

# Understanding Gases

## Carbon Monoxide



CO

**Carbon monoxide is often referred to as 'The Silent Killer', because you can't smell, hear or see carbon monoxide, yet it is a highly toxic gas which can have devastating consequences.**



Carbon monoxide (CO) is a colourless, odourless, tasteless, poisonous gas produced by incomplete burning of carbon-based fuels, including gas, oil, wood, and coal.



It is only when fuel does not burn fully that excess CO is produced, which is poisonous.



CO is present in several different industries, such as steel works, manufacturing, electricity supply, coal and metal mining, food manufacturing, oil and gas, production of chemicals and petroleum.

### What are the dangers?

Due to the characteristics of CO being so hard to identify, i.e., colourless, odourless, tasteless, poisonous gas, it may take time for you to realise that you have CO poisoning. The effects of CO can be dangerous, this is because CO prevents the blood system from effectively carrying oxygen around the body, specifically to vital organs such as the heart and brain. High doses of CO, therefore, can cause death from asphyxiation or lack of oxygen to the brain.

### What should you do if you are exposed?

Seek fresh air immediately and call 911 or emergency medical help if you or someone you're with develops signs or symptoms of carbon monoxide poisoning. These include headache, dizziness, nausea, shortness of breath, weakness and confusion. Hospital treatment may include breathing pure oxygen or spending time in a pressurized oxygen chamber.

### What are the applications of Carbon Monoxide?

CO is present in several different industries, such as steel works, manufacturing, electricity supply, coal and metal mining, food manufacturing, oil and gas, production of chemicals and petroleum refining to name a few.

CO is produced by incomplete combustion of fossil fuels such as gas, oil, coal, and wood. This happens where there is a general lack of burner maintenance, insufficient air – or the air is of insufficient quality to allow complete combustion.



15 people die from CO poisoning every year



Colourless, odourless, tasteless, poisonous gas



Effects of CO poisoning, include breathlessness, chest pain, seizures and loss of consciousness