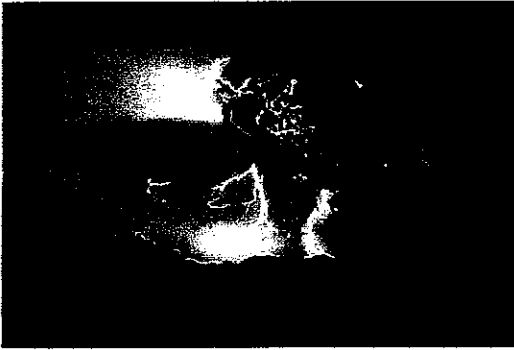


Thunderstorm Information



Thunderstorms affect relatively small areas when compared with hurricanes and winter storms. The typical thunderstorm is 15 miles in diameter and lasts an average of 30 minutes. Nearly 1,800 thunderstorms are occurring at any moment around the world. That's 16 million a year!

Despite their relatively small size, all thunderstorms are dangerous. Every thunderstorm produces lightning, which kills more people each year than tornadoes. Heavy rain from thunderstorms can lead to flash flooding. Strong winds, hail, and tornadoes are also dangers associated with some thunderstorms.

Of the estimated 100,000 thunderstorms that occur each year in the United States, only about 10 percent are classified as severe.

The number one thunderstorm killer is flash floods/floods which kill nearly 140 people each year.

Most flash flood deaths occur at night, and when people become trapped in automobiles.

Lightning occurs with all thunderstorms. Lightning averages 93 deaths and 300 injuries each year. It causes several hundred million dollars in damage to property and forests annually.

Straight-line winds are responsible for most thunderstorm wind damage. Winds can exceed 100 mph. One type of straight

-line wind, the down burst, can cause damage equivalent to a strong tornado and can be extremely dangerous to aviation.



WHAT MAKES A THUNDERSTORM?

Every thunderstorm needs:

Moisture - to form clouds and rain.

Unstable air - relatively warm air that can rise rapidly. Lift - fronts, sea breezes, and mountains are capable of lifting air to help form thunderstorms. The action of rising and descending air within a thunderstorm separates positive and negative charges. Water and ice particles also affect the distribution of electrical charge. Lightning results from the buildup and discharge of electrical energy between positively charged areas. The air near a lightning strike is heated to 50,000 degrees F -- hotter than the surface of the sun. The rapid heating and cooling of air near the lightning channel causes a shock wave that results in thunder.

LIFE CYCLE OF A THUNDERSTORM

Developing Stage:

Towering cumulus cloud indicates rising air.
Usually little if any rain during this stage.
Lasts about 10 minutes.
Occasional lightning during this stage.

Mature Stage:

Most likely time for hail, heavy rain, frequent lightning, strong winds, and tornadoes.
Storm occasionally has a black or dark green appearance.
Lasts an average of 10 to 20 minutes, but may last much longer in some storms.



Dissipating Stage:

Rainfall decreases in intensity.
Some thunderstorms produce a burst of strong winds during this stage.
Lightning remains a danger during this stage.

WHICH WAY DOES LIGHTNING TRAVEL?

A cloud-to-ground lightning strike begins as an invisible channel of electrically charged air moving from the cloud

toward the ground. When one channel nears an object on the ground, a powerful surge of electricity from the ground moves upward to the cloud and produces the visible lightning strike.

ENVIRONMENTAL CLUES

When skies darken or thunderstorms are forecast, look and listen for increasing wind, flashes of lightning, sound of thunder, and static on your AM radio.

HOW FAR AWAY IS THE LIGHTNING

To estimate the distance in miles between you and the lightning flash, count the seconds between the lightning and the thunder and divide by five.

WHO'S MOST AT RISK FROM THUNDERSTORMS?

From Lightning: People who are outdoors, especially under or near tall trees, in or on water, or on or near hilltops.

From Flooding: People who are in automobiles when flash flooding occurs near them.

From Tornadoes: People who are in mobile homes and automobiles.

In recent years, people have been killed by lightning while boating, swimming, golfing, bike riding, standing under a tree, riding on a lawn mower, talking on the telephone, loading the truck, playing soccer, fishing in a boat, mountain climbing.



WHAT CAN YOU DO?

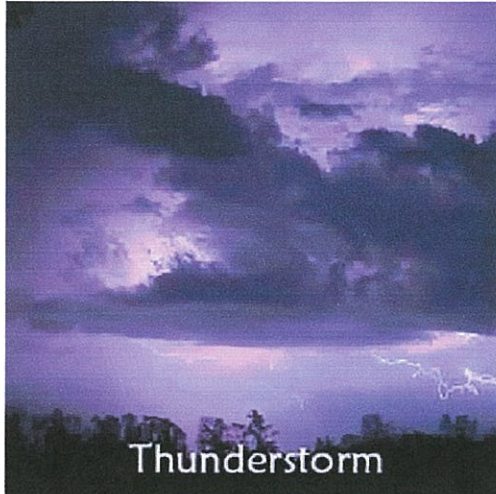
Before the storm:

Know the county in which you live (Franklin County) and its shape so you can identify it on TV weather alerts. Check the weather forecast before leaving for extended periods outdoors. Watch for signs of approaching storms. If a storm is approaching, keep a NOAA Weather Radio or AM/FM radio with you. Tune your weather radio to 162.525 mhz or 162.550 mhz. Postpone outdoor activities if thunderstorms are imminent. Check on those who have trouble taking shelter if severe weather threatens.

When thunderstorms approach:

REMEMBER:

If you can hear thunder, you are close enough to the storm to be struck by lightning. Go to safe shelter immediately! Move to a sturdy building or car. Do not take shelter in small sheds, under isolated trees, or in convertible automobiles.



If lightning is occurring and a sturdy shelter is not available, get inside a hard top automobile and keep windows up. Get out of boats and away from water. Telephone lines and metal pipes can conduct electricity.

Unplug appliances not necessary for obtaining weather information.

Avoid using the telephone or any electrical appliances. Use phones ONLY in an emergency. Do not take a bath or shower. Turn off air conditioners. Power surges from lightning can overload the compressors.

Get to higher ground if flash flooding or flooding is possible. Once flooding begins, abandon cars and climb to higher ground. Do not attempt to drive to safety. Note: Most flash flood deaths occur in automobiles. If caught outdoors and NO shelter is nearby: Find a low spot away from trees, fences, and poles. Make sure the place you pick is not subject to flooding. If you are in the woods, take shelter under the shorter trees. If you feel your skin tingle or your hair stand on end, squat low to the ground on the balls of your feet. Place your hands on your knees with your head between them. Make yourself the smallest target possible, and minimize your contact with the ground.

If you are boating or swimming, get to land and find shelter immediately.