

Homeowner Frequently Asked Questions

How do I know if my home's air is unhealthy?

There are 3 important clues that can be used to begin an assessment of the quality of air in your home.

1. Are there visual signs of mold, moisture or other IAQ issues? Signs such as condensation on windows, staining on walls or ceilings, spotting, bubbling or peeling of paint or signs of excessive dust, bugs or other pests?
2. How does your home smell after you have been away for a few hours? If it smells stuffy, stale, musty or if odours linger, these are signs of poor air quality. If you feel the need to use air fresheners on a regular basis to make the air smell fresh, that is an indication of poor air quality. Often someone new to your home is in a better position to detect unusual odours since your nose may have become conditioned to smells.
3. Do family members or others find they feel worse when in your home? That is, if people with asthma, allergies, sensitivities or respiratory problems feel their symptoms are worse when they are in your home, this is an indication the air in your home could be improved.

What causes indoor air pollution?

There are many possible sources of indoor air quality problems that can be related to the building or building materials, the surrounding outdoor air and activities and products used by the occupants in your home. Usually it is a combination of events, activities or circumstances that result in poor air quality. Someone with a trained eye and nose who is new to your home is often in the best position to help identify air quality problems.

How can I improve the quality of air in my home?

In the same way that there may be a combination of factors that lead to poor air quality, usually improvements in air quality are best achieved with a combination of solutions that may include lifestyle adjustments, modest renovations and improvements in mechanical systems. There is a systematic approach used by indoor air quality professionals when addressing indoor air quality solutions.

First, ask if the sources of potential pollutants can simply be removed. Examples would include removal of stored chemicals, reduction of scented chemical cleaners or personal hygiene products, removal of moldy or musty items, removal of carpets in favour of hard surface flooring, reduction of clutter or household items, repair or replacement of building materials that are causing water leaks or the entry of pets.

Second, for items that are not easily removed, seal pollutants from occupants. Examples include, properly sealing doors and other entry points between the house and an attached garage, air sealing holes that allow water or pest intrusion, seal the

exposed edges of particle board furniture or cabinets to reduce the off-gassing of chemicals, keep any regularly used chemicals in sealed plastic containers. Another great strategy is to create an “oasis” for sensitive family members. That is, make their bedroom into a very clean space by removing carpets, stored items and all chemicals from their room. Make sure pets are restricted from entering the room and avoid plants in their room.

Thirdly, once as many items as possible have been removed or sealed, improve the ventilation in your home. This means ensuring there is an adequate supply of fresh air from outside being delivered to your home on a continuous basis. Professional HVAC contractors can help with this.

Finally, allow your HVAC contractor to help you choose the right filtration system for your home. There are a number of cost effective choices for filtration and your HVAC contractor will help you choose one that is right for your family and your home.

What is the best indoor air quality product?

A professional HVAC contractor can help you identify and select the product or combination of products that address the specific indoor air quality issues in your home and for your family. Every home and every family has different needs and air quality products should be chosen that target those specific needs rather than looking for one “silver bullet”.

Will improving the quality of air in my home reduce the allergies, asthma or other respiratory problems family member experience?

Indoor air quality improvements are an important part of personal health management because each family member breathes in hundreds of cubic feet of air each day. Therefore recommendations by professional HVAC contractors can be seen as positive steps towards better air quality. However, your doctor would be in the best position to determine whether specific improvements in your home’s air quality will alleviate your specific health concerns.

What is the right relative humidity for my home?

Moisture is typically bad for buildings and building materials but good for people. We really want to achieve a moisture balance that avoids condensation on windows in the winter and damp basements in the summer and yet is comfortable for occupants. In most houses this means keeping RH levels below 55% in summer and between 35% and 45% in winter (lower if needed to avoid excessive window condensation).

I hear people recommending ventilation systems that bring in outside air but what about the news reports that say outside air is polluted?

It is true that on “smoggy” days, the air outside has a lot of fine dust particles and ozone in it. However, on most days the air outside has fewer pollutants in it than

inside air – after all, the air currently in your home came from outside and then you and your family added moisture, dust, chemicals and other pollutants to it. Therefore on most days, ventilation or the introduction of the right amount of fresh air, is very helpful in improving air quality. Even on smoggy days, a good, controlled ventilation system will provide an opportunity to filter out pollutants from the fresh as it enters your home.