



# Carbon Dioxide SAFETY

Whether your industry produces, stores, analyzes or uses CO<sub>2</sub>, you should always be aware of a potential leak in your system. Understanding these potential leak points allows individuals to prioritize their analysis on a regular schedule, as well as properly identify the best locations for installing carbon dioxide safety monitors.

## PHYSICAL SYMPTOMS AND OSHA LIMITS



**0.1% | 1,000 PPM**

Prolonged exposure can affect concentration



**0.5% | 5,000 PPM**

The International Safety Limit (HSE, OSHA)



**1.0% | 10,000 PPM**

Rate of breathing increases slightly



**3.0% | 30,000 PPM**

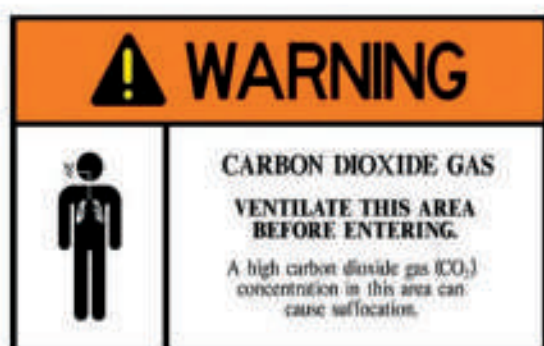
Breathing at 2x the normal rate, dizziness, an increase in heart rate, blood pressure, and headaches. Hearing can become impaired.



**10-100%**

Confusion, tinnitus, labored breathing, headaches, eventual unconsciousness, and suffocation

## SAFE PRACTICES



### Safety Signage

Have CO<sub>2</sub> safety signage displayed in areas of a potential leak and adjacent.

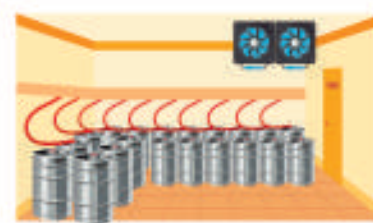
### Know the Codes

Familiarize yourself with the codes set by CGA, NBIC, NFPA, IFC, OSHA and NIOSH, as well as any codes set by your local jurisdiction.

### PPE

The personal protective equipment (PPE) recommended when handling CO<sub>2</sub> would be gloves, safety goggles, and a personal CO<sub>2</sub> detection monitor. Depending on the application, additional PPE could include hearing protection, a supplied air breathing apparatus, and safety shoes.

## HAZARD AREAS



**Confined Spaces or Low Lying Areas**



**Areas Where CO<sub>2</sub> is Transported or Used**



**Areas Where CO<sub>2</sub> is Vented and Stored**



**Areas Where CO<sub>2</sub> is Enriched or Implemented**



**Areas Where CO<sub>2</sub> is Filled, Including Adjacent Areas.**

## LEARN MORE!

