



FACT SHEET

Key Facts About Flood Recovery

CDC offers these essential tips to help you recover from a flood.

How to Avoid Illness

Always wash your hands with soap and water that has been boiled or disinfected before preparing or eating food, after toilet use, after participating in flood cleanup activities, and after handling articles contaminated with flood water or sewage. If you receive a puncture wound or a wound contaminated with feces, soil, or saliva, have a doctor or health department determine whether a tetanus booster is necessary.

How to Make Sure Your Food is Safe

Do not eat any food that may have come into contact with flood water. For infants, use only pre-prepared canned baby formula that requires no added water, rather than powdered formulas prepared with treated water. Thawed food can usually be eaten or refrozen if it is still "refrigerator cold," or if it still contains ice crystals. To be safe, remember, "When in doubt, throw it out." Discard any refrigerated or frozen food that has been at room temperature for two hours or more, and any food that has an unusual odor, color, or texture.

How to Make Sure Your Water is Safe

Listen for public announcements on the safety of the municipal water supply. Flooded, private water wells will need to be tested and disinfected after flood waters recede. Questions about testing should be directed to your local or state health departments.

Safe water for drinking, cooking, and personal hygiene includes bottled, boiled, or treated water. Your state or local health department can make specific recommendations for boiling or treating water in your area. Here are some general rules concerning water for drinking, cooking, and personal hygiene. Remember:

- Do not use contaminated water to wash dishes, brush your teeth, wash and prepare food, wash your hands, make ice, or make baby formula. If possible, use baby formula that does not need to have water added. You can use an alcohol-based hand sanitizer to wash your hands.
- If you use bottled water, be sure it came from a safe source. If you do not know that the water came from a safe source, you should boil or treat it before you use it. Use only bottled, boiled, or treated water until your supply is tested and found safe.
- Boiling water, when practical, is the preferred way to kill harmful bacteria and parasites. Bringing water to a rolling boil for 1 minute will kill most organisms.
- When boiling water is not practical, you can treat water with chlorine tablets, iodine tablets, or unscented household chlorine bleach (5.25% sodium hypochlorite):
 - If you use chlorine tablets or iodine tablets, follow the directions that come with the tablets.

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- If you use household chlorine bleach, add 1/8 teaspoon (~0.75 mL) of bleach per gallon of water if the water is clear. For cloudy water, add 1/4 teaspoon (~1.50 mL) of bleach per gallon. Mix the solution thoroughly and let it stand for about 30 minutes before using it.

Note: Treating water with chlorine tablets, iodine tablets, or liquid bleach will not kill parasitic organisms.

Use a bleach solution to rinse water containers before reusing them. Use water storage tanks and other types of containers with caution. For example, fire truck storage tanks and previously used cans or bottles may be contaminated with microbes or chemicals. Do not rely on untested devices for decontaminating water.

How to Handle Animals and Mosquitoes

Many wild animals have been forced from their natural habitats by flooding, and many domestic animals are also without homes after the flood. Take care to avoid these animals. Do not corner an animal. If an animal must be removed, contact your local animal control authorities. If you are bitten by any animal, seek immediate medical attention. If you are bitten by a snake, first try to accurately identify the type of snake so that, if poisonous, the correct anti-venom may be administered.

Contact local or state health and agricultural officials for state guidelines on disposal of dead animals. Protect yourself from mosquitoes: use screens on dwellings, wear long-sleeved and long-legged clothing, and use insect repellents that contain DEET.

How to Deal With Chemical Hazards

Be aware of potential chemical hazards you may encounter during flood recovery. Flood waters may have buried or moved hazardous chemical containers of solvents or other industrial chemicals from their normal storage places. If any propane tanks (whether 20-lb. tanks from a gas grill or household propane tanks) are discovered, do not attempt to move them yourself. These represent a very real danger of fire or explosion, and if any are found, police or fire departments or your State Fire Marshal's office should be contacted immediately. Car batteries, even those in flood water, may still contain an electrical charge and should be removed with extreme caution by using insulated gloves. Avoid coming in contact with any acid that may have spilled from a damaged car battery.

How to Deal with Electric and Gas Utilities

Electrical power and natural gas or propane tanks should be shut off to avoid fire, electrocution, or explosions until it is safe to use them. Use battery-powered flashlights and lanterns, rather than candles, gas lanterns, or torches. If you smell gas or suspect a leak, turn off the main gas valve, open all windows, and leave the house immediately. Notify the gas company or the police or fire departments or State Fire Marshal's office, and do not turn on the lights or do anything that could cause a spark. Avoid any downed power lines, particularly those in water. All electrical equipment and appliances must be completely dry before returning them to service. It is advisable to have a certified electrician check these items if there is any question. Also, remember not to operate any gas-powered equipment indoors.

How to Clean Up

Walls, hard-surfaced floors, and many other household surfaces should be cleaned with soap and water and disinfected with a solution of 1 cup of bleach to five gallons of water. Wash all linens and clothing in hot water, or dry clean them. For items that cannot be washed or dry cleaned, such as mattresses and

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upholstered furniture, air dry them in the sun and then spray them thoroughly with a disinfectant. Steam clean all carpeting. If there has been a backflow of sewage into the house, wear rubber boots and waterproof gloves during cleanup. Remove and discard contaminated household materials that cannot be disinfected, such as wallcoverings, cloth, rugs, and drywall. Also see the CDC fact sheet "After a Hurricane or Flood: Cleanup of Flood Water" (www.bt.cdc.gov/disasters/floods/cleanupwater.asp). Additional guidance is available from the Environmental Protection Agency at www.epa.gov/iaq/pubs/flood.html and the Federal Emergency Management Agency at www.fema.gov/hazards/floods/whatshouldidoafter.shtm.

See Also...

- Reentering Your Flooded Home (www.bt.cdc.gov/disasters/mold/reenter.asp)
- Protect Yourself from Mold (www.bt.cdc.gov/disasters/mold/protect.asp)

For more information, visit www.bt.cdc.gov/disasters/floods, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (español), or (866) 874-2646 (TTY).

September 10, 2004

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