# South Dakota

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## South Dakota Learns from a Pandemic Influenza Exercise

### Exercising prepares states to effectively manage partners' responses during an emergency.

The South Dakota pandemic influenza tabletop exercise was held in November 2006. The primary purpose of the exercise was to test the execution of the state's pandemic influenza plan during all phases of a simulated pandemic influenza event. Fifty participants and observers represented South Dakota state public health, emergency management, transportation, education, human services, and information agencies. The exercise scenario simulated the spread of avian influenza virus from Southeast Asia to North American cities and, eventually, to the state of South Dakota.

Participants reviewed state and local plans for isolation and quarantine, laboratory capacity to identify influenza virus types, means to distribute resources, communication plans with the public and between state and local emergency operations, and the state unified command structure. Key findings from this exercise identified both areas in which South Dakota was well-prepared for this type of public health emergency and improvements that could be made in preparation for future events. Improvements or clarification could be made in resource allocation/tracking, definition of state/local roles, policies for personnel, school closures, antiviral release, and travel restriction.

**According to the South Dakota Department of Health, the cooperative agreement is valuable because** the state has been able to develop relationships and expertise that have enabled the development of planning and response to emerging health threats in a much more coordinated and effective manner. Cooperative agreement funding has also enabled South Dakota to increase activities related to planning, training, and building effective and mutually beneficial relationships.

## Snapshot of Public Health Preparedness

Below are activities conducted by South 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] | 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

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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 South 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) | 22 |
| | - Percentage of test results submitted to CDC database (PulseNet) within 4 days | 86% |
| | 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) | 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 |
| | South Dakota SNS plan reviewed by CDC[2] | Yes |
| | - Score on CDC technical assistance review (1-100) | 52 |
| | Number of South 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 | No |
| | 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*[†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