

CO2: The Invisible Risk

Protect Your Health & Safety

WORKPLACE RISKS

- **Sick Building Syndrome (SBS):** Poor ventilation leads to CO2 buildup, causing fatigue, headaches, and eye irritation.
- **Industrial Hazards:** Breweries, labs, and restaurants using CO2 tanks or dry ice face fatal leak risks in confined spaces like walk-in coolers.
- **OSHA Limit:** The Permissible Exposure Limit (PEL) is **5,000 ppm** (8-hour time-weighted-average).



HOME RISKS

- **Airtight Modern Homes:** Energy-efficient designs can trap exhaled CO2, resulting in poor sleep and morning headaches.
- **Common Sources:** Indoor CO2 sources include gas stoves, fireplaces, and vehicle exhaust seeping from attached garages.
- **Sleep Quality:** Keep bedrooms below **1,000 ppm** for better rest and cognitive health.

PREVENTION & MONITORING

- **Ventilation:** Increase fresh air intake. ASHRAE 2025 guidelines recommend maintaining levels below **1,000 ppm** for general comfort.
- **Monitor:** Use real-time CO2 monitors in homes and offices. Increase fresh air if levels exceed **800–1,000 ppm**.
- **Placement:** Place sensors **near the floor**. CO2 is heavier than air and settles in low-lying areas.