



## **FACT SHEET: MOLD REMEDIATION**

Molds are living organisms, called fungi, and are found virtually everywhere, including indoors. They are most commonly encountered at UK in areas that have had leaks, floods, or other water damage. Certain molds may cause or exacerbate allergic reactions, cause toxic effects, or cause infections. However, the mere presence of mold in the indoor environment does not mean that people will be exposed to harmful organisms or develop health problems.

There are no commonly accepted scientific standards or limits for human exposure to mold in the air. Thus, air monitoring is generally not recommended when a problem is first suspected. The presence of mold in water-damaged environments can usually be identified by inspection. In that event, controlling and eliminating mold growth is the first line of defense.

Mold poses the greatest hazard for persons with conditions such as impaired host defenses and mold allergies. To prevent exposure that could result in adverse health effects from disturbed mold, persons should:

1. Avoid areas where mold contamination is obvious;
2. Use environmental controls;
3. Use personal protective equipment; and
4. Keep hands, skin, and clothing free from mold-contaminated dust.

Numerous species of mold cause infection through respiratory exposure. Many of the major noninfectious health effects of mold exposure have an immunologic basis. Exposure to mold can sensitize persons, who then might experience symptoms when re-exposed to the same mold species. For sensitized persons, hay fever symptoms and asthma exacerbations are prominent manifestations of mold allergy. Prolonged exposure to high levels of mold (and some bacterial species) can produce an immune-mediated disease known as hypersensitive pneumonitis. Ingesting toxins that molds produce can cause illness.

The primary factor that limits the growth of mold indoors is lack of moisture. Substantial indoor mold growth is virtually synonymous with the presence of moisture inside the building envelope. Studies of mold growth on organic materials such as plywood have found that mold grows on materials that remain wet for 48-72 hours. When organic materials remain wet for days or weeks, it provides optimal opportunity for mold growth. Levels of high relative humidity (generally above 70%) could also supply enough moisture to promote mold growth.

The most effective way to eliminate mold is to **discard organic, porous, and semi-porous materials that have been water-impacted, cannot be cleaned, and/or are physically damaged beyond use**. These can include ceiling tiles, paper, wood, and other items. For items and surfaces that can be cleaned, all visible contamination should be cleaned with a biocide and/or a bleach solution (one part bleach to ten parts water), depending on the surface. Persons with respiratory conditions, allergies, asthma, or weakened immune systems should avoid mold cleanup if at all possible.

Removing mold requires a series of actions. The order of actions is sometimes important, but might vary on a case-by-case basis. Typically the following actions are taken whether a problem is small or large:

1. Take emergency action to stop water intrusion, if needed;
2. Determine the extent of water damage and mold contamination;
3. Plan and implement remediation activities;
4. If needed, establish containment and protection for occupants; eliminate water or moisture sources; remove damaged materials as appropriate; dry any wet materials if possible; evaluate if the area has been successfully remediated; and reassemble the space to prevent or limit the possibility of recurrence by controlling sources of moisture.

Mold removal must be conducted following the procedures specified in the New York City Department of Health "*Guidelines on Assessment and Remediation of Fungi in Indoor Environments*", or the Environmental Protection Agency (EPA) "*Mold Remediation in Schools and Commercial Buildings*".

NYC Guidelines: <http://www.nyc.gov/html/doh/downloads/pdf/epi/epi-mold-guidelines.pdf>

EPA Guidelines: [http://www.epa.gov/mold/mold\\_remediation.html](http://www.epa.gov/mold/mold_remediation.html)

Please contact UK Occupational Health & Safety at 859-257-7600 if you have any questions.