FRS 1046

## HAZARDOUS MATERIALS FIRST RESPONDER AWARENESS

Lecture Skill Fractional Credit

8 0 0.5

## **Course Description**

This course introduces the student to the principles of recognizing hazardous materials presence, protecting themselves from hazardous materials and calling for trained personnel, and securing the area safely.

Prerequisites: NONE Corequisite: NONE

Task List		
1.	Identify the definition of hazardous materials.	
2.	Identify the DOT hazard classes and divisions of hazardous materials and identify common examples of	
	materials in each hazard class or division.	
3.	Identify the primary hazards associated with each of the DOT hazard classes and divisions of hazardous	
	materials by class or division.	
4.	Identify typical container shapes that may indicate hazardous materials.	
5.	Identify typical occupancies and locations in the community where hazardous materials are manufactured,	
	transported, stored, used, or disposed of.	
6.	Identify typical container shapes that may indicate hazardous materials.	
7.	Identify facility and transportation marking and colors that indicate hazardous materials, including:	
	a. UN/NA identification numbers;	
	b. NFPA 704 markings;	
	c. Military hazardous materials markings;	
	d. Special hazard communication markings;	
	e. Pipeline marker; and	
	f. Container markings.	
8.	Given an NFPA 704 marking, identify the significance of the colors, numbers and special symbols.	
9.	Identify U.S. and Canadian placards and labels that indicate hazardous materials.	
10.	Identify the basic information on material safety data sheets (MSDS) and shipping papers that indicates	
	hazardous materials.	
11.	Identify where to find material safety data sheets (MSDS).	
12.	Identify entries on a material safety data sheet that indicate the presence of hazardous materials.	
13.	Identify the entries on shipping papers that indicate the presence of hazardous materials.	
14.	Match the name of the shipping papers found in transportation (air, highway, rail, and water) with the mode of	
	transportation.	
15.	Identify the person responsible for having the shipping papers in each mode of transportation.	
16.	Identify where the shipping papers are found in each mode of transportation.	
17.	Identify where the papers may be found in an emergency in each mode of transportation.	
18.	Identify examples of clues (other than occupancy/location, container shape, markings/color, placard/labels and	
	shipping papers) that use the senses of sight, sound, and odor to indicate hazardous materials.	
19.	Describe the limitations of using the senses in determining the presence or absence of hazardous materials.	
20.	Identify difficulties encountered in determining the specific names hazardous materials in both facilities and	
	transportation.	
21.	Identify sources for obtaining the names of, UN/NA identification numbers for, or types of placard associated	
	with hazardous materials in transportation.	
22.	Identify sources for obtaining the names of hazardous materials in a facility.	
23.	Identify the ways hazardous materials are harmful to people, the environment, and property at hazardous	
	materials incidents.	
24.	Identify the general routes of entry for human exposure to hazardous materials.	
25.	Given the current edition of the Emergency Response Guidebook, identify the three methods for determining	
	the appropriate guide page for a specific hazardous material.	

26.	Given the current edition of the Emergency Response Guidebook, identify the two general types of hazards found on each guide page.
27.	Identify the location of both the local emergency response plan and the organization's standard operating procedures.
28.	Given a copy of the current edition of the Emergency Response Guidebook, describe the difference between
20.	the protective action distances in the orange-bordered guide pages and the green-bordered pages in the
	document.
29.	Given the local emergency response plan or the organization's standard operating procedures, identify the role
	of the first responder at the awareness level during a hazardous materials incident.
30.	Given the local emergency response plan or the organization's standard operating procedures, identify the
	basic precautions to be taken to protect himself/herself and others in a hazardous materials incident.
31.	Identify the precautions necessary when providing emergency medical care to victims of hazardous materials
	incidents.
32.	Identify typical ignition sources found at scenes of hazardous materials incidents.
33.	Given the identity of various hazardous materials (name, UN/NA identification number, or type placard), identify the following response information using the current edition of the Emergency Response Guidebook:
	a. Emergency action (fire, spill, or leak and first aid);
	b. Personal protective equipment necessary; and
	c. Initial isolation and protective action distances.
34.	Given the current edition of the Emergency Response Guidebook and the name of a hazardous material,
	identify the recommended personal protective equipment for the particular incident from the following list of
	protective equipment:
	a. Street clothing and work uniforms;
	b. Structural firefighters' protective clothing;
	c. Positive pressure self-contained breathing apparatus;
	d. Chemical-protective clothing and equipment.
35.	Given the current edition of the Emergency Response Guidebook, identify the definitions for each of the
	following protective actions:
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	a. Isolate hazard area and deny entry;     b. Evacuate; and
	b. Evacuate; and c. In-place protection
36.	Given the current edition of the Emergency Response Guidebook, identify the shapes of recommended initial
30.	isolation and protective action zones.
37.	Given the current definition of the Emergency Response Guidebook, describe the difference between small
	and large spills as found in the table of isolation distances.
38.	Given the current edition of the Emergency Response Guidebook, identify the circumstances under which the
	following distances are used at a hazardous materials incident:
	a. Table of initial isolation and protective action distances; and
	b. Isolation distances in the numbered guides.
39.	Identify the techniques used to isolate the hazard area and deny entry to unauthorized persons at hazardous
40	materials incidents.
40.	Identify the initial notification procedures for hazardous materials incidents in the local emergency response plan or the organization's standard operating procedures.
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## **Instructor Equipment List**

Projector screen Chalkboard or marker board Overhead projector Slide projector TV/VCR

## Old FRT 235 / FRT 124