of clinical specimens ³ (8/05 – 8/06)	Yes
	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
	Alaska SNS plan reviewed by CDC ²	Yes
	- Score on CDC technical assistance review (1-100)	80
	Number of Alaska 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
Improve	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
	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