



Information for Parents from Environmental Pediatricians: **MOLD FOUND IN THE HOME**

THE BOTTOM LINE

- 1. Mold is widely found outdoors and can grow indoors in damp or water damaged areas.**
- 2. The most common health effects of mold exposure are allergies (“hay fever”) and asthma attacks in those with asthma who are sensitive to mold.**
- 3. To reduce exposure to mold, it is important to safely remove the mold and fix the underlying water problem.**

WHAT IS MOLD?

Mold (a type of “fungus”) is widely found outdoors and can grow indoors in damp or water damaged areas.

- Mold is a common type of fungus. Fungi include a large group of organisms that are a natural part of the environment, and grow in wet, dark places (such as near lakes or forests). **There are almost always some mold spores in the air, even in cities.**
- **Mold can grow inside buildings with water damage or high humidity.** Mold usually has a musty odor. Mold growth on walls, furniture, and carpet may have discolored patches or a speckled, cottony appearance.
- There are hundreds of species of mold. Some of the most common species that can grow indoors include *aspergillus*, *penicillium*, *alternaria*, and *cladosporidium*.

CAN MOLD MAKE MY FAMILY SICK?

The most common health effects of mold exposure are allergies (“hay fever”) and asthma attacks in those with asthma who are sensitive to mold.

- The most common symptoms from exposure to mold spores are **allergy symptoms** such as sneezing, runny nose, cough, rash, and itchiness of the nose, throat, or eyes (“**hay fever**”).
- Mold exposure can trigger an **asthma attack** in people with asthma who are sensitive to mold.
- People with weak immune systems (such as cancer patients) are at higher risk of getting sick from mold.
- Several disorders that involve “hypersensitivity” to mold, such as allergic bronchopulmonary aspergillosis (ABPA), occur in patients with underlying lung disease (such as cystic fibrosis). Workers (such as farmers) with high occupational exposure to airborne mold may develop disorders called hypersensitivity pneumonitis (HP). **Generally healthy people are at much lower risk, especially from common environmental exposure to mold.**

THERE HAVE BEEN SCARY STORIES IN THE NEWS ABOUT “BLACK MOLD”.
SHOULD I BE WORRIED IF THIS WAS FOUND IN MY HOME?

The presence of mold, including *stachybotrys* or “black mold”, does not mean that your child will get sick.

- Many species of mold, including *stachybotrys* (known as “black mold” or “toxic mold” in the media), can make substances called “mycotoxins”. Mycotoxins are not released into the air (they tend to “stick” to the mold) and are unlikely to pose a health risk to people who live in a home contaminated with *stachybotrys*.
- Many molds look similar to *stachybotrys* or “black mold”. **The presence of any species of mold indicates a need to find the source of the water problem and take action to safely fix it.**
- In rare circumstances, exposure to mycotoxins can cause health effects when large amounts of moldy crops or grains are ingested. There is no scientific evidence to prove that household exposure to mycotoxins causes health conditions such as chronic fatigue, memory loss, or chronic obstructive pulmonary disease (COPD).

THERE IS MOLD IN MY HOME. SHOULD I TEST MY HOME FOR MOLD LEVELS?

If mold or water damage is seen or smelled, that is enough evidence to take action to safely remove the mold and fix the underlying water problem.

- **Environmental mold testing (for example, air testing for spore levels) is generally not necessary if a musty odor, water damage or visible mold is present**--that information alone is enough to safely remove the mold and fix the underlying water problem.
- **Mold spore levels alone do not provide information that helps to measure health risks from mold exposure.** There are no established guidelines for acceptable levels of mold spores in indoor environments. **The bottom line is that if mold is identified, it should be fixed.**
- **If you already had testing done** and if results show an indoor mold spore level higher than the outdoor level measured at the same time, this confirms that there is a source of mold growing inside the home that should be fixed. This mold is most often visible.
- In some cases, it may be useful to hire a professional to perform a thorough inspection to find the source of water leaks or to use a moisture meter to determine if walls are too damp and may lead to mold growth. Wall moisture should ideally be less than 15%.

SHOULD I GET MY CHILD TESTED FOR MOLD?

Tests for mold “toxins” are not recommended; however, children with allergies or asthma may benefit from environmental allergy testing.

- If your child has allergies or asthma and you suspect that mold exposure is related to their allergy or asthma symptoms, talk to your pediatrician about testing to determine possible environmental triggers.
- Allergy testing may include skin or blood tests, and should be done by a pediatric allergy doctor (allergist). The blood tests include a specific test for antibodies to mold (“mold-specific IgE”); these antibodies are proteins that can trigger allergy symptoms.
- Several tests (such as urine mycotoxin tests) advertised for mold and mycotoxins are **not recommended**. **These tests are not validated for clinical use.** Since mold is so common in our environment, many healthy people can have mycotoxins in their urine, and it is unclear what levels are linked to health effects.

IS THERE A TREATMENT FOR MOLD EXPOSURE?

The most important “treatment” is removing the mold and fixing the underlying water problem. Alternative treatments or detoxifications should be avoided. Children with asthma or allergies should be treated for those conditions by their pediatrician.

- **The most important “treatment” for mold exposure is removing the mold from your child’s environment and fixing the underlying water problem.**
- **Do not use products that claim to be alternative treatments or detoxifications for mold or mycotoxin exposure.** These treatments are not scientifically proven, may be harmful, and are not recommended by physicians who use scientific information to guide their medical practices.
- For children with **allergies (hay fever)**, treatment with routine allergy medications under the direction of your pediatrician is recommended. In addition to advising you to remove the mold from your home, your pediatrician may also recommend allergy testing.
- For children with **asthma**, treatment with their regular asthma medications under the direction of your pediatrician is recommended. You should also remove the mold from your home.
- Children with weak immune systems (for example, children undergoing chemotherapy) are at risk for serious fungal infections that will need careful medical treatment from their physician. People with normal immune systems do not usually get serious fungal infections.

HOW CAN I PREVENT MOLD GROWTH IN MY HOME?

The key to preventing mold is controlling indoor humidity levels and fixing water leak problems in your home.

- **The bottom line: The presence of mold means there is too much moisture in the air or areas of water damage.** Fixing leaks, drying damp areas, and removing humidity from the air will stop mold growth.
- **How can I get started to prevent mold?**
 - Mold usually grows in damp places, such as bathrooms, kitchens, and basements. You should look at these areas for dampness, water leak spots, and mildew to help identify moisture problems before they become serious.
 - Quickly fix water leaks or areas of water damage to avoid mold growth.
- **You can take simple steps to improve indoor air quality in your home and help prevent mold:**
 - Increase ventilation by opening windows and circulating outdoor air
 - Open the window while taking a shower in bathrooms with no exhaust ventilation
 - Use exhaust fans in the kitchen when cooking
 - Consider using a dehumidifier in the basement
 - When possible, use an air conditioner to keep humidity low
 - Do wet mopping and wet dusting surfaces on regular basis

WHAT SHOULD I DO IF THERE IS MOLD IN MY HOME?

The key is safe, swift, and effective remediation paired with controlling indoor humidity levels and fixing water leak problems in your home.

- If you notice a musty odor in your home, or if water damage or visible mold is present in your home, **then you have enough evidence for remediation**. Be sure to inspect your home to assess the full extent of mold growth and/or water damage. You may find it helpful to take pictures during your inspection; it may help you communicate the need for repair to others.
- **Look out!** Older homes with water damage are likely to have other possible risks such as lead paint, dust mites, or pests. These problems should be dealt with safely and effectively (see links below).
- **Renters in New York City (NYC):** After you identify mold or water damage, contact your **building manager or superintendent** to conduct a visual inspection to identify the underlying source of the moisture (such as water leaks). **If your landlord does not promptly address the mold or water damage problems, call 311.**
- It is very important that **remediation be done safely and effectively**, following best practice guidelines from the **NYC Department of Health (DOH)**.
 - **If the area of water damage or mold growth is less than 10 square feet:** Very often families can address small amounts of mold. To do this safely and effectively, clean with soap/detergent and water. Bleach is not recommended, unless you are cleaning up water damage from a sewage leak, and disinfection is needed (use no more than 1 cup of bleach mixed in 1 gallon of water).
- We also recommend the proper use of gloves, eye and respiratory protection, making every effort to avoid the spread of mold. Children and those with underlying respiratory issues should not do the cleaning or be present when the cleaning is taking place.
 - **If the area of damage or mold growth is greater than 10 square feet** (e.g., on multiple walls within a single room): the building should hire a licensed contractor who uses proper protective equipment and specialized methods. If there is lead-based paint in your building, any remediation work should be done by “Lead Safe Certified” contractors.

FOR MORE INFORMATION:

NYC DOH Guidelines for Safe and Effective Mold Remediation:
www1.nyc.gov/assets/doh/downloads/pdf/epi/epi-mold-guidelines.pdf

Environmental Protection Agency (EPA): www.epa.gov/mold

Centers for Disease Control and Prevention (CDC): www.cdc.gov/mold

Pediatric Environmental Health Specialty Units (PEHSU): www.pehsu.net

NY Children’s Environmental Health Centers: www.nyscheck.org

American Academy of Pediatrics (AAP) - information on asthma and allergies:
www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/default.aspx

Written by: Lauren Zajac, MD, MPH, Clinical Director of NYS Children’s Environmental Health Centers (CEHC)

Reviewed by NYS CEHC faculty: Maida Galvez, MD, MPH; Perry Sheffield MD, MPH; Sarah Evans, PhD; Sophie Balk, MD; Deborah Nagin, MPH

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