



INDOOR AIR QUALITY HEALTH HAZARDS



Indoor Air Quality (IAQ) is the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants. Understanding and controlling common pollutants indoors can help reduce indoor health concerns.

INDOOR AIR POLLUTION IMPACTS CHILDREN MOST

Children are particularly vulnerable to the impacts of indoor air pollution because they breathe more rapidly than adults and so absorb more pollutants. They also live closer to the ground, where some pollutants reach peak concentrations – at a time when their brains and bodies are still developing.

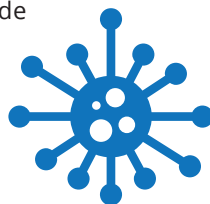


INDOOR AIR QUALITY HAZARDS

Below are the common air quality hazards found in buildings.

ALLERGENS

An allergen is something that causes allergy signs, or an allergic reaction. Common ones are pet dander, smoke, mold, pollen, chemicals, dust, and pests such as mice and cockroaches. Symptoms may include watery eyes, runny or stuffed up noses, itching, headaches, asthma attacks, and difficulty breathing.



health problems, especially in children. When absorbed by the body, it can damage the brain and vital organs such as the kidneys and can also result in behavioral problems and learning disabilities.

CARBON MONOXIDE

Carbon monoxide (CO) is a poisonous gas that can come from improperly operating fuel burning appliances such as furnaces, fireplaces, water heaters, space heaters, and gas stoves. Carbon monoxide cannot be seen, smelled, or tasted and can cause death if exposed to elevated levels. Carbon monoxide poisoning may be mistaken for headaches, stroke, food poisoning, or heart disease.



RADON GAS

Radon is an invisible, radioactive gas that comes from natural deposits of uranium and radium in soil and can be found in homes and buildings. Prolonged exposure to elevated radon gas levels can increase the risk of lung cancer. The United States Surgeon General, the American Lung Association, and the Environmental Protection Agency recommend that people avoid long-term indoor radon exposure at or above 4 pCi/L.

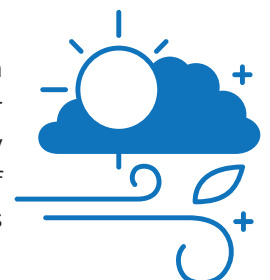


LEAD-BASED PAINT

Lead-based paint was used both inside and outside homes built before 1978. It is a very toxic metal that can cause many

VENTILATION

Ventilation (airflow) is the circulation of air throughout a building. Proper ventilation can control indoor humidity and airborne contaminants, both of which either contribute to or act as health hazards.



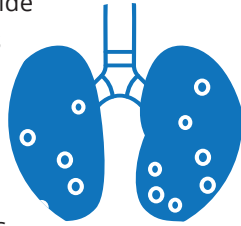


INDOOR AIR QUALITY HEALTH HAZARDS (CONTINUED)



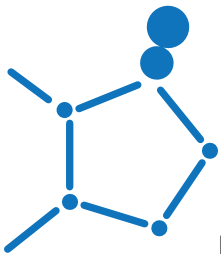
ASBESTOS

Asbestos is a mineral fiber used in a wide range of building construction materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products) for insulation and as a fire retardant. Unless labeled, you cannot tell visually if a material contains asbestos. Exposure to asbestos increases the risk of developing lung disease and the risk is made worse by smoking.



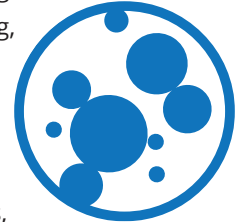
CHEMICALS

Chemicals are widely used as ingredients in household products and some building materials, and many are released as gases from certain solids or liquids including paints, varnishes, and wax all contain solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products and fuels are made up of organic chemicals. Exposure to chemicals can cause eye, nose, and throat irritation, headaches, dizziness, nausea, damage to organs and the nervous system, and cancer.



MOLD

Molds and mildew are organisms that can grow in your home on walls, ceilings, carpeting, and furniture in humid or wet areas. As part of its growth, mold and mildew can release tiny particles called spores and their associated disease-causing toxins. Mold exposure can cause watery eyes, a runny nose or nasal congestion, itching, headache, asthma attacks, and difficulty breathing.



SMOKING AND VAPING

Secondhand smoke is a mixture of the smoke given off by the burning of tobacco products, such as cigarettes, cigars or pipes and the smoke exhaled by smokers. Opening a window or increasing ventilation in a home or car is not protective from secondhand smoke. Secondhand smoke causes cardiovascular disease such as heart disease and stroke, lung cancer, sudden infant death syndrome, more frequent and severe asthma attacks, and other serious health problems. Vaping is the inhaling of a vapor created by an electronic cigarette (e-cigarette) or another vaping device.

