

# Colorado



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## Agencies Respond to Winter Storms in Southeast Colorado

A second major winter storm moved through Colorado the last week of 2006, after a storm brought the Denver metropolitan area to a standstill a week earlier. The second storm, which posed relatively minor problems in Denver, moved east, where some areas of the state were paralyzed with up to four feet of snow, and drifts as high as 10 feet.



In five days, the Colorado National Guard completed 137 missions, ranging from rescuing people stranded in vehicles or homes to dropping 80 tons of hay to cattle from helicopters and small aircraft. By the third day of the storm, 21 emergency facilities had provided shelter for nearly 700 people. The Colorado Department of Agriculture estimated that the storm left 360,000 head of grazing cattle without food and water. The full extent of the impact on livestock may not be known until spring, when the snow has melted.

The Governor requested a Presidential Snow Emergency Declaration to help fund response and recovery efforts, which were projected at more than \$2 million. At least 15 building roofs collapsed under the weight of the snow. Residences, businesses and health care facilities were without power for periods ranging from several hours to many days.

### About Southeast Colorado

The region is a six-county area of 9,598 square miles and 51,000 people. It is a rural area, with the largest city, Lamar, recording a population of 8,605. It is the only region in the state in which the population decreased from 2000 to 2005. The economy is largely agricultural, or what the census data calls “agribusiness.”

### Public Health Responds

At the state level, the Colorado Department of Public Health and Environment began monitoring the situation as soon as the State Division of Emergency Management activated several state agencies. Though the state health department was not activated with other agencies, after the situation reports noted three days without power in some areas, the department’s emergency manager requested activation.

- The state health department’s staff began contacting long-term care, dialysis, acute care and home health agencies and facilities to help assess needs.



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- Hazardous Materials staff monitored an oil leak.
- Air Quality staff monitored a gas leak.
- Water Quality staff worked with the Colorado Department of Agriculture on surface water issues related to dead animals. The state health and agriculture departments issued a joint news release on disposal of carcasses.
- Consumer Protection staff issued an advisory on refrigerated food.
- Consumer protection reviewed regulatory records to determine whether there were any commercial dairy cattle in the area affected by the storm, which may have interrupted milk supplies.
- The department's emergency manager coordinated all efforts among the divisions involved in the response, and communicated with the State Division of Emergency Management. Coordination with the area command in the Southeast Region also proved essential.

### The Public Health Role



In the meantime at the regional level, the Regional Public Health Planner for the Southeast Region coordinated the local public health response to a severe winter storm that prevented all surface transportation from accessing or moving within the area. The regional planner persisted until she identified the area command and shared her concerns from the public health perspective. As a result of the extensive preparedness and response activities over the last several years, the Southeast Regional Public Health Planner and local public health staff were able to provide much needed assistance. Fortunately, several months prior, the public health staff exercised with area home health care agencies for a major snowstorm event. The agencies were able to apply that experience and the lessons learned during the blizzard.

Viewing one their most important roles as identifying potential obstacles to care, regional and local public health employed rapid assessment expertise to check on facilities' and agencies' resources for managing and coordinating the response to the enormous obstacle to health care access. Some of these issues included snow removal; staffing shortages; medical waste; facility damage; supply shortages; movement of patients; ability of patients to get to the facility (e.g., dialysis); ability of agencies to get to patients (e.g., home health care); and ability of patients to get medication.

The regional public health planner asked the area command to activate Emergency Support Function 8 at the local and regional level. The response and recovery effort required the following emergency measures in which public health was involved:

- Patients were moved from an assisted living facility to a nursing home due to a roof collapse.
- Meals on Wheels reassigned its food delivery role, as Meals on Wheels volunteers were unable to deliver to homebound clientele.
- Community members loaned small generators to Holly Nursing Care as the facility's generator burned up due to the heavy load needed for 3-½ days during the power outage.
- A nursing home in Holly was asked to function as a special needs shelter.



- Public works and other emergency workers employed heroic measures to transport staff who were needed at acute care facilities. Public health mapped the area staff to identify those with adequate transportation who were closest to people in need of transport, food, generators, medications, etc.
- Mental health patients were unable to get to their designated facility to obtain medications that needed to be monitored by staff. However, the regional mental health center assessed the situation and helped their patients identify services to get them to the appropriate facilities to continue medications.
- Public health recommended that mental health issue a news release during recovery phase to acknowledge the loss of the livestock and people without electricity.
- Dialysis patients have limited incomes and assistance with snow removal. Public health helped to identify volunteers to help with snow removal and transportation.
- Distribution centers closed in the Denver area, which delayed delivery of pharmaceuticals and other supplies to the Southeast Region. Public health helped to identify alternatives, and many pharmacists issued limited supplies of medications for an interim solution.
- Conference calls were conducted region wide to assess ongoing issues such as leaking roofs, waterline breaks, health, medical and mortuary coordination and mitigation issues should the area lose electricity or running water.

### Public Health Support for Region

Public health leaders at the state requested activation of Emergency Support Function 8 and those in the region mobilized themselves to respond to their community needs. Public health:



- Provided rapid assessment of disrupted health sectors
- Made recommendations for addressing immediate needs for each type of facility or service provider
- Monitored pharmaceutical supplies
- Located health and medical expertise to address the disaster
- Obtained information about shelter operations to provide special needs assistance
- Located and reached out to at-risk populations
- Developed public health messages for general audiences
- Helped locate volunteers to respond to specific situations
- Coordinated with healthcare facility staff, and state ESF 8 lead

The state health department’s emergency manager noted that the push over the last year to train all public health staff in incident command and the National Incident Management System paid off. All divisions were familiar with the coordination and reporting requirements, and their responsibilities under ESF 8.

At the local level, regional staff were able to apply NIMS procedures to their coordination efforts, as well. Regional Surge Capacity Planning meetings and coordinating exercises with partner hospitals, home health, mortuary and EMS entities provided a good foundation for coordination during a crisis. A recent exercise was developed by public health for home health care agencies and hospital personnel to test coordination in a snow emergency. Planning, training and exercising efforts provided much needed practice for the very situation faced throughout the Southeast Region of Colorado.



One relatively recent resource that could have been employed, if needed, was COpharm, a statewide health alert network to coordinate pharmaceutical resources in an emergency. Though it was designed to be used in a situation in which the state may need to coordinate inventorying or redistribution of resources such as antibiotics or vaccines, the system may be used for any pharmaceutical or pharmacy supplies. If, for example, the region had expended its supplies of insulin, the state health department could use COpharm to locate extra supplies for the emergency. Since distribution centers, primarily in the metropolitan Denver area, were closed for a short time during the first storm, supplies to other areas of the state were delayed. COpharm would assist in identifying needed resources and providing them to areas with shortages.

## Lessons Learned

As with all emergency situations, the events of December 2006 and January 2007 helped public health staff to identify some gaps in their planning and work with other agencies. The snow emergency reinforced the need:

- for health facilities' management to have up-to-date patient lists and emergency contacts at their homes;
- for ESF 8 lead agencies to have healthcare facility contact numbers at home;
- for health facilities to recommend to patients that they consider signing waivers to release health information during emergency situations only;
- to identify staff who have four-wheel-drive vehicles;
- to map the homes of staff, particularly those living close to facilities;
- to coordinate with county commissioners for reassigning county employees during an incident;
- to create a means of staff sharing among health agencies, to shift staff to acute care centers;
- to provide leadership within the incident command structure, whether or not ESF 8 is activated; and
- to request ESF 8 activation through incident command and emergency operations centers.



The main issue to be addressed following the recovery is that the neither the State Division of Emergency Management nor the regional emergency managers requested public health activation (Emergency Support Function 8). ESF 8 should be visible from the beginning of events to ensure the local area command is in contact with the public health agencies that can help coordinate response to ensure continued access to needed care. Though public health has participated in many interdisciplinary exercises, the snow emergency made clear that there still is a lack of understanding of public health's role.

## Supporting Documents

- After-Action Review from Public Health, with photos (presentation)
- News articles
- After-Action Report from Emergency Management

## Additional Information

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