

# SAFETY ALERT

## EXPOSURE TO CHLORINE GAS

WSBC Recent Incidents Link: [Recent incidents - WorkSafeBC](#)  
ID Number: 2023194950013

Chlorine is commonly used as a disinfectant and as a bleaching agent. It can be present in both gas and liquid forms. Exposure to chlorine gas can result in death. The biggest danger when working with chlorine is a gas leak. If exposed to the gas, workers should immediately get out of the area and seek first aid.

Workers at risk of being exposed include workers who clean pools, janitors who use cleaning products, workers in water treatment and sewage facilities.

Symptoms:

**Low concentrations:** nose, throat, eye irritation

**High concentrations:** can be fatal within 30 minutes, symptoms become more severe with stinging, burning and coughing



## REDUCE YOUR RISK

### Consider

1

#### Elimination or Substitution

Eliminate or substitute with a safer material or process.

2

#### Engineering Controls

Make physical modifications to facilities, equipment, processes. Consider improving ventilation, storing chlorine in a sealed room with a fan at a lower level that exhausts to the outside, or install monitors/alarms.

3

#### Administrative Controls

Consider changing work practices and policies. Provide awareness tools and training. Implement an exposure control plan, put up warning signs, and post the safe work procedure.

4

#### Personal Protective Equipment

This is the least effective control. Personal protective equipment may include a respirators, eye wear, and/or protective clothing.

### Additional WorkSafeBC Resources:

<https://www.worksafebc.com/en/health-safety/hazards-exposures/chlorine>

### CCOHS:

[https://www.ccohs.ca/oshanswers/chemicals/chem\\_profiles/chlorine.html](https://www.ccohs.ca/oshanswers/chemicals/chem_profiles/chlorine.html)