

# Cleaning Up After a Flood

## Garbage Storage, Collection and Disposal

As you start cleaning, you will likely produce a great deal of garbage. Local authorities will tell you where and when collection will occur. Garbage invites insects and rodents. Rodents, in particular, may be looking for food because the flood may have destroyed their homes and normal food source. Store garbage in watertight, rodent/insect-proof containers with tight-fitting covers. Use plastic liners if available. Pile garbage in a convenient location but not near your well. If a rodent problem develops, use traps purchased at your local hardware, lawn, garden and grocery stores. Standing water is a breeding ground for some insects. When possible, drain or fill areas of standing water.

## Flush Toilets

If floodwaters are covering your septic tank and leach field, you should not use any flush toilets attached to the system. Septic systems rely on gravity to pull the wastewater down and away from the surface. When the system is flooded, wastewater can rise and mix with surface water, exposing people to human waste. If you are unable to use the toilets in your home, use portable toilets such as the type used for camping. Some communities may set up banks of commercial portable toilets for resident use.

## Food, Containers and Utensils

- Raw foods that were exposed to flood waters may be contaminated and should not be eaten.
- Food and food containers that have been in or splashed with floodwaters need to be either thrown away or properly cleaned.
- Canned foods can be used unless the cans are swollen, rusted, seriously dented, or the contents cannot be identified. Wash off food cans that are still sealed and disinfect them for five minutes in a bleach solution of two teaspoons of bleach per gallon of water.
- Discard food containers with lids that are screwed on or pressed on (such as soda and beer bottles). They cannot be cleaned adequately.
- Clean and disinfect dishes, utensils and cookware in a solution of two teaspoons bleach per gallon of water. Do NOT use this method on sterling silver tableware. The bleach will cause these items to tarnish. Sanitize sterling silver by putting it in boiling water for at least two minutes.

## Drinking Water

Assume all water sources are unsafe until approved by your local health department. Until water sources are approved, use health department approved bottled water (look for the New York State certificate number on the label), or water distributed by a health department approved tank truck until your well is usable or public water has been restored. If your well has been covered over with floodwaters, it should be disinfected before drinking (see separate sheet *Well Contamination*). Follow local officials' usage restrictions to conserve water. If you must use water of unknown quality, it should be disinfected (see separate sheet *Using Water Safely*).

## Household Cleanup

During flood cleanup, the indoor air quality in your home or office may appear to be the least of your problems. However, flooding may cause indoor air quality problems that could last for a long time and cause you and your family to get sick. The next few sections provide information about how to reduce the likelihood that you will have indoor air quality problems. The information is intended to be used in conjunction with the FEMA/Red Cross booklet *Repairing Your Flooded Home*, which details general cleanup methods.

### Remove Standing Water

For health reasons and to lessen structural damage, all standing water should be removed as quickly as possible.

The water can “wick” into the walls causing a greater area to be affected. Standing water is a breeding ground for bacteria and mold, which can become airborne and be inhaled. Where floodwater contains sewage or decaying animal carcasses, infectious disease is a concern. Even when flooding is due to rainwater, the growth of bacteria and mold can cause allergic reactions in sensitive individuals.

An exception to the water removal rule is if there is fuel oil floating on top of the water in a flooded basement. This usually happens when a basement floods and the oil tank was not properly fastened to the floor. The oil should be cleaned up before the water is pumped out. If the oil is not removed first, then the walls and floor will be coated with oil as the water is removed.

### Excess moisture and indoor air quality

Dry out your home as quickly as possible. Dehumidifiers, fans and open windows all help. Avoid using too much heat because it will encourage bacteria and mold growth more quickly.

Bacteria and mold brought into the home during flooding may present a health hazard. These organisms can penetrate deep into soaked, porous materials and later be released into the air or water.

Coming into contact with air or water that contains these organisms can make you sick. High humidity and moist materials provide ideal environments for the excessive growth of bacteria and mold that are always present in the home. This may result in additional health concerns such as allergic reactions.

Increases in home humidity over the longterm can foster the growth of dust mites that are a major contributor of allergic reactions and problems with asthma.

*Be patient.* The drying out process could take several weeks and the growth of bacteria and mold will continue as long as humidity is high. If the house is not dried out properly, a musty odor, which signifies the growth of bacteria and mold, can remain long after the flood.

### Remove Wet Materials

Discarding items, particularly those with sentimental value, can be difficult for some people. However, keeping certain items soaked by water may be unhealthy. Some materials tend to absorb and keep water more than others. As a general rule, materials that are wet and cannot be thoroughly cleaned and dried should be discarded because they can remain a source of bacteria growth.

Look in the FEMA/ Red Cross booklet, *Repairing Your Flooded Home*, “Step 4,” for an explanation of how to dry out the different types of construction material that are used in your house (for example, plaster, wallboard, insulation). The booklet suggests that you may be able to dry out and save these building materials. You may, however, want to consider removing and replacing them to avoid indoor air quality problems. Because they take a long time to dry, these materials may be a source of bacteria growth.

In addition, fiberboard, fibrous insulation and disposable filters should be replaced if they are in your heating and air conditioning system and came in contact with water. If a filter was designed to be cleaned with water and was in contact with clean rain water only, thoroughly clean it before reinstalling.

## Use Cleaners and Disinfectants Wisely

Be careful about mixing household cleaners and disinfectants together. Check labels for warnings. Mixing certain types of products can produce toxic fumes and result in injury and even death.

The cleanup process involves thorough washing and disinfecting of the walls, floors, closets, shelves and contents of the house. In most cases, common household cleaning products and disinfectants can be used for this task. The Federal Emergency Management Agency also suggests using disinfectants and sanitizers when cleaning the heating and air conditioning ductwork if it has been flooded.

Disinfectants and sanitizers contain substances that can cause other problems. The health effects from chemicals in household cleaning products vary greatly, from “no known health effects” to “serious health effects.” Read and follow label instructions carefully and provide fresh air by opening windows and doors. If it is safe for you to use electricity and if the house is dry, use fans both during and after the use of disinfecting, cleaning and sanitizing products.

## Avoid Airborne Asbestos and Lead Dust

If you have to remove all or part of walls or floors, lead or asbestos-containing materials (for example, paint, plaster, pipe wrap) could be disturbed, causing lead dust or asbestos fibers to be spread around your home. Lead is a highly toxic metal that produces a range of health effects, particularly in young children. Longterm exposure to airborne asbestos can cause lung cancer and mesothelioma, a cancer of the chest and abdominal lining. If you know or suspect that your home contains lead-based paint or asbestos, contact the New York State Department of Health at 800-458-1158 for information about steps you should take to avoid contaminating your home.

These pages are from the New York State Department of Health (NYSDOH) booklet *Don't Be Left in the Dark* (November 2003) which contains additional emergency sanitation and safety information. This 32-page booklet is available by calling 1-800-458-1158, extension 27530.