



Jim Persons
jimpersons@safetypride.com
707-889-0881

Carbon Monoxide and your Equipment

Be aware of the hazard when equipment is used inside of confined spaces, trenches/excavations, tanks, vaults and buildings where dangerous levels of carbon monoxide (CO) can build up quickly.

CO is a poisonous gas that can cause nausea and dizziness. In high concentrations it can be fatal.

Because it is impossible to smell, taste or see CO, it is crucial that you be aware of its dangers and do as much as you can to avoid overexposure before symptoms occur.

The problem is that equipment powered by gasoline, propane and diesel fuel emit CO in their exhaust. In tightly insulated or enclosed areas, high concentrations of CO can remain for several hours after the last entry by a piece of equipment.

Emissions are worse from vehicles/equipment that are not tuned up, but even a new, factory tuned vehicle or piece of equipment can create a CO problem if it is used in an unventilated environment.

Recognize the symptoms - CO interferes with the blood's ability to carry oxygen. As CO accumulates in the blood, less and less oxygen is carried to the body and brain, which need oxygen to survive. Low exposures cause slight headaches.

As concentrations increase, weakness and dizziness may occur. High exposures can cause nausea, vomiting, confusion, collapse, coma and even death.

Be alert for CO poisoning year-round and especially during the winter months, when doors and windows are kept closed and ventilation is reduced.

If you suspect CO poisoning, do not wait for symptoms to worsen. Headaches or dizziness during or after equipment operation should be reported immediately.

Reduce the Risk - You can do several things to reduce your exposure to CO:

- Drive smart. Avoid racing the engine, braking erratically, idling for long periods and jerky operation of the hydraulic systems. All of these increase CO emissions.
- Cold starts generate higher CO concentrations. Avoid storing or parking equipment in cold areas to reduce warm-up time and exhaust gases.
- Make sure equipment is properly tuned up.
- Whenever possible, do not leave your equipment running inside a vault, sump, manhole, trench or confined space. Remember, hazardous concentrations build up quickly in these areas.
- Make sure the area of use is adequately and properly ventilated.

Take the Team Approach - Be alert to the dangers of CO exposure.

Practice responsible equipment operations to reduce CO buildup, and encourage your co-workers to do the same.