

# HAZARDOUS MATERIALS

## in Your Home and Community

*While the United States has a body of law governing the safe handling, transport, and disposal of hazardous materials, accidents can and do occur throughout the country on a regular basis.*



**Taking it one step at a time.**

### WHAT ARE "HAZARDOUS MATERIALS"?

By law, a hazardous material is "any product that corrodes other materials, explodes or is easily ignited, reacts strongly with water, is unstable when exposed to heat or shock, or is otherwise toxic to humans, animals, or the environment." Hazardous materials can include: explosives, flammable gases and liquids, poisons and poisonous gases, corrosives and caustics, nonflammable gases, oxidizers, water-reactive materials, and radioactive materials.

### WHAT TYPES OF HAZARDOUS MATERIALS ARE FOUND IN A "TYPICAL" HOME?



- **Cleaning Products:**
  - Bleach (liquid, powdered cleanser, etc.) - reactive and can form toxic vapors when mixed with other cleaners - especially ammonia or any acid, including vinegar. Irritant to eyes and mucous membranes. Corrosive.
  - Ammonia (liquid, glass cleaner, etc.) - reacts with acids (such as vinegar) to form a flammable vapor. Skin, eyes, nose, and throat irritant. Corrosive if swallowed.
  - Oven cleaner - skin irritant, inhalation hazard, caustic substance.
  - Laundry detergent - harmful if swallowed. Mild to severe irritant to skin and eyes.
  - Aerosols - container may explode if heated. Contents may be flammable liquids or gasses, irritants, corrosives, toxins, or poisons.
- **Beauty Aids:**
  - Hair spray (pump or aerosol) - most contain alcohol, which is flammable. Aerosol types use flammable propellants.
  - Nail polish and removers - flammable
  - Perfume, cologne - flammable
  - Deodorant (aerosol) - flammable
- **Garage or Garden Shed Products:**
  - Paints, varnish, paint thinner - flammable
  - Gasoline - flammable and irritant
  - Diesel - combustible and suspected carcinogen
  - Pesticides, herbicides - poison
  - Fertilizers - poison, caustic, oxidizer. Explosive when mixed with hydrocarbons (such as diesel).
  - Lighter fluid - flammable
- **Other Materials:**
  - Propane tanks - flammable gas. Exposure to heat may cause venting or vapor ignition.
  - Oily rags - spontaneously combustible when stored in other than airtight containers.

For more information on hazardous household products and effective alternatives, call Metro Recycling Information at (503) 234-3000 and request copies of "The Hazardless Home Handbook" and "Common Sense Gardening."

# WHAT IS THE HAZARDOUS MATERIALS THREAT IN MY COMMUNITY?

A wide variety of hazardous materials are transported through, stored, or used in Washington County, from flammable gases to highly toxic materials. Most hazardous materials are transported into and out of Washington County by truck. Other transportation methods include pipeline and rail. Common hazardous materials sites include high tech facilities, commercial gas stations, propane distributors, fertilizer plants, feed and garden stores, and public swimming pools. Once hazardous materials are on site at industrial storage and manufacturing facilities, strict Fire and Building Codes mandate double- and triple-redundancy safety systems to reduce the impact of human error or mechanical failures.



## WHAT CAN I DO TO DECREASE MY RISK OF EXPOSURE?

- While there is no way to predict hazardous materials accidents, certain areas are at some degree of risk, including those located near interstate highways; manufacturing, storage, or disposal facilities; and nuclear power plants. Prevention of accidents, rather than prediction, is central to avoiding potential damage, loss, or contamination from hazardous materials.
- All producers of hazardous materials are required to describe the hazards on the product label. Always read the labels carefully and follow directions completely when purchasing, using, or storing these products. Whenever possible, store substances in their original containers. Bulk items, such as gasoline for your power mower, should only be stored in approved containers.
- Around the house, remember the acronym **LIES**:
  - **Limit** - limit the amount of hazardous materials stored to the absolute minimum
  - **Isolate** - store hazardous materials in a separate, locked cabinet whenever possible
  - **Eliminate** - get rid of hazardous materials as soon as they are no longer needed. Call Metro Recycling Information (503-234-3000) for hazardous waste collection dates in your area.
  - **Separate** - do not store potential reactants together - for example, oxidizers with flammables, or bleach with ammonia.
- If you witness a hazardous materials transportation accident, spill, or leakage:
  - Distance yourself from the site to minimize risk of contamination - stay uphill, upwind, or upstream. Try to go at least one-half mile (about 10 city blocks) from the danger area.
  - Call 9-1-1. Your local fire department will isolate the area, investigate the situation, and, if needed, call in the regional hazardous materials response team.
- During a hazardous materials incident, you may need to evacuate or shelter in-place. Sheltering in-place may be your best option, especially when there isn't time to evacuate safely.
  - Evacuate if told to do so. If local officials say there is time, close windows, shut vents and damper, and turn off fans and other ventilation systems before evacuating the area.
  - If sheltering in-place is the safest option, go indoors, close windows, shut vents and damper, turn off fans and other ventilation systems, and place a wet towel under exterior doors to minimize contamination from the outside air.
  - If you are in a car, close windows and vents and shut off heat or air conditioning and try to proceed away from the hazard area.

## HOW WILL I KNOW WHAT TO DO?

- In the event of a hazardous materials release in your community:
- If public safety officials are in the area, follow their instructions.
  - Tune to a local radio or television station for further information.



For more information call  
503-649-8577

or visit our website at  
[www.ocem.org](http://www.ocem.org)