



# **Chemicals and hazardous materials incidents**

Hazardous materials can include explosives, flammable and combustible substances, poisons and radioactive materials. Chemical agents are poisonous vapours, aerosols, liquids and solids that have toxic effects on people, animals or plants. Emergencies can happen during the production, storage, transportation, use or disposal of hazardous materials. You are at risk when chemicals are used unsafely or released in harmful amounts where you live, work or play.

Signs of a chemical release include difficulty breathing, eye irritation, loss of coordination, nausea or burning in the nose, throat and lungs. The presence of many dead insects or birds may indicate a chemical agent release.

#### **Before an incident**

- Build an emergency supply kit and include duct tape, scissors and plastic to cover doors, windows and vents.
- Make a family emergency plan.
- Know how to operate your home's ventilation system.
- Identify an above-ground shelter room with as few openings as possible.
- Read more about sheltering in place.

#### **During an incident**

Listen to local radio or television stations for detailed information and follow instructions carefully. Remember that some toxic chemicals are odourless. Instructions may differ depending on the threat and risk of exposure. Sometimes it may be safer to shelter inside your home, other times it may be safer to evacuate.

#### If told to evacuate

- Do so immediately.
- Quickly try to figure out which areas are affected or where the chemical is coming from, if possible, and get away immediately.
- If the chemical is inside your building, get out of the building without passing through the contaminated area, if possible.
- If you can't get out of the building or find clean air without passing through the affected area, move as far away as possible and shelter-in-place.

### If told to stay indoors

- Bring pets inside.
- Seek shelter in an internal room. Close and lock all exterior doors and windows. Close vents, fireplace dampers and as many interior doors as possible. Seal the room with duct tape and plastic sheeting.

- Turn off air conditioners and ventilation systems or set ventilation systems to 100 percent recirculation so that no outside air is drawn into the building.
- Seal gaps under and around the following areas with wet towels, plastic sheeting, duct tape, wax paper or aluminium foil:
  - o Doorways and windows
  - o Air conditioning units
  - o Bathroom and kitchen exhaust fans
  - o Stove and dryer vents
- Take shallow breaths through a cloth or a towel if gas or vapours could have entered the building.
- Avoid eating or drinking any food or water that may be contaminated.

# If outside when an incident occurs

- Quickly decide what is the fastest way to find clean air. Move away immediately in a direction upwind of the source.
- If in a car, keep car windows and vents closed and shut off the air conditioner and heater.
- Find the closest building to shelter-in-place.

# After an incident

- Do not leave the safety of a shelter to go outdoors, including to help others, until authorities say it is safe to do so. If you have evacuated, return home only when authorities say it is safe.
- If you are affected by a chemical agent and medical help is not immediately available, the best action is to decontaminate yourself and help others to do so too, if possible.

# How to decontaminate:

- Remove all clothing and other items that are in contact with your body.
- Cut off clothing normally removed over the head to avoid contact with the eyes, nose and mouth.
- Put contaminated clothing and items into a plastic bag and seal the bag.
- Remove eyeglasses or contact lenses. Put glasses in a pan of household bleach to decontaminate them and then rinse and dry.
- Wash hands with soap and water. If helping someone decontaminate, immediately wash your hands and other exposed skin afterwards.
- Flush eyes with water.
- Gently wash face and hair with soap and water before thoroughly rinsing with water.
- As soon as it is safe to do so, proceed to a medical facility for screening and professional treatment.

