

Carbon Monoxide Detectors Are They Necessary?

Everywhere you read these days talks about carbon monoxide and the dangers associated with it. How serious can it be? And what should I look out for? Hopefully, the following article will help answer some of those questions.

Carbon Monoxide is a colorless, odorless, tasteless, highly toxic gas that is produced by incomplete combustion. It is important to know that carbon monoxide is deadly from the toxicity standpoint long before it reaches the combustible range.

Carbon monoxide comes from appliances that consume coal, oil, wood, propane gas, natural gas and other hydrocarbon based fuels. It is absorbed by the hemoglobin of the blood cells and replaces the oxygen of the red blood cells that your body needs. When carbon monoxide replaces enough oxygen, your body begins to suffocate from the inside out and may cause brain damage, coma or later, death.

The carbon monoxide concentrations and the effects listed below are only a guideline. Effects can vary significantly based on age, weight and overall state of health.

Concentrations	Effects
9 parts per million	The maximum allowable concentration for short-term exposure in a living area according to the American Society of Heating, Refrigeration, and Air Conditioning Engineers.
35 parts per million	The maximum allowable concentration for continuous exposure in any 8 hour period according to federal law
200 parts per million	Slight headache, tiredness, dizziness, nausea after 2-3 hours
400 parts per million	Frontal headaches within 1-2 hours, life threatening after 3 hours, also maximum parts per million in flue gas according to EPA and American Gas Association
800 parts per million	Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours, death with in 2-3 hrs
1,600 parts per million	Headache, dizziness and nausea within 20 minutes, death within 1 hour.
3,200 parts per million	Headache, dizziness and nausea within 5-10 minutes, death within 30 minutes
6,400 parts per million	Headache, dizziness and nausea within 1-2 minutes, death within 10-15 min
12,800 parts per million	Death within 1-3 minutes

The effects vary depending on the level of carbon monoxide and exposure time. If you feel you have carbon monoxide in your building or home you can call your local plumber or the city to test your home.