



## Now that you've found your dream home, make sure the air inside is healthy.

Whether you are a first time buyer or an experienced veteran, buying a house is probably the biggest investment you'll ever make, and the decision could affect you for many years. There is always a financial risk involved with such a large purchase decision. How can you be sure that your dream home doesn't have indoor air quality (IAQ) problems that could cost you good health and well-being? Buying a home with existing IAQ issues can subject you and your family to serious health hazards, and might require you to incur large clean-up costs, reduce your property value, and make your home hard to sell in the future. With a Home Air Check™ IAQ audit, you can make your home purchasing decision an informed decision. This simple, inexpensive test can quite literally allow you to breathe easy and confidently.

### Love that New Home Smell?

Today's new-home construction materials contain an excessive amount of chemicals that evaporate and off-gas into **VOCs, or Volatile Organic Compounds**. Kitchen and bathroom cabinets, moulding and paneling, drywall, flooring and roofing materials are manufactured using toxic chemicals such as **formaldehyde** and **phenolic** resins. Paints, stains, and sealants are used extensively in just about every room in the house, and contain VOCs that can cause serious health effects. A newly-constructed house will have a significant amount of VOCs in the air because the rate of off-gassing for VOCs is highest initially. This accounts for the "new home smell" that most new home buyers experience. After several weeks the rate of VOC off-gassing from building materials will decline; however, the off-gassing will continue at a slow and continuous pace and the gases will remain in the air for many months, and possibly years. There have been many cases of homeowners who have developed mysterious health ailments shortly after moving into a new home.

#### **Products that emit VOCs in Newly Constructed or Remodeled Homes**

- Paints & varnishes
- Building materials
- Carpeting
- Wallpaper
- Vinyl flooring
- Glues & adhesives
- Cabinets and built-in bookcases made from pressed wood
- Roofing shingles

### Buying a resale home?

Poor IAQ is a serious health issue, and public health experts advise homeowners and prospective home buyers to take the initiative and test for indoor air pollutants. Several states have now enacted laws requiring home sellers to disclose the presence of certain air pollutants like formaldehyde and mold to the prospective buyer. Although many states still do not require home buyers or sellers to conduct IAQ tests, performing a comprehensive home IAQ audit just makes good, healthy sense.

## Signs of Possible Home Indoor Air Quality Problems

- Unusual and noticeable odors, stale or stuffy air
- Noticeable lack of air movement
- Dirty or faulty central heating or air conditioning equipment
- Damaged flue pipes or chimneys
- Unvented combustion air sources for natural gas or propane appliances
- Excessive humidity
- Air-tight home
- Presence of molds and mildew
- Health reaction after remodeling, weatherizing, using new furniture, using household or hobby products, or moving into a new home
- Feeling noticeably healthier outside the home

Mold is another serious health hazard in any home. Mold is caused by excessive moisture present in a home due to leaky roofs, leaky plumbing and wet basements. Many times you can smell the presence of mold and mildew upon first entering a home, and often are able to see it growing in areas where moisture is obvious. However, sometimes the quality of the air in a home is something that cannot be determined simply by walking through the house. It is the unseen mold that can be most problematic, especially for those people who suffer from chronic respiratory diseases like asthma. Roof leaks are particularly troublesome because the water seeps into the ceiling and drywall, and mold begins to grow on those damp surfaces inside the walls – completely unseen. With Home Air Check™, mold can be detected anywhere in the house, even behind walls, allowing you to determine the source of the problem. [For more on mold, click here](#)

## Buying a foreclosed home?

Sometimes your dream home becomes available in the form of a foreclosed property. Currently, home foreclosures are at record levels with nearly 2 million foreclosed properties available for purchase. It is predicted that this number will continue to rise and reach 5 million through the year 2011. This rise in foreclosures also means that there are many great deals to be had if you are in the market for a new home. Often, these homes are sold for prices well below market value because the bank or mortgage holder is eager to sell them. However, investing in a foreclosure can be extremely risky. Property inspections in advance of their sale can be hard, or impossible. Many buyers are purchasing foreclosed properties "as is," not realizing what is waiting for them once they take possession.

### **Indoor Air Quality in Foreclosed Homes**

Many homes in foreclosure have been locked up tight for many weeks or months without utilities, giving ample opportunity for mold to grow at amplified rates and airborne contaminants to remain trapped in the home. Not only does this pose a potential structural problem with the home, but it could also pose significant health risks for anyone who enters. In some instances, unsuspecting home buyers who believed they were getting a great deal on a foreclosed property ended up paying thousands of dollars to solve severe air quality issues. For only \$125 and very little time, a Home Air Check test can be performed on the foreclosed property prior to the sale, and an accurate assessment of the indoor air quality can be made.

### **Could the foreclosed property you want to buy be a former meth lab?**

In 2007, the DEA seized over five thousand clandestine methamphetamine laboratories (meth labs) in the United States. Formerly, these meth labs were set up in remote and rural locations, usually on private property. Now, with the advent of more sophisticated manufacturing practices, they are increasingly being found in private residences in busy suburbs and cities, as well as in apartment complexes. Although the U.S. Department of Justice (DOJ) reports that the rate of clandestine meth lab seizures has been declining since 2003, it also states that many criminals are producing meth on a smaller scale, becoming more sneaky in their production of the

drug, moving from site to site after only a few months of use, and breaking up the meth production to more than one site in order to avoid detection. This means that the number of actual sites used as meth labs is growing, and many of those properties have been the subject of past and present foreclosures. But one thing has not changed—the operators of these methamphetamine manufacturing facilities do not conduct their business in an environmentally responsible manner. The mess they leave behind can pose varied risks to those responsible for cleanup or for the people who may live there after the cleanup. And that cleanup isn't cheap. The cost of decontaminating a former meth lab property can range from \$3,000 to \$150,000, depending on the size of the house and the scope of remediation.

**Are meth labs really dangerous to your health?**

Methamphetamine is an illegal synthetic drug manufactured from various chemicals often found in common household items and over the counter medicines. Cold and allergy medications containing pseudoephedrine or ephedrine are "cooked" with other chemicals to produce meth. These chemicals are often found in everyday household products and can be dangerous in their inherent form (see section on VOCs). Of the 32 chemicals that are commonly used in the production of methamphetamine, about one third are extremely toxic. Add the "cooking" process where these chemicals are evaporated into the air, and the situation has gone from dangerous to deadly. It is estimated that about six pounds of highly toxic waste is generated from every pound of meth that is produced. Vapors and hazardous chemical spills can seep into carpeting, insulation, woodwork and drywall. Plumbing lines and septic systems can also become contaminated with waste chemicals from meth production. Toxic VOCs are drawn into the home's heating and cooling systems and spread throughout the ventilation system when it's activated. Many of these chemicals remain in the home for months and years, and aren't always removed in the toxic clean-up process.

**The following is a list of typical chemicals that produce VOCs that have been associated with meth labs:**

Methanol	White gas
Isopropanol	Ethyl acetate
Toluene	Turpentine
Diethyl ether	Mineral spirits
Trichloroethane	Acetone
Kerosene	Anhydrous ammonia
Gasoline	

Exposure to these chemicals and the meth by-products can cause a plethora of health problems, including respiratory difficulties, skin and eye irritations, headaches, dizziness, nausea, and damage to the central nervous system and internal organs. These adverse health effects are bad enough to a person of good or average health. However, to an adult or child with [asthma](#), they are even more troublesome. So before you invest in that foreclosure, make sure the previous owners were responsible and haven't left you with a toxic and monetary pitfall.

### **How can I be sure that the foreclosed home I want to buy hasn't been used as a meth lab?**

Several states have now enacted disclosure requirements to sellers of property, as well as other procedures designed to protect unsuspecting home buyers from purchasing a meth-contaminated property. Arizona, Missouri, South Dakota, Colorado, and Minnesota, to name a few, have all enacted tough disclosure laws pertaining to homes once used for meth production, whether or not the property has been remediated. Other states have laws pending enactment. But unfortunately, many states lack any such requirements. Therefore, it is essential that a potential buyer of any property, especially a foreclosed property, make a thorough inspection of the home, including a comprehensive indoor air quality audit. You don't want your most expensive investment to endanger your most valued possession – your family.

With a Home Air Check™ indoor air quality test, you can determine the total level of VOCs in the air. To determine if the home has traces of specific compounds used for meth production, a very detailed additional data analysis needs to be done. There is an additional charge for this analysis. Please contact your Home Inspector or Home Air Check at [contact@homeaircheck.com](mailto:contact@homeaircheck.com) if you feel you require this additional service. Even after cleanup or remediation has occurred, additional testing is recommended to ensure there are no lingering hazards. This is needed primarily to document that the cleanup has been successful, thus minimizing the liability of the property owner, everyone involved in the cleanup, and the people paying for the cleanup. It is also useful documentation to have in the event there is an impending property transfer.

## **Home Air Check™ – Features & Benefits**

- **One test covers 2,000 sq. ft. with a single air sample**
- **Reports the level of chemicals in the home air**
  - Monitors for hundreds of airborne VOCs
- **Reports the level of actively growing mold**
  - Extremely sensitive technology measures presence of mold that can be hidden in walls or carpeting
- **Provides information on why the air may be making the occupants sick**
  - Easy-to-read report with a discussion of each level
  - Contamination Index Report with predicted VOC sources and suggestions for their removal
- **Advanced analysis performed by an accredited laboratory**
  - PATI has been a trusted lab to Fortune 100 companies for over 17 years
  - Proprietary technology used as standards in industrial and building air monitoring
  - Extensive method development
- **Peace-of-mind at an economical price**
- **Optional formaldehyde test with second air sample**