

# FACT SHEET



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## Get The Mold Out: Mold Clean-Up Guidance for Residences

### Introduction

This fact sheet provides basic information that individuals should consider before beginning a mold clean-up project or hiring a professional to evaluate or clean up mold in a home. *Get The Mold Out* reviews basic concepts concerning indoor mold, third party oversight, training, environmental assessment, abatement/remediation (including heating, ventilation and air conditioning (HVAC) systems), health and safety, and hazard communication. *Get The Mold Out* also contains information about when to seek professional assistance, and informs individuals about technical guidance documents that professionals should be following, such as the *Connecticut Guidelines for Mold Abatement Contractors*, prepared by the Connecticut Department of Public Health (CT DPH). Additionally, readers are referred to other sources and reference materials for detailed “how to” information.

### Mold Abatement/Remediation

The words abatement and remediation are often used interchangeably- both refer to correcting the problem. Realistic goals for mold abatement should be to eliminate visible mold, reduce hidden mold, and/or reduce the amount and types of mold to what is normally found in similar, non-affected indoor areas. Because molds are carried indoors on clothes, shoes, pets, through open windows and doors, and via ducted ventilation systems such as those that supply forced hot air heat and/or central air-conditioning for cooling, *it is not possible for mold abatement contractors to make homes totally free from all mold.*

Mold needs water to grow. If there is no past or current moisture problem, there will be no mold problem in a home. However, evidence of water damage suggests that there might be a mold problem. The first step to take when thinking about mold abatement is to look for evidence of water damage, chronic leaks, and/or mold growth. Initially, most people can do this themselves. If you can see that water is getting into the home, steps must be taken to stop the water before beginning any mold clean-up activities. If you decide to hire a professional mold abatement contractor, be sure to tell them where you think the water entered the home, even if it was an old leak or moisture problem that has since been repaired.

## Evaluation and Testing

### 1. Who Should Evaluate Mold Problems in A Home?

If the water source causing the mold is straightforward, such as a flood, sump pump failure, hole in the roof, or leaking faucet, you may choose to do the inspection yourself.

If you choose to hire a professional, a home inspector licensed by the CT Department of Consumer Protection and certified by the American Society of Home Inspectors, National Association of Certified Home Inspectors, or CT Association of Certified Home Inspectors can look for water damage. (Please see the resource list at the end of this fact sheet for further information.) **Please note that the state of Connecticut does not license individuals or entities that perform mold inspection or mold abatement.**

In situations where someone living in the home lacks a healthy immune system (due to cancer or other diseases), or there is a concern about hidden mold, mold growth on or in complex building materials/structural elements, or an extensive area of visible mold growth, you may choose to hire an industrial hygienist (IH) or indoor environmental professional (IEP) who is specifically trained in the area of indoor mold assessment and credentialed by an independent professional organization, to help you evaluate the situation and design a remediation plan, if appropriate. **The state of Connecticut does not license or credential industrial hygienists or IEPs.**

### 2. What About Testing?

In most instances, CT DPH does not recommend testing the air or contaminated surfaces to find out how much or what kind of mold is present. The most important types of testing are the eyeball and nose tests - can you see or smell mold, and/or, do you see evidence of water damage?

If you can see or smell mold, the next step is to identify the source and then remove it. If you smell a musty odor but cannot see visible growth, mold may be hidden behind wallpaper, paint, inside of wall cavities, etc.

There is little to be gained scientifically from air testing in most home and work place environments, especially if there is a visible source, because:

- Mold is everywhere – if you test the air, you *will* find some mold
- There are no standards for “acceptable levels” of mold in indoor environments, because different types of mold vary in ability to produce allergy or illness, *and*, people vary in individual susceptibility/resistance.
- Knowing air test results will not change the abatement outcome - removal of the moldy source is still the recommended course of action.

Sometimes, people may choose to perform testing as part of an investigation for documentation purposes (i.e., for insurance or litigation). However, testing rarely contributes to understanding what has occurred from a health perspective. For further information about testing, see the CT DPH Fact sheet, *Indoor Air Quality Testing Should Not Be Your First Move* [http://www.dph.state.ct.us/Publications/brs/eoha/ieq\\_testing.pdf](http://www.dph.state.ct.us/Publications/brs/eoha/ieq_testing.pdf).

## When to Call A Professional Mold Abatement Contractor

If any of the following conditions apply to your home, you may wish to consider talking to a professional mold abatement contractor.

### 1. Size of Visual Contamination

If you see more than a few isolated areas of mold, such as half of the ceiling or wall, you may need to hire professionals to perform the abatement. While there are no firm rules about when to do the clean-up yourself or hire a professional, many people use the guidelines published by the New York City Dept. of Health and Mental Hygiene (“NYC Guidelines”). While the New York City Guidelines recommend the use of a professional mold abatement contractor for areas larger than 30 square feet (such as several wallboard panels), the guidelines suggest that small, isolated areas less than 10 square feet, and even mid-sized isolated areas less than 30 square feet (such as individual wallboard panels) can be handled safely by non-professionals, as long as they are trained properly and wear proper protective gear.

### 2. Hidden Mold

If you can smell mold or a musty odor, but can’t find it, it may be in an inaccessible location, such as in a wall cavity or above a suspended ceiling. It may even be hiding underneath wallpaper. It is not uncommon to find mold underneath vinyl wall covering, especially in bathrooms and rooms that are air-conditioned or have high humidity. Sometimes, the tip-off is that a household member is experiencing chronic respiratory problems that improve when they leave the building, but worsen when they return to the building. If you think you have hidden mold your home, consider calling a professional mold abatement company.

### 3. Floods

If water has been standing in an indoor space for longer than 48 hours, any porous materials that were soaked, such as carpets, furnishings and wallboard, should be discarded, as there is a strong chance that mold will be growing on these materials. Mold may also be growing on the surface of tile floor covering and sealed wood. A professional mold abatement contractor may be needed to perform an assessment to determine the extent of the damage, and to perform the abatement in a safe manner according to established guidelines such as the *Connecticut Guidelines for Mold Abatement Contractors*, which are available on the CT DPH website at: [http://www.dph.state.ct.us/BRS/EOHA/Documents/CT Guidelines for Mold Remediation Contractors.pdf](http://www.dph.state.ct.us/BRS/EOHA/Documents/CT%20Guidelines%20for%20Mold%20Remediation%20Contractors.pdf)

### 4. Special Populations

If mold abatement is to occur in the home of an individual who lacks a healthy immune system (such as people with cancer, AIDS, etc.), special set-ups and procedures may be needed related to the containment structure and equipment and methods used to perform the mold abatement. These practices may be similar to abatement protocols used in hospitals and other health care facilities. It is important that you discuss these issues with a professional mold abatement contractor who is accustomed to doing this type of work.

## **Additional Information About Mold Abatement That You Should Know Before Getting Started**

If you decide to hire a contractor to perform the mold abatement, *ask if the contractor has received any formal training specifically in mold abatement.* CT DPH does not certify training providers, however, there are a number of reputable professional organizations that conduct such trainings. See the “Hiring Professionals” section of the Resource List at the end of this fact sheet. *In addition,* make sure the contractor you select has a copy and is familiar with the CT DPH document, *Connecticut Guidelines for Mold Abatement Contractors.*

All mold removal projects should include some type of containment or isolation to prevent mold spores from spreading and contaminating other parts of the home. If your home has forced hot air heat or central air-conditioning for cooling, and the ducts are contaminated with mold, there are special procedures that should be followed. Lastly, if contractors or consultants suggest the use of chemicals called biocides, it is important for you to understand their pros and cons, and whether they are necessary for a particular project.

### **1. Containment**

For small, localized mold removal, such as cleaning surface mold off of a windowsill or a few spots on a bathroom wall, isolation with plastic sheeting is not needed. You can perform these types of clean-up projects yourself. You should contain the mold spores by disposing of the cleaning materials (paper towels, sponges, etc.) in a sealed, zip-lock bag. For larger jobs (see *When to Call A Professional Mold Abatement Contractor* [p. 3]), the area may need to be cordoned off with plastic sheeting, some type of containment system may need to be built, and units called “negative air” machines brought in to create an air pressure differential to keep the “dirty air” inside of the containment and prevent it from escaping into the clean area outside of the containment while the abatement work is going on. There are specific guidelines for contractors regarding building containments for various scenarios. Make sure that the contractor you select is familiar with containment systems and is planning on using one appropriate for your job so that the rest of your home does not become contaminated with mold spores during the abatement process.

### **2. Heating, Ventilation and Air-Conditioning (HVAC)**

If your house/school/office has a forced hot air ventilation system or central air conditioning system that has become contaminated with mold from floods, excessive condensate, or fouled duct liner, these systems should be remediated separately. There are special guidelines for the remediation of heating, ventilation, and air conditioning (HVAC) equipment. Check with your contractor to see if they will be following these guidelines. See resource list at the end of this fact sheet.

### **3. Biocides**

Biocides are chemicals that kill microorganisms. In general, CT DPH does not recommend biocide use for most mold abatement. Biocide use is not a substitute for cleaning and following proper abatement procedures! Some contractors have been known to leave mold in place, spray or paint it with a biocide, and call that practice “mold abatement”. **THIS IS NOT ACCEPTABLE!!!** It is crucial that moldy materials be removed and discarded, and the area thoroughly cleaned. Biocides must only be used to treat microorganisms for which the product is registered. While many biocides are effective against bacteria, most are ineffective against mold. Biocides may cause chemical exposures which must be explained to people living in the home before they are used.

If a professional suggests using a biocide, be sure to ask them what their reasoning is for its use, and how this will fit with the mold abatement guidelines that they are following.

## **How To Ensure A Job Well Done**

Mold abatement is based upon removing the source of the problem, preventing it from re-occurring, and cleaning up any residue. CT DPH does not generally advise relying upon air testing to assess whether a mold abatement project is completed (also see *What About Testing?* [p.2]). However, documentation in the form of testing for insurance or litigation purposes may be useful. At the end of a mold abatement project:

- You should not see or smell any mold after the abatement is complete. If you do, consider hidden mold.
- Make sure all porous moldy materials have been removed, discarded, and replaced with clean and dry materials.
- Make sure all non-porous, previously contaminated materials have been cleaned thoroughly.
- Make sure all water leaks and moisture problems have been fixed and water can no longer collect where it's not supposed to collect.

## **Where To Find Contractors**

The Connecticut Department of Public Health does not keep a list of mold abatement contractors on hand. However, there are several websites that offer lists of companies. Some of them enable you to locate a contractor near you by typing in your zip code.

Contractors performing work falling within the definition of “home improvement” (Connecticut General Statute section 20-419) must obtain a certificate of registration from the CT Department of Consumer Protection (CT DCP). This includes abatement contractors if their scope of work includes replacing building materials and/or structural elements such as window casings, sills, frames, sheetrock or plaster walls, studs, beams, etc. If the abatement contractor is solely involved in cleaning and/or demolition, they do not have to register with CT DCP as a Home Improvement Contractor. If you have further questions, go to the CT DCP website, <http://www.ct.gov/dcp> or call 860-713-6110 or 1-800-842-2649.

## **Resource List**

The CT DPH does not certify or endorse any of the individuals or companies listed by the organizations mentioned below. Each organization has it's own set of requirements for membership, training, qualifications, and credentialing. Before you hire someone to perform mold assessment or abatement in your home, you should ask questions about their training, qualifications, experience, and credentials.

## **General Information About Mold and Home Clean-up:**

### ***Creating A Healthy Home: A Field Guide For Clean-Up of Flooded Homes***

National Center for Healthy Housing (July 2006)

[http://www.centerforhealthyhousing.org/FloodCleanupGuide\\_screen\\_.pdf](http://www.centerforhealthyhousing.org/FloodCleanupGuide_screen_.pdf)

### ***The Facts About Mold***

#### **American Industrial Hygiene Association**

A booklet with sections for the public and the professional, plus resources, a mold glossary, and short section about common indoor molds. <http://www.aiha.org/Content/AccessInfo/consumer/factsaboutmold.htm>

### ***Fighting Mold – The Homeowners’ Guide***

**Canada Mortgage and Housing Corp.** [http://www.schl.ca/en/co/maho/yohoyohe/momo/momo\\_005.cfm](http://www.schl.ca/en/co/maho/yohoyohe/momo/momo_005.cfm)

## **Guidelines for Mold Remediation/Abatement:**

### ***Connecticut Guidelines for Mold Abatement Contractors.***

Connecticut Department of Public Health (October 2006)

[http://www.dph.state.ct.us/BRS/EOHA/mold\\_problems.htm](http://www.dph.state.ct.us/BRS/EOHA/mold_problems.htm) (page down to “Remediation Guidelines”)

### ***Guidelines on Assessment and Remediation of Fungi in Indoor Environments***

**NYC Dept of Health & Mental Hygiene** (This is the remediation guide that most people have been using.)

<http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.shtml>

### ***Mold Remediation in Schools and Commercial Buildings***

**U.S. Environmental Protection Agency** (note – the principles are useful in residential settings as well!)

[http://www.epa.gov/iaq/molds/mold\\_remediation.html](http://www.epa.gov/iaq/molds/mold_remediation.html)

## **Hiring Professionals**

### **Licensed Home Inspectors**

**All Home Inspectors must be licensed by the CT Department of Consumer Protection (CT DCP).** Go to <http://www.ct.gov/dcp/> or call (860) 713-6050. Licensed Home Inspectors may be affiliated with one or more of the following organizations:

American Society of Home Inspectors: <http://www.ashi.org/>

National Association of Certified Home Inspectors: <http://www.nachi.org/>

CT Association of Certified Home Inspectors: <http://www.ctinspectors.com/>

### **Industrial Hygienists**

American Industrial Hygiene Association: <http://www.aiha.org>

American Conference of Governmental Industrial Hygienists: <http://acgih.org>

American Board of Industrial Hygiene: <http://abih.org>

### **Indoor Environmental Professionals/Consultants**

American Indoor Air Quality Council: <http://www.iaqcouncil.org/>

### **Mold Abatement Contractors**

Institute of Inspection, Cleaning and Restoration Certification: <http://www.iicrc.org/>

Restoration Industry Association ( Association of Specialists in Cleaning & Restoration ): <http://www.ascr.org/>

## **Indoor Environmental Quality Testing**

### ***Testing Should Not Be Your First Move***

Connecticut Department of Public Health [http://www.dph.state.ct.us/Publications/brs/eoha/ieq\\_testing.pdf](http://www.dph.state.ct.us/Publications/brs/eoha/ieq_testing.pdf)

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