

I.7 CHEMICAL EMERGENCIES

Chemicals are a natural and important part of our environment. Even though we often don't think about it, we use chemicals every day. Chemicals help keep our food fresh and our bodies clean. They help our plants grow and fuel our cars. And chemicals make it possible for us to live longer, healthier lives.

Under certain conditions, chemicals can also be poisonous or have a harmful effect on your health. Some chemicals that are safe, and even helpful in small amounts, can be harmful in larger quantities or under certain conditions. Chemical accidents do happen, at home and in the community.

How might you be exposed?

You may be exposed to a chemical in three ways:

- Breathing the chemical
- Swallowing contaminated food, water, or medication
- Touching the chemical, or coming into contact with clothing or things that have touched the chemical

***Remember, you may be exposed to chemicals even though you may not be able to see or smell anything unusual.

CHEMICAL ACCIDENTS CAN BE PREVENTED!

Chemicals are found everywhere – in our kitchens, medicine cabinets, basements, and garages. In fact, most chemical accidents occur in our own homes. And they can be prevented.

PREPARE:

Home chemical accidents can result from trying to improve the way a product works by adding one substance to another, not following directions for use of a product, or by improper storage or disposal of a chemical. Fortunately, a few simple precautions can help you avoid many chemical emergencies.



- **Avoid mixing chemicals**, even common household products. Some combinations, such as ammonia and bleach, can create toxic gases.
- **Always read and follow the directions** when using a new product. Some products should not be used in small, confined spaces to avoid inhaling dangerous vapors. Other products should not be used without gloves and eye protection to help prevent the chemical from touching your body.
- **Store chemical products properly**. Non-food products should be stored tightly closed in their original containers so you can always identify the contents of each container and how to properly use the product. Better yet – don't store chemicals at home. Buy only as much of a chemical as you think you will use. If you have product left over, try to give it to someone who will use it. Or see below for tips on proper disposal.
- **Beware of fire**. Never smoke while using household chemicals. Don't use hair spray, cleaning solutions, paint products, or pesticides near the open flame of an appliance, 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.
- **Clean up any spills immediately** with some rags, being careful to protect your eyes and skin. Allow the fumes in the rags to evaporate outdoors in a safe place, then wrap them in a newspaper and place the bundle in a sealed plastic bag. Dispose of these materials with your trash. If you don't already have one, buy a fire extinguisher that is labeled for A, B, and C class fires and keep it handy.
- **Dispose of unused chemicals properly**. Improper disposal can result in harm to yourself or members of your family, accidentally contaminate our local water supply, or harm other people or wildlife.
- Many household chemicals can be taken to your local household hazardous waste collection facility. Many facilities accept pesticides, fertilizers, household cleaners, oil-based paints, drain and pool cleaners, antifreeze, and brake fluid. Some products can be recycled, which is better for our environment. If you have questions about how to dispose of a chemical, call the facility or the environmental or recycling agency to learn the proper method of disposal.

RESPOND DURING:

There are many organizations that help the community in an emergency, such as police, fire departments, the Red Cross and government agencies. All of these groups coordinate their activities through the local office of emergency management (HMCI).

If an accident involving hazardous materials occurs, you will be notified by the authorities as to what steps to take. You may hear a siren, be called by telephone, or emergency personnel may drive by and give instructions over a loudspeaker. Officials could even come to your door. If you hear a warning signal, you should go indoors and listen to a local radio.

Important Points to Remember

- In the event of an emergency, follow the instructions of the authorities carefully. They know best how to protect you and your family. Listen to your emergency broadcast stations on radio and TV.
- If you are told to "shelter in place", go inside, close all windows and vents and turn off all fans, heating or cooling systems. Take family members and pets to a safe room,



seal windows and doors, and listen to emergency broadcast stations for instructions.

- If you are told to evacuate immediately, follow your [Family Disaster Plan](#). Take your [Family Disaster Supplies Kit](#). Pack only the bare essentials, such as medications, and leave your home quickly. Follow the traffic route authorities recommend. Don't take short cuts on the way to the shelter.
- If you find someone who appears to have been injured from chemical exposure, make sure you are not in danger before administering First Aid.
- And lastly, remember, the best way to protect yourself and your family is to be prepared.

In Case of Poisoning

The most common home chemical emergencies involve small children eating medicines. Keep all medicines, cosmetics, cleaning products, and other household chemicals out of sight and out of reach of children. Experts in the field of chemical manufacturing suggest that doing so could eliminate up to 75 percent of all poisoning of small children.

If someone in your home does eat or drink a non-food substance, find the container it came out of immediately and take it with you to the phone. Call the Emergency Medical Services (EMS), or 9-1-1, or call the operator and tell them exactly what your child ingested.

Follow their instructions carefully. Please be aware that the First Aid advice found on the container may not be appropriate. So, do not give anything by mouth until you have been advised by medical professionals.