



Mold Information

FOR BUYERS AND SELLERS

Mold may be a concern for homebuyers and sellers, real estate brokers, inspectors, appraisers and mortgage lenders. Here are a few items pertaining to mold that you should keep in mind, brought to you by your REALTOR® and the Louisiana REALTORS® Association:

- Real estate agents and brokers are not experts on mold. If you need more information on this subject, you should consult the resources listed at the end of this document or contact an expert.
 - Insurability may be an issue. Buyers should discuss the insurability of a property with their insurance agent early in the transaction or, in some cases, before an offer is made.
 - You may have the property inspected for the presence of mold. The cost for such inspections varies depending on the size of the property, the extent of the mold present, the type of expert conducting the inspection and other factors.
 - Because there are presently no licensing or inspection standards for mold in properties, you may want to discuss mold inspections with more than one expert. Most experts will discuss the limitations of the inspections. For example, an air-sampling test that does not reveal extraordinary levels of toxic mold does not necessarily mean that mold is not present behind walls or under floors where the air samplers were not placed.
 - Most experts suggest property owners undertake preventive action, such as periodic cleaning of A/C systems, regular inspections of attic spaces, and periodic plumbing leak tests. Many of the online sources listed at the end of this document have helpful suggestions.
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Mold Basics

Molds are part of the natural environment. Outdoors, molds play a part in nature by breaking down dead organic matter such as fallen leaves and dead trees, but indoors, mold growth should be avoided. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air. Mold may begin growing indoors when mold spores land on surfaces that are wet. There are many types of mold, and none of them will grow without water or moisture.

Can mold cause health problems?

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds produce allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals. Allergic responses include hay fever-type symptoms, such as sneezing, runny nose, red eyes, and skin rash (dermatitis). Allergic reactions to mold are common. They can be immediate or delayed. Molds can also cause asthma attacks in people with asthma who are allergic to mold. In addition, mold exposure can irritate the eyes, nose, throat, and lungs of both mold-allergic and non-allergic people. Symptoms other than the allergic and irritant types are not commonly reported as a result of inhaling mold. Research on mold and health effects is ongoing. This document provides a brief overview; it does not describe all potential health effects related to mold exposure. For more detailed information consult a health professional.

How do I get rid of mold?

It is impossible to get rid of all mold and mold spores indoors; some mold spores will be found floating through the air and in house dust. The mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors. If there is mold growth in your home, you must clean up the mold *and* fix the moisture problem. If you clean up the mold, but don't fix the moisture problem, then most likely, the mold will come back.

Moisture and mold: prevention & control tips

- Moisture control is the key to mold control, so when water leaks or spills occur indoors, act quickly! If wet or damp materials or areas are dried 24-48 hours after a leak or spill happens, in most cases mold will not grow.
- Clean and repair roof gutters regularly.
- Make sure the ground slopes away from the building foundation, so that water does not enter or collect around the foundation.
- Keep air conditioning drip pans clean and the drain lines unobstructed and flowing properly.
- Keep indoor humidity low. If possible, keep indoor humidity below 60 percent (ideally between 30 and 50 percent) relative humidity. Relative humidity can be measured with a moisture or humidity meter, a small, inexpensive (\$10-\$50) instrument available at many hardware stores. Ways to reduce humidity include:
 - Vent appliances that produce moisture, such as clothes dryers, stoves and kerosene heaters to the outside where possible.
 - Use air conditioners and/or dehumidifiers when needed.
 - Run the bathroom fan or open the window when showering. Use exhaust fans or open windows whenever cooking, running the dishwasher or dishwashing, etc.
- If you see condensation or moisture collecting on windows, walls or pipes, act quickly to dry the wet surface and reduce the moisture/water source. Condensation can be a sign of high humidity. Ways to help prevent condensation include:
 - Reduce the humidity (see above)
 - Increase ventilation or air movement by opening doors and/or windows, when practical. Use fans as needed.
 - Cover cold surfaces, such as cold water pipes, with insulation.
 - Increase air temperature.

Is testing/sampling for mold necessary?

In most cases, if visible mold growth is present, sampling is unnecessary. Since no EPA or other federal limits have been set for mold or mold spores, sampling cannot be used to check a building's compliance with federal mold standards. Surface sampling may be useful to determine if an area has been adequately cleaned or remediated. Sampling for mold should be conducted by professionals who have specific experience in designing mold sampling protocols, sampling methods, and interpreting results. Sample analysis should follow analytical methods recommended by the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists (ACGIH), or other professional organizations.

Hidden mold

You may suspect hidden mold if a building smells moldy, but you cannot see the source, or if you know there has been water damage and residents are reporting health problems. Mold may be hidden in places such as the back side of dry wall, wallpaper, or paneling, the top side of ceiling tiles, the underside of carpets and pads, etc. Other possible locations of hidden mold include areas inside walls around pipes (with leaking or condensing pipes), the surface of walls behind furniture (where condensation forms) inside ductwork, and in roof materials above ceiling tiles (due to roof leaks or insufficient insulation). Investigating hidden mold problems may be difficult and will require caution when the investigation involves disturbing potential sites of mold growth. If you believe that you may have a hidden mold problem, consider hiring an experienced professional.

Mold cleanup guidelines

The tips and techniques provided below will help you clean up your mold problem. Professional cleaners or remediators may use methods that are not covered in this document. Please note that mold may cause staining and cosmetic damage. It may not be possible to clean an item so that its original appearance is restored.

- Scrub mold off hard surfaces with detergent and water, and dry completely.
- Fix plumbing leaks and other water problems as soon as possible. Dry all items completely.
- Absorbent or porous materials, such as ceiling tiles and carpet, may have to be thrown away if they become moldy. Mold can grow on or fill in the empty spaces and crevices of porous materials, so the mold may be difficult or impossible to remove completely.
- Avoid exposing yourself or others to mold. Wear long gloves, goggles that do not have ventilation holes, and you may want to wear an N-95 respirator, available from many hardware stores (\$12-\$25)
- Do not paint or caulk moldy surfaces. Clean up the mold and dry the surfaces before painting. Paint applied over moldy surfaces is likely to peel.
- If you are unsure about how to clean an item, or if the item is expensive or of sentimental value, you may want to consult a specialist. Specialists in furniture repair, restoration, painting, art restoration and conservation, carpet and rug cleaning, water damage, and fire or water restoration are commonly listed in phone books. Be sure to ask for and check references, and look for specialists who are members of professional organizations.

The preceding information is based on information provided by the U.S. Environmental Protection Agency at www.epa.gov/iaq/pubs/moldresources.html.

For more information...

GENERAL MOLD INFORMATION:

- U.S. Environmental Protection Agency - Mold Resources (www.epa.gov/iaq/pubs/moldresources.html)
- Kansas State University Agricultural Experiment Station and Cooperative Extension Service (www.oznet.ksu.edu/library/hous2)
- California Department of Health Services (www.cal-iaq.org/mold9803.htm or www.cal-iaq.org/laymem97.html)
- New York City Department of Health (nycdoitt.ci.nyc.ny.us/html/doh/html/epi/epimold.html)
- The Family Handyman (www.familyhandyman.com/200003/how_a_house_works/main.html)
- General Clinical Research Center (gcr.cwru.edu/stachy/default.htm)
- Health House (www.healthhouse.org)
- Kansas Department of Health and Environment (www.kdhe.state.ks.us)
- Texas Department of Health (www.tdh.state.tx.us)
- Centers for Disease Control and Prevention (CDC) (1-800-311-3435, www.cdc.gov)
- CDC's National Center for Environmental Health (1-888-232-6789, www.cdc.gov/nech/asthma/factsheets/molds/default.htm)
- University of Montana Healthy Indoor Air for America's Homes (www.montana.edu/wwwexair/facts_mold.html)
- American Lung Association Health House Project (www.healthhouse.org/tipsheets/mold.htm)
- American Academy of Pediatrics Committee on Environmental Health (www.aehf.com/articles/apmold.htm)
- University of Minnesota Environmental Health & Safety (www.hehs.umn.edu/iaq/fungus/stachybotrys)

TESTING LAB INFORMATION:

- Indoor Air Quality Association (www.iaqa.com)
- HomeTest.com (www.hometest.com)
- Louisiana State Board of Home Inspectors (www.lsbhi.com)

ADDITIONAL EPA RESOURCES:

- Environmental Protection Agency Indoor Air Quality Information Clearinghouse (1-800-438-4318 or 1-703-356-4020, iaqinfo@aol.com)
- Indoor Air Quality (IAQ) Home Page (www.epa.gov/iaq)
- An Office Occupant's Guide to IAQ (www.epa.gov/iaq/pubs/occupgd.html)
- Biological Contaminants (www.epa.gov/iaq/pubs/bio_1.html)
- Building Air Quality Action Plan (for Commercial Buildings) (www.epa.gov/iaq/base/actionpl.html)
- IAQ in Large Buildings/Commercial Buildings (www.epa.gov/iaq/base/index.html)
- IAQ in Schools (www.epa.gov/iaq/schools/index.html)
- Mold Remediation in Schools and Commercial Buildings (www.epa.gov/iaq/pubs/molds.html)

ASTHMA & ALLERGIC DISEASES:

- American Academy of Allergy, Asthma & Immunology (AAAAI) (1-800-822-2762, www.aaaai.org)
- Asthma and Allergy Foundation of America (AAFA) (1-800-727-8462, www.aafa.org)
- American Lung Association (ALA) (1-800-586-4872, www.lungusa.org)
- Asthma and Allergy Network/Mothers of Asthmatics, Inc. (AAN-MA) (1-800-878-4403 or 703-641-9595, www.aanma.org)
- National Institute of Allergy and Infectious Diseases (NIAID) (301-496-5717, www.niaid.nih.gov)
- National Jewish Medical and Research Center (1-800-222-5864, www.njc.org)

FLOODS & FLOODING:

- EPA Floods/Flooding Info (www.epa.gov/iaq/pubs/flood.html)
- Federal Emergency Management Agency (FEMA) (1-800-480-2520, www.fema.gov/mit)
- University of Minnesota, Department of Environmental Health & Safety (612-626-5804, www.dehs.umn.edu/remanagi.html)
- University of Wisconsin-Extension, The Disaster Handbook (1-608-262-3980, www.uwex.edu/ces/news/handbook.html)

OTHER RESOURCES:

- American College of Occupational and Environmental Medicine (ACOEM) (847-818-1800, www.sioxland.com/acoem)
- American Conference of Governmental Industrial Hygienists, Inc. (ACGIH) (513-742-2020, www.acgih.org)
- American Industrial Hygiene Association (AIHA) (703-849-8888, www.aiha.org)
- American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) (1-800-527-4723, www.ashrae.org)
- Association of Occupational and Environmental Clinics (AOEC) (202-347-4976, www.aoec.org)
- Association of Specialists in Cleaning and Restoration (ASCR) (800-272-7012, www.ascr.org)
- Energy and Environmental Building Association (952-881-1098, www.eeba.org)
- Indoor Environmental Remediation Board (IERB) (215-387-4097, www.ierb.org)
- Institute of Inspection, Cleaning and Restoration Certification (IICRC) (360-693-5675, www.iicrc.org)
- International Sanitary Supply Association (ISSA) (1-800-225-4772, www.issa.com)
- International Society of Cleaning Technicians (ISCT) (1-800-949-4728, www.isct.com)
- Material Safety Data Sheets (MSDSs) - Cornell University (<http://msds.pdc.cornell.edu/msdssrch.asp>)
- MidAtlantic Environmental Hygiene Resource Center (MEHRC) (215-387-4095, www.mehrc.org)
- National Air Duct Cleaners Association (NADCA) (202-737-2926, www.nadca.com)
- National Antimicrobial Information Network (NAIN) (1-800-447-6349, <http://ace.orst.edu/info/nain>)
- National Association of the Remodeling Industry (NARI) (847-298-9200, www.nari.org)
- National Institute of Building Sciences (NIBS) (202-289-7800, <http://nibs.org>)
- National Institute for Occupational Safety & Health (NIOSH) (800-356-4674, www.cdc.gov/niosh)
- National Pesticide Telecommunications Network (NPTN) (800-858-7378, <http://ace.orst.edu/info/nptn>)
- Occupational Safety & Health Administration (OSHA) (800-321-6742, www.osha.gov)
- Sheet Metal & Air Conditioning Contractors' National Association (SMACNA) (703-803-2980, www.smacna.org)
- Smithsonian Center for Materials Research and Education (SCMRE) (301-238-3700, www.si.edu/scmre)
- University of Michigan Herbarium (734-764-2407, www.herb.lsa.umich.edu)
- University of Tulsa Indoor Air Program (918-631-5246, www.utulsa.edu/iaqprogram)
- Water Loss Institute, Association of Specialists in Cleaning and Restoration (800-272-7012 or 410-729-9900, www.ascr.org/wli.asp)



This information is brought to you by your REALTOR® and the Louisiana REALTORS® Association. For more information, contact Louisiana REALTORS® at 1-800-266-8538.