



Spring and Summer Severe Weather Preparedness



(Photos and information provided by the National Weather Service, Red Cross and the Massachusetts Emergency Management Agency).

Spring and summer are wonderful times of the year for people to be outdoors and enjoy the warm weather. They are also times when people should be alert and pay attention to rapidly changing weather conditions. Severe thunderstorms with lightning, heavy rain, hail, high winds and even tornadoes are possible during this time of the year.

All thunderstorms produce lightning and all have the potential for danger. Severe thunderstorms can produce tornadoes; nature's most violent storms. They can appear suddenly without warning and can be invisible until dust and debris are picked up or a funnel cloud appears.

In the United States, lightning kills 300 people and injures 80 on average, each year. Lightning's risk to individuals and property is increased because of its unpredictability, which emphasizes the importance of preparedness. It often strikes outside of heavy rain and may occur as far as 10 miles ahead of or after the arrival of the storm. Most lightning deaths and injuries occur when people are caught outdoors during the afternoon and evening. Thunderstorms can occur singly, in clusters or in lines. The typical thunderstorm is 15 miles in diameter, producing heavy rain for a brief period from 30 to 60 minutes.

Damage from these events in New England can be severe including damaged/ destroyed buildings, massive tree damage, downed wires, closed roads and sudden flooding. The aftermath of severe weather can have an impact on a community or the entire region for days, weeks or even months. As with most potential disasters: preparedness, monitoring the media and common sense can minimize the danger to you and your family.

Before Spring and Summer Severe Weather Threatens:

- **Know the terms used by weather forecasters:**

Excessive Heat Watch/ Warning – Conditions are favorable for an excessive heat event in the next 24 to 72 hours. A Warning is used for conditions posing a threat to life. Stay hydrated and remain indoors under air conditioning; avoid direct sunlight for extended periods of time. Be sure to check on elderly neighbors.

Heat Index – The apparent temperature when relative humidity is factored in with the actual air temperature. The National Weather Service will initiate alert procedures when the Heat Index is expected to exceed 105°-110°F.

Flash Flood – A flood which is caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. A dam failure can also cause a flash flood, depending on the type of dam and time period during which the break occurs.

Flash Flood Watch – Flash flooding is possible in and close to the watch area, but the occurrence is neither certain or imminent. Listen to the National Weather Service, radio or television for information.

Flash Flood Warning – Flash flooding is in progress, imminent, or highly likely. Seek higher ground immediately or evacuate if directed to do so.

Severe Thunderstorm – A thunderstorm that produces a tornado, winds of at least 58 mph (50 knots), and/ or hail at least ¾" in diameter. Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots) and/or hail of at least ½" is defined as approaching severe.

Severe Thunderstorm Watch – Tells you there is a possibility of severe thunderstorms in your area likely to occur. Watch the sky and stay tuned to know when warnings are issued.

Severe Thunderstorm Warning – A severe thunderstorm is occurring or will likely occur soon in your area. Warnings are for imminent danger to life and property to those in the path of the storm. Seek shelter immediately.

Tornado Watch – Tornadoes are possible in your area. Remain alert for approaching storms. Listen to the media for updates.

Tornado Warning – A tornado has been sighted or indicated by weather radar. Take shelter immediately.

- Develop a **Family Emergency Communication Plan** in case family members are separated from one another during severe weather (a real possibility during the day when adults are at work and children are at school), and 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 is often easier to call out long distance. Make sure everyone knows the name, address and telephone number of the contact person. Plan a place where your family will meet, both within and outside of your immediate neighborhood.
- Notify caregivers and babysitters about your emergency plans and shelter locations.
- Find out what types of events and kinds of damages are covered by your insurance policy. Keep insurance policies, important documents and other valuables in a safe and secure location.
- Everyone should have an **Emergency Supply Kit** which would prepare them to survive on their own for at least three days. There should be: non-perishable food, bottled water, flashlights and extra batteries, a portable radio in case of power outages or other emergencies caused by severe weather. Additional items that should be included are a freshly-stocked first-aid kit, essential prescription medicines, a non-electric can opener, baby-care items, extra blankets, sleeping bags and a fire extinguisher.
- Keep fire extinguishers on hand and make sure everyone knows how to use them. Know how to shut off power, water, and gas to your home. Have proper tools (ie: wrench) ready and nearby.
- Continually monitor the media – Be aware of storm's which could impact your area.
- Know how you will be warned in an emergency (NOAA Weather radios with a tone alert are a good option).
- Know if you live or work in a flood prone area. Check with your local emergency management for details.
- Know where to shelter (ie: basement, interior room/hall, bathroom, closet, etc) if conditions warrant and where shelters in your area are located.
- Ensure your home is ready – Elevate items in the basement which could be flooded. Bring in outdoors items such as children's toys, patio furniture, garbage cans, etc which could be blown around and damaged. Remove dead or rotting trees and branches that could fall and cause injury or damage.

During Severe Weather:

- Keep an eye on the sky. Look for darkening skies, flashes of light or increasing wind. Listen for the sound of thunder. If you can hear thunder, you are close enough to be struck by lightning.
- Blowing debris or the sound of an approaching tornado may alert you. Tornado danger signs included dark, almost greenish sky; large hail; a large, dark, low-lying cloud or a loud roar, similar to a freight train.
- Heed shelter or evacuation requests made by officials or announcements on radio/television.
- Gather family members, bring pets indoors and have your emergency supply kit ready. Stay indoors and limit travel to only absolutely necessary trips. Listen to radio/television for updates.
- During a tornado warning, head indoors to a safe location. Basements, lower floors or interior hallways, bathrooms, closets, rooms are best for shelter.
- If outdoors with nowhere to go during a tornado, lie flat in a ditch or low lying area. Cover your head with your hands. Be aware of the potential of flooding. Watch out for flying debris. Never try to outrun a tornado.
- Close outside doors and window blinds, shades or curtains. Stay away from doors, windows and exterior walls. Stay in the shelter location until the danger has passed.
- During lightning, seek shelter indoors. Never lean on a car during a lightning storm; cars are safe from the inside if you beware of the metal and electrical parts. Do not seek shelter under a tree – being underneath a tree is the second leading cause of lightning casualties.
- Do not use wired telephones, touch electrical appliances or use running water. Cordless or cellular telephones are safe to use.
- If outdoors, head for shelter indoors or inside a vehicle. If boating or swimming, get out of the water immediately and get indoors. Go to a low-lying place away from trees, poles or metal objects. Squat low to the ground. Make sure the place you pick does not flood.
- Remember the 30/30 Lightning Safety Rule: Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.
- If it has been raining hard for several hours, or steadily raining for several days, be alert to the possibility of a flood.
- Do not walk through flowing water. Drowning is the number one cause of flood deaths. Six inches of swiftly moving water can knock you off your feet.

Auto Safety Steps:

- Plan long trips carefully, listening to the radio or television for the latest weather forecasts and road conditions. If bad weather is forecast, drive only if absolutely necessary.
- Keep your gas tank full in case evacuation is needed. Keep your vehicle maintained and in good working order.
- Assemble an **Emergency Car Kit** including: flashlight with extra batteries, basic first-aid kit, necessary medications, pocket knife, booster cables, blanket/sleeping bag, extra clothes (including rain gear, gloves and socks), non-perishable foods, non-electric can opener, basic tool kit (pliers, wrench, screwdriver), tow rope, container of water and a brightly colored cloth to serve as a flag.
- If in a car during a tornado, get out immediately and lay flat in a ditch or low lying area. Do not get under an overpass or bridge. Never try to outrun a tornado.
- Do not drive through a flooded area. Six inches of water can cause a vehicle to lose control and possibly stall. A foot of water will float many vehicles. Cars, SUVs and pickup trucks can be swept away in just 2 feet of moving water. Do not drive around road barriers – they are there for a reason.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.

After Severe Weather:

- Stay off roads to allow emergency crews to clear roads and provide emergency assistance.
- Help injured or trapped persons. Do not attempt to move seriously injured persons unless they are in immediate danger of death or further injury.
- Use the telephone only for emergencies.
- Use care around downed power lines. Assume a downed wire is a live wire. Report it to emergency authorities.
- Watch out for overhead hazards such as broken tree limbs, wires and other debris. Be cautious walking around.
- Be aware of children playing outdoors and in the streets, particularly climbing on or running around downed trees and wires. Parents should remind their children to stay away from these hazards.
- Avoid walking into flood waters. The water may be contaminated by oil, gasoline or raw sewerage, contain downed power lines or animals.
- Look for hazards such as broken/leaking gas lines, damaged sewage systems, flooded electrical circuits, submerged appliances and structural damage. Leave the area if you smell gas or chemical fumes.
- Clean everything that gets wet. For food, medicines and cosmetics; when in doubt, throw it out.
- Make sure backup generators are well ventilated. Never use grills, generators or camping stoves indoors.
- Listen to media reports and/or local authorities about whether your community water supply is safe to drink and other instructions.
- Make sure gutters and drains are clear for future rain/flood events.
- Check on neighbors, particularly elderly or those who may require special assistance.
- Take photographs/videos of damage as soon as possible. Contact your insurance company to file a claim.

Additional Spring and Summer Severe Weather Preparedness Information:

Boston College Emergency Management	www.bc.edu/emergency
BC Emergency Facebook	www.facebook.com/bcemergency
BC Emergency Twitter	www.twitter.com/BC_OEM
American Red Cross	www.redcross.org (click on Plan & Prepare)
Center for Disease Control and Prevention	http://www.bt.cdc.gov/disasters/
Disaster Resistant Communities Group	http://www.drc-group.com/project/jitt.html
Federal Alliance for Safe Homes	http://www.flash.org/video.php
Federal Emergency Management Agency	www.fema.gov/hazard/types.shtm
Mass Emergency Management Agency	www.mass.gov/mema
National Weather Service Severe Weather	www.noaawatch.gov/themes/severe.php