You survived the natural disaster! Now it is time to assess the damage. Conduct a disaster risk assessment to identify hazards and determine the location, intensity, frequency, and probable size of the harm done. These findings help determine physical, social, health, environmental, and economic vulnerability and determine the urgency. Priorities will vary with the kind of damage and its severity. After assessing the situation, you may only want to make temporary repairs until extensive work can be done.

Begin by taking a notepad and pen in hand, taking a deep breath, and listing what needs to be done. After you have assessed the damage, set your priorities. List which of the repairs and clean-up you can do yourself. Then, list those things that are best left to a professional. Always remember to follow safety rules for entering damaged buildings. Take photos of the damage for insurance claims and tax records, and be sure to keep records of all expenses.

Be extremely careful. Pay special attention to damages requiring immediate attention such as utilities and other lifelines (e.g., water, sewer, power). Hazards that pose a serious risk to life or cause bodily harm, like downed power lines, must be reported immediately to the proper authorities.

**Building structure.** Check the roof and thoroughly inspect shingles, ridges, gable ends, and eaves. Check the foundation for settling, cracking, or undermining. Examine fireplaces and chimneys for cracks or loose bricks. Also examine walls, floors, and windows. Determine what repairs are necessary.

**Sewage, water, and heating systems.** Examine these systems carefully for signs of damage.
Household contents. Determine what can be salvaged and what must be thrown out.

Landscaping. Assess the damage to landscaping and make plans to remove any large trees in danger of falling near your home.

Safety considerations during clean-up

- Assemble a “bare essentials” first aid kit for minor injuries that may occur while cleaning.
- Don’t enter any building damaged by a tornado, earthquake, flood, or fire until you are sure it is safe.
- When entering damaged buildings, use flashlights only. Do not use matches, torches, or any open flame, or try to turn on electric light switches. Watch for gas leaks, undermined foundations, wet or falling plaster, holes in walls or floors, nails, and splinters.
- Set priorities. Accomplish the most important tasks first. Avoid physical overexertion.
- Be sure children are safe and are being cared for. Never leave young children alone or allow them to play in damaged buildings or areas that might be unsafe.
- Keep chemicals used for disinfecting and poisons used for insect and rodent control out of the reach of children.
- Wear protective coverings on the face, legs, arms, feet, and hands while cleaning up debris. Wear rubber gloves while scrubbing flood-damaged interiors and furniture.

Cleaning up

Before you enter a damaged building or structure to begin cleanup (for any other reason), it must be examined by a building inspector or other government authority to certify that it is safe to enter.

Suggested cleaning supplies

For protection, use safety gear such as hard hats, goggles, N95 masks, heavy work gloves, waterproof boots with steel toe and insole, earplugs or protective headphones, and fire extinguishers of at least 5 pounds. Select your cleaning supplies based on the type of cleanup.

For all jobs:
- detergents
- bleach
- disinfectants
- ammonia
- cleaning powder or gel
- rubber gloves
- strong boots or thick-soled shoes
- sturdy garbage bags for waste

For small jobs:
- buckets and/or scoops
- scrub brushes, sponges, and cloths
- small tools (for example, hammer and screwdriver)

For large jobs:
- buckets
- tools, brooms and mops, and shovels
- hoes
- water hose, wheelbarrow, and dolly
baskets
• wash tubs (for soaking objects)

Choosing cleaners and disinfectants
Household cleaners help remove dirt. Disinfectants help stop the growth of disease-causing microorganisms carried in floodwater. Consider using powdered or liquid cleaners and disinfectants because large areas will probably need to be cleaned. They are more practical and less expensive than aerosol products. Use appropriate ratios to mix the products with water. Never mix cleaning products together—ammonia and bleach, for example—due to toxic gases that can form.

Not all products are suited for all uses. Read the label for specific directions or precautions. Make sure the products you choose will do the job you want them to.

Always follow manufacturer’s directions and precautions. Many products are harsh on hands, so wear waterproof gloves. Cleaning products may burn your eyes, so avoid any contact with the eyes. If you splash or spill any product on your skin, wash it off immediately.

Disposing of garbage and sewage
Try to remove garbage as soon as possible to prevent rodent infestations and other health problems. Consult local agencies regarding garbage and sewage removal. Depending on local laws, it might be possible to burn some garbage. Biodegradable garbage can be buried in a hole 4 to 5 feet deep and covered with at least 2 feet of soil.

Damaged sewer systems are health hazards.
Trained personnel in local environmental regulatory agencies will help with these problems. Problems with water purity, waste disposal, or pest control should also be referred to these agencies.

Temporary sanitation. Until sewage systems are back in normal working order, use a large container with a tight-fitting lid for a temporary toilet. Line the container with a plastic bag. After each use, add chlorine bleach or disinfectant to stop odor and kill germs. If you have a chemical campers’ toilet, use it until regular plumbing is restored.

Disinfecting wells
Flooded wells should be disinfected before they are used as a source of drinking water.

To disinfect a well, use the following steps:
1. Scrub the pump room and wash all equipment, including piping, pump, and pressure tank.
2. Remove the well seal at the top of the casing. Pour a solution of 1 quart of laundry bleach and 3 gallons of water into the top of the well. Pour the solution so it washes down the inside casing and outside the drop pipes. (In some wells, you only need to remove a plug from the seal to pour the solution into the well.)
3. Leave the solution in the well for about 4 hours, then pump it into the pressure tank and distribution system.
4. Draw the chlorinated water into all piping by opening each faucet until the odor of chlorine is apparent. Leave the chlorine in the piping for at least 2 hours. Then run the water until the taste and odor are no longer objectionable.

Did you know?
If your important papers have become wet and you don’t have time to slowly dry them out, you can put each one in a sealed plastic bag in the freezer until you have the time to properly dry it.

Deciding what to salvage
Before starting to salvage damaged clothing, bedding or furniture, and accessories, decide which pieces are worth saving. Consider each item individually and
make your decision based on the extent of the damage; the cost of the article; sentimental value; and the cost of restoration. Your county Cooperative Extension service may be able to advise you on methods for cleaning and repairing household items damaged by flood waters or smoke damage, should you decide to do that work yourself.

Cleanup may require drying and airing out your house rapidly—opening doors and windows and using fans to dry wet areas. Throw away anything you cannot clean or dry quickly (e.g., mattresses, carpeting, carpet padding, rugs, upholstered furniture, cosmetics, stuffed animals, baby toys, pillows, foam-rubber items, books, wall coverings, and paper products).

- Items damaged by flood waters need to be cleaned and dried out as soon as possible to prevent mildew. Disinfect when necessary.
- Pull up waterlogged rugs and remove drapes immediately to prevent further damage to the floor and walls.
- Dry out books and important papers slowly. If you prefer, put each book or important paper in a sealed plastic bag in the freezer until you have time to deal with it.
- During a fire, heat drives smoke into every accessible opening. It becomes deeply embedded in textiles and other porous items. Smoke odor is exceedingly difficult to remove, even for professionals. Nonetheless, it may be best to let professionals come into your home to treat lingering smoke odor. Professional dry cleaning may or may not remove smoke odor from clothing, drapes, and upholstery.

For more information:

Your county UC Cooperative Extension office may be able to advise you on preparing for emergency situations. Remember that being prepared will speed up the recovery process. In addition, you can draw on the following resources:

- American Red Cross, redcross.org/get-help/disaster-relief-and-recovery-services/disaster-cleanup.html
- Centers for Disease Control and Prevention  
  - cdc.gov/disasters/watersystemrepair.html  
  - cdc.gov/hygiene/cleaning/facility.html

About this publication

The Ready or Not Emergency Preparedness Newsletter Series is a resource for individuals and families. Each newsletter addresses a specific topic on how to prepare for a disaster. The series includes the following issues: 1: Planning for an Emergency; 2: Safety Considerations; 3: Food and Water; 4: Emergency Considerations for Children and Families; 5: Finances and Insurance; and 6: Time to Clean Up.

For more information about this publication, visit ucanr.edu/sites/CNH/.