



Waupaca County

Department of Health and Human Services

Health Services Division | Environmental Health Unit

FLOOD CLEAN UP PROCEDURES

Bacteria, viruses, mold, fungi, etc., must be killed in the clean up process. The most widely-accepted, safe and effective sanitizing agent is hypochlorite in the form of household bleach. For all following procedures, the bleach solution referred to is one cup of bleach to one gallon of water. This will give sufficient strength to kill organisms.

Time is an important consideration in clean up. Organisms to be killed will not become airborne as long as they remain wet. As long as surfaces remain wet, the only way organisms can enter the body and cause disease is by splashing into the mouth, eyes, open cuts, etc. Once dried, organisms can be spread on dust particles by air movement. It is, therefore, important to bring the bleach solution in contact with contaminated surfaces as soon as possible after rinsing off heavy soil. In order to prevent decomposition and rotting of wet items, immediate drying after disinfection is necessary.

Once the water has receded, the following steps should be taken:

- Assure that the above personal protection and general safety steps have been taken.
- Determine what items will have to be discarded and remove them for disposal. Generally, if the bleach solution can be made to come in contact with all surfaces, an item may be salvageable. Stuffed furniture, pillows, and mattresses will have to be discarded. Indoor/outdoor carpeting and rugs may be salvageable. Thick wall to wall carpets and padding will have to be discarded or professionally treated.
- Thoroughly rinse all visible soil from all items to be salvaged. Rinse the walls from several inches above the highest level the water reached to the floor. Carefully hose behind any base coping to remove all soil. Hose down the entire floor.
- Prepare the bleach solution of one cup of household bleach to one gallon of water. Smaller items may be immersed in this solution. Hand scrub larger items with the solution. Pour this solution on the walls several inches up from the highest level reached by the flood waters and over the entire floor. Make sure all affected surfaces have been contacted with the solution. An effective method is to use a broom or mop to splash the solution on the walls and over all of the floor.
- If water has reached more than a few inches up the walls, hollow walls will have to be opened. Cut off the portion of the drywall which has become wet. Saturate the remaining studs with the bleach solution.
- Using various methods, dry all surfaces as much as possible (the bleach solution needs 15 minutes to kill organisms). The wettest areas can be squeegeed or mopped to a floor drain. A wet/dry vacuum can be used on flat surfaces to further remove remaining water. Using fans and/or a dehumidifier, thoroughly ventilate the rooms to dry all surfaces.

- Indoor/outdoor carpeting and rugs need a very thorough treatment if they are to be safely salvaged. Remove them to a flat area such as a driveway. Hose down both sides of the carpet several times to thoroughly remove all soil. Follow this with several buckets of the bleach solution on each side, scrubbing with a broom. Then rinse both sides with clear water. Remove as much water as possible with a wet/dry vacuum and allow to dry thoroughly.
- Over the next weeks, replace disposable furnace filters or clean permanent filters with the bleach solution at least two times to reduce trapped mold spores.

Future Concerns

A major health concern after flooding or other water damage in homes is the growth of molds, bacteria, and other biological contaminants. This is often associated with a musty mildew odor, as well as visible evidence of mold growth on walls, floors, carpeting, or other water damaged items. Some persons may be allergic to or develop allergies or asthma-like symptoms from exposure to these contaminants. It is important that items in a home contributing to mold and bacterial growth be cleaned and dried as soon as possible. See item(s) below. If this is not possible the item(s) should be discarded. The following are provided as general recommendations for dealing with water damage.

Correcting Water Damage

- Discard any water-damaged furnishings such as carpet, drapes, stuffed toys, upholstered furniture, mattresses, wicker furniture, ceiling tiles, and other porous items unless they can be cleaned by steam cleaning or hot water washing and thorough drying.
- Remove and replace wet insulation to prevent conditions where biological pollutants can grow.
- Wash surfaces and floors with a household chlorine bleach solution. A cup of household bleach per gallon of water is recommended. The bleach solution should stay in contact with the affected surfaces at least fifteen minutes before rinsing off with clean water.
- Seal all leaks (ceilings, walls, foundations) and correct improper surface drainage.
- Reduce moisture generation in crawl spaces by ventilation or covering the crawl space floor with a moisture resistant material such as polyethylene.

Home inspection after water damage

- Inspect and clean all appliances that have been in contact with water.
- Have professionals check heating/cooling ducts and wall insulation for mold growth.
- Look for obvious mold growth throughout the house including attics, basements and crawlspace and around the foundation.

If you have any questions contact the Waupaca County Health Services Division 715-258-6300