

# MITIGATION



## Solutions to Mold Problems

### Mold In Your Home?

You may have mold and/or mildew growing in your home if your home has water damage due to:

- Flooding
- Sewage back-up
- Plumbing or roof leaks
- A damp basement or crawl space
- Overflows from sinks or bathtub
- High humidity (steam cooking, dryer vents)

Mold and mildew will develop within 24-48 hours of water exposure. Even worse, it will continue to grow until steps are taken to eliminate the source of moisture, and effectively deal with the mold problem.

### Dry Out a Mold or Water Damaged House

General: Turn off main power if wiring is wet or moldy. Have an electrician check the house's electrical system before turning power on again. Open the house to fresh air when the humidity is lower outside than inside. Use fans and dehumidifiers to remove moisture unless mold has already started to grow (fans may spread existing mold). Use the furnace only if the ducts have not been inundated (any forced air central heating ducts that have come in contact with water or mold should be professionally checked). Remove all wet items such as furniture, rugs, bedding and toys. Discard soaked or moldy carpeting. Clean and disinfect other items. Discard all food products that were not stored in a water tight container.

### Interior walls and Ceilings

Remove all wet or contaminated porous materials such as ceiling tiles, drywall and wood by-products. If wallboard is soaked, remove to a foot above the watermark and discard. Drain walls by removing the baseboards and drilling holes near the floor. Dry panel-type walls by pulling the bottom edge out from the studs. Check the interior walls for hidden mold.



### Floors and Exterior Walls

Remove all wet insulation. Discard all but rigid insulation. Rigid insulation can be reinstalled after disinfecting and drying.



### Hard Surfaces

Wash items such as metal, glass, solid wood, plastic and other nonporous materials with a non-ammonia detergent and hot water. Use a stiff brush on rough surface materials such as concrete. Use a wet-dry shop vacuum to remove water and to clean items such as studs or exposed wood framing. Disinfect all cleaned surfaces with a bleach solution (1 ½ cups of bleach per 1 gallon of water). Let the solution stay on the surface for at least 10 minutes before rinsing with clean water and allowing to dry.

### Porous Materials

This includes upholstered furniture made of pressed particle materials. Deciding whether or not to keep a contaminated item? Remember, when in doubt, throw it out. If an item has been wet for less than 48 hours, it may be able to be cleaned and disinfected with phenolic or pine-oil cleaner. It should then be completely dried and monitored for several days for any fungal growth and odors – if any mold develops, discard the item. Allow the wet area to dry completely (usually two to three days) before beginning to rebuild or replace the damaged items.

### Stop the Water

- Fix leaks in pipes and any damp areas around tubs and sinks so that biological pollutants don't have a growing environment.
- Rebuild or retrofit using water-resistant materials such as tile, stone, deep-sealed concrete, galvanized or stainless steel hardware, indoor/outdoor carpet, waterproof wallboard, water-resistant glues.
- Prevent seepage of water from outdoors into your house. Rain water from gutters needs to drain away from the house. Ground around the house needs to slope away to keep the basement and crawl space dry.
- Cover dirt in crawl spaces with plastic to prevent moisture coming from the ground. Ventilate the area as much as possible.
- Clean fabrics often and store them in a well-ventilated area to keep them dry. Soiled fabric promotes mold growth.
- Routinely check potential problem spots like the bathroom and laundry for moldy odors and disinfect as necessary with bleach (1 ½ cups of bleach per 1 gallon of water).

### Materials You'll Need:

- Buckets and trash bags
- Scrub brush, sponges, and rags
- Gloves (latex, rubber) and mask (painter's or respirator)
- Broom, mop, and wet-dry shop vacuum
- Non-ammonia soap or commercial cleaner (phenolic or pine-oil based)
- Disinfect with liquid chlorine bleach (1 ½ cups of bleach per 1 gallon of water)

### Cleaning and Disinfecting

#### Before you begin:

- Wear gloves and a mask; protect your eyes and lungs.
- Make sure the working area is well ventilated.
- If mold is present, clean a small test patch. If you feel your health is adversely affected, consider hiring a professional to do the work.
- Only apply disinfectants to already cleaned materials.

### Some General Cautions:

- Exercise caution in cleaning and disinfecting molds because they release mold spores when disturbed. Wear gloves and a mask.
- *Never mix bleach with ammonia; doing so will create toxic fumes.*
- When discarding items contaminated with mold, use extreme caution or hire a professional.

### Serious Health Problems from Mold Exposure

Typical symptoms reported from mold exposure include:

- Respiratory problems – sneezing, asthma attacks, etc.
- Nasal and sinus congestion or dry, hacking cough
- Eye irritation – burning, watery, redness
- Nose or throat irritation – sneezing fits, bloody noses
- Skin irritations – rashes or hives
- Nervous system – headaches, memory loss, mood changes
- Aches and pains