

National benefits of strengthening nuclear security through tabletop exercises: perspectives from US communities

Summary:

A common operational strategy should unify and integrate Federal, State, and local response actions for the duration of a nuclear or radiological incident. However, coordination mechanisms and objectives of the different response groups will change depending on the phase of an incident. Incident response starts at the local community level with local first responders in the immediate aftermath of an incident. From the perspectives of U.S. local communities, this presentation demonstrates how tabletop exercises can strengthen nuclear security for enhanced cross-sector communications, cooperation, and integration among Federal, State, and local resources in the immediate aftermath of a nuclear/radiological incident. Moreover, national level tabletop exercises strengthen nuclear security by bringing together and strengthening the whole of government approach; promoting and cross-pollinating nuclear and radiological response technical experts; facilitating the development of local radiation-specific response plans; and raising awareness of current threats and the geographical and national resources available to counter them.

These perspectives, lessons learned, and observations are from the established Weapons of Mass Destruction (WMD) Counterterrorism Exercise Program within the Department of Energy, National Nuclear Security Administration, Office of Nuclear Incident Policy and Cooperation. Since its start in 1999, the WMD Counterterrorism Exercise Program has conducted more than 170 different WMD counterterrorism, preparedness, and response exercises across the United States and with key foreign partners, with over 13,000 international, Federal, State, and local participating officials. The program aims to promote awareness of terrorist threats associated with WMD materials; examine WMD counterterrorism prevention and response procedures, and exercise cross-sector communications, cooperation and team building.

Preparedness

- Strategy and the Planning Process: tabletop exercises bring together and strengthen the whole community to prevent, counter, and respond to a nuclear or radiological incident. Through the WMD counterterrorism tabletop exercise program, the Office of Nuclear Incident Policy and Cooperation has observed a number of local jurisdictions that have developed radiation-specific response plans, often including a communications component. These plans not only help identify and codify information pathways and roles for various authorities, but they also identify resources and available expertise both locally and provided by the Federal government. The plans also include the procedures for accessing those resources.
- Promoting Technical Experts: full community exercises (all levels of government) are not only a valuable tool for assessing plans, policies and procedures, but should be considered an opportunity to expose the response community to radiation subject matter experts.
- Cross-pollination of expertise: successful response to a nuclear/radiological incident relies on the acknowledgement of multiple expert communities, including: communications, radiation/health physics, and emergency response; by providing a forum for these communities to interact and learn from each other, they are better positioned to support public messaging during an emergency.
- Municipality planning case study from a U.S. city: operating in a regulatory environment necessitated by the proximity of two nuclear reactors has created an uncommon degree of familiarity with radiation and associated response plans. This experience enhanced their exercise performance and clearly impacts readiness.

Immediate Response

- Promote Awareness of Nuclear/Radiological Threats: tabletop exercises can raise awareness and subsequently enhance prevention and response tactics, techniques, and procedures, building an in-depth understanding of specific responsibilities which start at the local and community level.
- Exercise geographically specific resources: local authorities should be positioned to use networks and resources provided by specific sites, such as universities and hospitals. This facilitates a quicker response within a small community that may be directly impacted by a radiological event.
- Exercise phased actions and tiered response: coordinating structures start at the local level and are essential in aligning the key roles and responsibilities of Federal and State resources.
- Establish information pathways: while immediate messaging is ongoing, information pathways should be established to subsequently support more detailed and specific information as additional resources arrive. However, it is important to emphasize that immediate messaging cannot wait on the establishment of these information sharing pathways.

Long-Term

- By this time in the response/recovery, Federal assets will be deployed to assist with long challenges
- The accuracy and consistency of early operations and messaging directly impacts the credibility of long term planning.
- Pathways for information sharing that support unified public messaging must be established early and these should be the same information sharing pathways that support response operations and response decision making.

Gender

Male

State

United States

Author: Mr ESTES, Derek (United States, Department of Energy, National Nuclear Security Administration)

Presenter: Mr ESTES, Derek (United States, Department of Energy, National Nuclear Security Administration)

Track Classification: CC: Good practices in the development and execution of nuclear security exercises (e.g. tabletop, drills and field exercises);