Counter Terrorism Operations Support (CTOS)

Background
As a member of the National Domestic Preparedness Consortium, the U.S. Department of Energy, National Nuclear Security Administration (NNSA)/CTOS program develops and conducts training courses. These courses are for the U.S. Department of Homeland Security (DHS) Federal Emergency Management Agency/National Preparedness Directorate National Training and Education Division, Counter Weapons of Mass Destruction Office and the National Guard Bureau. This partnership of nationally recognized public entities, DHS and NNSA has created a well coordinated and fully integrated training program of the highest caliber. In recent years, the various CTOS programs have met the training and education needs of more than 21,000 emergency responders per year in state, local and tribal governments, protecting the nation from a potential radiological or nuclear weapon of mass destruction (WMD).

Courses
The CTOS program develops and delivers training for emergency responders to take immediate, decisive action to prevent or respond to terrorist use of radiological and nuclear WMDs, such as radiation dispersal devices (RDDs) and improvised nuclear devices (INDs). Training and course materials are provided at no cost to eligible participants.

Participants train with radioactive material in classroom practice, scenario-based drills, and performance evaluations. Courses use multiple types of radioactive material but are designed so that participants receive only minimal radiation exposure (lower than a chest X-ray or a typical round-trip airline flight across the U.S.). The radiation levels are sufficient to learn techniques required in an actual incident involving much higher radiation levels. Each participant operates and employs radiation detection and measurement instruments throughout the course.

Courses are conducted at the NNSS, onsite at participant locations and online. For a list of all mobile, resident and online courses, visit the CTOS website at: www.ctosnnsa.org.

Radiological/Nuclear WMD Incident Exercise Site (T-1 Site)
Established in 2004, T-1 is unlike any other training ground in the United States. Located 65 miles northwest of Las Vegas, in a remote, highly secure area of the NNSS, T-1 is used by more than 2,000 military and first responders...
annually. Training at CTOS enhances the security of the United States by providing nuclear and radiological emergency response capabilities and training programs to these personnel.

There is a small amount of nuclear fallout remaining from detonations that took place between 1952 and 1957 below the surface of the soil, providing a realistic and safe training area today. The soil at T-1 emits low levels of radiation, simulating widespread radiological contamination from an IND or multiple RDDs, while posing minimal risk to participants. Adding to the realism, radioactive debris created during the nuclear detonations, such as twisted steel fragments and sand melted into radioactive glass (trinity glass or trinitite), are still scattered throughout T-1, and industrial, sealed radioactive sources are also placed in exercise areas to create higher levels of radiation as needed for training objectives.

1. Ground Zero of Actual Nuclear Detonations
2. RDD in Downtown with Buses and Cars
3. RDD at Airport with Planes and Trucks
4. RDD at Train Station with Locomotive
5. Rail Station/Classroom
6. Industrial Site/Clandestine Laboratory
7. Attacks on Tractor Trailer Transport Vehicles
8. Airliner Debris Field
9. Participant Staging Area
10. Contaminated Restaurant and Strip Mall
11. Residences/Safe Houses
12. Railroad Tunnel
13. Crashed/Damaged Vehicles