



Hazard #9 Flooding

Hazard #10 Tornadoes



Avoid building residences / office buildings in a floodplain unless they are elevated and reinforced. Ensure that the furnace, water heater, and electric panel are elevated if they will be susceptible to flooding. Install "check valves" in sewer traps to prevent floodwater from backing up into the drains of the ALUs. Construct barriers (levees, beams, floodwalls) to stop floodwater from entering the ALU/apartment/office. Seal walls in basements with waterproofing compounds to avoid seepage. Train all staff in the preparedness, response, and recovery of flooding. The web site www.floodsmart.gov provides a flood risk profile for individual addresses.



Flooding Response

All staff 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, staff and clients need to move immediately to higher ground. They should not wait for instructions to move.

Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings.

Secure each ALU/building. If there is 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.

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 the car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

When driving, remember that six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.

Keep in mind that 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 pickups.

Listen for news reports to learn whether the community's water supply is safe to drink.

Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.

Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.

Stay away from downed power lines, and report them to the power company.

Refer to the Functional Procedure for "Evacuation," as indicated.

Return home only when authorities indicate it is safe.

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.

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

Clean and disinfect everything that came in contact with floodwaters, as mud remaining can contain sewage and chemicals.

Flood Recovery

A flood can cause emotional and physical stress. It is important to look after yourself and your clients as you focus on cleanup and repair.

Ensure that your clients 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 the area.

The American Red Cross can help by providing you with a voucher to purchase new clothing, groceries, essential medications, bedding, essential furnishings, and other items to meet emergency needs. Listen to the radio to find out where to go for assistance, or look up American Red Cross' phone number within this document.

The Red Cross can provide the agency with cleanup kits: mop, broom, bucket, and cleaning supplies.

The insurance agent will need to be contacted to discuss claims.

Listen to your radio for information on assistance that may be provided by the state or federal government or other organizations.

The agency may hire cleanup or repair contractors that are qualified to do the job. It is important to be wary of people who drive through neighborhoods offering help in cleaning up or repairing the ALU/work site.

Tornadoes have been reported in every state, and though they generally occur during spring and summer, they can happen any time of the year. While tornadoes can occur at any time of the day or night, **they are most likely to occur between 3:00 pm and 9:00 pm.**

Definition: A tornado is a violently rotating column of air extending from a thunderstorm to the ground.

The most violent tornadoes have rotating winds of 250 miles per hour or more. They are capable of causing extreme destruction, including uprooting trees and well-made structures, and turning normally harmless objects into deadly missiles. Most tornadoes are just a few dozen yards wide and only briefly touch down, but highly destructive violent tornadoes may carve out paths over a mile wide and more than 50 miles long.

- **While tornadoes can be highly destructive and are potentially deadly, timely precautions can save lives and reduce property damage.** During active weather, stay alert of the forecast by listening to radio or television or by using a NOAA Weather Radio.
- **National Weather Service (N.W.S.) WATCH** is a message indicating that conditions favor the occurrence of a certain type of hazardous weather. For example, a severe thunderstorm WATCH means that a severe thunderstorm is expected in the next six hours or so within the area.
- **A N.W.S. WARNING** indicates that a hazardous event is occurring or is imminent in about 30 minutes to an hour. Local N.W.S. forecast offices issue warnings on a county-by-county basis.
- When selecting a "**Tornado Safe Place**," look for a place on the lowest level and away from windows, preferably in a small room (closet or bathroom) in the center of the house. Closer walls will help provide more support to the roof, and each wall between you and the outside will provide further protection.
 - o **It used to be advised to go to the southwest corner for safety; however, the southwest corner of a house is no safer than any other corner.** Historical information has shown that any corner on the lowest level away from windows is as safe as any other corner. If tornado winds enter the room, debris has a tendency to collect in corners.
 - o **Pick a safe place in your home where everyone could gather during a tornado.** The safest place to be is underground, or as low to the ground as possible, and away from all windows. If you have a basement, make it your safe place. If you do not have a basement, consider an interior hallway or room on the lowest floor.
 - o **If you are in a high-rise building, pick a place in a hallway in the center of the building.** You may not have enough time to go to the lowest floor. Center hallways are often structurally the most reinforced part of a building.
- **Discuss tornadoes with all staff and clients.** Everyone should know what to do in case all household members are not together. Discussing disaster ahead of time helps reduce fear and will let everyone know how to respond during a tornado.

