

# Hazardous and Household Chemical Safety

**H**azardous chemicals are substances that pose a risk to life, health and property due to their composition and their possible release into the environment due to unsafe storage, improper use and handling or transportation. Whether at industrial and chemical plants, gas stations, hospitals, labs, or in homes, hazardous chemicals and household cleaning products used in most homes are a part of daily life and can affect every community.

To reduce injury, prepare now by learning how to safely handle these substances and how to respond in an emergency. Here are some tips to follow:

## Before an Incident

- † Learn about your community's plans for responding to a hazardous chemical accident.
- † Find out about warning procedures from your local authorities in the event of a hazardous chemical release. These include:
  - Outdoor warning sirens and horns
  - Emergency Alert System (EAS) utilized by your local media and radio
  - Reverse 911: an automated message transmitted to your telephone
  - Alerts from emergency vehicles equipped with public address systems.
- † Identify locations that use or store hazardous chemicals in your area and determine how close your home may be to these locations.
- † Plan to evacuate if a hazardous chemical incident occurs. Evacuations for hazardous chemicals could last several hours or longer depending on the chemical and time required to clean up the area. (see the "Evacuation" and "Emergency Supply Kits Checklist" sections)
- † Identify a pre-designated location within your home to be utilized for **sheltering-in-place\*** procedures.

## During an Incident

- † If you smell or witness a hazardous chemical incident keep away from the chemical, get away from the site and immediately notify 911.
- † Gather all household members and pets as quickly as possible and follow all instructions given by emergency officials.
- † If asked to evacuate your home, do so immediately. (see "Evacuation" section)
- † If requested to stay indoors rather than evacuate, **shelter-in-place\***.
- † If caught outside, try to stay upstream, uphill and upwind from the hazardous chemical incident.

## After an Incident

- † Do not return home until authorities say it is safe.
- † If vapors linger, contact emergency officials immediately, open windows and vents and turn on fans to provide proper ventilation.

- † Find out from your local officials how to clean up your property.

### **\*Sheltering-in-place**

**An emergency order issued by officials alerting residents that conditions outside preclude immediate evacuations and sheltering should take place within the home. The following should take place:**

- † Get household members and pets inside immediately.
- † Close all doors, windows, vents, fireplace dampers and as many interior doors as possible.
- † Turn off air conditioners and ventilation systems.
- † Stay in a pre-designated room with the fewest openings to the outside, if possible, above ground.
- † Make sure this room has access to a battery-operated radio or corded phone to keep updated to emergency instructions.
- † Remain in this room until authorities advise you to leave your shelter.

### **Chemical Safety**

- † Adhere to instructions on the product label for proper use, handling and disposal of chemicals.
- † Store chemicals in a safe, secure location, preferably up high and always out of the reach of children.
- † Avoid mixing hazardous chemical products. For example, deadly toxic fumes can result from the mixture of chlorine and ammonia.
- † Never smoke while using hazardous chemicals.
- † Avoid using cleaning solutions, paint products, pesticides and flammable products near open flames, pilot lights on stoves, candles, fireplaces, etc.
- † Never pour chemical products down a sink or storm drain.
- † Dispose of the following products at a recycling center or a collection site: kerosene, motor or fuel oil, car batteries, diesel fuel and gasoline, transmission and power steering fluid, paint, thinner and stripper, cleaning solvents and tires.

### **Chemical First Aid**

- † Keep the number of the local poison control center by all telephones for quick access in an emergency.
- † Learn to **recognize the symptoms of toxic poisoning:**
  - *Difficulty breathing*
  - *Irritation of the eyes, skin or throat*
  - *Headache or blurred vision*
  - *Dizziness, clumsiness or lack of coordination*
  - *Cramps or diarrhea*
  - *Changes in skin color*
- † If a person or child ingests or inhales a hazardous chemical, locate the chemical's container if possible and immediately call 911, poison control or a medical professional.
- † If you are exposed to a hazardous chemical, wash hands, arms and other uncovered body parts, remove clothing to prevent additional exposure and change into fresh, loose clothing and seek medical help as soon as possible.
- † Place exposed clothing and shoes in a tightly sealed container- do not allow contact with other materials.
- † Advise everyone who comes in contact with you that you may have been exposed to a chemical, isolate