



Short Safety Subject

Short Safety Subjects are provided by the Public Safety Business Center, Fort Bragg, NC. Our intent is to provide safety topics for the purpose of increasing safety awareness and improving safety performance. Additional Short Safety Subjects are available on the PSBC Business Management Web Site at:

www.bragg.army.mil/psbc-bm/PubsAndForms/ShortSafetySubjects.htm

Carbon Monoxide (CO)

Carbon monoxide (CO) is a clear, odorless, heavier than air gas which is created by inefficient combustion emissions. The most common sources in industry are gasoline, diesel powered or other petroleum fired machinery.

The chemical makeup of CO is a carbon molecule linked to an oxygen molecule. The carbon molecule makes CO heavier than air and will not allow the lungs to absorb oxygen into the blood stream. Without oxygen, you will slowly suffocate to death.

What does this mean for workers? As the CO fills the space, it displaces oxygen and will affect workers as follows:

- Slight headache and dizziness
- Nausea
- Drowsiness and an euphoric feeling
- Unconsciousness
- Death

The level of CO mandated by OSHA as the maximum allowable for 8 hours is 35 parts per million. This is an extremely small amount of CO. To put this into perspective, think of a room that holds 1 million ice cubes and then remove 35 cubes from the room. Those 35 ice cubes are the maximum amount allowed by OSHA for workers to be exposed to over an 8 hour period.

What to do to prevent CO overexposure?

- 1) Inspect the jobsite and remove any internal combustion machinery located near a hatch or other opening that may cause exhaust fumes to enter the space.
- 2) **VENTILATE, VENTILATE, VENTILATE!!!**
- 3) Train workers about the early symptoms of CO exposure.