

## Floods



Floods are one of the most common hazards in the United States, however not all floods are alike. Some floods develop slowly, while others such as flash floods, can develop in just a few minutes and without visible signs of rain. Additionally, floods can be local, impacting a neighborhood or community, or very large, affecting entire river basins and multiple states.

Flash floods can occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden release of water held by an ice jam. Flash floods often have a dangerous wall of roaring water carrying rocks, mud and other debris. Overland flooding, the most common type of flooding event typically occurs when waterways such as rivers or streams overflow their banks as a result of rainwater or a possible levee breach and cause flooding in surrounding areas. It can also occur when rainfall or snowmelt exceeds the capacity of underground pipes, or the capacity of streets and drains designed to carry flood water away from urban areas.

Be aware of flood hazards no matter where you live or work, but especially if you are in low-lying areas, near water, behind a levee or downstream from a dam. Even very small streams, gullies, creeks, culverts, dry streambeds or low-lying ground that appear harmless in dry weather can flood.

## Before a Flood

What would you do if your property were flooded? Are you prepared?

Even if you feel you live in a community with a low risk of flooding, remember that anywhere it rains, it can flood. Just because you haven't experienced a flood in the past, doesn't mean you won't in the future. Flood risk isn't just based on history; it's also based on a number of factors including rainfall, topography, flood-control measures, river-flow and tidal-surge data, and changes due to new construction and development.

[Flood-hazard maps](#) have been created to show the flood risk for your community, which helps determine the type of [flood insurance coverage you will need](#) since standard homeowners insurance doesn't cover flooding. The lower the degree of risk, the lower the flood insurance premium.

In addition to having flood insurance, knowing following flood hazard terms will help you recognize and prepare for a flood.

To prepare for a flood, you should:

- [Build an emergency kit](#) and make a [family communications plan](#).
- Avoid building in a floodplain unless you elevate and reinforce your home.
- Elevate the furnace, water heater and electric panel in your home if you live in an area that has a high flood risk.
- Consider installing "check valves" to prevent flood water from backing up into the drains of your home.
- If feasible, construct barriers to stop floodwater from entering the building and seal walls in basements with waterproofing compounds.

### **Flood Hazard Terms**

**Familiarize yourself with these terms to help identify a flood hazard:**

**Flood Watch** - Flooding is possible. Tune in to NOAA Weather Radio, commercial radio or television for information.

**Flash Flood Watch** - Flash flooding is possible. Be prepared to move to higher ground; listen to NOAA Weather Radio, commercial radio or television for information.

**Flood Warning** - Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.

**Flash Flood Warning** - A flash flood is occurring; seek higher ground immediately.

### **Driving: Flood Facts**

**The following are important points to remember when driving in flood conditions:**

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.
- Do not attempt to drive through a flooded road. The depth of water is not always obvious. The road bed may be washed out under the water, and you could be stranded or trapped.
- Do not drive around a barricade. Barricades are there for your protection. Turn around and go the other way.
- Do not try to take short cuts. They may be blocked. Stick to designated evacuation routes.
- Be especially cautious driving at night when it is harder to recognize flood dangers.

## During a Flood

If a flood is likely in your area, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of stream, drainage channels, canyons and other areas known to flood suddenly. Flash floods can occur in these areas with or without typical warnings such as rain clouds or heavy rain.

If you must prepare to evacuate, you should do the following:

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- [Turn off utilities](#) at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground, when water is not moving or not more than a few inches deep. You and the vehicle can be swept away quickly. If your vehicle is trapped in rapidly moving water, stay in the vehicle. If the water is rising inside the vehicle, seek refuge on the roof.
- Do not camp or park your vehicle along streams, rivers or creeks, particularly during threatening conditions.

## After the Flood

Your home has been flooded. Although floodwaters may be down in some areas, many dangers still exist. Here are some things to remember in the days ahead:

- Use local alerts and warning systems to get information and expert informed advice as soon as available.
- Avoid moving water.
- Stay away from damaged areas unless your assistance has been specifically requested by police, fire, or relief organization.
- Emergency workers will be assisting people in flooded areas. You can help them by staying off the roads and out of the way.
- Play it safe. Additional flooding or flash floods can occur. Listen for local warnings and information. If your car stalls in rapidly rising waters, get out immediately and climb to higher ground.
- Return home only when authorities indicate it is safe.

- Roads may still be closed because they have been damaged or are covered by water. Barricades have been placed for your protection. If you come upon a barricade or a flooded road, go another way.
- If you must walk or drive in areas that have been flooded.
  - Stay on firm ground. Moving water only 6 inches deep can sweep you off your feet. Standing water may be electrically charged from underground or downed power lines.
  - Flooding may have caused familiar places to change. Floodwaters often erode roads and walkways. Flood debris may hide animals and broken bottles, and it's also slippery. Avoid walking or driving through it.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.

## **Staying Healthy**

A flood can cause physical hazards and emotional stress. You need to look after yourself and your family as you focus on cleanup and repair.

- Avoid floodwaters; water may be contaminated by oil, gasoline or raw sewage.
- Service damaged septic tanks, cesspools, pits and leaching systems as soon as possible. Damaged sewer systems are serious health hazards.
- Listen for news reports to learn whether the community's water supply is safe to drink
- Clean and disinfect everything that got wet. Mud left from floodwaters can contain sewage and chemicals.
- Rest often and eat well.
- Keep a manageable schedule. Make a list and do jobs one at a time.
- Discuss your concerns with others and seek help. Contact Red Cross for information on emotional support available in your area.

## **Cleaning Up and Repairing Your Home**

- Turn off the electricity at the main breaker or fuse box, even if the power is off in your community. That way, you can decide when your home is dry enough to turn it back on.
- Get a copy of the book [Repairing Your Flooded Home](#) (737KB PDF) which is available free from the American Red Cross or your state or local emergency manager. It will tell you:
  - How to enter your home safely.
  - How to protect your home and belongings from further damage.
  - How to record damage to support insurance claims and requests for assistance.
  - How to check for gas or water leaks and how to have service restored.
  - How to clean up appliances, furniture, floors and other belongs.

- The Red Cross can provide you with a cleanup kit: mop, broom, bucket, and cleaning supplies.
- Contact your insurance agent to discuss claims.
- Listen to your radio for information on assistance that may be provided by the state or federal government or other organizations.
- If you hire cleanup or repair contractors, check references and be sure they are qualified to do the job. Be wary of people who drive through neighborhoods offering help in cleaning up or repairing your home.

This information is taken from: <http://www.ready.gov/floods>

This and other training modules from this website will be helpful to your family and you as an ARES member. It might be advisable to print these modules out and keep them in a binder for your family to be able to refer to in your absence. Being prepared is no accident.

