

IAQ Home Survey™

Sometimes it's what you don't know that can hurt you.

We spend a lot of time making sure we stay healthy by eating the right foods, exercising, and getting regular physical exams. We are vigilant about keeping our children away from things that can harm them, but how often do we question whether or not the air in our homes is safe to breathe?

IAQ Home Survey is a simple, inexpensive do-it-yourself test that measures and reports on the air in the home for chemicals and hidden mold that could be detrimental to your health, and that of your family. You'll know the total levels of airborne chemicals, called VOCs (volatile organic compounds), in your home air, as well as the total level of actively growing mold that could be hidden behind walls or in carpeting.

If there were a way to ensure you are breathing healthy air in your home, wouldn't you want to know about it?

An IAQ Home Survey test will give you a total assessment of the air you breathe every day. It is the only test available to the home market that gives you an affordable, comprehensive air quality audit of the chemicals in the air — volatile organic compounds (VOCs) and mold VOCs (the chemicals emitted from actively growing mold).

Here are some good reasons why you should test the air in your home today:

1. Elevated VOC levels in the home can cause both short-term and long-term health issues.

The U.S. Green Building Council's recommended healthy building level is 500 ng/L. However, data from hundreds of homes measured by homeowners show the median value is 1,200 ng/L, more than twice the recommended level.

2. High VOC levels can trigger asthma attacks in the 20+ million US adults and children who have the disease. Asthma is also the most prevalent chronic illness among children. Therefore, finding high VOC levels and their sources can be helpful to homeowners and tenants.

3. Asthma prevalence and severity continue to rise and are at all-time high levels. At the same time, outdoor air pollution is declining. On average, most people spend about 90% of their time indoors. Therefore, many experts suggest there is a strong association with the increase in asthma illnesses and indoor air quality.

4. Babies, young children, pregnant women, older persons, and people with respiratory or cardiovascular disease can be more vulnerable to indoor air pollution. If your family is made up of any of these groups of people, then an air quality assessment would be wise.

5. Many newer, more energy-efficient homes do not "breathe" correctly. IAQ Home Survey can potentially discover HVAC issues before they become more problematic.

6. Carpeting, vinyl and laminate flooring, cabinets, countertops, and other similar building materials use adhesives that “off-gas” continuously over time, even for years. Many of these materials are manufactured using hazardous chemicals, some that can even cause cancer. Testing for harmful toxins that could be lurking within the framework of the house would be prudent.

7. Common household and personal care products contain VOCs and off-gas continuously, leaving home occupants constantly exposed to airborne chemicals. IAQ Home Survey can predict the sources of VOC contamination.

8. Soil gas from environmental contamination can seep into the basement similar to radon. IAQ Home Survey can observe this contamination.

Indoor air can be hazardous to your health

The U.S. Environmental Protection Agency (EPA) has declared that indoor air quality poses a greater health hazard to humans than outdoor air pollution, with pollutant levels averaging two to five times higher, and sometimes 100 times higher, than outside air. The World Health Organization has stated that indoor air pollution is responsible for nearly 3% of the worldwide burden of disease. We spend approximately 90% of our time indoors, much of that time in our homes; therefore, our exposure to air pollutants is significant.

Breathing bad air can cause many health effects, from mildly irritating to extremely serious. Symptoms such as frequent headaches, dizziness, fatigue, nausea, confusion, coughing, wheezing, itchy eyes, nose and throat irritation can be indicators that the quality of air in the home is poor – especially if these symptoms subside once you leave the house. Other more serious health problems that can arise with poor indoor air quality are asthma exacerbation, digestive problems, and damage to the liver, kidneys and central nervous system. Some air contaminants are so harmful that they can even cause cancer. And the source of these harmful air contaminants? Products that we use or are surrounded by every day.

In addition to the presence of health problems from inhalation of mold, serious structural damage can occur if mold is present. Leaky pipes, poorly working or dirty air conditioning and heating systems, and ground water penetration in basements and other damp areas are all potential sources of actively growing mold. Often this mold goes undetected because it's growing behind drywall or underneath flooring.

If you could perform a simple, inexpensive test that could give you a total assessment of the air you breathe every day, wouldn't you want to do it? If not for yourself, for your loved ones?

The IAQ Home Survey difference

IAQ Home Survey is the only test available to the homeowners or tenants that provides an affordable comprehensive air quality audit of the total number of volatile organic compounds (VOCs) and the total number of mold volatile organic compounds (MVOCs) with a single air sample. This test, while simple to perform, is based upon sophisticated chemical analysis technology, previously only available to the industrial community. Because of the analysis methods employed, this single test is extremely sensitive and can measure for chemical contaminants in the air within a

2,000 sq. ft. area. It is so sensitive, in fact, that it can even detect mold hidden behind walls or in carpeting.

The air sample is taken inside the home by the homeowner or tenant, but the analysis of the air sample is conducted by the very same air testing laboratory that developed the IAQ Home Survey test – Prism Analytical Technologies, Inc. For nearly two decades, Prism has been the trusted air quality laboratory source for numerous Fortune 100 and 500 companies. It is from Prism’s experience and expertise that they have been able to design a state-of-the-art indoor air quality test specifically for use in homes.

What you don’t know about your home air could be hurting you... and your family

Maintaining good indoor air quality is as much a priority as having regular check-ups by the doctor – for the sake of our physical health and wellbeing. According to the U.S. Environmental Protection Agency (EPA), indoor air quality poses a greater health hazard than outdoor air pollution, with pollutant levels averaging two to five times higher, and sometimes 100 times higher, than outside air. And with Americans now spending about 90% of their time indoors, the exposure to these air pollutants has never been more significant.

What causes indoor air quality problems?

Pollution sources that release gases or particles into the air are the primary cause of poor air quality in homes. These pollutants can quickly build up inside homes to levels that are much higher than those typically found outdoors due to inadequate ventilation and lack of air purification methods. Due to better home construction and energy efficiency, today’s homes are kept tightly closed up for most of the year. In addition, most homes do not have air purification methods, so fresh air is prevented from being circulated in the house to dilute emissions from indoor pollutant sources, or from being exhausted to the outdoors. Buildings lacking proper amounts of fresh air usually contain airborne contaminants at levels that can cause adverse health effects. The Journal of the American Medical Association stated that the risk of respiratory infection is 45% higher among occupants of energy efficient buildings.

What are the sources of these indoor pollutants?

There are many sources of air pollutants in the home, including combustion sources such as oil, gas, coal, wood, and tobacco products; building materials and furniture; new carpeting and vinyl flooring; cleaning products; personal care products; glues and adhesives and paints and varnishes. These types of products contain organic chemicals called volatile organic compounds (VOCs) – volatile because they “off-gas” into the air.

Other pollutants in the home can come from biological sources, released into the air through air conditioning and heating systems, humidifiers, leaking pipes, leaking roofs and wet carpets. Biological, or micro-organism, pollutants include: molds, dusts, pollens, insects, bacteria, and viruses.

Some sources, such as building materials, furnishings, air fresheners, and micro-organisms (molds) release pollutants continuously. Other sources, like cleaning solvents, paints, and paint strippers release pollutants intermittently. While people are using products containing VOCs, they can be exposed to very high pollutant levels, and elevated concentrations can remain in the air long after the activities are completed.

Who is affected by indoor air pollution?

Everyone who breathes contaminated air can experience effects ranging from mild to very serious soon after exposure or even years later. Children, the elderly, and those with chronic illnesses are particularly susceptible to harmful effects of indoor air pollutants because they are home the most. In addition, children have underdeveloped immune systems that make it difficult to resist air contaminants, they breathe faster and inhale more air per unit of body weight than adults, and they stand closer to the ground where there is a higher concentration of contaminants. Pregnant women should also be wary of poor indoor air quality as some pollutants can be harmful to the development of unborn babies.

What are some of the effects of exposure to indoor air pollution?

Many times we just can't understand why we feel sick and tired on a daily basis, and why we develop symptoms that worsen over time. For instance, those who are living in homes contaminated by mold may not be able to smell any odor and may be unaware that a problem exists. The sudden onset of food allergies and digestive problems can go undiagnosed, or even misdiagnosed. And long after you've finished using a product containing VOCs, you could be feeling its effects. If you or a loved one has unexplained allergic reactions or illnesses occurring on a continual basis, the source of the problem could be indoor air pollutants.

Below are some of the health effects you may experience when exposed to indoor air pollution:

Acute:

Headaches
Fatigue
Eye, nose & throat irritation
Sinus congestion
Itchy skin
Nausea
Dizziness
Shortness of breath
Wheezing & coughing
Digestive problems

Confusion
Loss of coordination
Severe allergic reactions
Asthma exacerbation

Chronic:

Liver damage
Kidney damage
Central nervous system damage
Cancer

The presence of these indoor air pollutant sources does not necessarily mean that you have an indoor air quality problem in your home. However, by performing an IAQ Home Survey indoor air quality assessment you will know the levels of chemicals in your air, as well as the potential sources of the chemical contamination in your home, allowing you to take steps to mitigate any health problems that could arise.

IAQ Home Survey — Simply the best test you can take to ensure the air you breathe at home is safe

IAQ Home Survey is simply the most powerful analysis technology ever developed for monitoring home air quality. IAQ Home Survey monitors for hundreds of airborne chemicals, called VOCs, or volatile organic compounds, that may be present in your home. In fact, IAQ Home Survey is so sensitive that it can measure the presence of actively growing mold (or mold VOCs — the chemicals off-gassed into the air from growing mold), behind walls or in carpeting, even if the mold is not visible.

An action plan to improve air quality

With IAQ Home Survey, you're not only getting an advanced air analysis, but also an action plan that will provide you with valuable information on how to improve your home's air quality. The Contamination Index™ report that is sent along with the analysis results will list the potential sources of the air contaminants (VOCs) so that you can begin to take steps to reduce or remove them from your home. No other air quality test on the market is able to provide you with this type of contamination source prediction.

Why should I test the air in my home?

The EPA has declared that indoor air quality poses a greater health threat to humans than outdoor air pollution, with indoor pollutant levels averaging 2 – 5 times higher, and sometimes 100 times higher, than outside air. Most of these air contaminants are below the odor threshold, so you can't smell them.

In addition, the U.S. Green Building Council (USGBC) and the European Union (EU) suggest that levels greater than 500 ng/L (nanograms per liter) of VOCs could pose a health hazard in homes. However, data from hundreds of homes measured by homeowners show the median value is 1,200 ng/L, more than twice the recommended level. Mold VOCs detected above 30 ng/L indicate significant actively growing mold. Even slightly elevated levels of these airborne chemicals could produce health concerns for some people, particularly to children, the elderly, pregnant women, and those who suffer from allergies and asthma.

How do I perform an IAQ Home Survey test?

Performing the test is simple. After placing your order, you will receive a test kit with a sampling pump, a sampling tube for collecting the air sample, and detailed instructions. One test covers a 2,000 sq. ft. area.*

After collecting the air sample, simply return the entire kit to Wonder Makers. Once your sample is received, a chemical analysis will be performed in the Prism laboratory.

Within a few days, you will receive a report describing the total amount of VOCs and mold present in your home air, and information on the type of contamination that is suspected and its potential

source. With all of this information, you can then take appropriate steps to remove or reduce the sources of contamination.

*If you need to test an area greater than 2,000 sq. ft., we offer discount pricing on two or more tests.

Does IAQ Home Survey measure formaldehyde?

IAQ Home Survey can also test for the presence of formaldehyde in your home air. Formaldehyde is a common cancer-causing chemical classified as a hazardous air pollutant (HAP) by the Environmental Protection Agency. At a minimum, every home should be tested for the presence of formaldehyde. A formaldehyde test can be included in your IAQ Home Survey test kit, or it can be ordered separately.

What if my test results exceed recommended levels?

If the total VOC levels and/or mold VOC levels shown to be excessive, we will help you determine the next steps to improve the air quality in your home with a consultation or further testing (call us for pricing).