Too much time indoors can be bad for your health. Considering the average amount of time spent inside, it has significant effects. The official terms for illness caused by indoor spaces are sick building syndrome (SBS) and building-related illness (BRI). SBS means the root cause is unknown but it's clear that the issue stems from time spent in the space. BRI is when the origin(s) of the illness are identifiable in the building.

Stale indoor air also causes a plethora of problems in homes. All indoor space related health issues are often due to poor airflow and the specific air particles stuck circulating inside. So, what exactly is stale indoor air?

What Is Stale Indoor Air?

Stale indoor air is simply air that is either poorly circulated or not circulated in a space. Minimal, poor or a complete lack of air circulation means one is living and working in spaces and consistently breathing old air.

The problem with stale or old air is that it causes occupants to be further exposed to harmful particles, air toxins and hazardous chemicals that are in circulation. Air that doesn't circulate well allows said toxins to sit in a room or space for extended periods of time and increases exposure.

While every space has its share of toxins that needs to be filtered or ventilated, buildup occurs if air isn't circulating regularly. Fresh cleaner air is drastically important for everyone's health and wellbeing as well as the quality of indoor spaces.

How Does Air Become Unhealthy?

Dust and mold are common contaminating culprits. Also, things like cleaning supplies, cooking and cooking methods as well as hot showers are additional sources of pollutants. The sad truth is, most of our daily living activities contribute to polluted air. And, this is in addition to other invisible indoor sources that increase pollution. These are things like home location and outdoor pollutants or the building materials used.

This combination of factors means ensuring good air circulation is absolutely crucial. Gases, excess humidity, bacteria and other pollutants never have an

opportunity to leave a poorly circulated space. Then, occupants are left to inhale the polluted air far longer than one should.

Poor circulation is common in buildings as windows and doors simply aren't opened often enough to let proper amounts of fresh air in. It is perhaps more common in extreme temperature or humid climates because it's too hot or cold to leave windows open on a regular basis. This can cause a buildup of pollutants and humidity, which makes it easier for bacteria and mold to grow.

Poor circulation is also common in homes, specifically newer builds. This is because new construction has prioritized energy efficiency and uses better construction practices. The result, however, is less natural ventilation. This unintended consequence means reduced airflow. New construction limits airflow through gaps and cracks in home foundations present in older builds.

Stale Indoor Air Symptoms

People that work or live in buildings and homes with poor air circulation can notice the effects in a few ways. Those suffering from excess humidity might be prone to fatigue and worsening allergies. Those suffering from low humidity levels due to poor circulation likely notice dry skin and eyes. In warm spaces, nausea, headaches and nasal irritation are common.

Respiratory system irritation due to poor circulation often causes coughing and congestion. It can also worsen said symptoms. Not all who work or live in poorly circulated spaces experience these symptoms equally. SBS, BRI and the aforementioned problems usually affect those with allergies and asthma more severely. However, in situations where mold or bacteria growth is severe and circulation is limited, the outcome can be dangerous for anyone.

The Solutions

There are a variety of ways to improve the air quality in our indoor spaces. For improving poor air circulation, the answer is always ventilation. An easy ventilation method is to open windows and/or doors whenever possible to allow fresh air in. Due to weather, temperatures, safety and other reasons, this is not always a viable option.

The second ventilation solution is mechanical ventilation. Mechanical ventilation ensures proper air circulation and that the entire home has fresh air. A mechanical ventilation system is installed directly to the existing HVAC system, making it a low-maintenance solution.

Upgrading to a whole-home ventilation system reduces and keeps toxins out of the air by providing consistent airflow. There are two types of mechanical ventilation systems: ERVs and HRVs. Energy recovery ventilation and heat recovery ventilation systems use slightly different methods, but both actively pull fresh outdoor air in and remove stale indoor air.

Make Fresh Air a Priority

The bottom line is: breathing in stale and polluted air is bad for your health. Poor circulation means harmful particles and toxins can accumulate in your spaces. Cleaning helps remove dust and pollutants, but proper circulation is the ideal long-term solution for all of your spaces. A whole-home ventilation system is the best choice to get rid of stale air and provide a healthier cleaner breathing space for all occupants.