Carbon Monoxide Poisoning In Grand Rapids: Causes, Prevention, and Legal Issues

AUTHORS
Bonnie Y. Sawusch

RELATED PRACTICES
Personal Injury

Personal Injury Blog Post
January 7, 2010

Carbon Monoxide ("CO") is a colorless, odorless gas that is a byproduct of incomplete combustion, causing it to be called “the silent killer.” CO interferes with the delivery of oxygen in the body, which can cause death and significant injuries, especially brain damage. Recently, there was a reported release of carbon monoxide at a factory in Kentwood, Michigan. Carbon monoxide poisoning can occur from many situations. It can lead to death and serious life-long complications, depending upon the severity of the exposure, whether it was an acute or chronic exposure, and depending on many human variables (age, health, sex, medical history, medical response, for example). CO poisoning can occur without any notice whatsoever in the absence of a CO detector because it is an invisible, odorless gas. In the Kentwood circumstance, it appears as if there may have been faulty equipment and/or maintenance involved, which is, unfortunately, a fairly typical factor, for the cause of many CO poisonings.

CO can be caused by a faulty heat exchanger in a furnace, by incomplete combustion, and/or by faulty venting. Improper maintenance can be a major factor in CO productions. For example, below is a photograph of a heating system where a previously rusted-out vent created toxic levels of CO at a hotel, causing it to be shut down but not before injuries were suffered.

As in many circumstances, just because the injuries may not appear to be “life-threatening” does not mean that there can be no residual, long-term or permanent damage. What is critical is for an accurate and reliable blood draw to be done to evaluate the carboxyhemoglobin levels, taking into account exposure times, levels of CO recorded (and when and where and how), when the victim was removed from the toxic area, and whether and when the victim was given oxygen (non-rebreather mask with oxygen for example). The half-life of carbon monoxide in the body differs depending on these factors. And the levels of CO recorded in the area in comparison to the injured person’s carboxyhemoglobin levels can be important, but are not dispositive or controlling in evaluating what happened, why, and any long-term complications from the exposure.

Symptoms of CO poisoning can range from nausea and headaches to mental confusion and dizziness. “Flu-like” symptoms may be indicative of CO poisoning. Victims of CO poisoning have been thought to be “drunk”
when in fact they were exposed to high levels of CO (707 ppm). Typically, a safe level of CO in a building is between 0 and 9 ppm.

Brain damage can result from CO poisoning, and the damage is not dependent on the person’s carboxyhemoglobin levels or the severity of the poisoning. There are circumstances in which a substantial CO exposure or persons with high COHb levels can make substantial recoveries. However, many do not. Those with ostensibly “minimal poisoning” (or low or nearly normal COHb levels) can suffer substantial damages. Loss of consciousness is not a requirement for neurological damage to have been suffered.

Exposure to CO, whether chronic or acute and depending on many factors, can lead to neurological changes and damage along with other physiological damage. Immediate treatment in a hyperbaric oxygen chamber has been utilized in some cases. Simply because a person may be discharged with appropriate levels of carboxyhemoglobin after treatment does not mean that there is no damage. Sometimes, brain damage and other neurological deficits do not appear until later. Often times, the victim of CO poisoning does not equate the CO exposure with their symptoms of tiredness or difficulties in processing and organization. There are specialists who are knowledgeable and experienced in this highly specialized area. Specialized neuropsychology battery of tests have been developed and are geared towards those who have been exposed to CO and may be experiencing problems.

Varnum has handled CO poisoning cases in the past and is currently involved in a major CO poisoning case in which two people were exposed to significant levels of CO. In such cases there are many issues that should be addressed, ranging from preservation and documentation of the scene, the cause (before repairs are made and equipment thrown away), and other testing. Experts familiar with CO poisoning can be helpful early on in assisting in treatment and diagnosis, all of which requires skill in the coordination of how best to handle the many issues that may confront a victim of CO poisoning. Issues ranging from medical bills and expenses, preservation of the evidence and cause, and legal recourse. Varnum attorneys investigate and handle CO poisoning cases and stay abreast of the mechanical, medical, and legal issues surrounding these types of cases.

Our law firm is a strong proponent of CO and gas detectors in homes and environments where this deadly gas may escape purely by accident or due to someone’s negligence.
Public education is critical not only to understand the dangers presented by CO exposure, but also about prevention and treatment. Public perceptions about the dangers and causes of CO show that there is not a sufficient understanding of the risks and from where the risks come (i.e. not just a furnace, but also from automobiles, recreational boats, radiant heaters, and so on). The risks are underestimated; the use of CO detectors is small (not unlike the utilization of smoke detectors years ago).

CO poisoning is a substantial risk and may lead to unanticipated and unexpected damages. Carbon monoxide lawyers with an established record of state-wide experience and knowledge in protecting your rights and obtaining maximum justice should be contacted immediately before critical evidence is lost.