

Understand the Effects of Carbon Monoxide Exposure

Concentration of CO in Air (ppm = parts per million)	Approximate Inhalation Time and Symptoms Developed
50 ppm	The maximum allowable concentration for continuous exposure for healthy adults in any 8-hour period, according to OSHA*.
200 ppm	Slight headache, fatigue, dizziness, and nausea after 2-3 hours.
400 ppm	Frontal headaches within 1-2 hours, life threatening after 3 hours.
800 ppm	Dizziness, nausea and convulsions within 45 minutes. Unconsciousness within 2 hours. Death within 2-3 hours.
1,600 ppm	Headache, dizziness and nausea within 20 minutes. Death within 1 hour.
3,200 ppm	Headache, dizziness and nausea within 5-10 minutes. Death within 25-30 minutes.
6,400 ppm	Headache, dizziness and nausea within 1-2 minutes. Death within 10-15 minutes.
12,800 ppm	Death within 1-3 minutes.

*Occupational Safety and Health Administration

Low Levels:

Generally 50 ppm and below.

Mid Levels:

Generally 50 ppm to 100 ppm.

High Levels:

Generally 100 ppm and above if no one is experiencing symptoms.

Dangerous Levels:

Generally 100 ppm and above if someone is experiencing symptoms.

Reminder: The chart above relates to the exposure of healthy adults. Read the information regarding descriptions of those who are at higher risk.