

Vermont's Full-scale Exercise of *Operation Pandemic Influenza*

Extensive exercising is important to test the readiness of all components of an emergency response plan.



Vermont conducted *Operation Pandemic Influenza*, a full-scale, 2-week exercise in July 2007, to evaluate a multi-faceted, statewide

response to a pandemic avian influenza outbreak. The emergency scenario included the discovery of avian influenza on a poultry farm in southern Vermont and the quarantine of students at two Vermont colleges.

The Health Alert Network was tested to rapidly exchange information among health professionals. The state emergency operations centers also were activated. The new emergency management system, DisasterLAN, was effectively used to keep key state support roles updated on critical information. Information also was provided to the public through activation of the Crisis and Emergency Risk Communication plan.

The exercise provided an opportunity for state departments of health and agriculture, hospitals, universities, emergency management, and the National Guard to practice critical skills required should the state need to activate public health emergency plans. Partners tested disease surveillance, epidemiologic investigation, and response to detect and control the spread of pandemic influenza, as well as laboratory capacity to test and confirm clinical samples. The exercise also simulated the request, receipt, storage, and dispensation of Strategic National Stockpile assets from CDC. Delivery of influenza vaccine by community clinics and the system to monitor distribution and use of influenza vaccine were also tested.

According to the Vermont Department of Health, the cooperative agreement is valuable because the state now has a dedicated Office of Public Health Preparedness & Emergency Medical Services that coordinates all work in this area. Laboratory abilities to test numerous chemical and biological agents have increased substantially, and the necessary staff are in place in times of emergency.

Snapshot of Public Health Preparedness

Below are activities conducted by Vermont 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



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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 Vermont laboratories in the Laboratory Response Network ¹	1
	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)	3
	- 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)	No	
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)	No

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
	Vermont SNS plan reviewed by CDC ²	Yes
	- Score on CDC technical assistance review (1-100)	90
	Number of Vermont 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	No
	- 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
	Activated public health emergency operations center as part of a drill, exercise, or real event ^{*16} (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 ¹⁶ (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 ¹⁶ (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