

Volatile Organic Compounds (VOC)

Exposure to VOC vapors can cause a variety of health effects, including eye, nose, and throat irritation; headaches and loss of coordination; nausea; and damage to the liver, kidneys, or central nervous system. Some VOCs are suspected or proven carcinogens.

Oxides of Nitrogen

Environmental and health effects of nitrogen oxides

Elevated levels of nitrogen dioxide can cause damage to the human respiratory tract and increase a person's vulnerability to, and the severity of, respiratory infections and asthma. Long-term exposure to high levels of nitrogen dioxide can cause chronic lung disease. Jun 28, 2023

Carbon Monoxide

Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.

Particulate Matter

Short-term (hours to days) acute exposures to fine particles can trigger cardiovascular events, hospitalization episodes, and mortality. Long-term (months to years) chronic exposures to fine particles can increase the risk of strokes, coronary heart disease and cause premature deaths. Oct 25, 2023

Particulate Matter 10 Micrometers

PM10 (particles with a diameter of 10 micrometres or less): these particles are small enough to pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects.

Particulate Matter 2.5 Micrometers

Breathing in unhealthy levels of PM_{2.5} can increase the risk of health problems like heart disease, asthma, and low birth weight. Unhealthy levels can also reduce visibility and cause the air to appear hazy. Particle pollution can come from outdoor and indoor sources.

Sulfur Dioxide

Sulfur dioxide is a severe irritant to the respiratory tract, eyes, mucous membranes, and skin. Exposure to high doses can cause pulmonary edema, bronchial inflammation, and laryngeal spasm and edema with possible airway obstruction.

Hydrogen Sulfide

Exposure to hydrogen sulfide may cause irritation to the eyes and respiratory system. It can also cause apnea, coma, convulsions; dizziness, headache, weakness, irritability, insomnia; stomach upset, and if liquid: frostbite.

Ammonia

High levels of ammonia can irritate and burn the skin, mouth, throat, lungs, and eyes. Very high levels of ammonia can damage the lungs or cause death. Workers may be harmed from exposure to ammonia. The level of exposure depends upon dose, duration, and work being done.

Hazardous Air Pollutants (HAP)

What Are the Health Effects from Toxic Air Pollutants?

- Cancer, including lung, kidney, bone, stomach.
- Harm to the nervous system and brain.
- Birth defects.
- Irritation to the eyes, nose and throat.
- Coughing and wheezing.
- Impaired lung function.
- Harm to the cardiovascular system.
- Reduced fertility.

Carbon Dioxide

Symptoms of mild CO₂ exposure may include headache and drowsiness. At higher levels, **rapid breathing, confusion, increased cardiac output, elevated blood pressure and increased arrhythmias** may occur. Breathing oxygen depleted air caused by extreme CO₂ concentrations can lead to death by suffocation.