

OFFICE OF EMERGENCY MANAGEMENT



Thunderstorm Disaster Response

Background

Thunderstorms can bring heavy rains (which can cause flash flooding), strong winds, hail, lightning, and tornadoes. A severe thunderstorm can cause downed trees, downed power lines, power outages, and massive amounts of debris.

Know the difference between a *watch* and a *warning*:

- A *severe thunderstorm WATCH* means that a severe thunderstorm (damaging winds 58 miles per hour or more, or hail three-fourths of an inch in diameter or greater) is likely to occur in the area.
- A *severe thunderstorm WARNING* means that a severe thunderstorm has been sighted or indicated by weather radar, and is occurring in your area. Precautions may need to be taken for the warning area.

Facts about Thunderstorms

- They produce heavy rain for a brief period, anywhere from 30 minutes to an hour, and can spread 15 miles wide.
- Warm, humid conditions are highly favorable for thunderstorm development.
- About 10% of thunderstorms are classified as severe-ones that produced hail at least an inch or larger in diameter, has winds of 58 mph or higher or produces a tornado.
- Can include straight line winds, which can exceed 125 mph, or a tornado.
- Hail can be larger than a softball (5 inches in diameter) and causes more than \$1 Billion in crop and property damage each year.
- Flash flooding is possible during a thunderstorm if enough rain falls in a short amount of time.
- Wildfires are also possible during dry thunderstorms, where there is no rain but lightning and thunder.

Facts about Lightning

- Often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- "Heat Lightning" is actually lightning from a thunderstorm too far away from thunder to be heard. However, the storm may be moving in your direction.
- Causes an average of 55-60 fatalities and 400 injuries each year.
- Your chances of being struck by lightning are estimated to be 1 in 600,000.00, but could be reduced even further by following safety precautions.
- Lightning strike victims carry no electrical charge and should be tended to immediately.
- Costs more than \$1 Billion in insured losses each year.

If someone you know is struck by lightning

- Call 9-1-1 for medical assistance as soon as possible.
 - Make sure the person struck is:
 - Breathing: if not, begin mouth-to-mouth resuscitation
 - Heart beating: if not, administer CPR
 - Has a pulse: if they have a pulse, look for other injuries such as burn, broken bones, etc.

If in a Car

- Pull safely onto the shoulder of the road away from any trees that could fall onto the vehicle.
- Stay in the car and turn on the emergency flashers until the heavy rains subside.
- Do not attempt to drive over a flooded road - you could be trapped or stranded. The depth of the water is not always obvious, or the road could be washed away. (If you can't see it, you can't be sure it's there).

If Outdoors

- There is no safe place outside during a thunderstorm. Plan ahead to avoid this dangerous situation.
- Avoid open areas if possible. Go inside a building or car. If no structure is available, quickly find an open space, away from isolated tall trees and utility poles, and squat low to the ground (do not be the tallest object in the area, lightning tends to strike the tallest objects in the area).
- Avoid tall structures such as towers, trees, tall fences, telephone or power lines, etc.
- DO NOT use natural lightning rods such as golf clubs, fishing rods or bicycles.
- Stay away from bodies of water and flood prone areas.

If on the Water

- Monitor local weather on your weather radio.
- Get to land and find shelter immediately.

Before the Storm

- Build an emergency go-kit and make a family communications plan.
- Remove dead or rotting trees and branches that could fall and cause injury or damage during the storm
- Postpone outdoor activities.
- 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.
- Secure outdoor furniture that could blow away or cause damage.
- Get inside a home, building or hard top vehicle (not a convertible).
- Rubber-soled shoes and rubber tires provide NO protection from lightning. However, the steel frame of a hard-topped vehicle provides increased protection if you are not touching metal.
- Shut windows and secure outside doors, or close window blinds, shades or curtains.
- Unplug any electronic equipment well before the storm arrives.

During the Storm

- Use your battery-operated NOAA Weather Radio and pay attention for text alerts from NotifyMe regarding updates from local officials
- Avoid contact with corded phones and devices including those plugged into electric for recharging. Cordless and wireless phones not connected to wall outlets are okay to use.
- Avoid contact with electrical equipment or cords. Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can cause serious damage.
- Avoid contact with plumbing. Do not wash your hands, do not take showers, do not wash dishes, and do not do laundry. Plumbing and bathroom fixtures can conduct electricity.
- Stay away from windows and doors, and stay off porches.
- Do not lie on concrete floors and do not lean against concrete walls
- Avoid natural lightning rods such as a tall, isolated tree in an open area.
- Avoid hilltops, open fields, the beach or a boat on the water.
- Take shelter in a sturdy building. Avoid isolated sheds or other small structures in open areas.
- Avoid contact with anything metal-tractors, farm equipment, motorcycles, golf carts, golf clubs, sports equipment, bicycles, etc.
- If you are driving, and it begins to rain heavily and you cannot see, safely exit the roadway and park. Stay in the vehicle and turn on the emergency flashers until the heavy rain ends. Avoid touching metal or other surfaces that conduct electricity in and outside the vehicle.

After the Storm

- Continue to listen to NOAA radio and NotifyMe alerts from local officials for storm updates in your area.
- Stay away from downed power lines and report them immediately.
- Stay away from storm damaged areas to avoid putting yourself at risk from the effects of the damage.
- Help people who may require special assistance, such as infants, children and seniors, or those with access or functional needs.
- Monitor your pets closely; keep them under your direct control to avoid injury.