

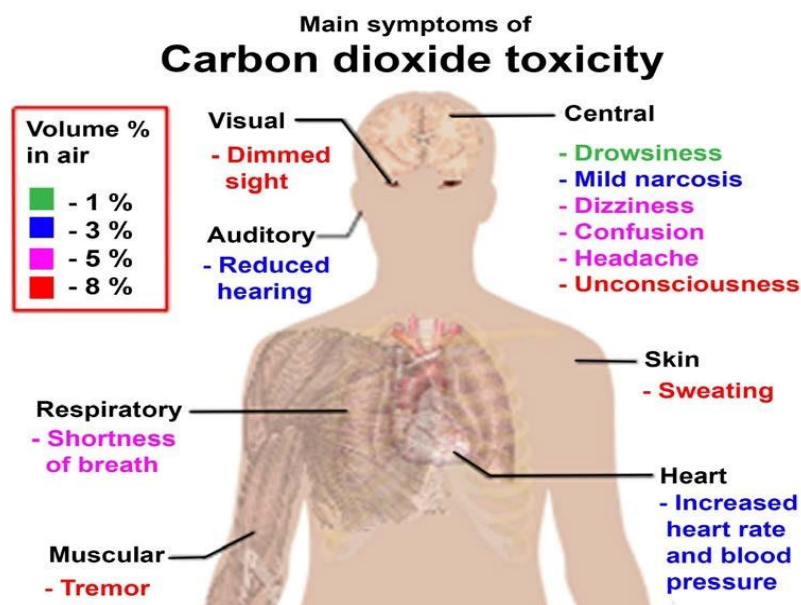
INTRODUCTION

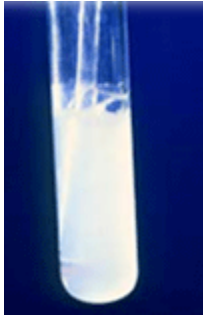
Carbon dioxide (CO₂) is a rare hazard that you cannot see or smell, but will still cause damage if you are not careful. The industries most susceptible to carbon dioxide poisoning are miners, brewers, carbonated beverage workers, and grain workers. However, even if you are not in one of these categories you should still be aware of the signs and symptoms that relate to carbon dioxide poisoning.

EXPOSURE

Carbon dioxide is a naturally occurring byproduct from cellular respiration or any burning fossil fuel. It is heavier than oxygen so it is likely to build up in air pockets underground or in confined space. It causes suffocation by dispersing the oxygen in the area, but luckily there are many warning signs before then:

- **Concentrations up to 1-3%** - May make you and others in the area feel drowsy.
- **Concentrations of 3-5%** - May cause mild narcosis, increased heart rate and blood pressure.
- **Concentrations of 5-7%** - May cause dizziness, headache, and shortness of breath.
- **Concentrations of 7-10%** - May cause muscle tremors, sweating, and unconsciousness within a few minutes to an hour.





PROTECTIVE MEASURES

- Test the air quality in confined spaces before entering.
- Take measures to increase ventilation.
- Always wear personal protective equipment.
 - Safety goggles protect from frost bite when handling liquid CO₂.
 - Insulated protective clothing is required when handling liquid or solid CO₂ (dry ice).
 - Either a NIOSH approved respirator or a supplied air respirator is recommended.



FIRST AID

Inhalation – Take precautions to protect your own health before attempting to rescue another person. Relocate the person to a well-ventilated area and call a physician. If breathing is difficult, give oxygen and if the person is not breathing, administer cardiopulmonary resuscitation.

Skin Contact – Gently remove clothing or jewelry that may restrict circulation, cover the area with a sterile dressing, and call a physician. Do not attempt to warm or rub the affected area.

CONCLUSION

Carbon dioxide can cause serious health problems even though you may not see it or smell it. Always wear the required personal protective equipment and follow all safe work practices as instructed by your employer. Should an accident occur, administer basic first aid and contact a physician.





Builders' Exchange
OF SANTA CLARA COUNTY

Safety Meeting Report

Employer _____

Date _____

Location _____

Meeting Supervisor _____

Safety Meeting Subject: _____

Accidents Reviewed: _____

Suggestions: _____

Employee's Attending

1. _____

2. _____

3. _____

4. _____

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