# Counter Terrorism Operations Support (CTOS) Overview

#### **Mission:**

Our mission is to develop and deliver the most realistic and highest quality training in support of homeland security and the global war on terrorism using the unique assets of the Nevada Test Site and our extensive radiological expertise.

#### **Background:**

The U.S. Department of Energy, National Nuclear Security Administration's (NNSA) NTS is a member of the National Domestic Preparedness Consortium (NDPC). NTS develops and conducts training courses for Federal Emergency Management Agency (FEMA) National Preparedness Directorate (NPD) Training Exercise Integration and the U.S. Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO). Its continuing role is to provide expertise and training to the state and local emergency response community. This partnership of several nationally recognized public universities, the DHS, and NNSA are bound together into a single, well-coordinated and fully integrated training program of the highest caliber.

#### **Operations:**

The Counter Terrorism Operations Support (CTOS) Program at the NTS develops and delivers the training for emergency first responders. This training prepares the responders to take immediate, decisive action to prevent or mitigate terrorist use of radiological or nuclear weapons of mass destruction (WMD), such as Improvised Nuclear Devices (INDs) and Radiological Dispersal Devices (RDDs or "dirty bombs"). Training courses and exercises conducted at the NTS, municipality-hosted locations, and online, provide state and local first responders with the tools they need to protect their communities from these threats. The courses include:

- ♦ WMD Radiological/Nuclear Awareness (AWR-140 and AWR-140-W)
- ♦ WMD Radiological/Nuclear Awareness Train-the-Trainer (AWR-140-1)
- ◊ WMD Radiological/Nuclear Responder Operations (PER-240)
- ♦ WMD Radiological/Nuclear Course for Hazardous Material Technicians (PER-241)
- ♦ Personal Radiation Detector (PRD) (PER-243)
- ♦ Personal Radiation Detector (PRD) Train-the-Trainer (PER-243-1)
- ♦ Secondary Screener Radiation Isotope Identifier Device (PER-245 SS/RIID)
- ♦ Primary Screener Backpack Basic (PSBB) (course number pending; pilot phase)

This program trains approximately 10,000 first responders per year.

## Nevada Test Site:

The NTS is a massive outdoor laboratory and national experimental center originally established for nuclear weapons testing. There are 1,375 square miles of secluded and secure land with guarded boundaries and security areas. Located 65 miles northwest of Las Vegas, the NTS is isolated from population centers and provides a safe environment to conduct training using realistic scenarios.



Responders measure real radiation and contamination levels at the scene of a simulated terrorist attack

#### **Actual Radioactive Material:**

With the exception of awareness-level and online courses, all courses are "live agent," using radioactive material. These courses are designed and monitored so attendees receive only minor radiation dosages (lower than a chest X-ray or a typical round-trip airline flight across the U.S.); however, radiation levels are sufficient to practice techniques needed in a real incident involving much higher levels. Each attendee operates and employs radiation detection and measurement instruments throughout the course. Attendees practice with radioactive material in the classroom, and during drills and exercise scenarios. The NTS exercise areas can be configured in thousands of square feet at elevated radiation levels.



Layout of the Radiological/Nuclear WMD Incident Exercise Site (T-1 Site)

- 1. Ground Zero of Nuclear Detonations
- 2. RDD Downtown
- 3. RDD at Airport
- 4. RDD at Rail Station
- 5. Rail Station/Classroom
- 6. Industrial Site/Clandestine Lab
- 7. Attacks on Transport Vehicles
- 8. Airliner Debris Field
- 9. Attendee Staging Area
- 10. Contaminated Restaurant and Strip Mall
- 11. Residences/Safe-houses
- 12. Railroad Tunnel
- 13. Crashed/Damaged Vehicles

## Radiological/Nuclear WMD Incident Exercise Site:

The Radiological/Nuclear WMD Incident Exercise Site at the NTS was constructed after 9/11/2001 at the T-1 Site, located at the ground zero of four nuclear detonations conducted between 1952 and1957. The radioactive material remaining in the ground from the nuclear detonations produces safe radiation levels throughout the ten-acre exercise area, with higher than normal background radiation levels. Attendees train in an area with simulated widespread radiological contamination from an RDD or IND, without the risks of contaminating themselves. Additional radioactive material is also employed at each scenario site.

## **Capabilities:**

The NTS infrastructure is an essential element in a global network of key locations used on the war against terrorism for training, test and evaluation, and demonstrations of specialized technologies. Training the nation's first responders in a realistic, operational environment prior to facing a real world WMD event is essential where minutes and actions are critical.

For More Information, Contact the Registration Desk at: National Nuclear Security Administration/Nevada Site Office Counter Terrorism Operations Support Program P.O. Box 98521, M/S NLV126, Las Vegas, NV 89193-8521 702.295.3224 • 702.537.2639 Fax E-mail: ctosreg@nv.doe.gov www.ctosnnsa.org







# WMD Radiological/Nuclear Awareness Course AWR-140 and AWR-140-W

This awareness-level weapons of mass destruction (WMD) course is delivered throughout the nation to jurisdictions approved by the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk.

#### **Course Description:**

This course presents WMD radiological/nuclear overview designed for first responders and other personnel who are likely to be the first to arrive on the scene of a radiological/nuclear incident. It focuses on the basics of radiation, possible health effects, hazard identification, and proper notification procedures. The course consists of either classroom or online instruction.

## Cost, Course Length, and Delivery:

All Training and course materials are provided at no cost to eligible participants. This Course is 6 hours. Classroom training is delivered at the attendees' location by instructors who have successfully completed the WMD Radiological/Nuclear Awareness Train-The-Trainer Course (AWR-140-1).

This course is also available online as AWR-140-W at http://www.ctosnnsa.org.

## **Target Audience:**

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- Emergency Management Agency
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works
- ♦ Governmental Administrative
- ♦ Public Safety Communications
- ♦ Health Care
- ♦ Public Health
- Other skilled support personnel that provide immediate support services during prevention, response, and recovery operations



Recognize the characteristics of radiation burns as compared to thermal burns



Possible effects of an Improvised Nuclear Device

#### **Eligibility:**

It is the responsibility of the jurisdiction to select the course participants.

#### **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 0.6, continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.

#### **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery

#### **Enrollment Information:**

See Contact Information below, or register for the online course at <u>http://www.ctosnnsa.org</u>.

#### **Prerequisite:**

None



Typical radiography camera that could be stolen for illicit use



Recognizing characteristics of a smoke cloud from a nuclear detonation

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# WMD Radiological/Nuclear Awareness Train-The-Trainer AWR-140-1

This awareness-level weapons of mass destruction (WMD) course is delivered throughout the nation to jurisdictions approved by Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and their Centralized Scheduling and Information Desk.

## **Course Description:**

This course is designed to prepare trainers to deliver a six-hour WMD Radiological/Nuclear Awareness Course (AWR-140) for first responders and other personnel who are likely to be the first to arrive on the scene of a radiological/nuclear incident. The AWR-140 course focuses on the basics of radiation, radiation exposure, health effects, hazard identification, and proper notification procedures. Using a prepared lesson plan, each attendee will learn the how to deliver the AWR-140 course using platform presentation and classroom discussion.

## **Prerequisites:**

It is preferred but not required that attendees be instructor-qualified (National Fire Protection Association or equivalent).

## Course Length: 9 hours

## **Target Audience:**

All persons responsible for the training of:

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Emergency Management Agency
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works
- ♦ Governmental Administrative
- ♦ Public Safety Communications
- ♦ Health Care
- ♦ Public Health
- Other skilled support personnel that provide immediate support services during prevention, response, and recovery operations



An experienced instructor explains notification procedures



Possible effects of an Improvised Nuclear Device

#### **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 0.9 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.

#### **Eligibility:**

Jurisdictions select their course participants.

#### **Course Delivery:**

Classroom training is delivered at the attendees' designated location.

#### Cost:

All training and course materials are provided at no cost to eligible participants.

#### **Enrollment Information:**

In order to attend a training class delivered by one of the FEMA/NPD training partners, a request must be submitted to the designated U.S. Department of Homeland Security training point of contact. For the Training Coordinator in your area, please contact the FEMA/NPD Help Line at 800-368-6498.



Possible indicators of illicit use of radiological/nuclear material



Difference between exposure and contamination covered in classroom demonstrations

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# WMD Awareness-Level Training Course AWR-160

This awareness-level weapons of mass destruction (WMD) course will be delivered throughout the nation to jurisdictions approved by the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk.

#### **Course Description:**

Developed by the National Domestic Preparedness Consortium (NDPC), the WMD Awareness-Level Training Course is a six-hour training program that provides emergency responders with awarenesslevel instruction on recognition, avoidance, isolation, and notification techniques in a WMD environment. The course covers prevention and deterrence of chemical, biological, radiological, nuclear, and explosive (CBRNE) hazards.

## Cost, Course Length, and Delivery:

All Training and course materials are provided at no cost to eligible participants. This Course is 6 hours.

This course is also available online at

<u>http://www.ctosnnsa.org</u>. Attendees may also challenge the course and receive full credit if they pass the pretest (available online).

#### **Target Audience:**

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Emergency Management Agency
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works
- ♦ Governmental Administrative
- ♦ Public Safety Communications
- ♦ Health Care
- ♦ Public Health
- Other skilled support personnel that provide immediate support services during prevention, response, and recovery operations.

## **Eligibility:**

Responders applying for the course must submit the enrollment application provided by the NDPC.



Example of terrorist use of explosives



The RAIN concept is stressed throughout the course for all hazards



Use of the Emergency Response Guidebook is covered in this course

#### **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery

#### **Enrollment Information:**

See Contact Information below. To register for the online course go to <u>http://www.ctosnnsa.org</u>.

#### **Prerequisite:**

None



Effects of a single salt-sized grain of a primary explosive

#### **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 0.6 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.



Recognize the effects of a chemical blister agent



Radiation exposure versus radioactive contamination is covered in classroom demonstrations

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# Personal Radiation Detector Course (PRD) PER-243

This operations-level preventative radiological and nuclear detection (PRND) course is delivered throughout the nation to jurisdictions approved by Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk.

## **Course Description:**

This course is designed to train law enforcement and public safety officers to employ departmentprocured and issued personal radiation detectors (PRDs) within the bounds of the jurisdiction/agency operational environment, including local instruments, procedures, and legal considerations. The course provides training and extensive hands-on practice with actual radioactive material so that personnel employing a PRD in detection and interdiction missions will be able to do the following:

- Detect and locate the presence of radiation and/or radiological material.
- After receiving an alarm, identify and distinguish between the following:
  - False alarms
  - Alarms due to background radiation
  - Alarms due to legitimate causes
  - Alarms due to illicit radiological/nuclear material
- Upon detecting, locating, and assessing the alarm, measure the approximate radiation level that generated the alarm.
- Use radiological/nuclear material recognition factors to assist in assessing the situation.
- Upon discovering the illicit use of radiological/ nuclear material, initiate organizational protocols to ensure the health and safety of responders and the public.



After an initial survey around the vehicle, an officer pinpoints the location of the hidden radioactive material.

This is a "live agent" course using radioactive materials. This course is designed and monitored so attendees receive only minor radiation doses (lower than a chest X-ray or a typical round-trip airline flight across the U.S.) This course complies with ANSI N42.37-2006, "American National Standard for Training Requirements for Homeland Security Purposes Using Radiation Detector Instrumentation for Interdiction and Prevention."

# **Equipment:**

Each attendee will be issued a PRD instrument for use in the course. Each delivery of the PRD course will use one specific make and model of PRD, which will be the same as (or similar to) the instruments owned and issued by the agency being taught. The host agency may choose to provide the PRD instruments to be used in the course. See contact information for the current course availability on specific models of PRDs.



Examples of some PRD models taught in this course

#### Cost, Course Length, and Delivery:

All Training and course materials are provided at no cost to eligible participants. This course is seven (7) hours. All Training is provided at participant locations by a Mobile Training Team.

#### **Target Audience:**

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ◊ Public Works
- Other skilled personnel that provide immediate support services during prevention and deterrence of radiological/nuclear detection and interdiction operations

#### **Enrollment Information:**

In order to attend a training class delivered by one of the FEMA/NPD Training Partners, a request must be provided to the designated U.S. Department of Homeland Security State Administrative Agent (SAA) Training point of contact. For the training coordinator in your area, contact the FEMA/NPD Help Line at 800-368-6498.

#### **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery.

#### **Prerequisite:**

Attendees should be law enforcement, public safety officers, and other personnel who are issued a PRD, whose duties place them in locations where illicit radiological/nuclear material may be hidden, transported, assembled, and/or employed by terrorist elements.

#### **Eligibility:**

It is the responsibility of the jurisdiction to select the course participants.

## **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 0.7 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.

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# Personal Radiation Detector Course (PRD) Train the Trainer (TTT) PER-243-1

This operations-level preventative radiological and nuclear detection (PRND) course is delivered at the Nevada Test Site to jurisdictions approved by Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk

# **Course Description:**

This course is designed to train law enforcement and public safety officers to instruct the Personal Radiation Detector (PRD) PER 243 Course. PER-243-1 provides Train the Trainer level instruction on the employment of issued personal radiation detectors and includes instruction on local instruments, procedures, and legal considerations. The course provides training, teach-back experience, and extensive hands-on practice with real radioactive sources so that personnel instructing the employment of PRDs in detection and interdiction missions will be able to instruct PRD users on:

- Detection and locating the presence of radiation and/or radiological material.
- After receiving an alarm, how to identify and distinguish between the following:
  - False alarms
  - Alarms due to background radiation
  - · Alarms due to legitimate causes
  - Alarms due to illicit radiological/nuclear material
- Upon detecting, locating, and assessing the alarm, attendees will be taught how to instruct on measuring the approximate radiation level that generated the alarm.
- ♦ Use radiological/nuclear material recognition factors to assist in assessing the situation.
- Upon discovering the illicit use of radiological/nuclear material, initiate organizational protocols to ensure the health and safety of responders and the public.

This course complies with ANSI N42.37-2006 "American National Standard for Training Requirements for Homeland Security Purposes Using Radiation Detector Instrumentation for Interdiction and Prevention."

# **Equipment:**

Each attendee will be issued a PRD instrument for use in the course. Each delivery of the PRD TTT course will use one specific make and model of PRD, which will be the same as (or as close as practical to) the instruments owned and issued by the agency being taught.

See Contact Information for the current course availability on specific models of PRDs.













Examples of some PRD models taught in this course



Officer detects radiation near a person (mannequin)

#### **Course Length:**

This course is a four day program, one day (8 hours) of PER-243 and three days (24 hours) of PER-243-1.

#### **Cost and Delivery:**

All training, travel, lodging, meals and course materials are provided at no cost to eligible participants. The course is delivered at the CTOS training facilities located on the U.S. Department of Energy, National Nuclear Security Administration (DOE/NNSA) Nevada Test Site.

#### **Target Audience:**

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works

#### **Enrollment Information:**

In order to attend a training class delivered by one of the FEMA/NPD Training Partners, a request must be provided to the designated U.S. Department of Homeland Security State Administrative Agent (SAA) Training point of contact. For the training coordinator in your area, contact the FEMA/NPD Help Line at 800-368-6498.

## **Certificate:**

A certificate will be issued upon successful completion of the course.

#### **Performance Standard:**

Using the job aid provided attendees must pass a written test with a score of 70% or higher, and complete at least one teach-back exercise instructing at least one classroom or practical PER 243 module.

#### **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery.

#### **Prerequisite:**

Attendees should be law enforcement and public safety officers who are qualified instructors and have successfully completed PER-243 within the last year. Attendees must also attend the PER-243 course delivered as the first day of the four-day PRD TTT training program. Attendees must provide written documentation of instructor certification within their respective jurisdiction. Attendees must be part of a regional or statewide program that has developed a comprehensive plan for future delivery of PRD training in their region or state. Such plans require the jurisdiction to show acquisition of training equipment and radioactive source material for replicating PRD training locally. States and UASI regions that have completed their plan and received the required training material will be given priority in scheduling to train additional instructors.

## **Eligibility:**

It is the responsibility of the jurisdiction to select qualified course participants.

For More Information, Contact the Registration Desk at: National Nuclear Security Administration/Nevada Site Office Counter Terrorism Operations Support Program P.O. Box 98521, M/S NLV126, Las Vegas, NV 89193-8521 702.295.3224 • 702.537.2639 Fax E-mail: ctosreg@nv.doe.gov www.ctosnnsa.org

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# WMD Radiological/Nuclear Responder Operations Course PER-240

This operations-level weapons of mass destruction (WMD) course is designed to teach first responders how to respond to an incident involving a radiological or nuclear WMD, such as a Radiological Dispersal Device (RDD, or "Dirty Bomb") or an Improvised Nuclear Device (IND).

#### **Course Description:**

Responders are given hands-on experience with radiation fields while learning the basic operation of radiation detectors and dosimeters. Attendees are taught to conduct radiological surveys of personnel, vehicles, facilities, and outdoor areas. Hands-on activities blend cognitive knowledge of radiation and instruments with survey techniques used in detecting the presence of radiation, locating radioactive material, and measuring levels of radiation and radiological contamination.

Attendees also learn to select personal protective equipment (PPE), perform radiological decontamination, conduct team operations at a radioactive hot zone, and perform lifesaving rescue operations in high radiation areas.

The course culminates with an evaluation exercise requiring attendee teams, under a unified command, to respond to a scenario where a terrorist attack has dispersed radiological material at a facility or in a public transportation system.

Every participant will be issued a dosimeter and radiation survey meter; however, it is recommended that attendees bring their own department's equipment if available.

This is a "live agent" course using actual radioactive and nuclear materials. This course is designed and monitored so that attendees receive only minor radiation doses (lower than a chest X-ray or a typical round-trip airline flight across the U.S.)

## **Course Length:**

24 hours (three 8-hour days)

## **Prerequisite:**

Weapons of Mass Destruction Radiological/ Nuclear Awareness Course (AWR-140-W). This course is available online at http://www.ctosnnsa.org.



After rescuing victims of an RDD attack, responders detect radioactive contamination in a subway car.



A responder checks for safe radiation levels in a bus after a simulated RDD attack on a metropolitan bus station.



Responder team prepares to assess the scene after a simulated terrorist attack involving radioactive medical devices in a hospital.

## **Target Audience:**

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Emergency Management Agency
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works
- ◊ Governmental Administrative
- Public Safety Communications
- ♦ Health Care
- ♦ Public Health
- Other skilled support personnel that provide immediate support services during prevention, response, and recovery operations



Responders check the buildings surrounding the scene of a simulated RDD attack on a metropolitan bus station.

## **Eligibility:**

It is the responsibility of the jurisdiction to select qualified course participants.

## **Enrollment Information:**



Responders measure radiation and contamination levels in a clandestine lab at a simulated terrorist safe house.

#### **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 2.4 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.

## Cost:

All training and course materials are provided at no cost to eligible participants.

## **Course Delivery:**

The course is delivered by a Mobile Training Team at the participants' locations.

In order to attend a training class delivered by one of the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) partners, a request must be provided to the designated U.S. Department of Homeland Security training point of contact. For the training coordinator in your area, please contact the FEMA/NPD Help Line at 800-368-6498.

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# WMD Radiological/Nuclear Course for HazMat Technicians PER-241

The technician-level weapons of mass destruction (WMD) course prepares the hazardous materials (HazMat) technician to respond to an incident involving a radiological or nuclear WMD, such as a Radiological Dispersal Device (RDD, or "Dirty Bomb") or an Improvised Nuclear Device (IND). This course is delivered at the Nevada Test Site to jurisdictions approved by Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and their Centralized Scheduling and Information Desk.

#### **Course Description:**

The HazMat course provides the attendees with an awareness of the fundamentals of radiation, health effects, recognition, and terrorist use of radiation and radiological material. HazMat technicians are given hands-on experience with radiation fields while learning the basic operation of radiation detectors and dosimeters. Attendees are taught how to use these instruments to conduct surveys of personnel, vehicles, facilities, and outdoor areas. The hands-on activities blend cognitive knowledge of radiation and instruments with survey techniques used in detecting the presence of radiation, locating radioactive material, and measuring levels of radiation and radiological contamination.

HazMat technicians are taught operational considerations for working in high radiation areas, limiting responder radiation doses, and rescuing contaminated victims. Attendees form operational teams that deal with cadre-evaluated, realistic drills involving the probable terrorist use of radiological material. The course culminates with an evaluation exercise requiring attendee teams, under a unified command, to respond to a terrorist attack that has dispersed radiological material at the target facility. This is a "live agent" course using actual radiological and nuclear materials. This course is designed and monitored so that attendees receive only minor radiation doses (lower than a chest X-ray or a typical round-trip airline flight across the U.S.).

Course Length: 32 hours (four 8-hour days)

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Rendered image of potential WMD attack

## **Target Audience:**

The target audience includes attendees with technician-level training representing the following disciplines:

- ♦ Law Enforcement
- ♦ Emergency Medical Services
- ♦ Emergency Management Agency
- ♦ Fire Service
- ♦ Hazardous Materials (HazMat)
- ♦ Public Works
- ♦ Governmental Administrative
- ♦ Public Safety Communications
- ♦ Health Care
- ♦ Public Health
- Other skilled support personnel who provide immediate support services during prevention, response, and recovery operations



Decontamination exercise on simulated victims of an RDD.

#### **Certificate:**

A certificate will be issued upon successful completion of the course, acknowledging 3.2 continuing education units (CEUs) through the University of Nevada, Las Vegas (UNLV). A letter verifying CEUs can be provided upon request by contacting the Counter Terrorism Operations Support (CTOS) registration desk.

#### **Eligibility:**

This course is primarily intended for responders trained to the HazMat technician level. It is the responsibility of the jurisdiction to select qualified course participants.

#### **Prerequisites:**

Although not required, attendees should be State-Certified Hazardous Materials Technicians.

#### **Course Delivery:**

The course is delivered at the CTOS Program training facilities on the U.S. Department of Energy, National Nuclear Security Administration (DOE/NNSA) Nevada Test Site.

## Cost:

All training, travel, lodging, meals, and course materials are provided at no cost to eligible participants.

#### **Enrollment Information:**

In order to attend a training class delivered by one of the FEMA/NPD training partners, a request must be provided to the designated U.S. Department of Homeland Security training point of contact. For the Training Coordinator in your area, please contact the FEMA/NPD Help Line at 800-368-6498.

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# Secondary Screener Radiation Isotope Identifier Device (SS/RIID) Course

This operations-level preventive radiological and nuclear detection (PRND) course is delivered throughout the nation to regions, jurisdictions, or agencies approved by the Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk.

## **Course Description:**

This course is designed to train law enforcement officers, and personnel from other disciplines designated to support law enforcement agencies, to perform radiological/nuclear detection secondary screener duties, through the employment of radiation isotope identifier devices (RIIDs). The course provides training, which includes extensive hands-on practice utilizing actual radioactive material, to enable personnel assigned as secondary screeners to respond effectively to a request for assistance from a primary screener. As a result of this training, secondary screeners will be able to assist primary screeners by employing the RIID to perform the following detection mission tasks:

- Assist the primary screener in verifying the alarm and pinpointing/measuring the source of radiation that caused the alarm.
- Identify the name(s) and category of the radioactive material(s) and the confidence level of the identification result.
- Based on the RIID measurements and identification results, shipping documentation, interview results, assessment procedures, and recognition factors, assess and adjudicate the radiation alarm (on a person, package, vehicle, or facility) as innocent, illicit, or requiring further investigation.
- If the alarm requires further investigation, utilize technical reachback assistance, via telephone and email, to adjudicate the alarm.



Identifying hidden radioactive material in a vehicle

The SS/RIID is a pre-event detection course aimed at training personnel to perform secondary screener duties at points of illegal manufacture, transportation, deployment, and emplacement. This course does not train personnel in response activities for the activation/detonation of a weapon of mass destruction (WMD) or hazardous materials release.

This is a "live agent" course using radioactive materials, including combinations of innocent bulk cargo, simulated nuclear medical patients, industrial devices, and nuclear materials. This course is designed and monitored so participants receive only minor radiation doses (lower than a chest X-ray or a typical round-trip airline flight across the U.S.).

# **Equipment:**

Each team (two participants) will be issued a RIID for use in the course. Each delivery of the SS/RIID course will use one specific make and model of RIID, which will be the same as (or similar to) the instruments owned and issued by the agency being taught. The host agency may choose to provide the RIID instruments to be used in the course. Use contact information in the box below to obtain the current course availability for specific models of RIIDs.











#### Cost, Course Length, and Delivery:

All training and course materials are provided at no cost to eligible participants. This course is fourteen (14) contact hours, two (2) training days. All training is provided at the participant location by a mobile training team. Class size is sixteen (16) participants.



Using a RIID to determine if material is illicit

#### **Target Audience:**

Detection mission/operation primary screener trained participants from the following disciplines who will perform or conduct secondary screening duties:

- ➤ Law enforcement
- All disciplines supporting law enforcement radiological/nuclear detection operations.

# Certificate:

A certificate of completion will be issued upon successful completion of the course.

#### **Enrollment Information:**

In order to attend a training class delivered by one of the FEMA/NPD Training Partners, a request must be provided to the designated DHS State Administrative Agent (SAA) Training point of contact. For the training coordinator in your area, contact the FEMA/NPD Help Line at 800-368-6498.

For More Information, Contact the Registration Desk at: National Nuclear Security Administration/Nevada Site Office Counter Terrorism Operations Support Program P.O. Box 98521, M/S NLV126, Las Vegas, NV 89193-8521 702.295.3224 • 702.537.2639 Fax E-mail: ctosreg@nv.doe.gov www.ctosnnsa.org



## **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery.

#### **Eligibility:**

It is the responsibility of the jurisdiction to select the course participants.

#### **Prerequisite:**

- Participants should be law enforcement officers, or those disciplines that support law enforcement agencies, that are assigned secondary screener duties in support of radiological/nuclear detection missions/operations.
- It is recommended that participants be experienced primary screeners and have attended a radiological/nuclear weapons of mass destruction awareness level training course (such as AWR-140 or AWR-140-W WMD Radiological/Nuclear Awareness Course) and PER-243 Personnel Radiation Detector Course.



# Primary Screener Backpack Basic Course (PSBB)

This operations-level preventative radiological and nuclear detection (PRND) course will be delivered throughout the nation to jurisdictions or agencies approved by Federal Emergency Management Agency/National Preparedness Directorate (FEMA/NPD) and the Centralized Scheduling and Information Desk.

#### **Course Description**

This course is designed to train law enforcement and public safety officers to employ department procured and issued backpack radiation detection systems within the bounds of the jurisdiction/agency operational environment, including local instruments, procedures, and legal considerations. The course provides training and extensive hands-on practice with actual radioactive material so that personnel employing a backpack radiation detection system during detection and interdiction missions will be able to do the following:

- Detect, verify, and locate the presence of radiation and/or radiological material.
- ✤ After receiving an alarm, identify and distinguish between the following:
  - Non-Threat Innocent Alarms (background, NORM, and medical patient alarms)
  - Non-Threat Illegal Conveyance (radiological material transported or stored improperly)
  - Threat (illicit materials RED, RDD, or IND)
  - Unknown (requires additional assistance)
- Upon detecting, verifying, and locating the source of the alarm, measure the approximate radiation level that generated the alarm.
- Use radiological/nuclear material recognition factors to assist in assessing the situation.
- Upon discovering the illicit use of radiological/nuclear material, initiate organizational protocols to ensure the health and safety of the responders and the public.

This is a "live agent" course using radioactive materials. This course is designed and monitored so attendees receive only minor radiation doses (lower than a chest X-ray or a typical round trip



airline flight across the U.S.) This course complies with ANSI N42.37-2006, "American National Standard for Training Requirements for Homeland Security Purposes Using Radiation Detector Instrumentation for Interdiction and Prevention."

#### Equipment:

Each attendee will be issued a backpack radiation detection system for use in the course. Each delivery of the backpack radiation detection system course will use one specific make and model of the backpack radiation detection system, which will be the same as (or similar to) the instruments owned and issued by the agency being taught. The host agency may choose to provide the backpack systems to be used in the course. See contact information for the current course availability on specific models of backpack radiation detection systems.

Note: At the present time, only training for the Thermo Scientific PackEye Radiation Detection Backpack is available. Training for additional backpack systems will be developed as demand for specific backpack training increases.

#### Cost, Course Length, and Delivery:

All training and course materials are provided at no cost to eligible participants. This course is seven (7) hours. All training is provided at participant locations by a mobile training team.

#### **Target Audience:**

- Law Enforcement
- Fire Service
- Hazardous Materials (HazMat)
- Public Works
- Other skilled personnel that provide immediate support services during prevention and deterrence of radiological/nuclear detection and interdiction operations.

#### **Enrollment Information:**



In order to attend a training class delivered by one of the FEMA/NPD Training Partners, a request must be provided to the designated U.S. Department of Homeland Security State Administrative Agent (SAA) training point of contact. For the training coordinator in your area, contact the FEMA/NPD Help Line at 800-368-6498.

#### **Course Scheduling:**

Coordination between Counter Terrorism Operations Support (CTOS) and the hosting jurisdiction is required at least eight (8) weeks prior to the course delivery.

#### **Prerequisite:**

Attendees should be law enforcement, public safety officers, and other personnel who are issued a backpack radiation detection system, and whose duties place them in locations where illicit radiological/nuclear material may be hidden, transported, assembled, and/or employed by terrorist elements. Attendees should have completed Personal Radiation Detector Course (PER-243).

#### **Eligibility:**

It is the responsibility of the jurisdiction to select the course participants.

#### **Certificate:**

A Certificate of Completion is issued upon successful completion of the course.

#### For More Information, Contact the Registration Desk at:

National Nuclear Security Administration/Nevada Site Office Counter Terrorism Operations Support Program P.O. Box 98521, M/S NLV 126, Las Vegas, NV 89193-8521 702.295.3224 / 702.537.2639 Fax E-mail: ctosreg@nv.doe.gov www.ctosnnsa.org

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