

## Safety after a disaster

### Flood

After a disaster, property damage may cause unusual and additional safety hazards. Many disaster-related injuries and deaths occur during cleanup. Here's what to check:

Item	Action	Status
<b>Appliance or extension cords</b>	Replace the cord if it has been wholly or partially immersed in water and shows signs of insulation damage after being thoroughly dried out.	
<b>Small electrical appliances</b>	Thoroughly clean and dry the appliance before using it. If the appliance contains an electric motor, see <b>Electric motors</b> . Controls may be corroded and inoperative, making the appliance unusable. In many cases, purchasing a new appliance may cost less than servicing it.	
<b>Electric clocks</b>	Water and silt can damage precision bearings and clock parts. Seek servicing by a repair shop.	
<b>Electrical services and distribution panels</b>	An electrical contractor or qualified electrical equipment service agency should inspect and repair electrical service equipment. They will open, clean and thoroughly dry the equipment. Also replace electric circuit breakers, ground fault circuit interrupters (GFCIs) and fuses that have been submerged as water and silt inside these devices can cause electrical shorts or mechanical malfunctions.	
<b>Electronic components (stereos, radios and computers)</b>	Submersion in water severely damages the internal components of most electronic equipment. Rust, corrosion and dirt can leave the equipment unserviceable. Motors and power supplies will require servicing or replacement. Consult a service agency for an estimate for repairs as soon as possible. Corrosion will continue if the components are not thoroughly dried out immediately. Buying a new unit may be the safest and least expensive alternative.	
<b>Electric motors</b>	Without proper servicing, do not use any appliance with a motor that has been wet. An electric motor showing signs of being wet should be completely serviced before use. Moisture that has entered the windings can cause the motor to short out and fail. This can present a shock or fire hazard. Dirt or silt in the bearings will cause premature bearing failure. A motor repair or rewinding shop should do this work. The rehabilitation of a flood-damaged motor will include: dismantling, cleaning, baking of the windings to remove moisture, re-assembly, re-oiling of bearings and testing.	
<b>Heating and cooking equipment</b>	The main damage to an electric range will be soaked insulation and water-damaged switches and controls. Semi-enclosed elements may also be damaged. Electric heaters with sealed elements can be cleaned and dried. Thermostats may need to be replaced. The switches and controls on electric ranges are difficult	

<b>Heating and cooking equipment (continued)</b>	to dry out and may break down over time. Replacement may be necessary. The oven control may also fail due to moisture in the insulation. Newer ranges have sealed surface elements, which do not absorb moisture. Semi-enclosed elements can absorb moisture and will require replacement. Depending on the type and condition of the insulation on the internal wiring, proper drying out of the appliance may be all that is necessary. Have your range thoroughly checked by your appliance service agency.	
<b>Refrigerators, freezers, air conditioners and refrigeration equipment</b>	Refrigeration equipment can be classified into two types: belt-driven with exposed motor and thematically sealed units. The unit should be properly inspected and serviced by an appliance service agency, which will consider the following: <ul style="list-style-type: none"> <li>• Any refrigerator cabinet that has been even partially immersed in water will have wet insulation. The cabinet will have to be opened up and insulation dried or replaced.</li> <li>• Open-type motors will require servicing or replacement (see the Motors section).</li> <li>• Thematically sealed units will probably not be damaged and can be cleaned and re-used. Check controls, relays and wiring for damage.</li> </ul>	
<b>Telephones and telephone equipment</b>	Contact your telephone company for help in assessing damage to the telephone system in your building. Treat telephones themselves as noted under <b>Small electrical appliances</b> .	
<b>Washers and dryers</b>	Treat the motors and controls as noted under the <b>Electric motors</b> and <b>Heating and cooking equipment</b> sections. The gear box on most washers is sealed, but should be checked to see that water has not contaminated the lubricating oil or grease. Flush out the box with solvent, thoroughly clean, re-grease and reassemble the unit. Treat the pump as noted under <b>Water systems</b> . Remove all water and silt from bearings and other moving parts. Check the electric element in the dryer for moisture damage.	
<b>Water heaters</b>	Replace any damp insulation. Check the wiring in the water heater and replace it if it shows deterioration signs. Check and clean thermostats and heating elements.	
<b>Water systems (pump mechanism)</b>	If the pump mechanism is not a sealed unit, check for water and silt contamination. If it is contaminated, dismantle the pump, clean it and add fresh oil. Clean the inlet screen on the suction valve. Do not drain off old, contaminated oil until you are ready to clean and replace it. Otherwise, interior pump parts may rust.	