

Is Poor Indoor Air Quality affecting your Health?

Contributed by: David W. Bayne – CIE, CMR
General Manager of A1 Mold Testing and Remediation Services

Indoor air quality is important to human health because individuals spend a large fraction of their time indoors at their residences, schools and workplaces. In a study conducted by the EPA, it was found that on average a person spends 87% of their time indoors. This is broken down into 69% spent in residences and 18% spent in other indoor locations. Obviously in Nebraska during the winter time, these numbers are going to increase because of the cold weather we experience.

The EPA estimates that indoor air pollutant levels could be two to five times higher than pollution levels outdoors. Considering the above listed fact about time spent indoors, it makes sense as to why indoor air quality is so important to our health. In addition, indoor air pollutants are one of the foremost triggers of allergies and asthma.

So why is it that in the winter these indoor pollutants are so high? We tend to keep our houses tight in the winter, to keep them warm and keep that utility bill low. This in turn is causing the allergen and pollutant levels to rise due to the lack of fresh air to dilute them.

Some of the more common indoor pollutants are mold, pet dander, dust mites, bacteria, viruses, germs, tobacco smoke, carbon monoxide, and various VOC's like formaldehyde.

Immediate effects of poor indoor air quality can show up after just a single exposure and include headaches, dizziness, fatigue, and itchy eyes, nose, and throat. Asthma and chemical sensitivities can also be aggravated by exposure to indoor pollution. Chronic sensitivity may also build up after repeated exposures.

Although it remains uncertain what levels or periods of exposure are necessary to bring on serious health effects from indoor air pollution, long-term effects of indoor air pollution include respiratory disease, heart disease, and cancer.

Identifying indoor air quality issues is generally the most difficult step. Health effects can be good indicators that you may have an indoor air quality issue, especially if the issues are constant or recurring, or occur after moving into a property, remodeling, refurnishing, or after changing the habitat in any way. If you believe that your health problems may be related to your indoor air quality then

discussing your problems with your doctor or having a certified indoor environmentalist assess your home should be your next step.

The EPA recommends three basic strategies to improving your indoor air quality. The first is source control. Eliminating or reducing individual sources is often the most effective way of improving your air quality. An example would be if you know that you have mold growing within your home, it is likely that the mold is becoming air borne and you are breathing it in. Having the mold removed professionally will eliminate that pollutant source.

The second is increasing the amount of outdoor air coming indoors. Most of the heating systems inside of homes do not mechanically bring fresh air into the house. Opening windows and doors, operating window and attic fans when the weather is permitting increases the outdoor ventilation rate. Also, running bathroom and kitchen exhaust vents that exhaust to the outdoors will remove contaminants directly from the room where the fan is located and also increase the outdoor air ventilation rate.

The third and final strategy is the use of an air cleaner. There are many different types of air cleaners available for purchase ranging from a table-top model to a whole-house system. Some systems are very effective at removing particulates from the air, while others are not. Most air cleaners are not designed to remove gaseous pollutants. A professional should be contacted as to what type of air cleaner would be effective for your particular situation and budget.