

## Be Aware of Toxic Gas Exposure

Tips for avoiding toxic gas exposure on the worksite

While toxic gas exposure is certainly not the hottest safety topic for construction workers and contractors, it is still a real hazard that causes hundreds of occupational injuries each year.

Toxic gases are usually invisible, but they are nonetheless present in all types of workplaces and environments. While short-term effects may not be serious, the symptoms of toxic gas exposure often lead to more serious accidents. Be aware of the types of toxic gases you may be exposed to on the job so you can effectively respond in case of an accident or emergency.

**Trenching Gases** 

Digging in the ground is one of the most common sources of toxic gas exposure. Any excavation work has the potential to expose pockets of natural gas, which can ignite quickly and cause a fire or explosion.

In addition to natural gases, digging may expose poisonous gases like hydrogen sulfide or carbon dioxide. These substances are dangerous in and of themselves, but they also deplete the surrounding environment of oxygen. Working in conditions with low oxygen concentrations is just as dangerous as high quantities of toxic gases and can cause you to lose consciousness quickly.

**Gases from Equipment** 

Another major source of toxic gases on the job site is the wide array of equipment in use. Construction equipment powered by propane gas or diesel as well as torpedo heaters in the winter could pollute the surrounding air with carbon monoxide fumes. Acute

carbon monoxide poisoning causes headaches, vertigo and flu-like symptoms, but long-term exposure can cause depression, memory loss and failures of the central nervous system or heart.

Other equipment on-site, such as compressed gas cylinders used for welding or cutting, may also expose you to toxic gases.

Finishing and Maintenance Work
Contractors and construction workers
performing finishing operations have
unique risks of toxic gas exposure.
Poisonous fumes from paint or other
finishing products could cause serious
long-term harm, especially if you are not
wearing the appropriate respirator.

Workers performing maintenance may not be fully aware of the situation they are getting into. Before making routine repairs, identify all possible hazards, including the types of toxic gases that may have been present before you began working.

## Prevention

The most important thing you can do to protect yourself from toxic gas hazards is use a personal monitor that detects explosive or poisonous gas buildup as well as lack of oxygen in the environment. Wearing this simple device could save you and your co-workers' lives.



## Did You Know?

The atmospheric conditions on a construction or building site can change in a split second. What's more, a worker usually can't detect a change until it is too late. The only way to protect yourself is through proper toxic gas monitoring equipment.

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