

TOPOFF Exercise Offers Lessons for Preparedness

Planning for a massive emergency is crucial, but only practice locates gaps in preparedness. In May 2003, state, local, and federal agencies spent five days practicing responses to events they hope will never happen.

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Two years prior to the devastating events of September 11, 2001, the U.S. Congress mandated that America's top government officials participate in a national training program on responding to attacks by terrorists. The first TOPOFF exercise was held in Denver, CO, Portsmouth, NH, and Washington, DC, during May 2000. Subsequent national training and exercise programs for responders incorporated lessons learned from the TOPOFF 2000 exercise, as did the planning for TOPOFF 2.

Staging a disaster

Plans for TOPOFF 2 included a combination of natural disasters and terrorism events designed to overwhelm local, state, and federal agencies in Seattle, King County, Pierce County, and Washington State, as well as in Chicago and its surrounding counties. British Columbia and Ottawa, Canada, also participated, since disasters do not respect national borders.

Planning for the exercise took more than a year

and included leaders of law enforcement, public health, fire service, wastewater, public works, emergency manage-

ment, hospitals, and volunteer organizations. In some cases the participants had never worked together before. The networking process that started during the exercise continues, and the leaders agree that their efforts sealed important, enduring relationships.

As a complicating factor when the full-scale exercise began on May 12, participants were given the scenario that a cyber event the week before had affected the states' communication infrastructure. Then they received the report of an explosion in Seattle of a Radiological Dispersal Device (RDD).

At the same time, Chicago hospitals were reporting an increase of illnesses but had not yet concluded what had caused the illnesses. On May 13, a bomb explosion occurred on a transit bus on which terrorists were holding hostages in Pierce County, south of Tacoma, Washington, and on May 14 reports arrived of a hostile takeover of a Washington State ferry.

After 36 hours of struggle to respond to the cascade of disasters, the participants sat down together to look at recovery issues. On the final day, May 16, participants reviewed and assessed their experiences, focusing particularly on emergency public information, emergency public policy/decision making, communications and connectivity, resource allocation, jurisdiction, anticipating the enemy, and exercise conduct and design.

Lessons learned

Review and assessment of the Washington State Department of Health's experience with the TOPOFF exercise has uncovered a variety of problems with its emergency response process. Most of them touch on problems other response agencies also experienced and can be applied system-wide.

Disaster medical supplies distribution was hampered by unclear procedures.

Officials at the federal departments of Health and Human Services (DHHS) and Homeland Security (DHS) were uncertain about how to meet a state request for disaster medical supplies. As a result, regional and national officials were unable to respond rapidly to an urgent request for supplies from the Strategic National Stockpile (SNS). SNS officials insisted that the request for supplies come from the governor, despite the governor having already announced a Declaration of Emergency and a formal request for assistance under the Stafford Act. The confusion appears to be an artifact of the transfer of the ESF-8 Health and Medical Services coordination function and the SNS from DHHS to DHS.

Recommendation. DHS and DHHS should sort out these responsibilities and provide clear instructions to state health officials on how to obtain supplemental medical supplies in times of emergency.



"Bomb blast" site used in TOPOFF exercise.

Staffing and staff scheduling were inadequate.

Current procedures have the State Department of Health responding to many emergency centers. In an actual emergency this could result in a shortfall of trained staff, minimizing their effectiveness to support the centers. During the exercise, personnel assigned to 12-hour shifts lasted for three or four days, but in an emergency that continued beyond a few days, other trained staff would be needed to replace them. Often participants did not adhere to the 12-hour limitations and stayed much longer, some for the full 36 hours. Exhausted staff reduced the department's ability to function and provide the necessary support services.

Recommendation. Require shorter shifts to maintain a certain level of productivity and look at either reducing the number of emergency centers supported or increasing available manpower to support those centers.

Communication with outside agencies on radiation issues was ineffective and unsuccessful.

Most first responders, local politicians, health care providers, and a number of governmental agencies are unfamiliar with how to deal with radioactivity or radiation. The scientific terminology, tools for assessment, and principals of protection were difficult to communicate.

Recommendation. Identify and educate potential audiences ahead of time. Provide regular outreach programs to the response community, as well as the health department staff, and train staff to communicate information about radiation issues more effectively.

Established procedures for activating and using federal assets were not followed.

A lot of federal support arrives after a disaster. If proper protocols are not established or followed, federal aid may be misdirected, useless, or even harmful to response efforts. During the TOPOFF exercise, for example, the coordination of the arrival from the Federal Radiological Monitoring and Assessment Center of specialized scientists, technical hardware, and detection equipment failed due to inadequate communication efforts. This delayed the revision of the hazardous areas perimeter as well as the recommendation of protective actions.

Recommendation. Federal assets will be coming whether wanted or not. Local and state agencies must be prepared to direct the use of these assets. Procedures should be established, trained for, followed, and practiced to ensure proficiency.

Staff did not fully understand the needs of the local emergency medical services units and hospitals.

Current protocols are unclear as to who should communicate with the on-scene medical personnel

and facilities that handle the victims. During this exercise little communication was given to the hospitals regarding the radioactive material encountered. Needed medical care was delayed because of the misconception of how to handle a radioactively contaminated victim.

Recommendation. Communication responsibilities among all potential responders to an emergency event, regardless of their employers, need to be reviewed and clarified in advance of the emergency. Systems should be established for regular communication among all health responders.

Guidance and direction for initiating short- and long-term recovery was lacking.

Much has been written on how to address the first 48 hours of an emergency, but little information is available about recovery. We must consider not only environmental and

human consequences but also regional economic recovery. Recovery from a radiological or biological/chemical disaster comes with more problems than a natural disaster.

Recommendation. Local, state, and federal agencies need to address recovery issues and prepare not only guidance but also methods of prevention and preparedness similar to what is being done today for smallpox and anthrax. Identify the additional aspects, such as long-lived characteristics, that radioactive materials possess and include such things as long-term clean up, hazard perception, and regional economic factors.

Conclusion

In the final analysis, TOPOFF 2 showed us that the region has good basic plans. As a result of the exercise, we know each other better, and we have met our federal contacts who will be working with us in an emergency.

TOPOFF 3, which is already being developed, will continue the mission, build on our strengths, and expand public health's ability to address threats to the nation. 🐾



Local responders tend the "injured" during the TOPOFF exercise.

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