



Maryland

http://bioterrorism.dhmh.state.md.us



Maryland Responds to Letters Containing White Powder

State and local surveillance helps identify emergencies at the national level.



The daily work of epidemiologists in public health departments involves routine data collection about disease patterns and trends. However, in 2005 a field epidemiologist at the Maryland Department of Health and Mental Hygiene (DHMH) emphasized the need for immediate response to potential health threats. In March, DHMH received a report from Maryland's eastern shore about a letter containing white powder. The epidemiologist immediately initiated the DHMH white powder protocol and communication network, which had been established after the anthrax letter threats of 2001. Within hours, another letter with white powder was reported from the far western region of the state. Again, the epidemiologist initiated the white powder protocol, with the additional recommendation that the situations across the state be linked and investigated further.

DHMH leadership followed this recommendation and moved quickly to involve law enforcement officials in Maryland. Ultimately, the Federal Bureau of Investigation became involved due to related letters found in Kentucky and as far away as Alaska. Subsequent laboratory testing

determined that the white powder was not anthrax. Further investigations led to one man as the source of all of the threatening letters and supported a criminal conviction. This response demonstrates the importance of having well-trained staff, relationships with law enforcement, and plans in place before a potential event occurs.

According to the Maryland Department of Health and Mental Hygiene, the cooperative agreement is valuable because funds have allowed Maryland to hire and train staff, purchase needed equipment, and conduct exercises. Public health preparedness accomplishments have included developing emergency plans, conducting drills to prepare for mass vaccinations, and implementing an around-the-clock call system to make experts available during emergencies.

Snapshot of Public Health Preparedness

Below are activities conducted by Maryland 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 Maryland laboratories in the Laboratory Response Network ¹	9
	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)	22
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	91%
	Rapidly identified <i>Listeria monocytogenes</i> using advanced DNA “fingerprinting” techniques (PFGE): ²	
	- Number of samples received (partial year, 9/06 – 2/07)	12
	- Percentage of test results submitted to CDC database (PulseNet) within 4 days	75%
	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
	Maryland SNS plan reviewed by CDC ²	Yes
	- Score on CDC technical assistance review (1-100)	64
	Number of Maryland 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 ^{*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)	Yes	
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.

¹ 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