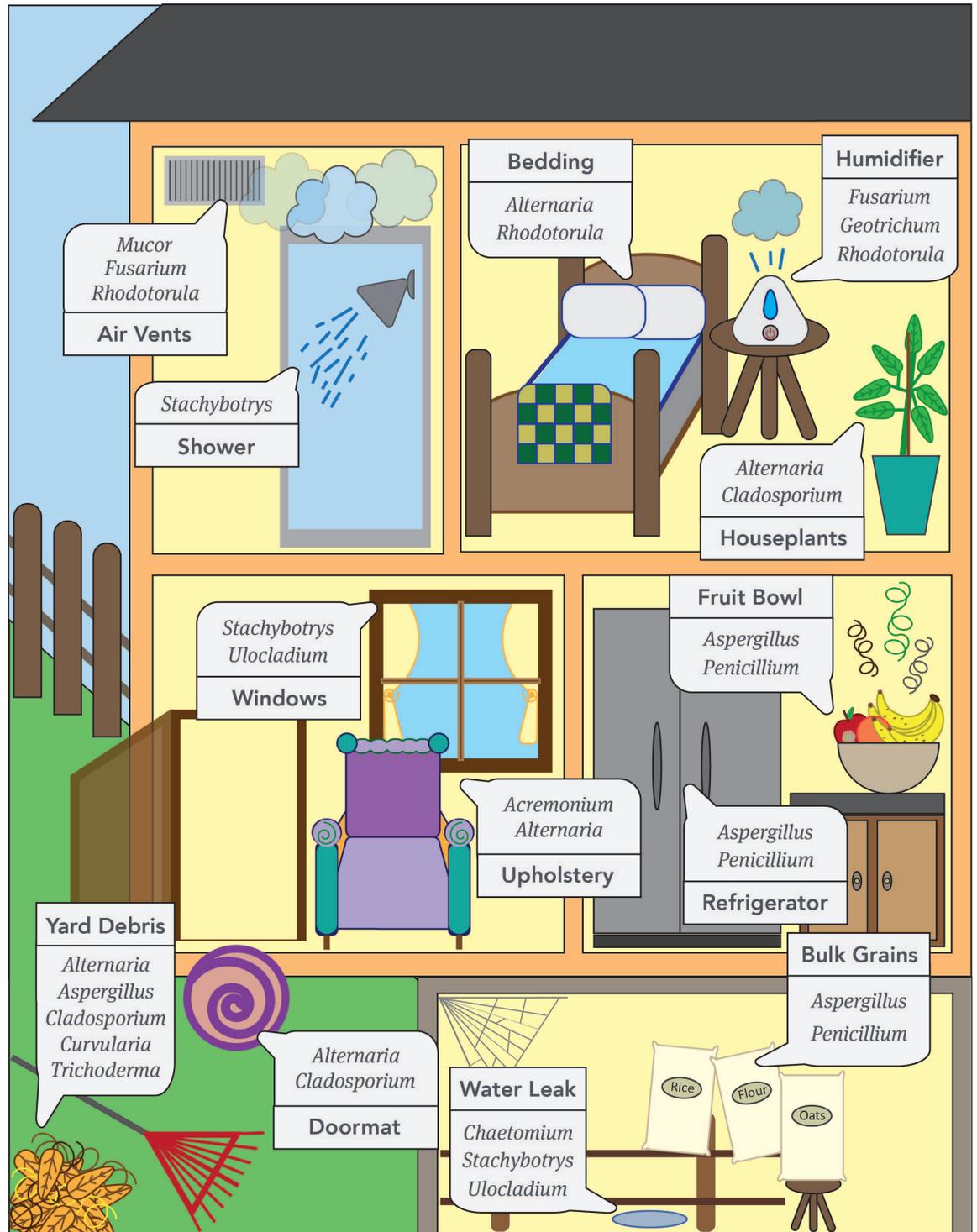


Environmental Mold Exposure



Note: Words in italics are types of mold.

Environmental Mold Exposure

Mold is everywhere. Many molds are found outdoors but can easily be transported indoors on clothing, shoes, pets, or simply airflow. Mold can be found in house dust and on almost every surface within a home.

Once indoors, mold needs moisture to grow. If dampness or moisture is not removed from the home, there is a higher likelihood that mold will grow. Houses with poor ventilation, poor insulation, inadequate heating, or overcrowding are more likely to have problems with moisture or dampness and mold growth. In the United States, it is estimated that roughly 50% of houses have dampness or mold issues.¹

Some sources of moisture or dampness in the home include:^{1,2}

- **Water leaks or damage:** may occur in basements with foundation issues or in areas of flooding; leaky attics from damaged roofs; areas of drywall damage in places that may have had pipes leak or burst near bathrooms, kitchens, or laundry rooms.
- **Areas with poor ventilation:** such as bathrooms without ceiling fans or windows; basements; improperly maintained or cleaned air vents or systems; rooms without good natural airflow.
- **Inadequate heating:** can lead to condensation buildup and result in indoor dampness during the winter months.
- **Wet or moist surfaces:** like those in the refrigerator or dishwasher and around sinks, showers, tubs, doors, and windows.
- **Humid environments:** homes in mild and temperate climates, personal humidifiers.

Dampness and mold concerns are not isolated to homes; they can occur in any building type. If a person is experiencing mold exposure symptoms, evaluation of schools, work spaces, day care centers, or other buildings may be necessary to find the source of exposure.

Fueling Mold Growth

Dampness is the main contributor to mold growth. However, mold also needs nutrients to grow and survive. Sources of nutrients readily available within and around homes and other buildings may include:¹

- **Plant matter:** houseplants, soil, and yard debris such as rotting leaves
- **Animal matter:** pet waste or dander found in house dust or on furniture upholstery, bedding, or carpets
- **Construction materials:** wallpaper, drywall, wood, etc.
- **Stored food products:** such as fruits and vegetables (fresh as well as rotting), bulk grains or beans, cooking oils, etc.
- **Others:** books, paper products, paints, glues

Symptoms of Mold Exposure

People are exposed to a variety of molds on a daily basis. Fortunately, our bodies have many ways of protecting us from mold. However, people who are sensitive or those with weakened immune systems may be more likely to get infections or experience symptoms from mold.³

Some symptoms of mold exposure or infections may include:⁴

- **Eyes:** itchy or watery eyes
- **Respiratory:** runny or stuffy nose, asthma, pneumonitis (lung irritation), sinus infections, sore throat, cough, sneezing, wheezing
- **Gastrointestinal:** nausea, vomiting, diarrhea
- **Skin:** rashes, eczema, ringworm, athlete's foot, dandruff, etc.
- **Nails:** thickening, yellowing, cracking
- **Systemic:** fever, flu-like symptoms, fatigue
- **Severe systemic conditions:** may be seen in those with weakened immune systems and may be specific to the type of mold exposure (e.g., *Aspergillosis*)

Mold Cleanup

If a home is suspected or found to have mold growth and it is contained to a small area (less than 10 square feet), then it may be appropriate to clean the area personally. Cleanup consists of:⁵

- Fix the source of the water damage or dampness
- Let everything dry completely, or replace it if unable to dry thoroughly (such as ceiling tiles or carpets that are absorbent or porous)
- Wear proper personal protective equipment:
 - **N-95 respirator:** to prevent breathing in spores
 - **Long gloves:** don't touch mold with bare hands
 - Rubber gloves if using mild detergents
 - Gloves made with neoprene, nitrile, polyurethane, or polyvinyl chloride (PVC) may be needed if using harsher chemicals like disinfectants, bleach, strong cleaning solutions, etc.
 - **Goggles:** to prevent mold spores from entering the eyes
- Do not paint or caulk over mold. Clean the surface and allow it to dry thoroughly before painting
- For hard surfaces, scrub with detergent and water or other cleaning chemicals if needed, then allow to dry
- For other surfaces, such as furniture, art, carpet, etc., consulting a specialist is recommended

If the mold growth covers more than 10 square feet; if heating, ventilation, or air conditioning systems are suspected to be contaminated; or if sewage or contaminated water was the source of water damage, then it would be better to hire a professional cleaning service. Ensure that the company has experience cleaning up mold, specifically, and that they follow guidelines from government or professional organizations.

Further resources on mold and cleanup are available from the [Environmental Protection Agency](#).

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