

February
2016



GEORGIA DEPARTMENT OF JUVENILE JUSTICE

Planning & Preparedness

Severe Weather Awareness

February is Severe Weather Preparedness Week for the state of Georgia. In 2015, severe weather was no stranger to the state with 22 reported tornadoes across Georgia. During the next couple of weeks make time to learn about severe weather and safe actions to take when severe weather strikes, and review your families preparedness plan.

If you do not have a family preparedness plan make time to do it now! Topics to be covered in 2016 include **Family Preparedness, Thunderstorm Safety, Tornado Safety, Lighting Safety, and Flooding**. All these subjects are important for protecting your family and each can affect the State of Georgia and your area!

Source: NWS Peachtree City



DJJ Commissioner Avery D. Niles

ONE TEAM
ONE MISSION

Family Preparedness

Families should be prepared for any type of hazard that could enter their area. The best way to protect your loved ones is to develop a family disaster plan. View the video below and the read the following preparation steps to make sure you and your family are prepared for an emergency. Remember to inquire about emergency plans at work and school.



Click on above image for video

Get a Kit

Collect emergency supplies (such as water, flashlight, non-perishable food, a battery-powered radio, first aid and prescriptions,) and keep them on hand for you and those in your care.



Make A Plan

Discuss, agree on, and document an emergency plan with those in your care. You can find sample plans at ready.ga.gov. Work with neighbors, colleagues, and others to build community resilience.

Stay Informed

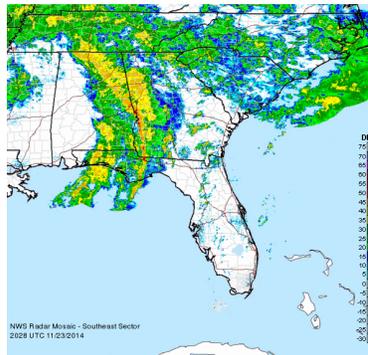
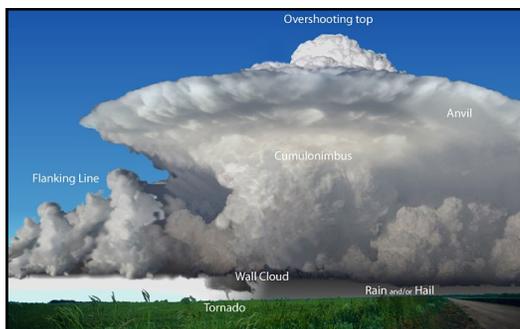
Make sure that you have the information you need (watches, warnings and advisories). **Remember it is important to receive alerts and warnings through multiple platforms** including NOAA weather Radios, Ready Georgia Weather App, local television and radio stations.



Thunderstorm Safety

Thunderstorms are a common occurrence in Georgia, especially during the spring and summer months. Thunderstorms can produce gusty winds, hail and even tornadoes, but in particular a severe thunderstorm can produce hail of 1” or larger (size of a quarter) and/or 58 mph (50 knots) winds or greater. Notice that lightning is not in the criteria for a severe thunderstorm warning. Typically, a severe thunderstorm lasts about 30 minutes and occurs in the afternoon and evening hours. However, severe weather is possible any time of the day and any time of the year. “Supercells”, a special class of thunderstorms, are particularly violent and can last for several hours. Tornadoes are often produced from these supercell thunderstorms. This type of thunderstorm is most common in the spring.

Damaging wind is the most common type of severe weather across north and central Georgia. These events can occur any time of the year, but peak in July when downbursts from “pulse” thunderstorms are common. Based on data from 1950-2010, 18 fatalities and 325 injuries were caused by damaging wind across north and central Georgia. Similar to damaging wind events, hail can occur in any month across north and central Georgia, however, hail events peak in May. April comes in a close second for hail events. Although most hail is between 1” and 2” in diameter in Georgia, 4.5” (softball sized) hail has been recorded across north Georgia four times. Click on the [radar image](#) to watch this video on Thunderstorm Safety.



How can you protect yourself and your family from severe thunderstorms?

- The best thing to do is have a plan of action in place before threatening weather develops. You should know the difference between a ‘watch’ and a ‘warning’. A Severe Thunderstorm **Watch** means conditions are favorable for severe thunderstorms to develop, but there is not an imminent threat. A Severe Thunderstorm **Warning** means a severe thunderstorm has been detected and an imminent threat to life and property has developed.
- Make sure to get watch and warning information from multiple sources. This will help ensure you receive life-saving weather information even if one method fails. NOAA Weather Radio, televisions, radios, cell phone alerts and sirens are all different ways to receive watches and warnings and each has its own benefits in terms of availability and use.
- If severe weather is imminent, move to a shelter such as a basement or an interior room on the lowest floor of the building. It is best to put as many walls between you and the outside weather as possible. Remember, even straight line winds from a severe thunderstorm can cause damage equal in magnitude to a tornado, so preparation is key to survival.
- If you are caught outside during any thunderstorm, seek shelter in a sturdy structure.



Tornado Safety

Tornadoes are violently rotating columns of air, extending from a thunderstorm that is in contact with the ground. Tornadoes can vary in shape, size and intensity. Most tornadoes are weak, lasting a few minutes and producing winds of less than 100 mph. However, a few tornadoes are strong or even violent. These tornadoes last from 20 minutes to more than an hour and can produce winds between 100 and 300 mph.

All of Georgia is prone to tornadoes, as shown in this map depicting **Georgia tornadoes** from 1950-2009. The average number of days with reported tornadoes in Georgia is six. Tornadoes have been reported throughout the year, but are most likely to occur from March to May, with the peak in April. Tornadoes are also most likely in the mid afternoon to early evening time frame, but can occur any time of the day or night. Thirty-seven percent of all tornadoes are classified as strong or violent (EF2 or greater on the **Enhanced Fujita Scale**), and these tornadoes are most likely to occur in the month of April. Although Georgia has seen a few EF-4 tornadoes, with the most recent one on April 27, 2011 in Catoosa County, the state has never recorded an EF-5 tornado. In Georgia, tornadoes are often hard to see as they are wrapped in areas of rain and hail. The hilly terrain can also limit your ability to see a tornado. Click on the image to check out this video on Tornado Safety.



The best thing to do is to have a plan of action in place before threatening weather develops. The Red Cross has a Tornado Safety Checklist available to help you make your plan.

- Know the difference between a watch and warning. A Tornado Watch means conditions are favorable for tornadoes to develop, but there is not an imminent threat. A Tornado Warning means a tornado has been detected and an imminent threat to life and property has developed.
- Know your area (including the name of your county) so you can track storms via weather radio, local TV, radio reports or the internet. Make sure you have battery backup. Monitor area forecasts to know if threatening weather is possible when you are planning outdoor activities.
- If a tornado is imminent and you are in a home or building, move to a pre-designated shelter on the lowest floor, such as a basement, or a small interior room closet, bathroom or hallway and get under a sturdy piece of furniture. Remember to always put as many walls as possible between you and the outside.
- Stay away from windows.
- Get out of automobiles. Do not try to outrun a tornado in your car. If you are caught outside or in a vehicle lie flat in a nearby ditch or depression, but be aware of possible flooding, and cover your head with your hands.
- Mobile homes are not a safe place to be during severe weather. You should leave a mobile home and go the lowest floor of sturdy nearby building or a storm shelter.



Lightning Safety

Lightning is one of the leading causes of weather deaths in the United States. From 1995 to 2010, lightning caused 26 deaths in Georgia. Most lightning deaths occur in the summer months - usually in the afternoon and evening hours. Also, most deaths occur when people are caught outside during a storm. For those who survive a lightning strike, there can be life-long effects. Click on the image below for some helpful tips about Lightning.



Lightning results from the buildup and release of electrical energy between positive and negative charges between the earth and a thunderstorm. A single lightning bolt can be as hot as 50,000 degrees Fahrenheit - hotter even than the surface of the sun. This rapid heating and cooling of the air creates a shock wave which we hear as thunder. Lightning will usually strike the highest object in the area. This includes trees, antennas, a boat on a lake, or a person standing in a field.

What should you do to protect yourself?

- When thunder roars, go indoors! If you can hear thunder, you are already at risk. If you are outside, get inside a building or vehicle. Stay indoors until 30 minutes after you hear the last clap of thunder. If you cannot find shelter, do not stand under a tree or remain in an open place when lightning is near. Avoid open water, as well as tractors, bicycles, motorcycles, or golf carts. These will not provide protection, and may actually attract lightning.
- Enclosed vehicles are generally safe, if you avoid contact with metal surfaces.
- If you are in a forest, seek shelter in a low area under a thick growth of small trees.
- If you are outside, and feel your hair stand on end, this indicates lightning is about to strike. Drop to your knees and roll forward to the balls of your feet. Place your hands on your knees and tuck your head down. Do not lie flat on the ground.
- If you are boating or swimming, get to land as quickly as possible.
- If you are inside, don't use a telephone or other electrical equipment unless in an emergency.
- Do not take a bath or shower during a thunderstorm.



Flooding Safety



Picture credit AJC

Although not a widely known fact, flooding kills more people than any other weather hazard. The majority of deaths from flooding occur when people become trapped in automobiles that stall while driving through flooded areas. Nearly half of all flood fatalities are vehicle related. Flooding is usually divided into two categories: flash flooding and river flooding. Both of these can cause death, injury, and property destruction.

Flash floods are usually caused by slow moving thunderstorms or thunderstorms called 'training' thunderstorms that move over the same area one after the other. These floods usually occur within six hours of heavy rainfall and are usually more life threatening as a result. Areas most prone to floods are mountainous streams and rivers, urban areas, low-lying areas, and culverts. A good example of flash flooding is the flooding in metropolitan Atlanta

in September of 2009.

River flooding is caused by the gradual increase in the water level of a river or creek. These floods usually occur seasonally with general rains or with heavy rainfall from tropical systems. A good example of river flooding is the flooding that affected south Georgia after Tropical Storm Alberto in 1994.

What can you do to protect yourself and your family during a flood?

- Know what news to listen for regarding floods. A Flood Watch or a Flash Flood Watch means that conditions have been detected that could lead to flooding of a certain area. A River Flood Warning or a Flash Flood Warning means that flooding is imminent and you should take action immediately. Monitor NOAA Weather Radio or any local radio or TV station to get the latest information.
- If flooding occurs, get to higher ground. Get out of areas subject to flooding such as canyons, dips, and low spots.
- Avoid areas already flooding, especially if the water is fast flowing. Do not attempt to cross flowing streams. Road beds may be washed out due to the flooding. Never try to cross flooded roadways. Remember, turn around, don't drown.
- If your vehicle is suddenly caught in rising water, leave it immediately and seek higher ground.
- Be especially cautious at night when it is harder to see flood dangers.
- Additional information on flood safety can be found in the **Flood Safety Checklist** from the American Red Cross.



Source for these articles: NWS Peachtree City



What the Celebrities are saying...

We asked some area meteorologist four questions about weather and why they chose meteorology as a profession. Here is what they had to say!

1. Why did you want to become a meteorologist?
 2. What is your most memorable ‘severe weather’ moment? – something you personally experienced
 3. What ONE item will you NEVER be without during an emergency and why?
 4. If you could get a family to do ONE weather preparedness item or task, what would it be and why? (i.e. buy a NOAA weather radio)
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Brad Nitz
WSBTV

1. I grew up surfing in Florida. As a teenager I tried to figure out what the weather and waves would be so my friends and I could pick the best times to go surf. I enjoyed the challenge of weather forecasting and decided to pursue it as a career as a senior in high school.
 2. It’s hard to pick just one weather event. The big tornado outbreaks are what sticks with me the most. It’s the most important thing I do as a meteorologist and lives are literally at stake. As a meteorologist, it’s a terrible feeling when people die in storms that you are covering. It’s what drives me to always try to learn more and be better.
 3. Water and (healthy) food. A supply of these will give you the stamina to deal with whatever an emergency may bring. For me, in weather emergencies I will always be at work. Eating junk food is quick and easy, but I’ve learned that I cannot sustain the energy necessary to do my job without eating well.
 4. If only one thing, it would be to download the WSB TV Weather app because it receives warning notifications, works when cable and power is out and you can watch the live stream of our TV coverage in the app. The TV coverage is so important because it’s the only way to get the very latest crucial information, second by second in severe weather situations.
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1. I met Guy Sharpe in the grocery store when I was around 7 or 8 years old. Guy was a legendary weatherman in Atlanta. I couldn’t believe I actually met the man who I watched everyday on TV!! That started my interest in TV news and weather. I enjoy being able to look at raw computer model data and “predict the future” by constructing a weather forecast for the next 7 days. It is also a huge honor and responsibility to have viewers trust you to give critical lifesaving information in the midst of severe weather.
2. I’ve had numerous severe weather moments in my life. My first close call with severe weather was when I was sitting on my parents’ screened porch when I was in elementary school. Lightning struck a tree in my neighbor’s yard. I ran in the house thinking that the neighbor’s house exploded. It was “only” the tree. The bark was shredded off of it. As far as broadcasting severe weather, I’ve had the opportunity to go storm chasing in Oklahoma and hurricane chasing with our news crews. I will never forget working side by side with Johnny Beckman in 1993 for the blizzard. Other notable severe weather events were the Gainesville and Dunwoody tornadoes in 1998, tracking the April 27th storms that rolled out of Alabama into Georgia and too many others to list.
3. Batteries. I will always have these on hand to power up flashlights and a weather radio to continue receiving weather information.
4. I would wish that everyone have a NOAA weather radio. It is so easy to get information on these. Just program your county and the counties around you, and it will warn you when a warning is issued. Also, tune to 11Alive for an explanation on the time of arrival and street level mapping as the storm moves through!



Chris Holcomb
11 Alive



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Jeff Hill
Fox 5

1. I wanted to become a meteorologist after I took an introductory course in college. I was initially going to college to be an architect, but after taking Meteorology 101 I got hooked and ended up transferring because the school where I was enrolled (Kent State Univ.) didn't offer the major. I ended up going to Penn State and the rest is history.

2. For me it would have to be at my first job in Sioux City, Ia. Back then (1987), we only did a 6pm and 10pm newscast. It was a spring afternoon and there were quite a few severe t-storms and tornadoes across the Upper Midwest including Iowa. After the 6pm news, we noticed a cell on radar across the border in Nebraska that was heading directly toward Sioux City. We went outside to look and just as we did the sky turned green and low and behold a tornado appeared on the horizon from that same cell. Needless to say, we ran back inside and went on TV immediately! First and only tornado that I have witnessed.

3. If you can afford it, a generator is a wonderful thing to have on hand. But, it is just as important to have non-perishable food and clean drinking water.

4. Build a storm shelter and stock it with the necessary items for 3 days of survival (i.e. food, water etc.)

1. I've been interested in weather since I was a little kid -- 3 or 4 years old. Growing up in the northeast, I loved snowstorms and that's really what got me interested (ironically, I'm not really a fan of winter weather at all now -- after living in the southeast for so long!). I was also interested in being on TV, so the two careers just went together!

2. Most memorable severe weather event would either be Tropical Storm Fay in Florida back in 2008 (during my career) and the Blizzard of '96 in the northeast growing up.

3. One item never without: Cell phone. Warnings, alerts, communication, etc., during a severe weather event.

4. NOAA weather radio or at least SOME way to get warnings (many apps are now available to do that -- to push and sound tones on your phone in the event of tornado warnings, for example).



Brian Monahan
WSBT

A big thanks to our Celebrities!



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Jim Kosek
CBS46

1. I loved history and jumping in puddles as a kid. I told my Dad that I wanted to go to college to learn everything about the history of the world. He asked me what I would I possibly do with that kind of a degree. So, I fell back on the puddles and the rest IS history.

2. Hurricane Ophelia (2005) on the coast of North Carolina. Broadcasting live on the beach as the storm approached, and the sand felt like needles hitting me in the face. Later that night, a couple blocks inland with water up to my knees, still broadcasting live, a piece of roof from the restaurant I was next to, blew off and brushed past my head; some of it landing at my feet. Had I been standing a few inches farther to the left, I wouldn't be here to tell you this. This answer would have been Hurricane Katrina, earlier that same year, but I was pulled off live remotes at the last minute at the

request of Fox's Geraldo Rivera so he could ask me questions in a safe studio location.

3. Common sense. Learned that in 2005 on the coast of North Carolina.
4. The task is to practice one's safety plan. Having a plan, but not knowing how to implement it, is just as bad as not having one.



Kent McMullen
NWS Peachtree

1. I was always interested in weather when I was growing up in St. Louis, MO. I enjoyed going outside and watching the storms roll in. Even when the tornado sirens started I was the one that went outside to see if I could see it. I had my own observation station set up in my back yard, took readings everyday. When it came time for college, I chose Missouri University.

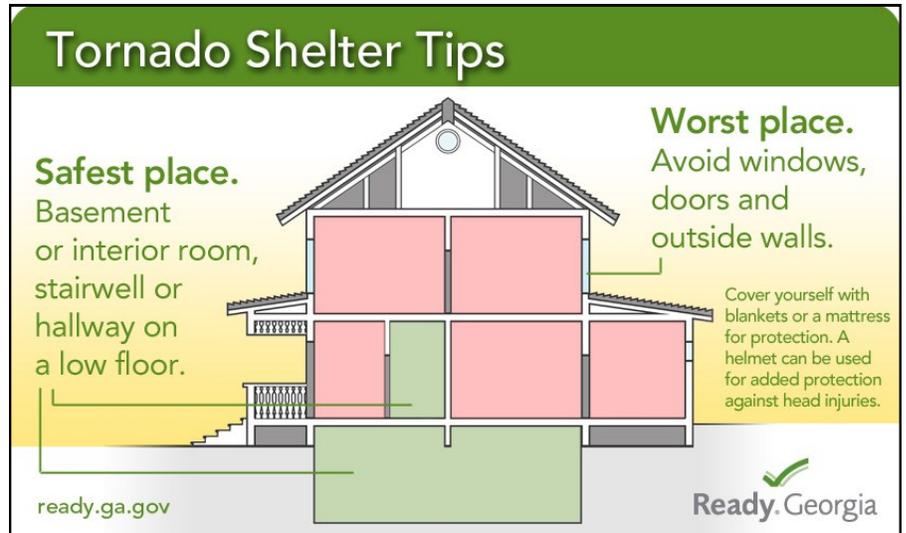
2. I was in the 5th grade and during the afternoon I heard a pounding on the roof of the school. We looked out the window and it was hail, probably baseball sized. It lasted for several minutes. The principal of the school had us go to our tornado positions. They let the schools out early shortly after the storm was over. When I got home I saw the damage. All the windows in the front of our house were broken and we had holes in our

roof. This was the start of the April 3-4, 1974 tornado outbreak, second only to the April 27, 2011 tornado outbreak.

3. My phone. It is a way of communicating to the "outside" world in case I am trapped, injured, etc. It is also my way of getting warnings/advisories from the National Weather Service.
4. Get a NOAA Weather Radio. This is the fastest way to get a warning, it comes directly from my computer console when I issue the warning.



**Where do YOU
go during
Tornado warnings?**



Have you ever thought about buying or instating a storm shelter? It's never too late...check out these websites for "portable" safe rooms that can fit in any size home.

www.survive-a-storm.com

www.familysafeshelters.com

www.valleystormshelters.com/storm-shelters-in-georgia

www.providencesaferooms.com



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