

# Spill Prevention and Response

## Stats and Facts

### FACTS

1. Chemicals can be toxic, explosive, flammable, and corrosive. Coming into contact with these substances can lead to adverse reactions and health problems. Exposure can happen in the following three ways:

- Inhalation
- Skin absorption
- Ingestion

2. In chlorine spills, exposed victims may sustain injuries or irritation to the nose, eyes, throat, and lungs.

3. Chemical Spills of one form or another are almost unavoidable. Given their likelihood, what is important is how to prevent and react. This involves having the right tools and know-how to clean up the mess.

4. When a spill happens using hazardous materials, any spill would be considered an “emergency spill,” which OSHA defines as:

- One in which there are high levels of toxic or potentially harmful ingredients or substances that could injure workers if exposed.
- Could cause a fire or explosion.
- Significantly or dangerously impacts indoor air quality or creates an oxygen deficiency in the facility.
- Necessitates workers evacuating the area.

5. Depending on the type of chemical someone has been exposed to, it can have the following effects:

- Burns or irritation to the mouth, skin, lungs, eyes, nose, or throat.

- Chest pain, Respiratory organ damage, Blindness, Death

## STATS

- The Occupational Safety and Health Administration (OSHA) published data regarding workplace chemical injuries. The data suggest that 14,024 fatal and nonfatal occupational chemical injuries occurred.
- At least 6,928 accidents involving toxic chemicals have occurred in the United States in the last five years, killing more than 135 people and injuring nearly 1,500, according to a government report not yet released.
- Two million people died due to exposure to hazardous chemicals in 2019, compared to 1.56 million in 2016, according to the global health body.
- According to the Environmental Protection Agency (EPA), many of the 14,000 oil spills reported each year in Canada are caused by industry activities resulting from storage tanks rupturing, pipeline leaks, and oil transport accidents.
- Ontario experiences about 8,000 spills per year, some of which injure workers, kill wildlife, and pollute the air, land and water.