

# Indoor Air Quality Stats and Facts

## DID YOU KNOW?

“Indoor air quality” refers to the quality of the air in a home, school, office, or other building environment. The potential impact of indoor air quality on human health nationally can be noteworthy for several reasons:

- Americans, on average, spend approximately 90 percent of their time indoors, where the concentrations of some pollutants are often 2 to 5 times higher than typical outdoor concentrations.
- People who are often most susceptible to the adverse effects of pollution (e.g., the very young, older adults, people with cardiovascular or respiratory disease) tend to spend even more time indoors.
- Indoor concentrations of some pollutants have increased in recent decades due to such factors as energy-efficient building construction (when it lacks sufficient mechanical ventilation to ensure adequate air exchange) and increased use of synthetic building materials, furnishings, personal care products, pesticides, and household cleaners.

## Other Factors Affecting Indoor Air Quality

In addition, several other factors affect indoor air quality, including the air exchange rate, outdoor climate, weather conditions, and occupant behavior.

The air exchange rate with the outdoors is an important factor in determining indoor air pollutant concentrations. The air exchange rate is affected by the design, construction, and operating parameters of buildings and is ultimately a function of infiltration (air that flows into structures through openings, joints, and cracks in walls, floors, and ceilings and around

windows and doors), natural ventilation (air that flows through opened windows and doors), and mechanical ventilation (air that is forced indoors or vented outdoors by ventilation devices, such as fans or air handling systems).

Outdoor climate and weather conditions combined with occupant behavior can also affect indoor air quality. Weather conditions influence whether building occupants keep windows open or closed and whether they operate air conditioners, humidifiers, or heaters, all of which can affect indoor air quality. Certain climatic conditions can increase the potential for indoor moisture and mold growth if not controlled by adequate ventilation or air conditioning.

According to **The Lancet**, 800,000 people die every year due to poor air quality in their workplace.

**You spend about 90% of your time indoors.**

At work, if you are like most people, you spend almost all of your time inside. This should be a major concern, when you consider this and the next fact together.

**The quality of indoor air can be two to five times (and even up to 100 times) more polluted than the worst outside air.**

Most people recognize the health concerns that outdoor air pollution poses, but few consider that exposure to poor indoor air quality has the same ill health effects.

**The EPA has ranked indoor air pollution among the top five environmental dangers.**

The Environmental Protection Agency has recognized that poor indoor air pollution is a very real problem and ranked it among the top of the environmental dangers facing the public.

**There has been an alarming increase in the number of children with severe allergies and asthma.**

The amount of children and young adults with severe allergies and asthma continues to climb every year. This has been linked to

increasingly poor indoor air quality.

**Allergies, asthma, lung cancer and heart problems have all been linked to poor air quality.**

The American Heart Association has linked poor air quality to heart problems while the American Lung Association lists it as a leading cause of lung cancer.

**Sources of indoor air pollution are all around you.**

Studies conducted by the EPA have shown that indoor air pollution is a problem for all types, whether in a dense urban city or a rural town. Some of the sources include:

- Combustion sources: gas, oil, kerosene and wood stoves or fireplaces, tobacco smoke
- Building materials: insulation, carpet, cabinetry, pressed wood products
- Chemical products: cleaning products, personal care products, glues, pastes
- Outdoor sources: radon, pesticides, pollen, outdoor air pollution
- Other: pet dander, dust mites, mold, virus

## **DUE TO AN ABNORMALLY WARM WINTER THIS YEAR**

the pollen counts are 800% higher (or 8 times greater) than normal.

**You inhale approximately 15,000 or more quarts of air per day.**

You likely understand the health benefits of clean water, of which you consume about two quarts per day. Yet, most people are unaware of or ignore the importance of breathing clean air, as well.