

# FACT SHEET



Federal Emergency Management Agency

## FLOODS AND FLASH FLOODS

Mitigation pays. It includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in mitigation steps now such as constructing barriers such as levees and purchasing flood insurance will help reduce the amount of structural damage to your home and financial loss from building and crop damage should a flood or flash flood occur.

### BEFORE

#### **Find out if you live in a flood-prone area from your local emergency management office or Red Cross chapter.**

Ask whether your property is above or below the flood stage water level and learn about the history of flooding for your region.

Learn flood warning signs and your community alert signals.

Request information on preparing for floods and flash floods.

#### **If you live in a frequently flooded area, stockpile emergency building materials.**

These include plywood, plastic sheeting, lumber nails, hammer and saw, pry bar, shovels, and sandbags.

#### **Have check valves installed in building sewer traps to prevent flood waters from backing up in sewer drains.**

As a last resort, use large corks or stoppers to plug showers, tubs, or basins.

#### **Plan and practice an evacuation route.**

Contact the local emergency management office or local American Red Cross chapter for a copy of the community flood evacuation plan.

This plan should include information on the safest routes to shelters. Individuals living in flash flood areas should have several alternate routes.

#### **Have disaster supplies on hand.**

- Flashlights and extra batteries
- Portable, battery-operated radio and extra batteries
- First aid kit and manual
- Emergency food and water
- Nonelectric can opener
- Essential medicines
- Cash and credit cards
- Sturdy shoes

#### **Develop an emergency communication plan.**

In case family members are separated from one another during floods or flash floods (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.

Ask an out-of-state relative or friend to serve as the "family contact." After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

#### **Make sure that all family members know how to respond after a flood or flash flood.**

Teach all family members how and when to turn off gas, electricity, and water.

Teach children how and when to call 9-1-1, police, fire department, and which radio station to tune to for emergency information.

#### **Learn about the National Flood Insurance Program.**

Ask your insurance agent about flood insurance. Homeowners policies do not cover flood damage.

### DURING

#### **DURING A FLOOD WATCH**

- Listen to a battery-operated radio for the latest storm information.
- Fill bathtubs, sinks, and jugs with clean water in case water becomes contaminated.
- Bring outdoor belongings, such as patio furniture, indoors.
- Move valuable household possessions to the upper floors or to safe ground if time permits.
- If you are instructed to do so by local authorities, turn off all utilities at the main power switch and close the main gas valve.
- Be prepared to evacuate.

## **DURING** DURING A FLOOD If Indoors:

- Turn on battery-operated radio or television to get the latest emergency information.
- Get your preassembled emergency supplies.
- If told to leave, do so immediately.

### **If Outdoors:**

- Climb to high ground and stay there.
- Avoid walking through any floodwaters. If it is moving swiftly, even water 6 inches deep can sweep you off your feet.

### **If In a Car:**

- If you come to a flooded area, turn around and go another way.
- If your car stalls, abandon it immediately and climb to higher ground. Many deaths have resulted from attempts to move stalled vehicles.

## **DURING AN EVACUATION**

- If advised to evacuate, do so immediately.
- Evacuation is much simpler and safer *before* flood waters become too deep for ordinary vehicles to drive through.
- Listen to a battery-operated radio for evacuation instructions.
- Follow recommended evacuation routes — shortcuts may be blocked.
- Leave early enough to avoid being marooned by flooded roads.

**AFTER** Flood dangers do not end when the water begins to recede. Listen to a radio or television and don't return home until authorities indicate it is safe to do so.

**Remember to help your neighbors who may require special assistance — infants, elderly people, and people with disabilities.**

**Inspect foundations for cracks or other damage.**

**Stay out of buildings if flood waters remain around the building.**

**When entering buildings, use extreme caution.**

- Wear sturdy shoes and use battery-powered lanterns or flashlights when examining buildings.
- Examine walls, floors, doors, and windows to make sure that the building is not in danger of collapsing.
- Watch out for animals, especially poisonous snakes, that may have come into your home with the flood waters. Use a stick to poke through debris.
- Watch for loose plaster and ceilings that could fall.
- Take pictures of the damage — both to the house and its contents for insurance claims.

### **Look for fire hazards.**

- Broken or leaking gas lines
- Flooded electrical circuits
- Submerged furnaces or electrical appliances
- Flammable or explosive materials coming from upstream

**Throw away food — including canned goods — that has come in contact with flood waters.**

**Pump out flooded basements gradually** (*about one-third of the water per day*) **to avoid structural damage.**

**Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are health hazards.**

## **Inspecting Utilities in a Damaged Home**

### **Check for gas leaks —**

If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbor's home. If you turn off the gas for any reason, it must be turned back on by a professional.

### **Look for electrical system damage —**

If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.

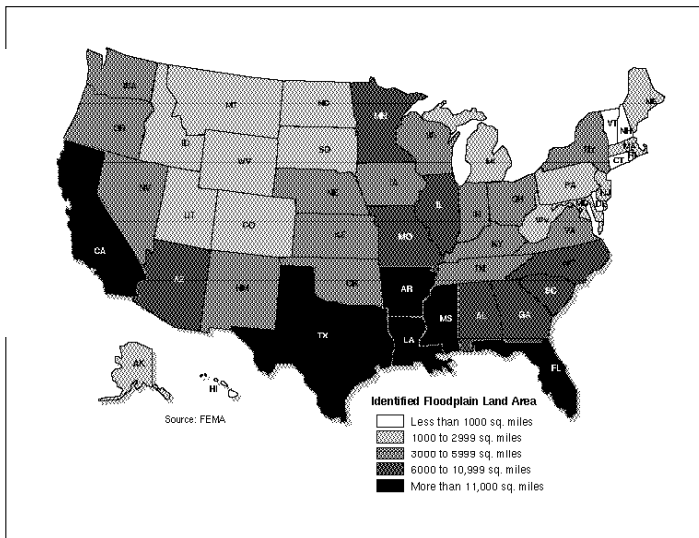
### **Check for sewage and water lines damage —**

If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water by melting ice cubes.

## FLOODS AND FLASH FLOODS

### EMERGENCY INFORMATION

1. Flood waters can be extremely dangerous. The force of six inches of swiftly moving water can knock people off their feet. The best protection during a flood is to leave the area and go to shelter on higher ground.
2. Flash flood waters move at very fast speeds and can roll boulders, tear out trees, destroy buildings, and obliterate bridges. Walls of water can reach heights of 10 to 20 feet and generally are accompanied by a deadly cargo of debris. The best response to any signs of flash flooding is to move immediately and quickly to higher ground.
3. Cars can easily be swept away in just 2 feet of moving water. If flood waters rise around a car, it should be abandoned. Passengers should climb immediately to higher ground.



Floods and flash floods occur within all 50 states. Communities particularly at risk are those located in low-lying areas, near water, or downstream from a dam.

### WHAT IS A FLOOD?

*Floods are the most common and widespread of all natural disasters—except fire. Most communities in the United States can experience some kind of flooding after spring rains, heavy thunderstorms, or winter snow thaws. Floods can be slow, or fast rising but generally develop over a period of days.*

*Dam failures are potentially the worst flood events. A dam failure is usually the result of neglect, poor design, or structural damage caused by a major event such as an earthquake. When a dam fails, a gigantic quantity of water is suddenly let loose downstream, destroying anything in its path.*

### WHAT IS A FLASH FLOOD?

*Flash floods usually result from intense storms dropping large amounts of rain within a brief period. Flash floods occur with little or no warning and can reach full peak in only a few minutes.*

## HELP YOUR COMMUNITY GET READY

The media can raise awareness about floods and flash floods by providing important information to the community. Here are some suggestions:

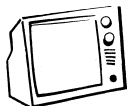


1. Publish a special section in your local newspaper with emergency information on floods and flash floods. Localize the information by printing the phone numbers of local emergency services offices, the American Red Cross, and hospitals.

2. Interview local officials about land use management and building codes in floodplains.



3. Work with local emergency services and American Red Cross officials to prepare special reports for people with mobility impairments on what to do if an evacuation is ordered.



4. Periodically inform your community of local public warning systems.

## DID YOU KNOW...

■ Individuals and business owners can protect themselves from flood losses by purchasing flood insurance through the National Flood Insurance Program. Homeowners' policies do not cover flood damage. Information is available through local insurance agents and emergency management offices.

■ Flooding has caused the deaths of more than 10,000 people since 1900. Property damage from flooding now totals over \$1 billion each year in the United States.

■ More than 2,200 lives were lost as a result of the Johnstown, Pennsylvania flood of 1889. This flood was caused by an upstream dam failure.

■ Nearly 9 of every 10 presidential disaster declarations result from natural phenomena in which flooding was a major component.

■ On July 31, 1976, the Big Thompson River near Denver overflowed after an extremely heavy storm. A wall of water 19 feet high roared down the Big Thompson Canyon where many people were camping. 140 people perished and millions of dollars worth of property were lost.

## HOW THE PUBLIC CAN HELP AFTER A DISASTER

**When disaster strikes, people everywhere want to help those in need. To ensure that this compassion and generosity are put to good use, the media can highlight these facts:**

- ▶ Financial aid is an immediate need of disaster victims. Financial contributions should be made through a recognized voluntary organization to help ensure that contributions are put to their intended use.
- ▶ Before donating food or clothing, wait for instructions from local officials. Immediately after a disaster, relief workers usually don't have the time or facilities to set-up distribution channels, and too often these items go to waste.
- ▶ Volunteers should go through a recognized voluntary agency such as the American Red Cross or Salvation Army. They know what is needed and are prepared to deal with the need. Local emergency services officials also coordinate volunteer efforts for helping in disasters.
- ▶ Organizations and community groups wishing to donate items should first contact local officials, the American Red Cross, or Salvation Army to find out what is needed and where to send it. Be prepared to deliver the items to one place, tell officials when you'll be there, and provide for transportation, driver, and unloading.