

CARBON MONOXIDE

Hazards

- Carbon monoxide (CO) is dangerous. It's a clear, colorless gas you can't smell or taste.
- In construction, the major source of carbon monoxide is engine exhaust. Gasoline, propane, and diesel engines all release carbon monoxide. Some types of welding, furnaces and heaters can also produce CO.
- Since CO has no taste or smell, you need special instruments to detect it. There are two types of gas detectors for carbon monoxide:
 - tubes that change colour when CO is in the air (they be used only once); and
 - continuous monitors with a cell designed to sense carbon monoxide.

[Instructor to demonstrate use of sample detectors.]

- Carbon monoxide is dangerous because it interferes with your body's ability to use oxygen. In relatively small doses, carbon monoxide can kill you.
- The first signs of CO exposure are headache and fatigue. Increased exposure can rapidly lead to loss of consciousness, arrested breathing, heart failure and death.
- Any person affected by carbon monoxide must be moved to a clean air location immediately. If symptoms are not quickly relieved, medical attention should be sought.

How to prevent CO exposures?

Maintain furnace and heaters to meet manufacturers specifications.

Wherever possible, operate engines outdoors. For instance welding machines and generators can be located outside with only the leads running into the building.

When engines must be operated indoors, precautions should be taken.

- Make sure the area is well ventilated. Keep doors and windows open. Use fans to bring in fresh air, if necessary.
- Limit running time and don't let engines idle.
- Monitor CO levels regularly, to make sure that ventilation is adequate.
- Where necessary, use exhaust hoses or fans to draw engine exhaust out of the work area.
- Keep engines well tuned. They will run cleaner and produce less CO.
- Where possible, use electrically powered equipment rather than gasoline, diesel or propane powered.

- When other controls are inadequate, respiratory protection must be worn. Air-purifying respirators are not suitable for protection against carbon monoxide. Only air-supplied respirators or self-contained breathing apparatus must be used.

In New Brunswick, the law on air quality can be found in *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 18 – 25.

You can find more information on WHSCC's programs and services on the internet at <www.whscc.nb.ca>.

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