

Carbon monoxide (CO) is a colourless, odourless and tasteless gas. In higher quantities it is harmful, even toxic, to humans and animals.

Why do human activities like burning coal emit carbon monoxide? Ideally, burning coal should give carbon dioxide and water.

If you have a camp fire in the open air, there will always be enough oxygen to make the fuel burn completely, so you don't have to worry about carbon monoxide. But, if you share the oxygen you breathe with too many appliances and people – for example, in an enclosed, crowded place, there isn't enough to go around.

That is when coal or wood burns inefficiently; there is partial oxidation and instead of *carbon dioxide* or CO₂, Carbon monoxide or CO is one of the end products.

CO is also naturally produced in volcanoes and forest fires.

When it enters the bloodstream, CO reacts with the haemoglobin in our blood and forms carboxyhaemoglobin. This reduces the ability of haemoglobin to transfer oxygen to various parts of our body.

Exposure to elevated carbon monoxide levels can cause impairment of

- visual perception,
- manual dexterity,
- learning ability and
- performance of complex tasks.
- headache, fatigue, dizziness, drowsiness, or nausea.
- Sudden chest pain may occur in people with angina.
- During prolonged or high exposures, symptoms may worsen and include vomiting, confusion, and collapse in addition to loss of consciousness and muscle weakness.
- Symptoms vary widely from person to person. CO poisoning may occur sooner in those most susceptible: young children, elderly people, people with lung or heart disease, people at high altitudes, or those who already have elevated CO blood levels, such as smokers.
- Also, CO poisoning poses a special risk to fetuses.

Can you imagine the immeasurable damage to our young if their abilities are so drastically impaired at the very beginning of life?

Who is at risk?

Anyone who works or lives in a very small or enclosed space, sharing it with many others, are exposed to harmful levels of carbon monoxide. People who work in factories, blast furnaces, firefighters and who are in their vehicles in traffic like drivers and traffic police, people who use coal and wood burners are at risk too. In short, everyone in India is exposed to dangerous levels of carbon monoxide.