

# Carbon Monoxide in the Workplace

## What Workers in Manufacturing Need to Know

*In June, 2014, twelve North Carolina manufacturing workers reported experiencing headaches, dizziness, blurred vision and nausea while on the job. They were being poisoned by a dangerous gas called carbon monoxide after a gas-powered tool was used indoors in a poorly ventilated area. Don't let this happen at your workplace!*



Photo courtesy of The Center for Disease Control and Prevention: CDC

Carbon monoxide (CO) is an odorless, colorless gas that can cause sudden illness and death.

CO is a lethal poison that can quickly build up when combustible materials, such as gasoline, propane, diesel or wood are burned indoors.

### Know Your CO Sources

- Processing-related: production furnace
- Building-related: heating system or hot water heater
- Tool-related: tile cutters, fork-lifts, generators, floor buffers, and power washers

### You Can Help Prevent CO Poisoning!

- Learn to recognize the warning signs of CO poisoning.
- Immediately turn off equipment if possible. Go outdoors or to a place with clean air if you feel you may have signs of CO poisoning.
- Call 911 immediately. Do NOT drive a motor vehicle.
- Stay away from the work area until it is determined to be safe.
- Use less hazardous tools (electric or battery-powered) whenever possible.



Photo courtesy of Gas Safe Register (UK): GasSafeRegister.co.uk





**BEWARE!**

**CO is known as the silent killer!**

## **WARNING!**

- Do not use equipment and tools that produce CO inside buildings or other partially enclosed spaces unless properly ventilated.
- Always monitor the level of CO in the air if you need to use CO sources indoors.
- Install a CO monitor or CO alarm in all workspaces with CO sources, and check the battery every six months.
- Be sure to seek the advice of a professional if you have questions about CO monitoring and/or ventilation.

## **CO Exposure Limit Standards**

- In North Carolina, the permissible exposure limit for CO in general industry and construction is 50 parts per million (ppm) averaged over eight hours.
- The Immediately Dangerous to Life and Health (IDLH) level for CO is 1,200 ppm at any given time, according to the National Institute for Occupational Safety and Health (NIOSH).
- Best practice is to never allow CO levels to go above 150 ppm within any area at any given time.

## **Need More Information?**

919-707-5900

**Occupational and Environmental Epidemiology Branch**

N.C. Department of Health and Human Services - Division of Public Health  
[www.ncdhhs.gov](http://www.ncdhhs.gov) - [www.publichealth.nc.gov](http://www.publichealth.nc.gov)



Adapted from:

Center for Disease Control and Prevention (CDC) (2015) "Carbon Monoxide Poisoning, General Information, Frequently Asked Questions." Retrieved from: <http://www.cdc.gov/co/faqs.htm>

The National Institute for Occupational Safety and Health (NIOSH) (2015) "Preventing Carbon Monoxide Poisoning from Small Gasoline-Powered Engines and Tools." Retrieved from: <http://www.cdc.gov/niosh/docs/96-118/default.html>

North Carolina Department of Labor (NCDOL) (2014). "Hazard Alert, Carbon Monoxide Can Reach Deadly Levels Without Warning." Retrieved from: [http://www.nclabor.com/osha/etta/hazard\\_alerts/CarbMonox.pdf](http://www.nclabor.com/osha/etta/hazard_alerts/CarbMonox.pdf)