



## Healthy building or sick building? Preventing problems is important to our well being

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Millions of people start their day feeling fine, until they get to work - and it's not the job that's making them sick. Some people experience symptoms like headaches, coughs, dizziness, fatigue, and nausea once they get to work and then, once they leave the building, their symptoms disappear. In these cases, poor indoor air quality, which is also known as "sick building syndrome," may be the cause.

What is Sick Building Syndrome?

Sick building syndrome has generally come to be defined as what happens when 20% or more of the occupants of a building experience a range of ill health symptoms that appear to be linked to time spent inside the building. No specific illness or cause can be identified and the symptoms disappear when they leave the building. The complaints may be specific to a particular area of a building or widespread throughout.

Sick building syndrome occurs largely in tightly sealed office buildings where air is re-circulated. It's a serious concern to businesses, building managers, tenants, and employees because it can affect the health and productivity of building occupants and at its worst, land them in the news or in court. Studies have shown clear associations between reduced productivity and absenteeism among office workers and poor indoor environmental conditions.

However, it's not just restricted to office buildings. Sick building syndrome also affects other commercial or residential buildings including apartments, condominiums and single family homes. In new homes in particular, building materials such as insulation, carpeting, and paint can cause reactions.

The Environmental Protection Agency (EPA) has identified Indoor Air Quality (IAQ) as is one of the top five environmental health risks. Because homes and commercial buildings are tighter and tighter these days to conserve energy, they tend to trap various airborne contaminants more easily. The agency says indoor pollutant levels can be 2 to 5 times - and sometimes more than 100 times - as high as outdoor levels.

So what can you do to ensure the conditions of your buildings actually contribute to worker productivity and health?

What Can You Do?

The best way to improve indoor air quality is to remove the source of the pollution, but that's not always possible. So what can you do?

1. Where possible, remove the pollutants from the building or isolate them.
2. Improve ventilation to more effectively remove pollutants.
3. Use an air purification system to ensure optimal indoor air quality standards.

Unique and Proven Technology Offers Better Solution

There are several options for air purification systems such as filters, ultra violet light, electronic air cleaners and bi-polar ionization. The most cost efficient, environmentally friendly, and effective of these options uses bi-polar ionization because it's the only option that covers the full range of contaminants that confront building owners. Bi-polar ionization involves an all natural process that works by dispersing positive and negative ions in the air so they are then able to interact with oppositely charged contaminants. With this process, mold is eliminated, bacteria and the spread of airborne viruses are controlled, VOCs and odors are eliminated, and airborne particles and germs that get past normal filtration solutions are reduced. This technology is unique in that it does not produce any harmful by-products such as ozone or ultraviolet light.

AtmosAir Solutions is a product line that uses a patented bi-polar ionization process. Because the air is purified, it restores indoor environments to the same clean and pure quality of air that is typically only found at higher mountain elevations. AtmosAir's products are available as standalone portable units or can easily be integrated into HVAC systems for use in homes, condominiums, apartments, schools, hospitals, commercial office buildings, hotels, athletic facilities, beauty and nail salons, manufacturing facilities and many other applications. They are easy to install in new construction or retrofits with little or no disruption to ongoing operations. Because the air is significantly purified inside the building, the building can rely on less air from the outside, which can also reduce energy and HVAC costs.

Everyone is becoming more aware and conscious of their environment - including indoors where we work and live. Preventing problems like sick building syndrome are important to our well being and can also contribute to a company's bottom line. The following organizations offer additional information and resources on their websites.

AtmosAir Solutions [www.atmosair.com](http://www.atmosair.com); ASHRAE [www.ashrae.org](http://www.ashrae.org); Indoor Air Quality Association [www.iaqa.org](http://www.iaqa.org); National Green Energy Council [www.greenenergycouncil.com](http://www.greenenergycouncil.com); and USGBC [www.usgbc.org](http://www.usgbc.org).

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