

## Hazardous Materials Incidents

**Find out what types of hazardous materials incidents could occur in your area.** Ask your Local Emergency Planning Committee (LEPC) or local emergency manager about the storage and use of hazardous chemicals in your area.

### **AWARENESS MESSAGES**

#### **Why talk about hazardous materials incidents?**

From industrial chemicals and toxic waste to household detergents and air fresheners, hazardous materials are part of our everyday lives. Affecting urban, suburban, and rural areas, hazardous materials incidents can range from a chemical spill on a highway to the contamination of groundwater by naturally occurring methane gas.

Chemical plants are one source of hazardous materials, but there are many others. Your local service station stores gasoline and diesel fuel, hospitals store a range of radioactive and flammable materials, and there are about 30,000 hazardous materials waste sites in the country.

Many communities have a Local Emergency Planning Committee (LEPC) that identifies industrial hazardous materials and keeps the community informed of the potential risks. All companies that have hazardous chemicals must adhere to the reporting requirements of the local government and/or LEPC. The public is encouraged to participate in LEPCs. Contact your local emergency management office to find out if your community has an LEPC and how you can participate.

#### **What are hazardous materials?**

Hazardous materials are substances that, because of their chemical nature, pose a potential risk to life, health, or property if they are released. Hazards can exist during production, storage, transportation, use, or disposal of such substances.

#### **How can I protect myself in the event of a hazardous materials incident?**

The best ways to protect yourself are to be familiar with the potential dangers, know the warning system in your community, and be prepared to evacuate or shelter-in-place.

Increased awareness about possible hazardous materials threats in your area will help you remain alert to these threats and contribute to your safety. For example, learning to detect the presence of a hazardous substance, researching response and evacuation plans, and becoming familiar with local warning systems will help you protect yourself and those around you. In addition, you can contribute to Local Emergency Planning Committee or local emergency management office discussions about hazardous materials issues that directly affect your community.

**What is the best source of information in the event of a hazardous materials incident?**

Depending on where you live, sirens, warning signals, and local radio and television stations may be used to alert residents if a hazardous materials incident occurs. However you learn of a hazardous materials incident, listen to a local radio or television station for further emergency information. Local officials are the best source of information in the event of a hazardous materials incident.

**ACTION MESSAGES**

**Be Prepared for a Hazardous Materials Incident**

**Protect Yourself**

**CORE ACTION MESSAGES**

- Determine your risk.
- Prepare members of your household.
- Be ready to evacuate or shelter-in-place.

For general preparedness, every household should create and practice a Family Disaster Plan and assemble and maintain a Disaster Supplies Kit. In addition, all households should take specific precautions to protect themselves in the event of a hazardous materials incident and plan and practice what to do if one should occur.

**You should:**

- **Evaluate the risks to your household** using information from your Local Emergency Planning Committee (LEPC) and local emergency management office. Determine how close you are to factories, freeways, or railroads that may produce or transport toxic waste. Remember that some toxic chemicals are odorless.
- **Learn about your community's plans for responding to a hazardous materials incident** at a plant or other facility, or a transportation incident involving hazardous materials. Talk to your LEPC or emergency management office.
- **Find out from the fire or police department what the hazardous materials warning procedures are for your area.** These could include:
  - Outdoor warning sirens or horns
  - Information provided on radio and television
  - "All-Call" telephoning—an automated system for sending recorded messages by telephone
  - News media—radio, television, and cable
  - Residential route alerting—messages announced to neighborhoods from vehicles equipped with public address systems

- **Choose and prepare your shelter-in-place room.** (See Appendix: How to Shelter-in-Place.)
- **Be ready to evacuate or shelter-in-place.**
- **Take your pets with you if you evacuate and keep them with you if you are sheltering-in-place.**

## What to Do During a Hazardous Materials Incident

### CORE ACTION MESSAGES

- **Avoid the incident site.**
- **Evacuate or find shelter.**

### During a hazardous materials incident:

- **If you witness (or smell) a hazardous materials release, call 9-1-1 or your local emergency number, or the fire department as soon as safely possible.**
- **If you hear a warning signal, listen to a local radio or television station for further information.** Follow instructions carefully.
- **Stay away from the incident site** to minimize the risk of contamination.
- **If you are caught outside during an incident, try to stay upstream, uphill, and upwind.** Remember that gases and mists are generally heavier than air and hazardous materials can quickly be transported by water and wind. In general, try to go at least one-half mile (10 city blocks) from the danger area; for many incidents you will need to go much farther.
- **If you are in a motor vehicle, stop and find shelter in a permanent building if possible.** If you must remain in your car, keep the car windows and vents closed and shut off the air conditioner and heater.
- **If asked to evacuate your home, do so immediately.** Take your animals with you, but do not endanger yourself to do so. If authorities indicate there is enough time, close all windows, shut vents, and turn off attic, heating, and air conditioning fans to minimize contamination. (See "Evacuation and Sheltering, and Post-disaster Safety.")

**Note:** Be aware that, if there is a hazardous materials incident while your children are at school, you probably will not be permitted to pick them up. Schools and other public buildings may institute procedures to shelter-in-place. Even if you go to the school, the doors will probably be locked to keep your children safe. Follow the directions of your local emergency officials.

- **If you are told to stay indoors (shelter-in-place) rather than evacuate:**
- **Follow all instructions given by emergency authorities.**
- **Get household members and pets inside as quickly as possible.**
- **Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible.**

- **Turn off air conditioners and ventilation systems.** In large buildings, building superintendents should set all ventilation systems to 100 percent recirculation so that no outside air is drawn into the building. If this is not possible, ventilation systems should be turned off.
- **Go into the pre-selected shelter room** (an above-ground room with the fewest openings to the outside). Ten square feet of floor space per person will provide sufficient air to prevent carbon dioxide buildup for up to five hours. Local officials are unlikely to recommend the public shelter in a sealed room for more than 2-3 hours because the effectiveness of such sheltering diminishes with time as the contaminated outside air gradually seeps into the shelter.
- **Take a battery-powered radio, water, sanitary supplies, a flashlight, and the shelter kit containing pre-cut plastic sheeting, duct tape, and scissors. Take your Disaster Supplies Kit.**
- **Close doors and windows in the room and seal the room** using the pre-cut plastic sheeting, duct tape, and modeling clay or other material:
  - Tape around the sides, bottom, and top of the door.
  - Cover each window and vent in the room with a single piece of plastic sheeting, taping all around the edges of the sheeting to provide a continuous seal.
  - If there are any cracks or holes in the room, such as those around pipes entering a bathroom, fill them with modeling clay or other similar material.
- **If authorities warn of the possibility of an outdoor explosion, close all drapes, curtains, and shades in the room.** Stay away from windows to prevent injury from breaking glass.
- **Remain in the room, listening to a local radio or television station until you hear that authorities advise you to leave your shelter.**
- **When authorities advise people in your area to leave their shelters, open all doors and windows and turn on the air conditioning and ventilation systems.** These measures will flush out any chemicals that infiltrated the building.
- **Avoid contact with spilled liquids, airborne mists and powders, and condensed solid chemical deposits.** Keep your body fully covered to provide some protection. Wear gloves, socks, shoes, pants, and long-sleeved shirts. Prevent your animals from contacting any of these substances. Most animals will groom themselves by licking, and may ingest toxins more readily this way.
- **Do not eat food or drink water that may have been contaminated.**
- **Be prepared to turn off the main water intake valve in case authorities advise you to do so.**

## What to Do After a Hazardous Materials Incident

### CORE ACTION MESSAGES

- **Stay away until officials say it is safe to return.**
- **Use proper decontamination procedures.**

**After a hazardous materials incident:**

- **Do not return home until local authorities say it is safe.**
- **Upon returning home, open windows and vents and turn on fans to provide ventilation.**
- **Be aware that a person or item that has been exposed to a hazardous chemical may be contaminated and could contaminate other people or items.**
- **If you or your animals have come in contact with or have been exposed to hazardous chemicals, you should:**
  - **Follow decontamination instructions from local authorities.** (Depending on the chemical, you may be advised to take a thorough shower, or you may be advised to stay away from water and follow another procedure.) Get medical treatment for unusual symptoms as soon as possible.
  - **If medical help is not immediately available and you think you might be contaminated, remove all of your clothing and shower thoroughly (unless local authorities advise you to do otherwise).** Change into fresh, loose clothing and get medical help as soon as possible.
  - **Place exposed clothing and shoes in tightly sealed containers,** for example plastic bags with twist-ties. Do not allow them to contact other materials. Call local authorities to find out about proper disposal.
  - **Advise everyone who comes in contact with you that you may have been exposed to a toxic substance.**
- **Find out from local authorities how to clean up your land and property.**
- **Report any lingering vapors or other hazards to your local emergency services office.**