

**Toolbox Talks**

**Carbon Monoxide and your Forklift Be Aware of The Hazard**

When forklifts are used inside of confined spaces and buildings, 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's crucial that you be aware of its dangers and do as much as you can to avoid overexposure before symptoms occur.

**The Problem**

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

**Recognizing 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, don't wait for symptoms to worsen. Headaches or dizziness during or after forklift operation should be reported immediately.

**Reducing 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 forklifts in cold areas to reduce warm-up time and exhaust gases.

•  Make sure equipment is properly tuned up.  
Ask whether your vehicle can be fitted with a catalytic converter to reduce CO emissions.

•  Whenever possible, do not leave your forklift running inside a shipping truck or other container. Remember, hazardous concentrations build up quickly in these confined spaces.

•  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 driving techniques to reduce CO buildup, and encourage your co-workers to do the same.