



# Carbon Monoxide

## What you need to know

### Understanding CO

Carbon monoxide is inhaled and absorbed from the lungs and into the bloodstream. Hemoglobin in the blood is responsible for transporting oxygen from the lungs to the body.

Hemoglobin, if given the choice, will link up with carbon monoxide instead of oxygen. CO is absorbed into the bloodstream 250 times faster than oxygen, raising the level of carboxyhemoglobin very quickly.

If this occurs a lack of oxygen to the body will produce CO Poisoning; CO asphyxiates the victim. If the blood oxygen is reduced enough it can result in unconsciousness, brain damage, or death.

#### Early Symptoms of CO poisoning:

- Flu-like symptoms
- Tightness across the forehead
- Headache, throbbing at temples
- Dizziness
- Weakness
- Nausea & vomiting
- Partial loss of muscle control
- Increased pulse & respiration

#### With prolonged exposure, symptoms include:

- Confusion
- Disorientation
- Conscious, but unable to move due to muscular weakness

#### Final stages, Symptoms include:

- Drop in blood pressure
- Complete loss of muscular control
- Unconsciousness
- Convulsions
- Death

#### CO Characteristics

- Colorless
- Tasteless
- Odorless
- Non Irritating
- Slightly lighter than air

#### Factors affecting CO absorption:

- Concentration—the concentration of CO in the free air.
- Exposure—The length of time an individual is exposed to CO.
- Physical Activity— The higher the rate of respiration, the more CO will be inhaled.
- Physical health—Sick persons, especially those with heart or respiratory ailments are more susceptible to CO.
- Age— Infants and elderly are more susceptible.
- Sex—Females are more affected than males.
- Altitude— the higher altitude, the greater effect of poisoning.
- CO absorbed in the bloodstream is cumulative. The human body has difficulty in removing carbon monoxide from the bloodstream and requires five hours to reduce the level by half.