

**Prevent Mission Courses:**

U.S. Department of Homeland Security certified courses are designed to improve the nation’s capability to detect unauthorized attempts to import, store, develop, or transport radiological/nuclear material that could be used detrimentally against the homeland.

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**Primary Screener/Personal Radiation Detector (PER-243)**

ILT 1-day (8 hrs/7 contact hrs) Mobile

PER-243 provides the Primary Screener with training to perform a preliminary radiological assessment with a Personal Radiation Detector (PRD). Training also includes operating a PRD to detect radiation, locate a source, measure radiation levels, assess the threat status of a situation, categorize threats, and adjudicate alarms.

**PRND Backpack Operations for the Primary Screener (PER-246)**

ILT 1/2-day (4 hrs) Mobile

PER-246 provides the Primary Screener with training in the basic operation and employment of the Backpack Radiation Detection system, which includes radiological material detection and assessment involving people, packages, vehicles, and facilities. This course enables Preventive Radiological/Nuclear Detection (PRND) personnel assigned Primary Screener duties to operate the Backpack systems, which provide increased capability and sensitivity.

**PRND Secondary Screener/Radio-Isotope Identification Device (PER-245)**

ILT 2-day (16 hrs/14 contact hrs) Mobile

PER-245 provides the Secondary Screener with training to operate Radio-Isotope Identification Devices (RIIDs) to detect radiation, locate the source, measure radiation levels, identify radioactive isotopes, assess the threat status of a situation, and adjudicate the alarms by categorizing threats, performing reachback, and resolving alarms. In addition, Secondary Screeners perform radiological assessments with RIIDs.

**Preventive Radiological/Nuclear Detection Team Operations (PER-318)**

ILT 4-day (32 hrs/28 contact hrs) Mobile

PER-318 provides both Primary and Secondary Screeners with the skills to maximize PRND equipment capabilities while efficiently and effectively executing essential tasks to protect and secure critical infrastructure, large venues, and special events using National Incident Management System (NIMS) typed teams. Drills are based on specific competencies, behaviors, and tasks leveraging typed personnel, equipment, and teams.

**Preventive Radiological/Nuclear Detection Maritime Operations (PER-350)**

ILT 3-day (24 hrs/21 contact hrs) Mobile

PER-350 establishes a standardized operational understanding of small-vessel maritime PRND operations, and provides the skills necessary to execute missions safely and effectively. Participants, working as a crew team, will demonstrate proficiency in primary and secondary screening, safety and tactical positioning, choke point setup and operation, and area sweeps in the maritime environment. Drills are based on specific competencies, behaviors, and tasks leveraging NIMS typed personnel, equipment, and teams.

**Preventive Radiological/Nuclear Detection Team Leader (PER-351)**

ILT 2-day (16 hrs/14 contact hrs) Mobile

PER-351 uses real-world scenarios to train Participants how to plan PRND operations using the Incident Command System (ICS) and NIMS typed resources. The Incident Action Plan (IAP) format—with applicable ICS forms—will be used. Missions will include choke points, checkpoints, and area and facility sweeps. The scenarios will range in size from single-resource assignments through a Special Event Assessment Rating (SEAR) 1 or 2 event with nationally deployed assets. Participants will be able to demonstrate the supervisory skills required of the Team Leader position and demonstrate proficiency in the performance of the duties associated with the position, as outlined in the NIMS typing documents.

**Radiation Instruments Employment (PER-355)**

ILT 1/2-day (4 hrs) Mobile

PER-355 applies to both the Prevent and Response mission areas. This class uses a series of drills to reinforce the skills of Emergency Responders previously trained to use radiation detection instruments.

**NOTE:** While CTOS provides instruments for training purposes, Participants are encouraged to bring their department’s instruments.

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**Refresher Courses:**

These refresher courses train Emergency personnel who have previously completed the associated Instructor-led courses.

**Primary Screener/Personal Radiation Detector Refresher (PER-300)**

ILT/WBT 2 hrs Mobile

PER-300 provides refresher training to Primary Screeners who have successfully completed the Instructor-led PER-243 Primary Screener/Personal Radiation Detector course. PER-300 emphasizes crucial training points from PER-243, while reviewing the knowledge and skills required in the operation and employment of a PRD during the initial detection of radioactive materials in varying scenarios.

**PRND Backpack Refresher (PER-349)**

ILT 2 hrs Mobile

PER-349 provides refresher training on the basic operation and employment of the Backpack Radiation Detection system, which is used to detect, locate, measure, and assess the radiation level of unknown radiological materials on/in people, packages, vehicles, and facilities.
Introduction to Nuclear Detonation Effects and Response Strategies (PER-307)
ILT/WBT 1/2-day (4 hrs) Mobile
PER-307 provides overviews of the expected nuclear device detonation effects in a major U.S. city with current preplanning guidance and response strategy recommendations to maximize the preservation of life. The course provides First Responders, Key Leaders, Emergency Planners, and support personnel with nuclear detonation-specific response guidance including recognition, immediate actions, response planning, damage zones, fallout/radiation hazards, and shelter and evacuation strategies.

Population Monitoring at Community Reception Centers (PER-332)
ILT 1-day (8 hrs/7 contact hrs) Mobile
PER-332 provides fundamental knowledge and situational awareness to safely and effectively perform or assist population-monitoring duties at Community Reception Centers (CRCs) or similar facilities after a radiological/nuclear incident has occurred.

Radiation Instruments Operations (PER-345)
ILT 1/2-day (4 hrs) Mobile/Resident
PER-345 provides instrument operation skills needed by First Responders when responding to a radiological/nuclear incident, as well as an overview of detection equipment, including selection and general operation. Training encompasses the basic operations of dosimeters, PRDs, survey meters, and RIIDs. This course also enables First Responders to select the appropriate instrument operation in the performance of their mission.

Operations Level Response to Radiological/Nuclear WMD (PER-348)
ILT 1-day (8 hrs/7 contact hrs) Mobile
PER-348 is designed for Response mission operations and personnel who have little or no training in radiological/nuclear emergency WMD response. This course provides First Responders with fundamental knowledge regarding mission spaces related to radiological/nuclear threats. The Response mission area includes an overview of radiological instruments and protective measures, such as PPE and decontamination (i.e., Emergency, Gross, Mass, and Technical).

Operations Level Response to Radiological/Nuclear WMD for Emergency Medical Services/Healthcare (PER-370)
ILT 1-day (8 hrs/7 contact hrs) Mobile
PER-370 provides response-level training to those Participants who could provide medical services during a radiological/nuclear incident. The goal of the training is to increase Participants’ knowledge when responding to a radiological/nuclear WMD incident in the safest manner possible for themselves and victims. The course will provide Participants with information needed to work in a radiologically contaminated environment and to best help radiologically contaminated victims.

Response Mission Courses:
These courses train Emergency personnel to respond to radiological/nuclear Weapon of Mass Destruction (WMD) incidents. Both mobile and resident courses are performance-based, with sealed radioactive sources used to create realistic drills and practical exercises.

Train-the-Trainer Courses:
This program is available to local agency personnel that have successfully completed a CTOS Train-the-Trainer Course of Instruction from one or more of the following courses:
- Introduction to Radiological/Nuclear WMD Operations (AWR-140-1)
- Introduction to Radiological/Nuclear WMD Operations for Law Enforcement (AWR-346-1)
- Primary Screener/Personal Radiation Detector (PER-243-1)
- Primary Screener/Personal Radiation Detector Refresher (PER-300-1)
- PRND Backpack Refresher (PER-349-1)
Introductory Courses:

Introduction to Radiological/Nuclear WMD Operations (AWR-140)

ILT/WBT/TtT 1/2-day (4 hrs) Mobile
AWR-140 provides First Responders and others in Response or Support mission roles with an introduction to radiological/nuclear WMD operations. This course—which aligns with the Awareness level and Operations level competencies of NFPA® 472, “Standard for Professional Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents”—also provides fundamental knowledge in threat or incident recognition, protective measures, notifications, and incident area management.

Introduction to Radiological/Nuclear WMD Operations for Law Enforcement (AWR-346)

ILT/TtT 1/2-day (4 hrs) Mobile
AWR-346 provides Law Enforcement with fundamental knowledge in two distinct mission spaces related to radiological/nuclear threats: PRND and Response. PRND training covers program structure, operational modes, and federal assets. Response mission training provides an overview of threat or incident recognition, protective measures, notifications, and scene site management during a radiological/nuclear WMD incident as they relate to Law Enforcement operations.

Resident Training Courses
Resident courses conducted at the Nevada National Security Site offer a unique training venue, shaped by numerous nuclear detonations and radiological dispersal tests.

No Cost
Training is fully funded for qualified individuals from state, local, territorial, and tribal agencies.

Travel & Lodging
CTOS pays travel and per diem expenses for attendees, but cannot provide funds for attendees’ overtime and backfill. Federal employees may attend a resident course based on availability, but must provide their own travel and per diem expenses.

Mobile Training
Training can be delivered to your agency to support its organizational needs.

Indirect Training
CTOS authorizes training personnel to conduct specific CTOS courses of instruction in their home state or jurisdiction. These courses are certified by the U.S. Department of Homeland Security/Federal Emergency Management Agency/National Training and Education Division. This program is available to local agency personnel that have successfully completed a CTOS Train-the-Trainer Course of Instruction.

Enrollment Information
In order to attend a course delivered by one of the Federal Emergency Management Agency/National Preparedness Directorate training partners, a request must be submitted to the designated U.S. Department of Homeland Security training point of contact. To locate a training coordinator in your area, call 877.963.2867 or send an email to ctosreg@nv.doe.gov.

CTOS
Center for Radiological/Nuclear Training
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