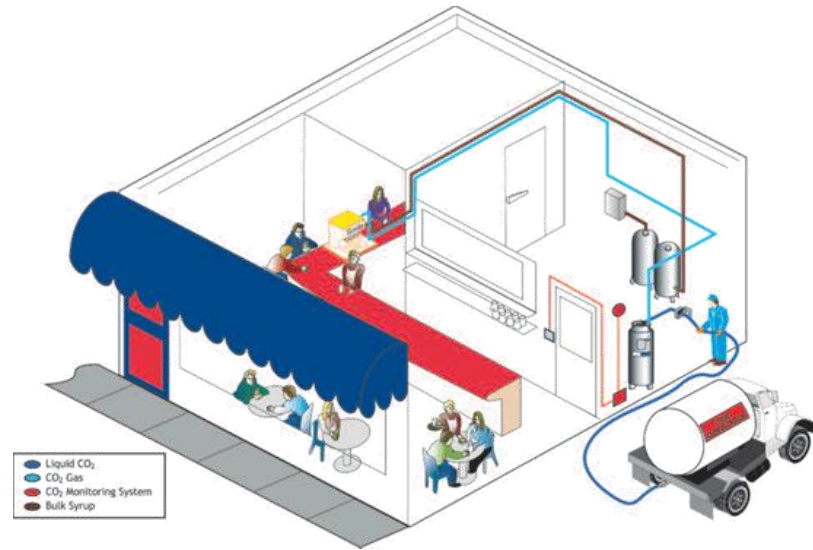




**Safety Guidelines
for
Preventing Carbon Dioxide Asphyxiation
from
Low Pressure CO₂ Supply Systems.**



Allegany County Health Department

Preparedness and Response Program
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Safety Guidelines for Preventing Carbon Dioxide Asphyxiation from Low Pressure CO₂ Supply Systems

1. Personnel handling liquid carbon dioxide should be trained and thoroughly familiar with the hazards associated with this product.

2. New carbon dioxide receptacles should be installed at ground level in an open area. It is recommended that existing CO₂ fill stations be relocated to above grade locations in order to prevent dangerous accumulations of CO₂ in below grade areas.

3. When carbon dioxide is delivered and stored in an enclosed area or below grade, it is necessary to adequately ventilate the area to maintain a safe working environment for personnel.

Ventilation systems should be designed to exhaust from the lowest level and allow make-up air to enter at a higher point.

The Ventilation system should provide makeup air at a flow rate of 1.0 cfm per square foot of floor area.

4. A Carbon Dioxide Detection device, and notification system, should be provided to alert employees and the public of a hazardous condition when the gas detection device reaches 30,000 ppm.

5. Appropriate warning signs should be affixed outside of those areas where high concentrations of carbon dioxide gas can accumulate. Recommended language is shown below:

CAUTION - CARBON DIOXIDE GAS

Ventilate the Area.

**A High CO₂ Gas Concentration May Occur
in this Area and May Cause Suffocation**

6. Buildings containing these systems should be marked and identified with Hazardous Materials Identifications systems: NFPA 704 signs.

7. The system should be inspected and maintained at regular intervals, by qualified personnel in accordance with the Manufacturer's instructions.

8. Adequate lighting should be provided so workers can use these systems safely.