After a flood, what the public should know about...

Cleaning/Mold removal

Is it safe to cook in my kitchen after flooding?
Yes, but precautions must be taken to protect food contact surfaces from contaminating your food. When cleaning or disinfecting, wear protective clothing, such as gloves, to avoid skin contact, irritation, or infection. Make sure to clean corners, cracks and crevices, door handles, and door seals, in rooms that have been affected by flood water.

How should I clean my pots, pans, dishes and utensils?
Discard wooden cutting boards, wooden dishes and utensils, plastic utensils, baby bottle nipples, and pacifiers that have come into contact with flood water. These items cannot be safely cleaned. Thoroughly wash metal pans, ceramic dishes and utensils (including can openers) with hot soap and water. Rinse and then sanitize them by boiling in clean water or immersing them for 15 minutes in a diluted bleach solution (1 tablespoon of unscented, liquid chlorine bleach per 1 gallon of drinking water). Allow to air dry.

How should I clean my countertops?
Wash countertops with soap and water, using hot water if possible. Rinse and then sanitize with a diluted bleach solution (1 tablespoon of unscented, liquid chlorine bleach per 1 gallon of drinking water). Allow to air dry.

What is the best way to clean sheetrock/plaster walls/crawlspaces after a flood?
Remove all water-soaked sheetrock and insulation between wall joists to allow the wall cavity areas to dry. For plaster walls, openings can be made in the top and bottom of the walls to allow water to drain and air to circulate. If power is available, use fans to circulate the air and dehumidifiers to assist. Hiring a professional drying service may be necessary. Crawlspace beneath the building may be difficult to clean and dry out. Bacterial growth can be a significant concern in these areas. Crawlspace are often small spaces to work and could be considered a confined space. Without proper ventilation and safety precautions do not enter these areas. Seek professional assistance to evaluate and clean these areas.

How do I clean ventilation systems after flooding?
Cleaning the ventilation system ductwork may be necessary to remove debris caused by flooding. The system should be inspected prior to using. Bacteria can be spread by the HVAC system so disinfection may be necessary. Not all disinfectants are appropriate for use in cleaning the ventilation system. Make sure the products being used are approved for use in the ventilation system before using them. Professional assistance may be needed for proper cleaning of the system.

How do I find out if I have mold?
Identifying mold in your home should always begin with a thorough visual inspection. An inspection can be done by a homeowner or by a qualified environmental consultant. Please note that there are no state or federal regulations which cover mold inspections, The inspection may be focused on specific areas where moisture has been seen, where flooding or water damage has occurred or in common areas known for mold growth such as basements, attics and crawl spaces. Stained or discolored areas of walls and
ceilings that continue to increase in size or change colors can be signs of mold growth. A strong musty smell is also an indicator of mold growth.

Should my home be tested for mold?
If a visual inspection shows the presence of mold, additional testing is not necessary. The focus should be on correcting any moisture problems and cleaning up the mold contamination. However, if mold is not found during a visual inspection and is still suspected of being present, additional testing may be necessary. Testing for mold should always be performed by a qualified person. Your local health department may be able to assist, or an environmental consultant who specializes in or has experience in evaluating mold contamination should be contacted.

What additional environmental testing do I need/should I consider?
Additional testing may include an evaluation of the relative humidity in the home and taking moisture readings of building materials in suspected areas. Swab testing of suspected surfaces and bulk samples of building materials may also be performed. Specialized air testing is also an option for identifying mold spores (MVOCs) from mold growth. However, these specialized air tests can be very expensive and need to be conducted in context with an overall assessment plan. Caution should be taken when considering air testing since there are no state or federal standards for determining an acceptable level of mold in the air. Careful interpretation of air sampling results is also very important since individual susceptibility and health status varies. If air sampling is conducted, an outside reference sample should also be collected at the same time for comparison with the indoor samples.

Who should I hire to test my home for mold?
There are no state or federal regulations which cover mold inspections. Environmental consultants are not required to obtain a license or certification to conduct mold inspections. Homeowners should make sure that any consultant performing work has received proper training and are familiar with current industry standards for performing inspections.

How should I discard moldy items?
Use gloves or other personal protection when cleaning items. People with asthma and allergies should not remove mold. Exposure to mold may cause these people to become sick. Clean all hard surfaces with a bleach and water solution (1 cup bleach to 1 gallon of water) to kill germs and mold. Wash hands after touching anything that has touched flood water. Wash all clothing worn during clean-up in hot water separate from the laundering of routine clothing.

What can I do to prevent mold in my home?
To prevent mold, wash surface areas in your home, including the walls, staircases and items that came in contact with floodwater. Disinfect with bleach solution and wipe surfaces dry with paper towels to minimize bacterial contamination.

My home was flooded. How do I know what household items can be saved and what I should throw away?
Take things that were wet for two or more days outside. Things that stayed wet for two days have mold growing on them even if you can't see it.
- Take out items made of cloth, unless you can wash them in hot water.
- Also throw away items that can't be cleaned easily (like leather, paper, wood, mattresses, and carpet).
- Throw away any items that do not dry completely because they can harbor germs and produce mold, which can irritate allergies as well as lead to respiratory or other illnesses.
- Keep the humidity and temperature as low as possible.
- Remove any moldy objects as soon as possible. Wash hands after touching anything that has touched flood water.
- Use bleach to clean mold off hard things (like floors, stoves, sinks, certain toys, countertops, flatware, plates, and tools).
What is the best way to clean up after a flood?
Follow these tips to clean up after a flood:

• Never mix bleach with ammonia or other cleaners.
• Wear rubber boots, rubber gloves, goggles, and N-95 mask.
• Open windows and doors to get fresh air when you use bleach.
• Mix no more than 1 cup of bleach in 1 gallon of water.
• Wash the item with the bleach and water mixture.
• If the surface of the item is rough, scrub the surface with a stiff brush.
• Rinse the item with clean water.
• Dry the item or leave it out to dry.
• If available, use a shop vacuum equipped with a HEPA filter to trap dust.

For more information

• Your local health department [http://nj.gov/health/lh/directory/lhdselectcounty.shtml](http://nj.gov/health/lh/directory/lhdselectcounty.shtml)
• Centers for Disease Control and Prevention (CDC) [http://emergency.cdc.gov/disasters/](http://emergency.cdc.gov/disasters/)
• Federal Emergency Management Agency (FEMA) [www.fema.gov](http://www.fema.gov) (800) 621.3362