



Responding to a Mold Outbreak

Immediately following any water-related disaster, preventing a mold outbreak should be one of the highest priorities of the recovery team. Mold can begin to grow in as little as 48 hours in conditions of elevated temperature and relative humidity. Items with a high moisture content, such as water logged documents and books, are highly susceptible to mold growth.



Mold is type of fungus that grows on the surfaces of organic materials in branching threads resembling cobwebs. Mold will grow on paper based materials, book bindings, photographic prints and negatives, leather objects, etc. Mold is not only difficult and costly to remove, but it can also cause permanent damage to an object and pose a health risk to those handling the moldy items.

Mold spores are in the air at all times but are dormant unless activated by elevated temperature and humidity. Relative humidity levels above 70% for several days combined with elevated temperatures and lack of air circulation results in conditions ripe for mold growth. Mold is difficult to kill but it can be rendered dormant by eliminating the conditions in which it prefers for growth.

There are literally thousands of species of mold. Some mold species can pose a significant health risk so any mold outbreak must be taken seriously, and be identified by a mycologist. Following are instructions for responding to a mold outbreak in an archives or records facility.

- **Isolate affected materials.**
For a small outbreak (less than 500 items) place materials in a garbage bag and move to a dry area. For a large outbreak quarantine area immediately (close doors, hang plastic sheeting, reduce circulation) and contact professional help.
- **Identify species.**
Many colleges and universities will have mycologists in the science department or contact your city or county health department for an industrial hygienist.
- **Locate source of humidity.**
Reduce relative humidity and increase air circulation. Look for roof leaks,



pipe leaks, broken windows, damp basement areas, blocked gutters, or leaking potted plants. Check HVAC system, especially the coils, drip pan, duct work.

- **Inactivate mold.**

Lower the relative humidity, dry damp materials before cleaning. A large outbreak may require professional dehumidification.

- **Clean the affected items.**

A vacuum with a HEPA (high efficiency particulate arrestment) filter is the safest and most effective way to clean dormant mold because it does not re-circulate the spores. Ensure that anyone handling moldy materials take necessary health precautions and wear personal protective equipment (PPE) (e.g. disposable latex gloves, coveralls or lab coat, goggles, respirator with a HEPA filter or an N95 respirator -not an ordinary dust mask).

- **Clean and disinfect storage area.**

Shelving may be cleaned with a solution of bleach diluted in water or other fungicide such as Lysol™. Never use this solution on the materials themselves, but rather on the shelving and walls. Rugs, walls and furnishings may also require cleaning as well as duct work.

- **Take Health Precautions**

- N95 or N99 respirators
- Gloves
- Goggles
- Coveralls
- Wash clothing in bleach and water after exposure

