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MOLD IN RESIDENTIAL PROPERTIES: Steps to take when addressing mold in homes

The following steps apply to individuals assessing and remediating mold in the home they own and occupy, as well as individuals assessing and remediating less than ten square feet of mold in a rental property. All individuals should consult the regulations in <u>20 DCMR §§ 3200-3299</u> prior to taking any action to address mold.

STEP 1: PREVENTION

Mold spores are everywhere and can thrive in damp and humid environments. To prevent mold from growing or returning, it is necessary to keep indoor spaces dry, clean, and at a low relative humidity, ideally 30%-50%. This can be achieved by using a dehumidifier, increasing the indoor air temperature, and adhering to the following:

- Fix plumbing leaks as soon as possible
- Clean and repair roof gutters regularly
- Keep air conditioning drip pans clean and the drain lines unobstructed and flowing properly
- Protect vulnerable areas from flooding
- Keep areas prone to humidity, like kitchens and bathrooms, well ventilated with fans and windows
- Ensure appliances that produce moisture, such as clothing dryers, stoves, and kerosene heaters, vent water vapor to the outside
- Insulate cold water pipes and other areas that may collect condensation

STEP 2: ASSESSMENT

Before taking any steps to remediate an indoor mold growth, you will need to conduct a visual inspection to assess the extent of water damage and growth. Personal protective equipment like gloves and respiratory protection are recommended in case assessment work might disturb mold growth. Pay careful attention to the following areas:

- Crawl spaces, attics, wallboards, carpets, wallpaper, baseboards, insulation, and other places where indoor mold may go unnoticed
- Ventilation systems like filters, insulations, coils, fins, or other places that may harbor moisture and create damp conditions
- Ceiling tiles, drywall (paper-covered gypsum wallboard), structural wood, and other cellulosecontaining surfaces that are susceptible to indoor mold growth when damp





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It is possible for mold to be hidden behind dry wall, wallpaper, paneling, ceiling tiles, or carpets and pads, especially in places with water damage. If your home smells musty or those living in the area are reporting respiratory health problems, these may be signs of hidden mold. Removal of materials that are harboring hidden mold can lead to a massive release of spores and can be very hazardous to health. If you believe you have a hidden mold problem, you should hire a licensed professional.

It is also possible for mold to grow in contaminated water. If you have mold in your home that you believe is caused by contaminated water, you should immediately stop and hire a professional.

STEP 3: REMEDIATION

It is necessary to wear proper protection before attempting any remediation of mold. The following steps are designed to prevent exposure to mold, however they are not sufficient for extensive mold contamination. If you discover ten or more square feet of mold in a rental apartment at any time, you must stop and hire a DOEE-licensed professional to assess and remediate the situation. Homeowners who believe they have extensive mold contamination are encouraged to hire a professional as well.

- Mold spores can be harmful to your lungs. To avoid breathing mold, it is a good idea to wear an <u>N-95 respirator</u>, available at many hardware stores. It is important to make sure the respirator fits properly. More information on respirators can be found on the Occupational Safety and Health Administration's <u>Respiratory Protection webpage</u>.
- Mold and mold cleaning agents can be irritating to your skin. Wear long gloves that extend to the middle of the forearm. If you are using a strong cleaning solution like chlorine bleach, wear gloves made from natural rubber, neoprene, nitrile, polyurethane, or PVC.
- To keep mold from getting in your eyes, goggles without ventilation holes are recommended.

When remediating, it is important to remove mold completely in order to avoid regrowth.

- For hard surfaces, wipe or scrub mold off with water, or with detergent and water, and dry quickly and completely. When using any cleaning products, follow all label instructions.
- Ceiling tiles, carpet, books and paper, and other absorbent or porous materials should be thrown away, as crevices often harbor mold that can return.
- Do not apply paint to a moldy surface.
- For valuable items, you may wish to consult a specialist.

Biocides are substances like chlorine bleach that can kill living organisms. Because dead mold can still be hazardous to health, and biocides cannot always eliminate mold completely, they are not recommended for most mold cleanup. However, if you do choose to use disinfectants or biocides, always ventilate the





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area, and never mix chlorine bleach with other cleaning solutions or detergents that contain ammonia because it can produce toxic fumes. A searchable list of biocides approved by the District and EPA can be found at the <u>National Pesticide Information Retrieval System</u>.

See EPA guidance document "<u>A Brief Guide to Mold, Moisture, and Your Home</u>" for more information about mold prevention and control, as well as EPA guidance document "<u>Mold Remediation in Schools</u> <u>and Commercial Buildings</u>" and the table at the end of this document for more information about mold assessment and remediation.

LEAD SAFETY

Lead-based paint was frequently used in properties built before 1978. Unless you have documentation showing that lead-based paint is not present, you must assume it is there. Federal and District law require that you use "lead-safe work practices" whenever working on a painted surface in pre-1978 residential housing or child-occupied facility. Lead safe work practices include:

- Containing the work area with plastic, to prevent spreading debris and dust
- Moistening the painted surface before working on it, to minimize dust
- Disposing of dust and debris carefully, without causing any increased chance of exposure to lead

For more on this, see the District of Columbia lead regulations, at 20 DCMR §§ <u>3302</u>, <u>3303</u>, and <u>3304</u>.





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Table 2: Guidelines for Remediating Building Materials with Mold Growth Caused by Clean Water*

Material or Furnishing Affected	Cleanup Methods†	Personal Protective Equipment	Containment
SMALL - Tot	al Surface Ar	ea Affected Less Than 10 squar	e feet (ft²)
Books and papers	3		
Carpet and backing	1, 3	Minimum	Newsymptot
Concrete or cinder block	1, 3	Minimum	None required
Hard surface, porous flooring (Linoleum, ceramic tile, vinyl)	1, 2, 3	N-95 respirator, gloves, and goggles	
Non-porous, hard surfaces (Plastics, metals)	1, 2, 3		
Upholstered furniture & drapes	1, 3		
Wallboard (Drywall and gypsum board)	3		
Wood surfaces	1, 2, 3		
MEDIUM – Total Surface Area Affected Between 10 and 100 (ft ²)			
Books and papers	3		
Carpet and backing	1, 3, 4	Limited or Full	Limited
Concrete or cinder block	1, 3		Liinteu
Hard surface, porous flooring (Linoleum, ceramic tile, vinyl)	1, 2, 3	Use professional judgment, consider potential for	Use professional judgment, consider potential for
Non-porous, hard surfaces (Plastics, metals)	1, 2, 3	remediator exposure and size of contaminated area	remediator/occupant exposure and size of contaminated area
Upholstered furniture & drapes	1, 3, 4		aica
Wallboard (Drywall and gypsum board)	3, 4		
Wood surfaces	1, 2, 3		
		ffected Greater Than 100 (ft²) o posure During Remediation Esti	
Books and papers	3		
Carpet and backing	1, 3, 4	Full	Full
Concrete or cinder block	1, 3	run	run
Hard surface, porous flooring (Linoleum, ceramic tile, vinyl)	1, 2, 3, 4	Use professional judgment, consider potential for	Use professional judgment, consider potential for
Non-porous, hard surfaces (Plastics, metals)	1, 2, 3	remediator exposure and size of contaminated area	remediator/occupant exposure and size of contaminated area
Upholstered furniture & drapes	1, 3, 4		alea
Wallboard (Drywall and gypsum board)	3, 4		
Wood surfaces	1, 2, 3, 4		



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METHODS KEY

Method 1: Wet vacuum (in the case of porous materials, some mold spores/fragments will remain in the material but will not grow if the material is completely dried). Steam cleaning may be an alternative for carpets and some upholstered furniture.

Method 2: Damp-wipe surfaces with plain water or with water and detergent solution (except wood—use wood floor cleaner); scrub as needed.

Method 3: High-efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

Method 4: Discard – remove water-damaged materials and seal in plastic bags while inside of containment, if present. Dispose of as normal waste. HEPA vacuum area after it is dried.



