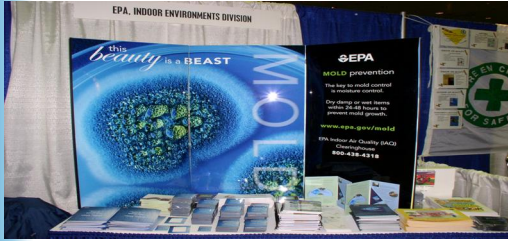


EPA Approach for Mold/Moisture Prevention and Remediation



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EPA Major Goal: Reduce Exposure to Indoor Mold



Current EPA Mold Work
 -Mold prevention and control incorporated into Best IEQ Practices
 -Produce guidance on prevention and cleanup/mitigation
 -Outreach- IAQ Hotline, training, work with public health professionals, industry groups, NGOs, etc

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EPA Response/Resources to Common Questions

Major theme:

Moisture Control Is the Key to Mold Control

- Control **humidity**
- Fix **water leaks**

Do you really need to know what mold it is?



In most cases NO

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How do you test/sample for mold?

- There are *many* types of mold and no Federal standards or guidelines to check compliance against
- If visible mold is present, it should be removed! Surface sampling may be useful to check clean-up
- Sampling is complex, often expensive and difficult to do well
- If you sample:
 - Consult a professional
 - Know why you are sampling and what you will do with the results



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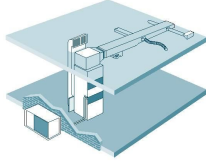
How do I kill mold?

- **Molds are allergenic** (and some may be toxic) whether **dead or alive** so molds must be removed, not just killed
- Once mold is removed, the key to preventing re-growth is moisture control
- Professional judgment may call for use of a biocide, such as chlorine bleach, in certain circumstances (immune compromised present)
- If you use a biocide, such as bleach:
 - Follow all label directions, precautions, and state and local laws
 - Ventilate!

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When to Consider Hiring a Professional Remediator

- If building occupants are reporting serious health concerns
- If a particularly toxic mold species has been identified or is suspected
- When extensive hidden mold is suspected (e.g. behind vinyl wall covering or in the HVAC system)
- When the chances of the mold becoming airborne are high
- If highly sensitive individuals are present



Mold publications

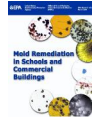
www.epa.gov/mold

IAQ Info. Clearinghouse

800-438-4318

Live operator during business hours

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How do prevent mold?

- Fix leaky plumbing
 - Keep HVAC clean and dry
 - Wet or damp materials should be cleaned and dried within 48 hours
- Prevent condensation
- Increase surface temperature by insulating or increasing air circulation
 - Reduce moisture level in air by increasing ventilation if outside air is cold and dry, or dehumidify if outdoor air is warm and humid.



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Current and Future Work of Interagency Committee on IAQ

- EPA *Moisture Control Guidance for Public and Commercial Buildings* –practical how to supplement to LEED; public comments closed on draft
- EPA/HUD American Healthy Homes Survey '06 leading to Environmental Relative Moldiness Index (ERMI) of 39 species
- EPA/HUD/ASHRAE *Building Moisture and Durability Study* helping standard 106P development "Design Criteria for Preventing Moisture in Buildings"
- HUD developing "Guidance on Rehabilitation/Reconstruction of Flood-Damaged Homes"
- NIOSH proposed Alert *Preventing Lung Diseases Caused by Exposure to Damp Indoor Environments*
- GAO Congressional Review of Federal Efforts to mitigate **health effects** of mold exposure

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Why should I Care About Mold?

Health effects –Allergic reactions, Asthma attacks, Toxic and/or irritant effects, Opportunistic infections (immune compromised)

- EPA commissioned scientific studies and guidance documents:

NAS'04 *Damp Indoor Spaces and Health*

UConn *Guidance for Clinicians on the Recognition and Management of Health Effects related to Mold Exposure and Moisture Indoors*

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