**Did you know …..**

Inert gases are generally free of odor. In contrast, hydrogen sulfide has the odor of rotten eggs, but this gas can cause “olfactory fatigue” (losing the ability to smell the odor) in high concentrations. Without an odor to a gas, the exposed person has no warning and can be readily overcome by oxygen deprivation.

The addition of chemical odorizers to inert gases can serve to warn persons about a gas leak. The odorant usually does not pose a health risk. For example, mercaptans are added to natural gas in order to provide an odor and warning in a gas leak.

Call the IPCC at **1-800-222-1222** for treatment advice on any gas or poison that has been inhaled.

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**Simple Asphyxiants**

Simple asphyxiants are inert gases or vapors that in high concentrations will displace oxygen from the air, resulting in oxygen deprivation. Examples of simple asphyxiants are carbon dioxide, nitrogen, propane, methane, hydrogen and acetylene. Nitrous oxide and butane are sometimes abused for euphoric effects and can also be simple asphyxiants. Toxic gases, such as ammonia or hydrogen sulfide, can also be simple asphyxiants in high concentrations.

Exposures usually occur in an industrial setting, but occasionally occur in outbreaks from a natural or industrial disaster or accident.

Signs and symptoms of toxicity depend on the concentration of the asphyxiant in the air, exposure duration, respiratory rate and the individual’s preexisting health issues. Symptoms are those of oxygen deprivation (hypoxia).

**Mild to Moderate Symptoms:** Headache, nausea, vomiting, compensatory increase in respiratory and heart rates. Oxygen saturations may be below 90%. Initial euphoria due to hypoxemia may impair the patient’s ability to escape from the toxic environment.

**Severe Symptoms:** Dyspnea, altered level of consciousness, cardiac dysrhythmias, cardiac ischemia, syncope, seizure and death. Oxygen saturations will likely be 80% or lower.

**Immediate Treatment Measures:**
- First, make sure you are protected and don’t succumb to the toxic gas or vapor, then remove the victim from the exposure environment.
- Provide cardio-respiratory support until recovery occurs.
- Give supplemental oxygen. Most patients recover rapidly once exposure ceases and oxygen is administered.

**Labs and Monitoring:**
- Monitor vital signs and mental status.
- Obtain serum lactate and ABG to monitor acid-base status (metabolic acidosis, etc.) and oxygenation.
- EKG and cardiac monitor patients with moderate to severe symptoms.
- A brain MRI or CT may be indicated if there are signs or symptoms of cerebral edema, coma, or a persistent abnormal neurological exam.

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