# HAZARDOUS MATERIALS





Hazardous materials (HAZMAT) are materials that because of quantity, properties or packaging, may endanger life or property.

### **HAZMAT FACTS**

 Hazardous chemicals are used in industry, agriculture, medicine, research, and consumer goods. They are most often released as a result of transportation accidents or due to chemical accidents in industrial plants. Varying quantities of HAZMAT are manufactured, used, or stored at an estimated 4.5 million facilities in the U.S. As many as 500,000 products pose physical or health hazards and can be defined as hazardous chemicals.

## DANGER ZONES

A hazardous materials accident can occur anywhere. Communities located near chemical manufacturing plants are particularly at risk. However, hazardous materials are transported on our roadways, railways, and waterways daily so any area is vulnerable to an accident.

## HOUSEHOLD CHEMICAL EMERGENCIES

- Never mix household hazardous chemicals or waste with other products. Incompatible chemicals such as chlorine bleach and ammonia may adversely react, ignite, or explode. Never use hair spray, cleaning solutions, paint products, or pesticides near an open flame (e.g., pilot light, lighted candle, fireplace, wood burning stove, etc.). Although you may not be able to see or smell them, vapor particles in the air could catch fire or explode. Get out of your home immediately if there is any danger of fire or an explosion. Do not waste time collecting belongings or calling the fire department. Once you are safe, call the fire department from outside the home using a cellular phone or a neighbor's phone. Stay upwind and away from the residence to avoid breathing toxic fumes.
- Call the Poison Control Center, 911 (or equiva-

## ACTIONS TO CONSIDER

- to evacuate should an incident occur.
- Assemble an emergency supply kit.
- Determine the best place in your home to
- it if you were to become separated.
- · Post emergency contact numbers (e.g., poison control, hospital emergency room, local

lent), hospital emergency room, county health department, fire department, or local pharmacy to receive emergency advice if someone has been exposed to a household chemical. Have any containers of the substance readily available in order to provide requested information.

- Take immediate action if the chemical gets into the eyes. Delaying first aid can greatly increase the likelihood of injury. Flush the eyes with clear water for a minimum of 15 minutes, unless authorities instruct otherwise.
- Discard clothing that may have been contaminated. Some chemicals may not wash out completely.



## **BEFORE**

- Determine evacuation routes and be ready • Determine if your community has a warning system.
- shelter if you are directed to shelter-in-place. Develop a family communications plan and ensure all family members know how to use
- · Keep fire extinguishers in your home and vehicle.
- pharmacy, etc.) by the telephone.

## (1) DURING

- Listen to local radio or television stations for detailed information and instructions.
- Stay away from the area to minimize the risk of contamination.
- Stay upstream, uphill, and upwind. In general, try to go at least one-half mile from the danger area.
- Stop and seek shelter in a permanent building if you are in a vehicle. If you must remain in your vehicle, keep windows and vents closed and shut off the air conditioner or heater.

#### If Directed to Shelter-in-Place

- Bring pets inside. Fill up sanitized bathtubs and/or large sanitized containers for an additional water supply and turn off the intake valve to the house.
- · Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible. Turn off air conditioners, furnaces, and ventilation systems.
- Find a room that is above ground and has the fewest openings to the outside. If gas or vapors have entered the building, take shallow breaths through a cloth or a towel.
- Avoid eating or drinking any food or water that may be contaminated.

## 🕖 AFTER

- Act quickly if you have come into contact with or have been exposed to hazardous chemicals. Follow decontamination instructions from local authorities. You may be advised to take a thorough shower or you may be advised to stay away from water and follow other procedures.
- Seek medical treatment for unusual symptoms as soon as possible.
- Place exposed clothing and shoes in tightly sealed containers. Do not allow them to contact other materials. Call local authorities to determine proper disposal.
- Advise everyone who comes in contact with you that you may have been exposed to a toxic substance.
- Report any lingering vapors or other hazards to your local emergency services office.
- Do not return to the area, if you were directed to evacuate, until authorities give the all clear.
- Listen to local radio or television stations for the latest updates.

Most victims of chemical accidents are

**DID YOU KNOW...** 

iniured at home.



#### **Caring for Accident Victims**

- · You should not try to care for victims of a hazardous materials accident until the substance has been identified and authorities indicate it is safe to go near victims.
- Once it is safe to do so, move the victim(s) to fresh air and call for emergency medical
- care. Remove contaminated clothing and shoes, place them in a plastic bag and seal. Cleanse victims that have come in contact with toxic substances by immediately pouring cold water over the skin or eyes for at least 15 minutes unless authorities instruct you not to use water due to the particular hazardous material involved.

#### **Recognize the Symptoms of Toxic** Poisoning

Be prepared to seek medical assistance if you have any of the following symptoms: difficulty breathing; irritation of the eves, skin, throat or respiratory tract; changes in skin color: headache or blurred vision: dizziness, clumsiness or lack of coordination; cramps or diarrhea.







