



# **Municipal First-on-the-Scene Participant Guide**

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Midwest Consortium for Hazardous Waste Worker Training

## **Acknowledgments**

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The Midwest Consortium developed this course under cooperative agreement number U45 ES06184 from the National Institute of Environmental Health Sciences.

We encourage you to comment on these materials. Please give your suggestions to those leading the program in which you are now enrolled or click on the Contact page of the Midwest Consortium website: <https://mwc.umn.edu/contact/>.

## **Warning**

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The material was prepared for use by experienced instructors in the training of persons who may witness a hazardous materials incident. Authors of this material have prepared it for the training of this category of workers as of the date specified on the title page. Users are cautioned that the subject is constantly evolving. Therefore, the material may require additions, deletions, or modifications to incorporate the effects of that evolution occurring after the date of this material preparation.

## **Disclaimer**

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This training is intended to meet the requirements of the OSHA Hazardous Waste Rule (29 CFR 1910.120) for first responder personnel (awareness level) who may be the first-on-the-scene at a hazardous materials incident. The training program covers basic hazard recognition, identification, reporting, and self-protection for individuals who may do preliminary observation of an event. It does **not** provide the necessary hazard recognition and protective skills required to perform emergency response activities. To undertake the activities of emergency responders, additional training is necessary.

For further information about this matter, consult the training instructor and/or your company's safety/emergency response plan or the Local Emergency Planning Committee for your city or county.

Content was updated August 4, 2023 and all web links are active as of that date; if you find an error, please inform the facilitator so that it can be updated.

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## **Introduction**

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You are here because you may be the first person on the scene at an incident involving hazardous materials. The term *hazardous material* will be defined during the program. Those who may be first-on-the-scene include police officers, county officials, emergency personnel, and private citizens. Incidents may be discovered near an industrial facility, on a major highway, or on a country road. As the first-on-the-scene, your job is to observe and report conditions to appropriate personnel. As personnel arrive with specialized training and equipment, they will assume control of the incident.

### **Course Objectives**

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When complete, you will be better able to:

- Identify hazardous materials and the risks they present
- Recognize potential outcomes related to hazardous materials during an emergency
- Understand the responsibilities as the first-on-the-scene
- Recognize the need for additional resources and to notify the appropriate personnel

We want you to participate in the program. Please ask questions about anything that you do not understand and/or anything you would like to have discussed in more detail.

## **Rights and Responsibilities**

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As the person first-on-the-scene, you must observe and report relevant information to the appropriate person. You have specific responsibilities that you must carry out to the best of your abilities. Along with these responsibilities, you should know about laws and regulations that provide worker rights.

### **Objectives**

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When complete, you will better be able to:

- Identify worker rights as defined by law
- Identify the first-on-the-scene role in the Incident Command System

### **“SARA” Is Your Friend**

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The Occupational Safety and Health Administration (OSHA) is the governmental agency that enforces health and safety regulations. In the Superfund Amendments and Reauthorization Act (SARA), Congress directed OSHA to develop requirements for training emergency responders.

OSHA's training requirements cover a wide range of emergency responders, from those first-on-the-scene to specialists. For those individuals who are likely to discover an incident during the course of their job, "awareness" training is required. This training was designed specifically to fulfill OSHA requirements for those who are first-on-the-scene.

**OSHA requires that awareness-level training include:**

1. An understanding of what hazardous materials are and the risks associated with them in an incident.
2. An understanding of the potential outcomes associated with an emergency created when hazardous materials are present.
3. The ability to recognize the presence of hazardous materials in an emergency.
4. The ability to identify the hazardous materials, if possible.
5. An understanding of the role of the first-on-the-scene awareness individual in the employer's emergency response plan. This includes site security, site control, and the use of the U.S. Department of Transportation Emergency Response Guidebook.
6. The ability to recognize the need for additional resources and to make notification to the appropriate personnel.

Additional training is required to control or contain a spill, aid in clean-up, rescue victims, or perform other on-site duties. If you are interested in other types of training programs, let your facilitator know.

**What Rights Does SARA Give You as a Worker?**

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Under the regulation issued by OSHA, your employer must provide a medical exam if you are injured or overexposed while performing emergency responder's (including first-on-the-scene) duties at a scene on his/her behalf. If you work for any private employer and are part of an organized emergency response activity, you are covered by OSHA. In all cases, a written emergency response plan is required. This plan must be available to you and your elected representatives, and you must be trained in your assigned role.

**What Rights Does SARA Give You as a Citizen?**

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Under another part of SARA, known as SARA Title III, emergency response plans for communities must be developed. This is also known as the Emergency Planning and Community Right-to-Know Act. In order for communities and states to develop comprehensive plans, state and local committees have been established. The Local Emergency Planning Committee (LEPC) generates the Local Emergency Response Plan (LERP); similarly, the State Commission writes a State Emergency Response Plan (SERP). Under Title III, officials at facilities with hazardous substances must develop their own Emergency Response Plan (ERP), cooperate with the state and local

committees, report releases, and make hazardous material information available to appropriate state and local officials, including the Local Emergency Planning Committee and Fire Department.

## **The Incident Command System (ICS)**

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Although every hazardous materials incident is unique, the need to respond in an organized and rational way calls for structure. The first-on-the-scene emergency responder is an important part of the structured response. Your response to the incident is the first step.

OSHA regulation 1910.120 requires that an Incident Command System be in place to deal with a hazardous materials response. The Incident Command System specifies the duties assigned to individuals as well as determines the chain of command for the emergency response. Regulation 1910.120 requires that individuals who are assigned specific duties as part of the Incident Command System must be trained in how to carry out these duties. An example organizational chart for the Incident Command System is shown below.

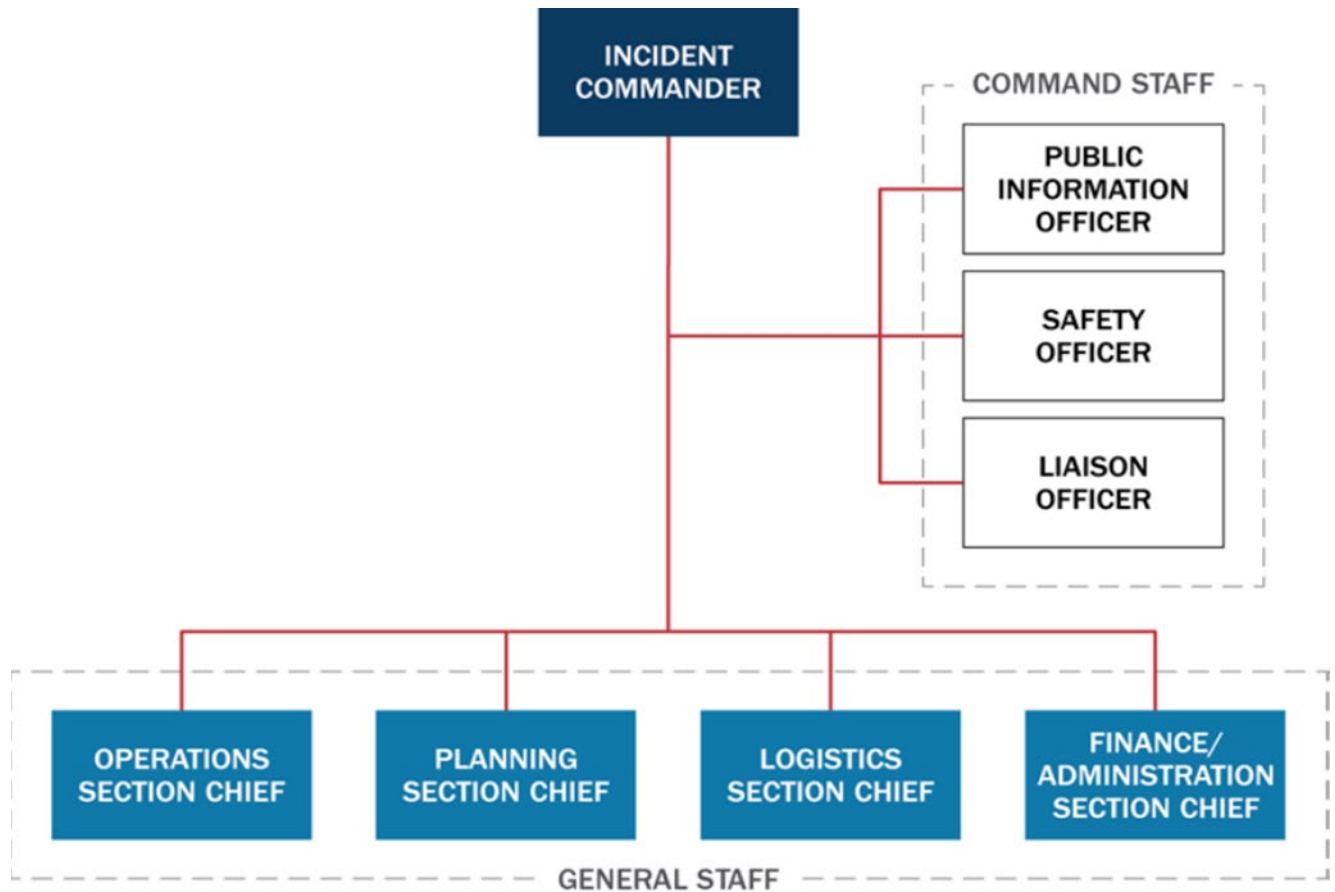
If as part of your job you may be first-on-the-scene, to whom you should make your initial report and what your duties are shown in your employer's Emergency Response Plan (ERP). After reporting the incident, you should then take the place in the chain of command to which you have been assigned.

If you discover an incident that has taken place away from your job, contact the local emergency response number or 911.

As a first-on-the-scene responder, you should know who is involved in your Local Emergency Planning Committee (LEPC) and the chain of command designated in the LERP.

- It is important that the correct person be notified and informed of the incident as quickly as possible.
- You should know whom to report to and take orders from after the emergency response team has arrived on the scene.

**ICS Response Team Structure**



Source: [https://www.fema.gov/media-library-data/1508151197225-  
ced8c60378c3936adb92c1a3ee6f6564/FINAL\\_NIMS\\_2017.pdf](https://www.fema.gov/media-library-data/1508151197225-ced8c60378c3936adb92c1a3ee6f6564/FINAL_NIMS_2017.pdf)

*Note: This chart should be adapted for the location, specific event and the available personnel. Other personnel may be added.*

Liaison Officer, Safety Officer, and Public Information Officer provide services for the entire organization.

Operations, Planning, Logistics, and Finance/Administration are assigned functional authority.

**Why Use Incident Command?**



- The Incident Command System (ICS) provides a standardized, on-scene, all-hazard incident management framework
- ICS allows its users to expand or contract organizational structure to match incident demands
- ICS is not hindered by organizational or jurisdictional boundaries and constraints
- ICS Helps Insure:
  - Safety of emergency responders, bystanders and the community
  - Achievement of tactical objectives
  - Efficient use of response and recovery resources

### **Incident Commander: Responsibilities**

- Establishes a single Incident Command Post (ICP) for the incident
- Establishes consolidated incident objectives, priorities, and strategic guidance and updating them every operational period
- Selects a single section chief for each position on the General Staff needed based on current incident priorities
- Establishes a single system for ordering resources
- Approves a consolidated Incident Action Plan (IAP) for each operational period
- Establishes procedures for joint decision making and documentation
- Captures lessons learned and best practices

As the first-on-the-scene person, you may participate in the response, if properly trained and directed by the Incident Commander. Your first and primary responsibility is to report incident facts accurately and as completely as possible to the appropriate party.

## **Key Points**

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- This training program was designed to meet OSHA requirements for first-on-the-scene awareness-level training
- Regulations give you certain rights. Know what they are!!
- Federal regulations require state and local emergency response plans
- The Incident Command System:
  - Sets the chain of command
  - Assigns specific job duties to specific individuals
  - Is developed **before** an incident takes place

## **Review Questions**

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1. What do regulations developed because of SARA do for you as a worker?

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2. What does SARA do for you as a citizen?

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3. Why is an Incident Command System needed? What does it do?

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## **Emergency Scenarios**

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This section will give you an opportunity to think about some emergencies which have occurred and could happen again. The definition of a hazardous material (legal and practical) will also be discussed.

### **Objectives**

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When complete, you will be better able to:

- Recognize a hazardous situation
- Describe the need for gathering information before actions are taken

### **Exercise**

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- During this activity, you will work in groups of two to six participants.
- Have one person in your group take notes.
- Your facilitator will tell you which scenarios you are to discuss. Spend three to five minutes on each, answering all the questions.
- Note: Please stay within the facts given. Don't make up anything.

**Scenario A**

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It's 2:05 p.m. on a hot Friday in July. A call comes into the police department from a man who lives next door to a storage facility. The man reports that something is leaking from under a pile of old transformers stored at the facility next to his house. He reports that the liquid is slowly moving under the fence that surrounds the storage facility and into his driveway. A police officer is dispatched and arrives at the caller's home to find him standing in his driveway next to a pool of liquid.

Answer the following in your group:

1. What should the police officer do?

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2. What "clues" were given that something serious may be happening?

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**Scenario B**

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While driving in the country with her family one spring Sunday afternoon, an off-duty police officer comes upon an overturned tank truck accident. The accident has just happened. No other law enforcement personnel have arrived.

The truck is lying on its side, and the product is leaking out of the dome covers onto the pavement. The driver is trapped in the cab. It is a warm, clear day with a brisk breeze blowing. The traffic is very light, but another driver stops soon after the off-duty officer arrives.

Answer the following in your group:

1. What should the officer do?

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2. What information should the officer gather?

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## Scenario C

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At 3:00 on Wednesday afternoon, a call is received for a TV news team at a vehicle accident on a major commuter route. Upon arrival at the scene, the team sees that a tractor trailer has overturned. The trailer has red placards (signs) on it. A liquid has spilled from 55-gallon drums onto the interstate shoulder. Many drums are leaking. One of the team members finds out that the driver, who was unconscious, was taken to the local hospital. Firefighters are applying foam to the liquid.

Answer the following in your group:

1. How close should the news team get to the accident?

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2. What information should the team gather to protect their own safety and health? Whom should they ask for this information?

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## Scenario D

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One May evening, firefighters respond to a structure fire at a nursery warehouse. When they arrive, the warehouse is totally engulfed in flames. Three employees of the nursery are trying to fight the fire with ordinary garden hoses. The firefighters immediately begin fighting the fire.

As the incident progresses, additional firefighters arrive. Soon after that, the crews are told that several chemicals are kept in the burning building and that self-contained breathing apparatus (SCBA) should be used.

A little while later, the firefighters who were first-on-the-scene and the employees who had been fighting the fire begin experiencing chest tightness, shortness of breath, abdominal cramps, nausea, and burning eyes, nose, and throat. They are all taken to the local emergency room for treatment.

Answer the following in your group:

1. What should the nursery workers have done? What should the firefighters have done?

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2. What "clues" were given that a hazard, other than fire, existed?

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**Examples from Your Experiences**

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Have you ever been the first person to discover an emergency situation?

YES    NO

What kind of emergency did you discover?

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Were hazardous materials involved?

YES    NO

How did you know?

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What is a hazardous material?

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## What is a Hazardous Material?

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*Hazardous material* is a legal term. The definitions of hazardous material can be found in several environmental laws. According to these laws, a material may be defined as hazardous because it is included on a list of substances considered to be hazardous materials.

A hazardous material can be defined as any substance capable of producing unwanted effects on health, safety, or the environment. Sometimes non-hazardous materials will be considered hazardous when mixed with other materials. Community members who notice something unusual will generally not know the name of chemicals. For those individuals, the following definition of a hazardous material can be used:

You should consider any unknown material as a hazardous material.

It is difficult to detect some hazardous materials. If you do not know for sure what a material is, treat it as a hazardous material!

**If you do not know for sure what a material is and that it is not dangerous; treat it as a hazardous material!**

## **Key Points**

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- Every situation is different
- Additional information is almost always needed before you can act safely
- Incorrect actions can cause serious damage to your health (and the health of others!) as well as property
- All unknown materials should be considered hazardous until proven otherwise

## **Review Question**

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Think about the incidents from your personal experience. Why would they (or wouldn't they) be considered hazardous materials incidents?

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## **Hazard Recognition**

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This section describes some clues you should look for both to help you avoid hazards and to prepare the emergency responders for hazards they may face at a scene that you have discovered.

Note that OSHA's General Duty Clause requires employers to provide "'employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees...".

### **Objectives**

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When complete, you will be better able to:

- Identify physical, biological, and chemical hazards
- Describe important characteristics of the scene
- Recognize how to safely observe a potential hazard
- Recognize labels and placards

## **Introduction**

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In order to recognize hazards and know "what's going on," two kinds of information are needed. The first kind of information concerns the type of health and safety hazards that are present at the scene. The second type of information concerns elements of the scene other than the health and safety hazards.

Health and safety hazards can be grouped into three main types:

- 1. Physical**
- 2. Biological**
- 3. Chemical**

Examples of each type of hazard are listed below.

### **1. Physical**

- Ionizing radiation
- Electricity
- Stress
- Heat and cold
- Slips, trips, and falls
- Falling or flying objects
- Steam and chemical vapor clouds
- Confined spaces
- Noise

### **2. Biological**

- Infectious hospital wastes
- Research materials

### **3. Chemical**

- Flammable liquids
- Reactive materials
- Oxidizing agents
- Corrosives
- Poisons (including carcinogens, or cancer-causing materials)

This section will provide you with some “clues” to help you recognize some physical, biological, and chemical hazards. Besides identifying potential hazards at the scene you observe, there is other information that would be helpful to note.

- Characteristics of the scene include such information as:
- Weather conditions
- Other chemicals or hazards that may be present
- Nearby buildings and/or businesses
- Access and evacuation routes
- Exact location
- Type of release? airborne, water, on roadway or land
- Evidence of smoke or fire
- Dead animals or vegetation
- People in the area or nearby
- Terrain

Characteristics of the scene can make the incident and the hazards present become even more dangerous. Any information about the characteristics of the scene must be relayed to the emergency responders.

### **What’s Going On = Hazards + Characteristics of the Scene**

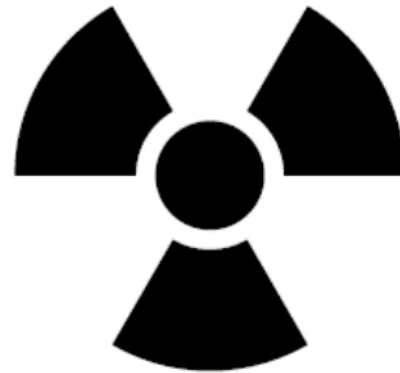
## Physical Hazards - Keep a Safe Distance

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It is important to recognize the physical hazards at the scene not only to protect yourself, but also to include them as information you give to emergency responders.

### Radiation (29 CFR 1910.1096)

Radioactive sources are used in industry and medicine, and radioactive wastes result from energy and weapons production. The best indication that a radiation source is present is the symbol shown on the right. It is usually **magenta** or **purple-colored** on a **yellow** background. Workers should keep as far away as possible from any containers with this marking unless they have had specific training and know that they are adequately protected. Where radiation hazards exist, the company must include Standard Operating Procedures (SOPs) in the safety and health plan.



**Radiation symbol**

As the first-on-the-scene, you should keep as far away as possible from any containers with the radiation marking.

Radiation exposure is minimized by **time, distance, and shielding** between you and the source. This means that the less time you spend near the source, the farther away from the source you stay, and the more shields (cars, walls, etc.) between you and the source - the safer you will be. All forms of radiation should be considered very hazardous - **treat them with respect!**

### Electricity

Power lines may be damaged in transportation accidents or incidents in which fire is involved. Downed lines represent a major risk of electrocution. Other risks of electrical and hazardous material exposure may be present at transformers and circuit boxes. **The presence of water will increase the hazard. Maintain a safe distance, and keep others out of the area.**

### Stress

A first responder has to make a lot of decisions quickly. This can lead to a lot of stress for that person. The wrong decision may increase the hazards at the incident. As the

first-on-the-scene, remember that your job is to gather as much information as you can as quickly as you can and call the local response personnel for help. **You are not trained to do everything. Just do what you are trained to do.**

### **Heat and Cold**

Extreme temperatures put extra physical stress on the body. You will probably not be at the scene long enough to suffer these effects, but the response team may be at risk. If the temperature is extremely high or low, you should include this information in the report to local emergency response personnel.

In addition, whatever weather conditions exist at the scene should be included in your report. For example, hazardous conditions such as snow or sleet should be made known.

If you are asked to stay at the scene and assist with crowd control or help in another way, be sure that you are protected from the weather before you agree to stay. This means that you have the right clothing for cold weather and that you do not stay in extremely hot temperatures long enough to suffer from heat-related illnesses.

### **Slips, Trips, and Falls**

Injured backs and broken limbs may result from slips, trips, or falls. Avoid any unstable footing. Don't climb steep slopes. Don't climb over equipment. Don't put yourself in situations which could result in injury. **If you fall and cannot alert the response team, response to the incident will be delayed,** and you may be exposed to hazardous materials while waiting for someone else to discover the accident.

### **Falling or Flying Objects**

If the scene is very unstable (for example, shifting drums or explosions), go to a safe distance. If you are seriously injured or pinned under a falling object, you cannot make a report to those who can control the incident. **Your job is to notice the changing conditions, not be a part of them.**

### **Steam or Chemical Vapor Clouds**

Steam from ruptured lines can cause severe burns. **Maintain a safe distance.** The steam, or the heat from it, may also react with other materials to compound the problem at a hazardous materials incident scene. Steam will be carried by the wind. Stay

upwind to further reduce the possibility of contact with the steam. **If there is steam at the scene, that information should be included in your report.**

It is possible that what appears to be steam may not actually be steam. Some chemicals may give off toxic clouds which may appear steam-like. Also, gases escaping from a pressurized container may look like steam. **Do not approach anything that looks like steam or a cloud.**

### **Confined Spaces (29 CFR 1910.146)**

Confined spaces are areas like ditches, stream beds, trailers, tanks, railcars, basements, sewers and storage closets. They are large enough that a person can enter but have restricted means for entry/exit and are not designed for continuous occupancy.

Some confined spaces are defined as a "permit-required confined space" meaning they have one or more of the following characteristics: contains or has the potential to contain a hazardous atmosphere; contains material that has the potential to engulf an entrant; has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant; or contains any other recognized safety or health hazard, such as unguarded machinery, exposed live wires, or heat stress.

Entry into confined spaces poses many dangers which first-on-the-scene responders must keep in mind. In fact, over half of all confined space fatalities involve would-be rescuers. Entry into confined spaces may block your view of what is happening around you. In addition, accumulations of chemical vapors can happen quickly in confined spaces and could prove deadly to you either through direct exposure or the increased risk of explosion. Don't attempt to rescue people from confined spaces unless you have special confined-space rescue equipment and have been trained.



## PHYSICAL HAZARDS CHECKLIST

### What do I look for?

- Radiation sources and symbols
- Damaged utility poles or other sources of electricity
- Weather conditions
- Unsafe and changing conditions
- Steam or clouds
- Confined spaces

### How do I observe them?

- From a distance
- Upwind if possible
- From higher elevation if possible
- With binoculars if possible

## Biological Hazards

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The most common type of packaged biological waste is probably infectious waste from hospitals or other healthcare facilities. This type of waste should be in boxes, plastic containers, or **red** plastic bags. These containers should be marked on all sides with the **fluorescent orange** infectious materials symbol shown below. Examples of infectious materials include used needles and syringes, soiled bandages, test tubes, and disposable vials.

As with any hazardous waste, disposal containers may break open in transportation accidents. If you notice anything that looks like hospital waste lying around an accident site, move away from the area. **Do not pick up or touch the material.**

Less frequently encountered biological hazards would include biological research materials such as genetic materials and viral or bacterial cultures. If the research materials involve biological agents, the containers should be clearly marked. If you notice broken vials, flasks, or culture dishes at the site, stay clear and report this to the emergency responders.



**Infectious Materials Label**

## **BIOLOGICAL HAZARDS CHECKLIST**

### **What do I look for?**

- Cardboard or plastic container
- Red plastic bag
- Infectious waste symbol
- Used needles, syringes, test tubes, and vials

### **How do I observe them?**

- From a distance
- Upwind if possible
- From higher elevation if possible
- With binoculars if possible

## Chemical Hazards

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The chemical hazards you face will depend on the properties of the material at the scene. Below are some definitions of properties that chemicals may have.

A **flammable** material gives off enough vapor to burn if there is a source of ignition.

A **reactive** material has the tendency to react with another component (including water).

An **oxidizing** material supports or speeds up burning by providing a source of oxygen.

A **corrosive** material is a liquid or solid that eats away or dissolves a material when it touches it.

A **poisonous** material can cause injury, illness, or death through exposure.

There can be a number of clues present at any incident that may provide information about the possible dangers from chemical hazards at the incident. This section describes some of the clues that you should look for to determine if chemical hazards are present. Clues to look for include labels and placards, characteristics of the containers that are present, and things you notice about the area around the incident (such as dead animals or vegetation).

**Remember: Even if you do not see any clues,  
hazards may be still present.**

### Recognizing Chemical Hazards

There are five kinds of information that will help you organize observations about potential hazards as the first-on-the-scene. These are:

1. Occupancy (use of the space) and Location (where)
2. DOT Placards and Labels
3. Markings and other label systems
4. Shipping Papers and Safety Data Sheets (SDSs)
5. Senses

Each of these topics provides information useful to the responders as they assess the hazards and develop a response plan and these topics are covered in this section.

## 1. Occupancy and Location

Identify the purpose or activity conducted in the area of the incident. If the location is the waste water treatment plant, you may know the process and be able to describe the materials used in the plant to responders; if you do not know about the process, it is sufficient to identify the waste water treatment plant. Plant or community responders will be able to identify any hazardous materials that may be in the location. Location can provide information on whether a hazard may be present. Certain areas of your facility may be known to contain hazardous materials. Releases or leaks in these areas (such as production vessels, laboratories, tank farms, reactors, etc.) should always be suspected of involving hazardous materials.

Location also requires a description of the area. This includes any:

- Drains
- Process or electrical equipment
- Water way
- Roadway/highway
- Buildings with occupants
- Buildings where materials are stored
- Weather conditions that affect the scene (wind, temperature, precipitation)
- Smoke, flames
- Steam or vapor clouds

## 2. DOT Placards and Labels

The DOT system of placards and labels is required on hazardous materials during shipment. It is important to understand the systems which are used to identify hazardous materials. Hazard information is included on DOT placards fixed to large containers (trailers, rail cars, tanks) and manufacturer labels fixed to small containers (drums, packages, boxes).

Caution must be exercised, because labels and placards may be missing, incorrect, or difficult to read.

Below is an example of a DOT signage or label that might be seen on a truck, train or cardboard shipping box.



Notice the... Shape: diamond

Color: red

Symbol: a flame

4-digit number: 1075

1-digit number: 2

All DOT placards are the same shape, but differ in the other 'clues' that are shown.

The red color of this placard indicates that the contents are flammable. A full listing of the hazard for each color is shown below:

<b>Color</b>	<b>Hazard</b>
Orange	Explosive
Red	Flammable or combustible gas or liquid
Green	Non-flammable gas
Yellow	Reactive
White with skull & crossbones	Toxic
White and red vertical stripes	Flammable solid
White top with black bottom	Corrosive
White top with red bottom	Spontaneously combustible
Blue	Water-reactive
Yellow top with white bottom	Radioactive
Black and white stripes on top, white bottom	Low to moderate hazard

NOTE: physical (radioactive) and chemical hazards are included.

The flame symbol of this placard also indicates that the chemical is flammable. Other symbols are shown in the table below:

<b>Symbol</b>	<b>Hazard</b>
Bursting ball	Explosive
Flame	Flammable/combustible/dangerous when wet/organic peroxide
Skull and crossbones	Poisonous
Circle and flame	Oxidizing material
Gas cylinder	Non-flammable gas
Propeller/Trefoil	Radioactive
Test tube/hand/metal	Corrosive
Special symbol	Infectious

The 4-digit number is an identification number used in the DOT Emergency Response Guidebook (ERG). This number will provide responders with information on potential hazards, public safety and emergency response procedures. Sometimes placards with the 4-digit number in the center are referred to as a “number placard.”

The 1-digit number provides information on the type of hazard that might result from release. For example, 2 indicates that the contents is a gas. The meaning of each of the nine hazard classes is shown below:

- | <b>#</b> | <b>UN Hazard Class</b>                                     |
|----------|--|
| 1        | Explosives   |
| 2        | Gases (compressed, liquefied, or dissolved under pressure) |
| 3        | Flammable liquids  |
| 4        | Flammable solids or substances                             |
| 5        | Oxidizing substances                                       |
| 6        | Poisonous and infectious substances                        |
| 7        | Radioactive substances                                     |
| 8        | Corrosives   |
| 9        | Miscellaneous dangerous substances                         |

For a report, the shape will guide a responder to the DOT ERG. Assuming you cannot read the numbers, a report of the color and symbol would provide a responder with information that the material is flammable. If you report color, symbol, 4-digit and 1-digit numbers, a responder would know that the contents are a flammable gas (color, flame, 2), the 4-digit number would be used to identify the chemical as acetone in the ERG.

Look at the placard to the right, and identify the shape, color, symbol, 4-digit number and 1-digit number for a report!



Some placards do not have a 4-digit number. One example is shown here:

For this placard, the report would include shape, color, symbol and 1-digit number and the word 'radioactive'. Examples of other words used include:

- Flammable Gas
- Combustible
- Fuel Oil
- Non-Flammable Gas
- Flammable Solid
- Oxidizer
- Infectious Substance
- Corrosive
- Organic Peroxide
- UNXXXX
- Dangerous when wet
- Spontaneously Combustible





## Using the DOT Emergency Response Guide (ERG)

You can find more information on what these placard numbers and symbols mean in the DOT Chart and the *DOT Emergency Response Guide*. The ERG is divided into sections, each with its own color. The typical starting point is looking up a substance by name (blue pages), ID (UN) number (yellow pages) or image (placard, rail car, trailer).

**YELLOW:** The yellow pages list chemicals in numerical order based on their assigned ID number (UN number). If you are reading a placard or label which has a four-digit number in the center, you can look up the chemical name in the yellow pages, which will tell you the name of the chemical and the Guide number. When using the app, you simply type the number into the Search by Name or UN field.

**BLUE:** The blue pages list chemicals alphabetically by their name. From this listing you can determine each chemical's ID number and the Guide number. When using the app, you simply enter the chemical name into the Search by Name or UN field.

**ORANGE:** The orange pages are called the Guides. These pages are of use in determining the potential hazards of the chemical in question, with the greatest concern listed first. Additionally, the Guides give a brief description of the emergency action that should be taken by appropriate emergency response personnel. When using the book, you must first find the appropriate Guide Number by looking in the yellow or blue pages or referring to the Table of Placards. When using the app, you are immediately taken to the appropriate Guide Number when you select the chemical name, ID number, or placard (Note: with some chemicals you may receive guidance based on if a fire is involved before proceeding to the Guides).

**GREEN:** Some chemicals are also included in the green pages. The green pages indicate the Table of Initial Isolation and Protective Action Distances. This section of the ERG describes the distances necessary for initial isolation around a chemical incident as well as the distance downwind that persons must be protected.

- **Book:** Chemicals that are highlighted green in the blue and yellow pages will be found in Table 1 (green pages). If the name of the material in Table 1 is followed by "(when spilled in water)", consult Table 2 for toxic gases produced. If there is an asterisk next to the ID number in Table 1, also consult Table 3.
- **Smartphone:** If a chemical has green page, this will be indicated during your search and, in the orange pages, you will see at the top of the screen the words Initial Isolation and Protective Distances. You can access the green pages by swiping left.
- **iPad:** The green pages information will automatically appear on the right side of the screen.
- **Windows:** The green pages information will automatically appear at the bottom of the Guide.

### 3. Markings and other Label Systems

In addition to DOT placards other information may be required on shipping containers. As appropriate, these markings include:

- Package orientation arrows
- Inhalation Hazard
- Poison
- Keep away from Heat
- HOT
- RQ (reportable quantity)

As the first-on-the-scene, make careful note of any marking on a container; the first responders will find all of the information useful.

#### Other Label Systems

The Hazard Communication Standard (HCS 2012) is described below, followed by two labeling systems that may continue to be used - the NFPA system and the HMIS system.

#### Hazard Communication Standard 2012 – Globally Harmonized System for Labeling

HCS 2012 covers labelling of hazardous chemicals used in industry (excluding wastes) to describe physical hazards (such as flammability and corrosivity), health hazards (including both immediate and long-term health effects) and environmental hazards. These labels include pictograms that may be visible from a distance.

The eight health and safety pictograms and one (non-mandatory) environmental pictogram are shown on the following pages.


Note the...    Shape: red diamond  
                    Symbol: black on white background.

The words above each pictogram are descriptions of the symbol; the words below the pictogram are the HCS 2102 Hazard Classes covered by the symbol. NOTE: Only the red diamond and symbol are shown on a label. In addition to the pictogram, a label will show other information such a signal word (Danger or Warning), hazard and precautionary statements, the product identifier, and supplier identification, but these require that you be closer to the container to read.

Do not move closer to a container in order to read the label.


HCS Pictograms and Hazards

Health Hazard




- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame




- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Gas Cylinder




- Gases Under Pressure

Corrosion



- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Flame Over Circle



- Oxidizers

Environment (Non-Mandatory)



- Aquatic Toxicity

Exclamation Mark



- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Exploding Bomb



- Explosives
- Self-Reactives
- Organic Peroxides

Skull and Crossbones



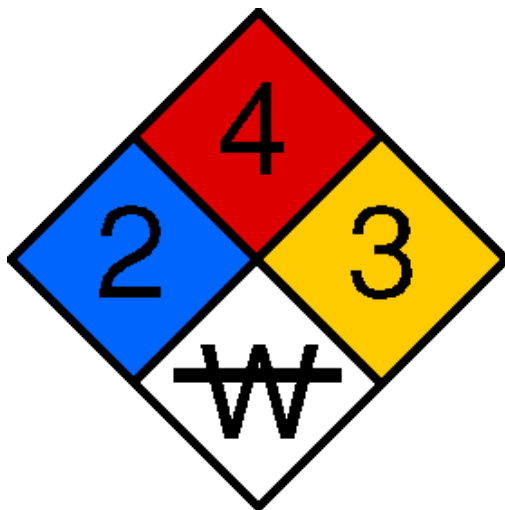
- Acute Toxicity (fatal or toxic)

Employers may continue to use signage such as National Fire Protection Association (NFPA) diamonds or HMIS (Hazardous Material Information System) requirements for workplace labels, as long as they are consistent with the requirements of the HCS.

National Fire Protection Association (NFPA) - 704 System

The NFPA system is used for storage vessels and stationary containers at an industrial facility.

Below is an example of the NFPA 704 System.



Notice the ...

Shape: diamond

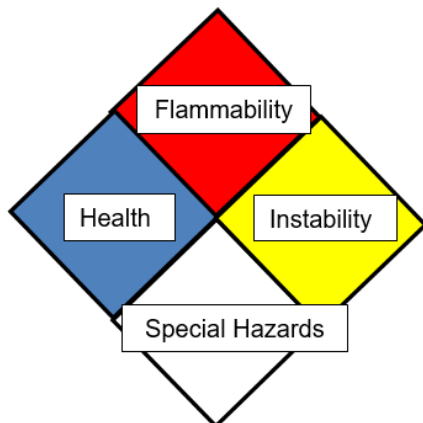
Colors: Red, Blue, Yellow, White

Numbers: 4, 2, 3

Symbol: ⚡

All NFPA placards and labels are the same shape and have the same colors. What differs are the numbers and symbol.

The color of each of the four small diamonds indicates the type of hazard as shown below.



Color	Hazard
Red	Flammability
Blue	Health
Yellow	Instability
White	Special hazards

The number in the red, blue, and yellow diamonds is a relative rank of the potential flammability, health, and instability hazard, respectively, ranging from 0 or blank (low) to 4 (high hazard).

The Special Hazards (white) section of the NFPA-704 label may contain symbols (examples shown below) that give more information about the chemical. The following are symbols and their meanings that might be found in the Special Hazards (white) section of the NFPA-704 label.

NFPA Standard Symbols:

**W**

Reacts with water

**OX**

Oxidizer

**SA**

Simple Asphyxiant

Non-Standard Symbols:

- **COR:** Corrosives.
- **ACID** and **ALK** (Alkali) to be more specific.
- **BIO:** Biological Hazard.
- **POI:** Poisonous Material (e.g. strychnine)
- **CYL or CRYO:** Cryogenic Material (e.g. liquid nitrogen)
- **Radioactive trefoil:** Radioactive materials. (e.g. plutonium, uranium)
- The field may also be left blank if no special hazards are present.

**The Hazardous Materials Information System (HMIS)**

These labels are used on storage vessels and containers.

Below is an example of an HMIS label.

Notice the ....

Shape: Rectangular

Chemical Name: Propane

Colors: Blue, Red, Orange, White

Boxes: Contain numbers or letters

Propane	
Health	2
Flammability	4
Reactivity	0
Personal Protection	

All HMIS labels have the same shape and colors. For hazard recognition and reporting, it is important to note numbers in the blue, red and orange boxes and any letter in the white section.

The numbers rank the potential health, flammability, and physical hazard and range from 0 (low) to 4 (high).

The Personal Protection section may contain a letter which tells you what personal protective equipment you should use to protect yourself when working with the material. Capital letters range from A (safety glasses) to K (full protective suit with gloves, boots, a hood or mask, and an air-line or Self-Contained Breathing Apparatus). If personal protection is coded X, specialized handling procedures are needed. Lower-case letters n through u, w, y and z are codes for specific protective equipment. For example, q represents boots and u represents an organic vapor respirator. A chart outlining each letter code will be accessible to responders.

Other Labels you May See

The most common type of packaged biological waste is probably infectious waste from a hospital or other health care facility. This type of waste should be in boxes, plastic containers, or **red** plastic bags. These containers should be marked on all sides with the **fluorescent orange** infectious materials symbol shown previously



**Infectious  
Materials Symbol**

The best indication that a radiation source is present is the **magenta or purple-colored** propeller on a **yellow** background shown previously.



Radiation Label



## **LABELS AND PLACARDS CHECKLIST**

### **What should I observe from labels/placards?**

- Type of placard (word or number)
- Labeling system (DOT, NFPA-704M, OSHA HCS2012, HMIS)
- Shape
- Color
- Words
- Numbers
- Symbols/labels/pictograms

### **How do I observe them?**

- From a distance
- Upwind if possible
- With binoculars, if possible
- From elevation if possible

## **Placards and Labels Exercise**

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You will again work in your small group. Several placards and labels will be distributed by your facilitator. Answer the following questions and be ready to report back as a group.

**Answer the following in your group:**

1. What important features of the labels and placards should you note?

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2. What are the hazards displayed on each of the placards and labels given to your group?

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**4. Shipping Papers and Safety Data Sheets (SDSs)**

Shipping papers and SDSs contain important information about the hazards of chemicals.

**Shipping Papers**

Each shipment of hazardous materials must have paperwork documenting the specific contents of the shipment and relevant information. A driver or operator may have this with him at the scene. This paperwork has different names, depending on the type of transportation vehicle.

<b>Transportation</b>	<b>Where Is It Kept</b>	<b>What's It Called</b>
Truck	In the cab	Bill of Lading, Hazardous Waste
Train	With the conductor	Waybills, Consists, Wheel Reports
Barge/Ship	In the wheelhouse/on the barge	Dangerous Cargo Manifests
Airplane	In the cockpit	Shipper's Certification, Shipping paper, Airbill, Bill of lading

When a shipment arrives at a plant, a copy of the shipping papers is given to plant personnel. As part of site characterization, shipping papers may be found for materials ultimately transferred to the site.

Do not risk exposure to a potentially hazardous material by retrieving shipping papers from the transport vehicle.

Information Included in Shipping Papers

Shipping papers are required by the Department of Transportation (DOT). The shipper of the material provides this information. No standard format is required; however, the following points must be covered.

- Shipper's name and address
- Receiver's name and address
- Description of hazardous material
- DOT hazard classification information
- Quantity of material shipped to the location

Another source of information on specific chemicals is the Safety Data Sheet (SDS). These are generally not available for municipal employees who discover an incident.

## 5. Senses

Your eyes and ears are important to gathering information when you are the first-on-the-scene of a release or other potential hazardous material incident.

Use your eyes to gather information to describe:

- Occupancy and Location
  - Activities conducted in area of incident
  - Location of incident
- Wind, temperature, precipitation
  - Dead or injured animals
  - Affected grass, trees
  - Smoke or flames
  - Steam or visible vapor release
- DOT Placards and Labels (and other label systems)
  - Markings and Colors
  - Container Shapes and Sizes
  - Shipping Papers and SDSs

Use your ears to gather information to describe:

- Communication heard from those involved, including injured
- Changes in pressure or pressure releases (hissing)
- Instability (contact sound as loads shift)

Be aware of any new sensation on your skin:

- Burn, tingle

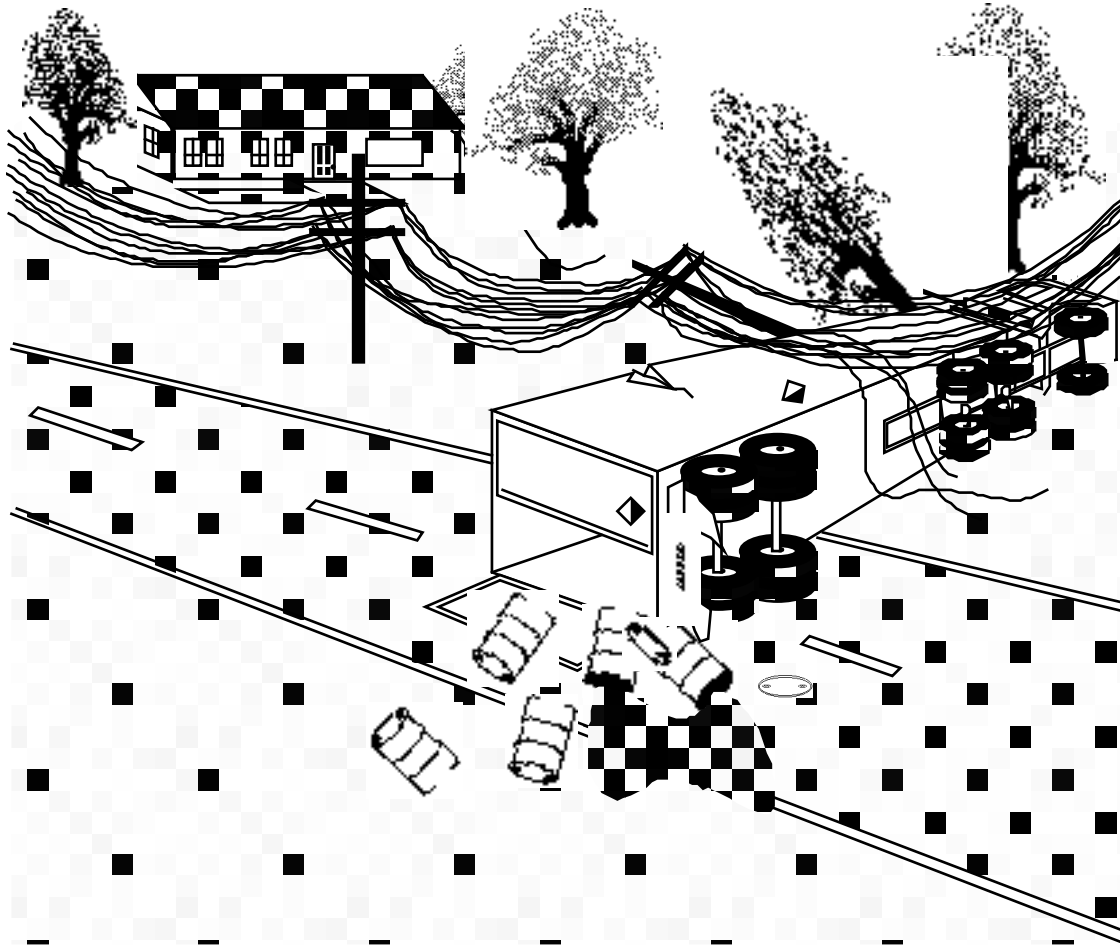
***Do not rely on your nose.***

Many hazards (e.g., carbon monoxide, radiation) have no warning properties by smell.

Some hazards overwhelm the sense of smell and the odor is no longer detected by your nose - but it has not gone away (e.g., hydrogen sulfide or sewer gas).

### What's going on here? - Exercise

You are driving down a country road and discover the scene below. What information should you gather to report to the emergency responders?



Write below the information that you would gather and be ready to discuss your answers with the class.

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## The Scene

A material may be toxic to the health of people at the scene or can affect others far removed by traveling in the air or entering a waterway or sewer. Flammable or explosive materials may cause a chain reaction that will affect people and property far removed from the actual scene. Approach any scene **upwind** and cautiously. **Stay at a distance upwind and uphill whenever possible.** Use **binoculars** if available.

During the "What's going on here?" Exercise, did you only concentrate on trying to figure out what the hazards were? There is other important information that concerns the scene that you should gather. The following should also be noted before your size-up is complete.

- Dead animals or vegetation
- Injured people
- Nearby buildings
- Other people at or near the scene (actual or probable)
- Wind direction
- Sewers or drains
- Creeks, rivers, or waterways
- Local weather
- Amount of traffic and portion of road that is blocked

By noting the presence or absence of the items stated above, you will be better able to protect yourself and inform the emergency responders of the critical nature of the incident. This information allows the emergency responders to better prepare for the possible consequences of the incident.

## Key Points

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- Treat any event as hazardous until you can prove otherwise.
- Physical hazards include radiation, electricity, stress, heat and cold, slips/trips/falls, flying or falling objects, steam/clouds, confined spaces and noise. These can be avoided by keeping your distance and staying upwind if you are outside.
- Biological hazards include infectious hospital waste and research materials. Look for the fluorescent orange infectious materials label and/or waste products such as used needles, syringes, and test tubes.
- Chemical hazards may be due to the different chemical properties such as the chemical being flammable, reactive, corrosive, poisonous, and/or an oxidizer.
- A direct clue to the presence of a chemical hazard can be found on labels or placards. Look for the shapes, colors, symbols, letters, pictograms and numbers on labels and placards.
- Other clues to chemical hazards include the type, location, size, and shape of the containers present.
- You need to observe other information as well, including:
  - Injured persons
  - Wind direction
  - Location of nearby buildings, people
  - Sewer or drains

**Review Questions**

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1. List 4 physical hazards and situations in which each might occur.

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2. List 4 clues to various types of chemical hazards which may be visible from afar.

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3. An NFPA label has a "0" in the flammability diamond. Is it flammable?

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4. What should be observed from labels/placards?

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5. What should be observed about the container?

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6. What should be observed about the scene?

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7. What is a clue to the presence of a biological hazard?

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8. How should you make observations at the scene?

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## **Health Effects**

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In this section you will learn about health effects that may occur to people like yourself who may be first-on-the-scene at a hazardous materials incident. Recognizing the potential for a health effect is the first step in avoiding it.

### **Objectives**

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When completed, you will be better able to:

- Recognize how an emergency situation may be hazardous to your health
- Recognize the signs and symptoms related to a chemical exposure
- Identify when and where hazardous materials affect the body
- Identify what to do if you think you have been exposed



## How, When, and Where?

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### How Do Chemicals Enter Your Body?

Chemicals can enter your body through skin contact, ingestion, inhalation, or injection.

**Skin Contact:** If you come into physical contact with some types of chemicals, they may just irritate your skin, and/or they may be absorbed into your body through the skin.

**Ingestion:** Chemicals may enter your body through swallowing chemicals on your hands if you smoke or eat after being exposed.

**Inhalation:** Chemicals can enter your body through breathing of fumes given off by the chemicals. Some chemicals can also mix with steam that you might inhale. Liquid droplets and dusts may also be inhaled.

**Injection:** Chemicals can enter your body through other means. Chemicals can enter through cuts or other skin abrasions. If you receive any type of puncture wound at the scene, it is possible that whatever caused the puncture wound could be contaminated.

### When Will Effects Appear?

Effects of chemicals may be considered acute and/or chronic.

**Acute:** Develops quickly, usually after exposure to high concentrations of a hazardous substance.

Example: Contact with concentrated nitric acid can cause an acid burn on skin.

**Chronic:** Takes a long time to develop or requires long exposures, usually at low concentrations.

Example: Breathing asbestos fibers can result in lung diseases many years following exposure.

## Where Will Effects Appear?

Reactions to chemical exposure may be local or systemic.

**Local:** Develops where the substance enters the body or comes into direct contact with parts of the body.

Example: Breathing hydrochloric acid can immediately result in coughing and cause bronchitis.

**Systemic:** Develops at some place other than the point of contact.

Example: Benzene can be absorbed through the skin and cause anemia and other blood disorders.

The figures on the next two pages summarize what parts of your body may be affected by exposure, and how your body may react.

Are any of these exposures likely in your community at industrial sites, or could they be in trucks on the roadways?

The figures on the next two pages summarize what part of your body may be affected and how your body may react to exposure. Are you exposed to any of the materials/stresses shown on these two pages?

**What Affects Your Body?**

**Head:** solvents, heat exhaustion, eye strain, noise, gases, vapor

**Eyes:** smoke, grease, fumes, acids, ultraviolet radiation

**Ears:** excessive noise

**Nose & Throat:** ammonia, caustic soda, dusts, resins, solvents, acid fumes, smoke

**Teeth & Gums:** acid fumes, cellulose, acetate production, lead poisoning

**Chest & Lungs:** cotton dust, TDI, detergent enzymes, beryllium solvents, long-term exposure to mineral dust (e.g., asbestos), metal oxides from welding, gases, vapors

**Muscles & Back:** excessive or improper lifting, bending, vibration

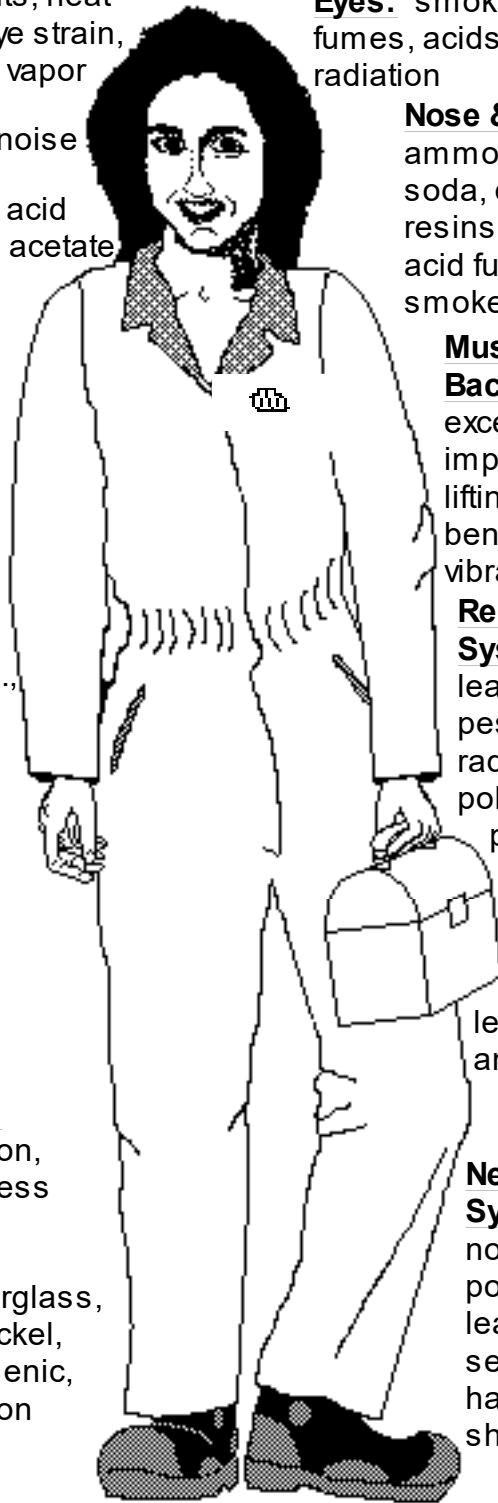
**Stomach & Intestines:** vapors, fumes, ingested substances

**Reproductive System:** lead, pesticides, radiation, polystyrene production, xylene, some solvents, benzene, lead, mercury, anesthetic gas

**Bones & Joints:** excessive vibration, constant dampness

**Skin:** solvents, epoxies, oil, fiberglass, caustic soda, nickel, mineral oils, arsenic, pitch, tar, radiation

**Nervous System:** noise, metal poisoning (e.g., lead, mercury), sexual harassment, shift work



adapted from the International Metal Worker's Union

## How Does Your Body React?

**Head:** dizziness, headache

**Eyes:** redness, irritation, watering, grainy feeling, "welder's flash"

**Teeth & Gums:** corrosion of tooth enamel, blue gums

**Ears:** ringing, temporary deafness, hearing loss

**Chest & Lungs:** wheezing, congestion, shortness of breath on mild exercise, flu-like symptoms (e.g., "metal fume fever")

**Nose & Throat:** sneezing, coughing, sore throat, nasal cancer

**Stomach & Intestines:** vomiting, diarrhea

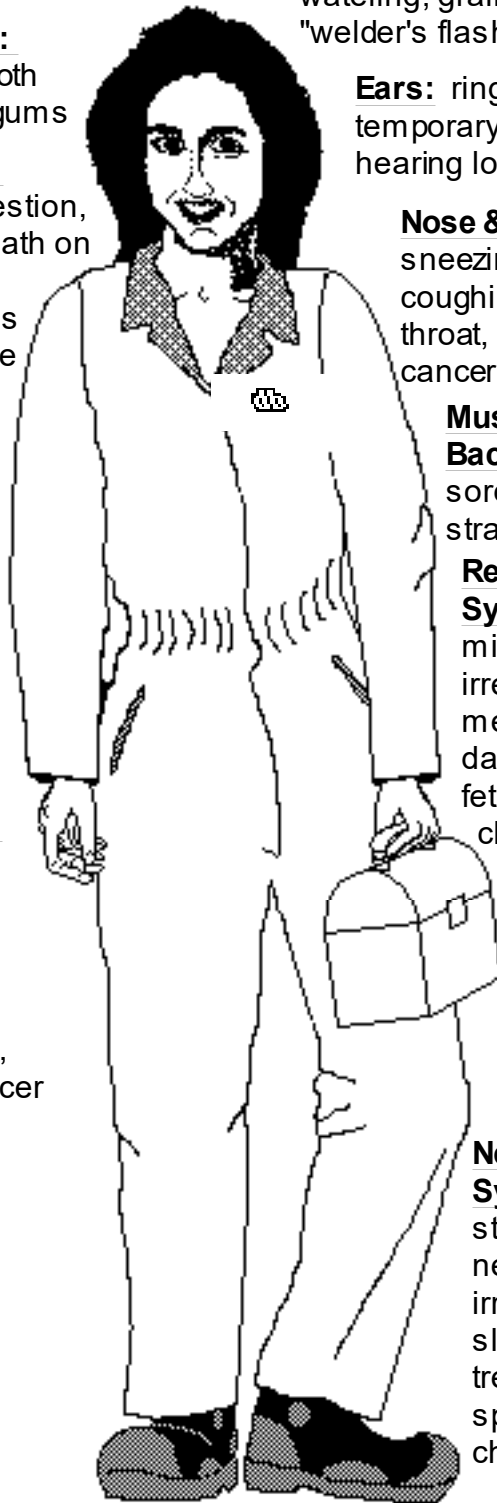
**Muscles & Back:** soreness, strain

**Bones & Joints:** arthritis

**Reproductive System:** miscarriage, irregularities in menstruation, damage to fetus or chromosomes, sterilization

**Skin:** redness, dryness, itching, ulcers, skin cancer

**Nervous System:** stress, nervousness, irritability, sleeplessness, tremors, speech changes



adapted from the International Metal Worker's Union

## At the Scene

Your body may be able to help you pick up clues that will help describe the scene to the emergency responders. While many substances leave no clues that can be detected by your senses, you should include anything that your senses pick up in your report. **Do not move closer to the scene to see if you can "sense" something.**

### Clues Your Senses Can Provide

<b>Eyes</b>	can spot hazards, read signs and placards, and/or display symptoms that can be caused by hazardous materials
<b>Skin</b>	can tingle
<b>Ears</b>	can hear sounds such as hissing
<b>Nose</b>	can smell bad or unusual odors

**WARNING** - Your nose will not be able to detect many substances.

Even substances that have a smell may be missed if you become "used to" the odor. Many substances have no smell.

Never breathe hazardous materials on purpose.



## Before You Leave the Scene

Maintain a safe distance from the scene, stay upwind and uphill, and use binoculars in order to avoid possible contamination by chemicals at the scene.

In the event that you are having an effect from something at the scene or any unknown substance at the scene comes into contact with your skin or clothing, leave immediately and request information about possible contamination from either your call-in person or emergency responders. Reiterate what has happened to the incident commander or health and safety officer when s/he arrives to verify whether or not there is a possibility of contamination. They will advise you of the necessity to seek medical attention. If your skin or clothing becomes contaminated, make note of your movements and try not to contact other surfaces, because whatever you contact may also become contaminated.

## After You Have Left the Scene

You should be aware of any symptoms that you may be having. If you are having any symptoms after being first-on-the-scene, you should:

- **Notify the agency** (Call 9-1-1, fire department, State EPA or equivalent, or other agency) in charge of responding to the incident. In most cases, you cannot delay this notification. Call immediately. Others who were at the scene may be experiencing similar symptoms.
- **Get information** about the chemicals involved in the incident. This may include easily identified (placards, labels and signs) information, as well as retrieving the Safety Data Sheets (SDSs) that are kept at the location where the material may be used, warehoused or temporarily stored. If you are not able to retrieve the SDSs, then communicate with your Emergency Coordinator or the plant guard.
- **See a doctor.** You may need to see an occupational physician who is trained to recognize signs and symptoms of chemical exposures. Your family doctor may not have the training or experience to do this.
- **Keep a log or diary** of any symptoms you experience. Record specific dates and times of the incident and of any symptoms you are having.



## **Key Points**

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- Chemicals can enter your body through skin contact or puncture, ingestion, or inhalation.
- Health effects may show up immediately or may not show up until years after exposure.
- Exposures affect different parts of the body.
- Your senses may help you spot clues, but they are not a reliable way to evaluate whether a hazard exists.
- If you have any symptoms or know you have come into contact with an unknown substance, leave immediately and make a call-in.
- If you have any symptoms after an emergency, see an occupational physician right away.

## **Sizing-up the Scene**

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This exercise will give you an opportunity to pull together all the information that was covered in the previous sections of this program.

### **Objectives**

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When you finish, you will be better able to:

- Recognize how different situations affect a hazardous materials incident response
- Identify what kind of information is needed for responders
- Describe how to pull together information to size up a scene

## **Emergency Scenarios - Exercise**

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Your facilitator will guide a discussion about the Emergency Scenarios Exercise you completed earlier in the course.

### **Sizing Up the Scene Exercise**

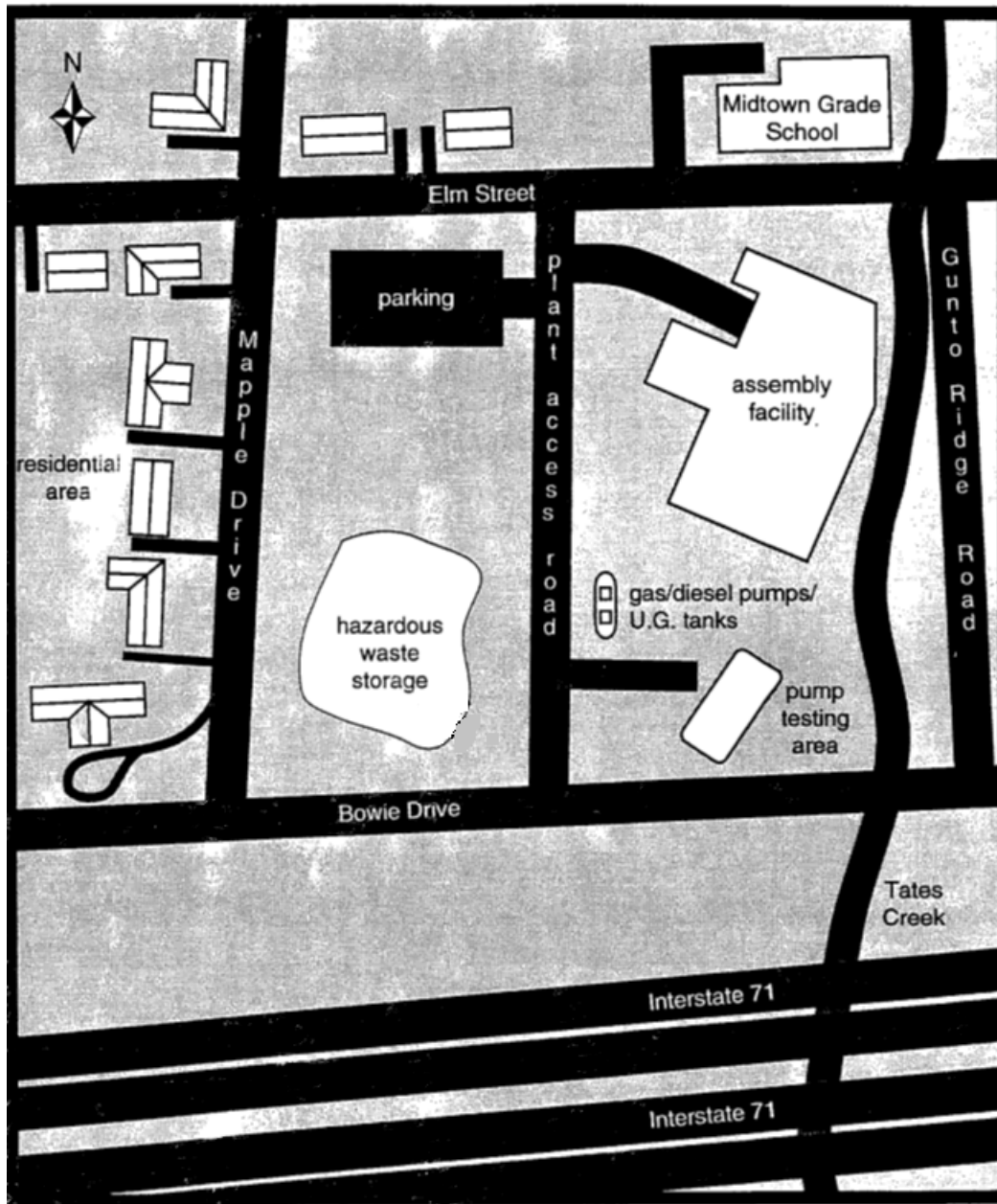
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#### **Directions**

1. You will work in small groups. One person in your groups should take notes and report back to the class.
3. A scenario and map for an incident is below. The map scale is one inch equals 100 yards.
4. Your facilitator will give you other information that you will need, such as the location of the incident, what chemical is involved, weather conditions, nearby people and vehicles.
5. Use the information to discuss the questions below with your group and be ready to have a class discussion about each group's incident, how they are alike, and how they are different.

**Scenario**

You are driving down the road and see an overturned tanker laying on the side of the road. A substance is leaking out of the tanker and forming a pool on and beside the road. It is 2:30 PM on a Wednesday afternoon.



**Sizing-Up the Scene Questions**

1. What are all of the potential hazards that may exist in this scene?

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2. Where would you observe the scene from?

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3. What information should you include in a report of the incident?

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4. What is the worst thing that could happen at this scene? (Note: Use only the information that you know about the scene.)

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## **KEY POINTS**

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- Every situation is different.
- Treat every incident as hazardous until you learn otherwise.
- You should safely collect as much information as possible about an incident before you report it to emergency responders.
- The setting of an incident combines with the hazardous material(s) to create a variety of problems that the emergency responders will have to understand and control.



## What Do I Do?

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This section covers the steps that you should follow between the time when you have finished sizing-up the scene and when the emergency response team arrives.

### Objectives

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When complete, you will be better able to:

- Identify the responsibilities of a first-on-the-scene responder
- Identify information that is relevant to provide after leaving the scene

### After Sizing-Up the Scene

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Your first responsibility at a scene is to gather information and notify appropriate personnel of the specifics of the incident while staying safe.

Call 911 unless there is a special number in your area. As a first-on-the-scene responder, keep any specialized contact information on your phone or readily available.

Above all, it is extremely important that **all relevant information** be given when you call in so that the nature and extent of the emergency can be known.

**Exercise: What would you tell them when you call?**

List the basic information you would report if you had to call in a hazardous materials incident.

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**What should you tell them when you call?**

Take a look at what you said you would report on the previous page. Did your report include all of the things listed below? Your report should include all the following elements from sizing-up the scene and can be structured as:

**Who:** Who are you?

**What:** What has happened or is happening?

- rail, highway, or fixed site
- shape of container
- placard/labels
- physical hazards
- wind direction
- others at risk - people in vicinity
- injured persons - conscious or unconscious
- drains, sewers, or surface waters

**When:** When did you get there?

**Where:** Where are you?

Where is the scene?

- city
- residential area
- remote area

## Before the Emergency Responders Come

After you have notified the appropriate personnel, you should move to a safe area or to staging areas designated by emergency response personnel.

If you return to the site (if you had to leave to call), you should continue to maintain a safe distance while noting any changes in the scene that may have happened while you were away making the call for emergency responders. Keep up-to-date on what is happening or has happened at the scene so you can give a complete picture of the incident when the emergency responders arrive. **Remember, it is not your responsibility to control or contain the incident.**

You have a very important additional responsibility while waiting for the emergency responders to arrive: **Do Not Let Unauthorized People Enter the Scene!!**

### If the media arrive

The media may arrive before the emergency responders or before you have the incident completely sized up. Their arrival raises several concerns:

- Who will they interview, and how will they get information?
- How can they be protected from the hazardous material?
- How can they get their story without endangering emergency responders or the public?

If the media arrive before those in the Incident Command System, here are some tips for dealing with them:

- Advise them for their own safety to stay uphill, upwind and as far away as possible.
- Remain calm, and do not exaggerate the seriousness of the situation. Tell them authorized, knowledgeable personnel will be arriving soon.
- When the Incident Commander or Public Information Officer arrives, direct the media to him/her.

### When Others Arrive

Once the emergency responders and/or Site Control personnel arrive, you will be under the control of the Incident Command System. These are your basic responsibilities in the Incident Command System:

- Provide a complete report to the highest-ranking officer who arrives. Usually this person will be the Incident Commander until someone of higher rank arrives. This report should include any changes in the incident which have occurred since the report was called in.
- Handle duties as assigned so long as they are within your scope of training or/and expertise.
- If you will not be involved with emergency response or site control, move to a safe area and await further instructions.
- Notify Incident Command before you leave.

### When You Leave

It is very important to write a detailed report of your observations and actions. Even if you are not required by the Incident Commander or your employer to write a report, you need one for your own personal protection. You should write this report especially if the incident results in loss of life, significant personal injury, substantial property damage or causes significant environmental damage. You may be subpoenaed to testify in court about the incident.

The report should include:

- Date and location of incident
- Description of the initial incident and sequence of events. (Note times.)
- People involved - victims, witnesses, and other responders  
(names/addresses/agencies)
- Actions you took (in time sequence)
- Your concerns, if any
- Any possible health effects you experienced

## **Key Points**

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- **Do** include all relevant information when you call in the incident report
- **Do** keep unauthorized personnel away from the scene
- **Do** report immediately to the Incident Commander when they arrive
- **Do** make a written report, even if only for yourself

**Review Questions**

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1. What are the elements of a complete call-in?

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2. What are your responsibilities as a first-on-the-scene emergency responder?

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3. What should you include in a write-up of the incident?

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## **Putting It All Together**

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This section will help you to tie together the information that has been presented during this training program.

### **Objectives**

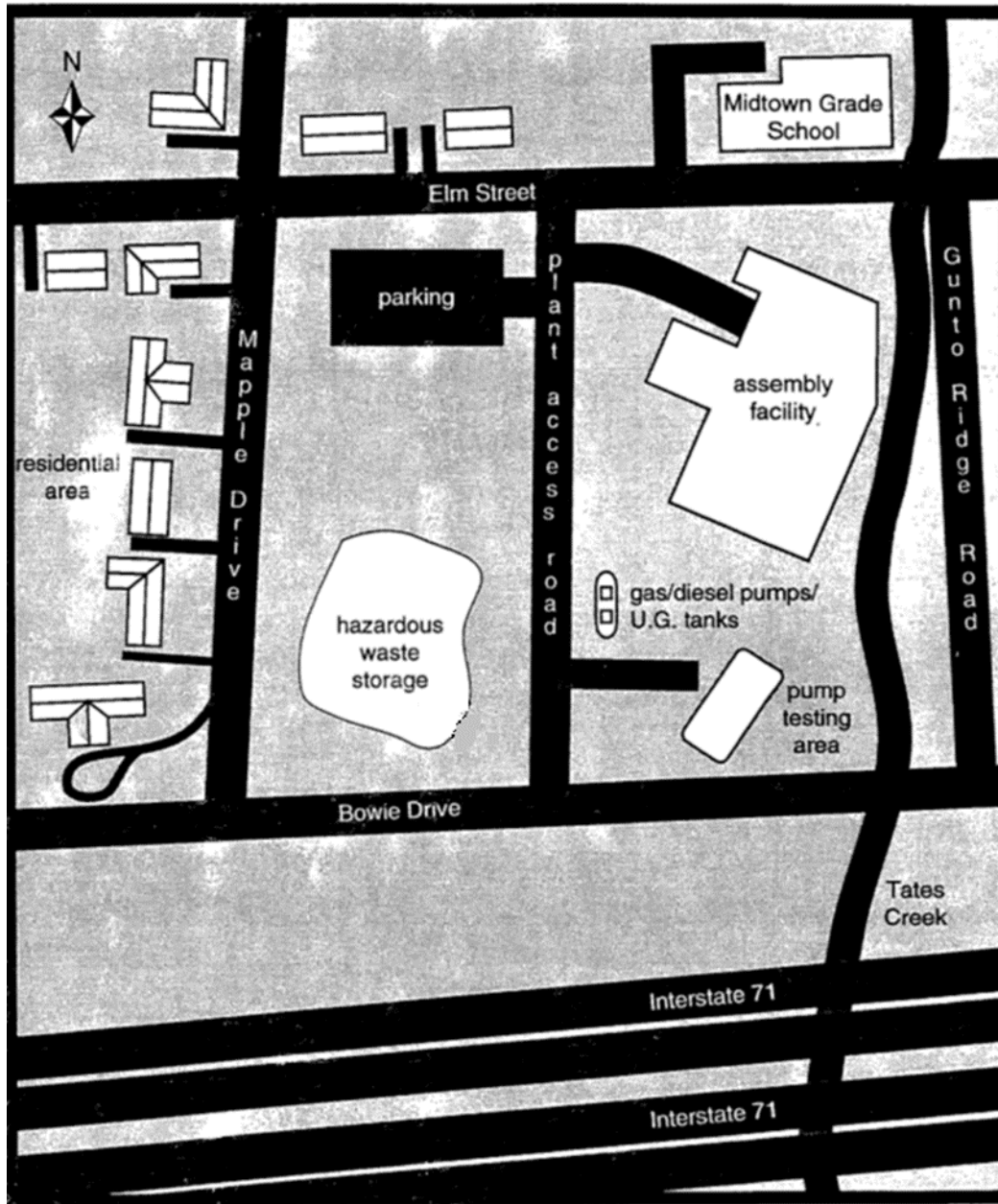
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When complete, you will be better able to:

- Identify a correct response upon discovering a hazardous materials incident scene
- Recognize how to protect yourself and others at a hazardous materials incident before emergency responders take control of the scene







## **Closing and Evaluation**

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Thank you for participating in this program.

This is an opportunity to ask any questions you may have, or to discuss how the knowledge and skills learned can be used at work.

Finally, we ask that you take 10 minutes to complete the program evaluation forms. These are important for improving the program. The Midwest Consortium does take your comments seriously and has made changes in content and the skill exercises based on feedback. Your comments are anonymous.

We hope to see you at another Midwest Consortium program in the future.