Connecticut's Statewide Exercise to Distribute Emergency Medications

Exercises are critical to ensure successful federal-state-local interactions during an emergency.

In April 2006, the Connecticut Department of Public Health (DPH) conducted a full-scale seven-day exercise to test the state's ability to order, receive, and distribute medications from the CDC Strategic National Stockpile (SNS) in the event of a public health emergency. An outbreak of a deadly infectious disease was simulated in which the local pharmaceutical supply ran out. The cooperation of federal, state and local government agencies, hospitals, municipalities, and schools was critical to the success of this exercise.

The exercise involved a mock receipt, storage, and staging of medical assets from the SNS and the distribution of assets to seven local public health departments and four hospitals across the state that acted as local points of dispensing (POD) and treatment centers, respectively. DPH delivered simulated medications to distribution points throughout the state within 24 hours of receipt. Local public health officials then worked to dispense 1,000 regimens per hour to residents and hospitals.

DPH collaborated with the Department of Emergency Management and Homeland Security (DEMHS) to plan this exercise according to Federal Homeland Security Exercise and Evaluation Program guidelines. Local public health departments that did not host a POD provided planning and operational support. DPH, DEMHS, and participating localities and hospitals activated their respective emergency operations centers and used the Incident Command System throughout the response. As a result, PODs distributed medication to a total of 1,539 volunteer "patients" across the state. This was the first time dispensing throughput had been documented in great detail, and the data will serve as a baseline on which to improve mass dispensing.

According to the Connecticut Department of Public Health, the cooperative agreement is valuable because the state has been able to build several key preparedness components and bring authority and legitimacy to planning for emergencies that might never have happened without the cooperative agreement. Newly hired staff for planning have also been critical for exercising, improved communications, and standardization of planning activities.

Snapshot of Public Health Preparedness

Below are activities conducted by Connecticut 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

Connecticut

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 Connecticut 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)	None
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	N/A
	Rapidly identified *Listeria monocytogenes* using advanced DNA "fingerprinting" techniques (PFGE):[2]	
	- Number of samples received (partial year, 9/06 – 2/07)	17
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	100%
	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)	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
	Connecticut SNS plan reviewed by CDC[2]	Yes
	- Score on CDC technical assistance review (1-100)	69
	Number of Connecticut cities in the Cities Readiness Initiative[3]	2
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)	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