

# WMD Radiological/Nuclear Awareness Course

**Min/Max Enrollment:** 10/50

**Hours:** 6 hours

**CEUs:** 0.6

**Format:** Instructor-Led

**DHS Course#:** AWR-140,

**Prerequisites:** FEMA Student ID

## Course Description

This course presents a WMD radiological/nuclear overview designed for first responders and other personnel who, in the course of their normal duties, 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, proper notification procedures, and the radiological/nuclear threat.

## Course Objectives

Upon completing this course, participants will be able to:

- LIST the three basic components of an atom.
- DESCRIBE the differences between ionizing radiation and non-ionizing radiation.
- DEFINE radioactivity.
- STATE the four basic types of ionizing radiation.
- DESCRIBE the shielding materials and biological hazards for each of the four types of ionizing radiation.
- EXPLAIN the differences between exposure to radiation and the contamination from radiological material.
- IDENTIFY the three techniques for minimizing exposure to radiation and radioactive material as low as reasonably achievable (ALARA).
- LIST the four major sources of natural background and man-made radiation.
- STATE the average annual dose to the general population from natural background and man-made sources of radiation.
- DESCRIBE the purpose of radiation dose limits and the guidance for emergency doses.
- DESCRIBE acute radiation dose and chronic radiation dose and the possible effects of each.
- STATE the routes of entry by which radioactive material can enter the body.
- IDENTIFY placards, symbols, and colors that indicate the presence of radiological material.
- DESCRIBE circumstances indicating the need for additional resources during an incident.
- DESCRIBE protective measures and how to initiate actions to protect others.
- STATE the functions of radiation meters and dosimeters

- DESCRIBE how radiological weapons may be obtained by terrorists and the methods used to employ them.
- DESCRIBE the current threat posed by terrorists using WMD radiological material.

## Target Audience/Discipline

Emergency Medical Services, Fire Service, Hazardous Materials (HazMat), Health Care, Law Enforcement, Public Health, Public Safety Communications, Public Works, Emergency Management

## Eligibility

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

## Certificate

A certificate will be issued upon successful completion of the course, granting 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 CTOS at [ctosnnsa@nv.doe.gov](mailto:ctosnnsa@nv.doe.gov).

## Cost

All training and course materials are provided at no cost to eligible participants. Funding provided by the Federal Emergency Management Agency/National Preparedness Directorate U.S. Department of Homeland Security.

## Compliance

This course enhances the competencies defined in National Fire Prevention Association NFPA 472, "Standard for Competence of Responders to Hazardous Materials/WMD Incidents," for responding to specific radiological/nuclear WMD incidents, and augments the responder's knowledge and skills to perform those duties and functions.

## Enrollment Information

See Email



Introduction to Ionizing Radiation