

Microbiological Control in Buildings After Flooding or Water Damage

Floods, leaks from plumbing or sprinkler systems, or condensation can cause unintentional wetting of office and residential surfaces. Microbial growth will begin on these surfaces very quickly, usually in less than 24 hours. With a few notable exceptions, most molds and fungi are harmless. However, individuals' allergic susceptibility can be significant, and odors from molds and fungi can be offensive. After water damage, take *immediate* action to minimize the growth of molds and fungi. After controlling the water source, follow these guidelines to resolve this problem quickly and cost-effectively:

Decontamination Procedure

1. **Inventory all flooded areas** so that every water-damaged area is identified, treated and cleaned.
2. Remove and dispose of all wet **ceiling tiles and drywall** within 24 hours of water contact.
3. Remove and replace all **drywall and insulation** up to 12 inches above the water line.
4. Dry all wet **light fixtures**.
5. Water damaged **furniture, including wood**, should be replaced or cleaned with a 10% bleach solution. *Note: be sure to verify that bleach will not discolor or damage surfaces before application. When in doubt, test in a small hidden area before general application.* Furniture made of or with **particle or pressed board** should be discarded. Treat fabrics as you would carpeting (see below).
6. Leave all **cabinets and drawers** open to facilitate air flow for drying. Treat surfaces of cabinets and drawers with the dilute bleach solution.
7. Remove and discard all non-essential **wet files and paper**. Remove essential paper to a location where it can be dried, photocopied, and discarded.
8. If a large amount of **paper** cannot be dried within 24 hours, **essential files** can be rinsed with clean water and temporarily frozen until proper drying can take place.
9. Immediately remove as much water as possible from **wet carpeting** using water vacuums.
10. After wet vacuuming, **shampoo the carpet** with a 10% bleach solution twice within a thirty minute period. Begin shampooing *immediately* after wet vacuuming. *Spot test an inconspicuous area first.*

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11. **If the carpet fades** with the bleach solution, then the area must be immediately dried and treated with an alternate biocide. *Consult a public health official, a microbiologist, or an industrial hygienist to determine the appropriate biocide.*
12. **Rinse the carpet** with clear water to remove the bleach, and **assure that the carpet is totally dry** within 12-24 hours of treatment.
13. When using any form of biocide, including bleach, **increase air circulation and ventilation.**
14. Use **dehumidifiers and air conditioning** to speed the drying process.
15. Verify that the source of **contamination has been controlled** to prevent future occurrences.
16. If **odors or complaints of health effects** exist after the clean up, consult an industrial hygienist or environmental microbiologist to determine the need for bioaerosol testing.

For more information, contact your local Hartford agent or your Hartford Loss Control Consultant. Visit The Hartford's Loss Control web site at <http://www.thehartford.com/corporate/losscontrol/>

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