

The Longest Mile

Preparing for Disasters on the Interstates of the West

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In fall of 2004 a 33-vehicle pileup occurred on a foggy stretch of I-80 between Laramie and Cheyenne, with 33 injuries reported and two deaths confirmed. Emergency response teams from the F. E. Warren Air Force Base, the Wyoming Air National Guard, and municipal and rural fire departments from both Laramie and Albany Counties responded. Injured persons were taken to hospitals in Laramie, Cheyenne, and Ft. Collins, Colorado. The incident resulted in road closure, and road damage caused eastbound traffic to be confined to Laramie or diverted south through Colorado and north on US 287 and US 220 to I-25 until repairs were completed. This accident gave emergency planners a small foretaste of the potential chaos that could result from a natural emergency or a terrorist attack on a Wyoming interstate highway.

Wyoming is the ninth largest state (97,914 square miles) with the smallest population (493,782, 2000 US Census). This expansive area and sparse population density leads to unique considerations when it comes to natural and intentional disaster preparedness. The three major interstate highways (I-80, I-90, and I-25) that run 914 miles through Wyoming serve as trucking routes and major arteries for both interstate and intrastate transportation. On various portions of these interstates, average daily traffic is as high as 26,115 on I-80, 23,780 on I-25, and 9,370 on I-90. Not surprisingly, the state's population density is higher along the interstate routes, which traverse seven of the state's largest counties with 60 percent of the state's population. The state's eight largest cities also lie along or at the intersection of interstates.

Potential for disaster

Wyoming's natural resources, agriculture production, and the geographical placement of its three major interstates places the state at risk for natural and intentional disasters. Major highways pass near military installations and mineral extraction sites that provide energy sources including coal, natural gas, coal bed methane, and crude oil for areas throughout the US. Additionally, attention has recently increasingly focused on the potential for terrorist attacks on major highway intersections in Cheyenne, which houses state and federal government offices. Therefore, disaster planning in Wyoming must incorporate preparedness plans for intentional highway-related disasters perpetrated by foreign or domestic groups that aim to disrupt the state's infrastructure or nation's transportation system or that oppose the expansion of various mining and energy industries.

Distinctive emergency planning considerations along Wyoming highways need to include preparedness related

to the transportation of hazardous materials, especially munitions and radioactive or biochemical materials; road hazards and closures because of extremes in weather; and the potential for a major earthquake, which can affect a large geographical area and result in subsequent natural disasters including rockslides, fires, and flooding. In addition, I-80, in the southern portion of the state, runs along the transcontinental railroad corridor and may be secondarily affected by a leakage or spill of radioactive or biochemical material carried on nearby railroad cars.

Disaster planners also recognize the potential for an influx of people resulting from a real or perceived threat along the densely populated Colorado Front Range area just to the south. A general panic and mass exodus of people from Colorado could quickly overwhelm Wyoming's infrastructure and emergency management capacity. Public health responses to such circumstances include addressing capacity for adequate food, shelter, and sanitation, and coordinating resources, including ensuring availability of adequate medical services and supplies.

Capacity for public health response

Rural Wyoming communities' responses to natural disasters such as snowstorms, rockslides, fires, and floods have resulted in a population that is self-reliant and knowledgeable about personal, family, and community preparedness. Wyoming communities have long been prepared to function somewhat self-sufficiently. Their relative isolation resulting from geographic separation by distance or mountain ranges and exacerbated by frequent snowstorms has led to a spirit of cooperation that serves Wyoming well in planning for and responding to disasters. As early as 1949 when flooding shut down Eastern Wyoming, its communities worked together to respond and protect their citizens and visitors. More recent opportunities to assess and exercise local response capacities occur when seasonal snowstorms result in highway closures stranding truckers and tourists.

Customarily, however, weather-related highway closures last up to 12 hours, rarely up to 24 hours, and almost never beyond 24 hours. If a disaster required closure beyond 24 hours, it is unlikely that hotels and motels, grocery stores, and restaurants in more rural areas would have sufficient capacity to support large numbers of stranded travelers. Such a disaster, with the potential to increase local populations several-fold, would almost certainly challenge the resources and infrastructure of local communities to meet suddenly expanded safety and public health needs.

Since 2001, Wyoming has recognized that public health professionals are integral to effective emergency re-

response. Specific public health roles in disaster planning, response, and recovery continue to be more precisely defined as public health workers develop this area of responsibility. In the highway-related disasters such roles may include disease surveillance, hazard assessment, shelter management, management of pharmaceuticals and medical supplies, health and safety education, and volunteer coordination.

The public health system in Wyoming is centralized. Each county has a Public Health Nursing (PHN) office and most PHN managers are employees of Wyoming Department of Health (WDH). To increase public health's participation in disaster planning, the state PHN office has established an All Hazard Response Coordinator (AHRC) position in every county that did not already have one. Most of these positions are funded through the state's Bio-terrorism Preparedness Program. AHRCs report to the local PHN Managers, and they also closely coordinate their efforts with each other, the WDH nursing office, and state emergency planners. At a more local level, public health employees actively participate with other first responders on Local Emergency Planning Councils (LEPC) to define roles and responsibilities for emergency response based on local resources and need. Recently strengthened ongoing relationships with law enforcement, first responders, and the community at large, mean that public health is better placed than ever to serve as an effective partner during emergency response.

Collaborating at all levels

The means for addressing large-scale, interstate-related disasters are incorporated into Wyoming's homeland security and disaster plans, coordinated by the state's Office of Homeland Security (OHS). In Wyoming, as in other states, OHS standard operating procedures specify that initial response authority rests with the local emergency manager in consultation with local government officials. At the local level, emergency managers working with LEPCs are responsible for developing plans and coordinating response and recovery efforts in each county. If a disaster response requires resources beyond those available in the community, local officials appeal to the governor. Depending on the magnitude of the disaster, the governor calls a meeting of the crisis management team, and may activate the Crisis Command Center (CCC). The CCC includes, as appropriate to the situation, representatives from the Department of Transportation, Office of Homeland Security, military, the state Health Officer, law enforcement, volunteer disaster response agencies, and so on. If state resources become overwhelmed, a disaster declaration may be made, and FEMA coordinates federal response and assistance. The overall plan enhances the capacity of various local, state, and federal programs to coordinate efforts when working to prevent or when responding to and recovering from natural or man-made disasters.

Response planning in Wyoming is characterized by strong collaboration between local responders and local law enforcement, and locals coordinate well with OHS. According to Jim Case, chief of the Plans Division of the Wyoming OHS, "Local folks (planners and responders) have come from the field, and are ready to go" in respond-

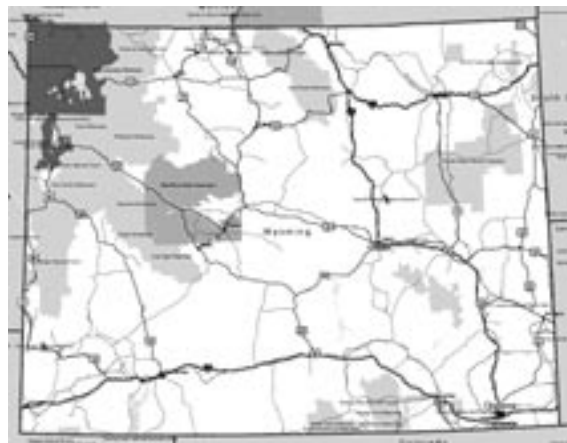
ing to community disasters. One local EMS responder concurs that most major incidents, especially if relatively short-termed, could be handled at the local level because of the innate hardiness of rural Wyoming residents and because of well-coordinated local emergency plans and the sense of community cooperation seen in rural areas.

In the past public health representatives have not been involved in the state-level highway hazard mitigation planning process. However, participation in planning will be critical as local procedures and protocols are developed to implement state policy. Future considerations should include planning for public health and safety needs along potential highway by-pass routes, as well as contingency planning for delivery of core public health services in communities affected and isolated by a transportation disaster.

In Wyoming, a sparse population and a citizenry that often wears several hats require that all phases of disaster planning be conducted in the spirit of cooperation. Collaboration at

all levels is critical. State and local emergency planners continue to assess, develop plans for, and exercise our emergency response system. All hazards emergency response is a relatively new

role for public health professionals. However, it is increasingly recognized that public health is a critical player in emergency planning if communities are to effectively respond and recover from natural or man-made disasters. In recent years, public health professionals have actively participated on exercise design teams, and specific roles are refined, practiced, and critiqued with each exercise. Wyoming hasn't conducted statewide exercises specifically to test plans for intra- and interstate highway disasters, but county, state, and regional disaster preparedness exercises coupled with response to smaller-scale emergencies have afforded the opportunity to refine Wyoming's transportation-related emergency planning and response. ■



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Resources

Wyoming Department of Health, Public Health and Terrorism Preparedness Program <http://wdh.state.wy.us/hazards/index.asp>.

Wyoming Office of Homeland Security wyohomelandsecurity.state.wy.us.

Wyoming Division of the Federal Highway Administration www.fhwa.dot.gov/wydiv/index.htm.