# Seasonal Weather Hazards and Preparedness LBA Coalition Meeting West Monroe, LA



IWS Shreveport, LA



### Who are We

- NOAA Weather Radio
- Internet (weather.gov/shv) Shreveport NWS (weather.gov/jan) – Jackson NWS
- Social Media
  - **F**acebook.com/NWSShreveport facebook.com/NWSShreveportLA
  - X Y Twitter.com/NWSShreveport Twitter.com/NWSJacksonMS
- Cell phone (mobile.weather.gov)
- Television/Radio









© Scott Peake

# Severe Weather

Bosco, LA 11/29/10 (Ouachita Parish)

### **Monitor These Products**



Conditions are favorable for the specified weather *Tornado Severe Thunderstorm Flash Flood Hurricane High Winds Winter Weather* Keep a "Watch" for weather threats



The weather specific *Winter Weather Strong Thunderstorm Dense Fog Minor Flooding Elevated Winds Heat* is a public inconvenience and creates travel/general hazard.



The weather specific *Tornado Severe Thunderstorm Flash Flood Hurricane High Winds Winter Storm* is imminent/occurring

and is considered a threat to life and /or property.





### **Criteria for a Severe Thunderstorm**



Hail of 1 inch or larger (Quarter size or larger)

Winds of 58 mph (50kts) or greater

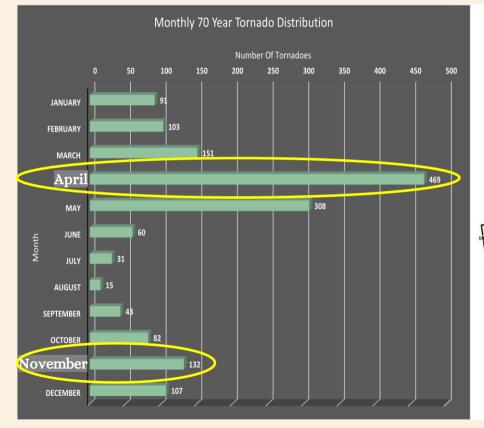
\*Tornadoes or Funnel Clouds\*

TAKE SHELTER INSIDE STURDY BUILDING IMMEDIATELY!

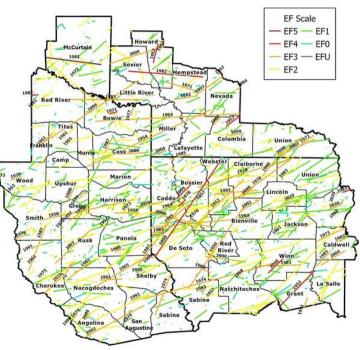
**TORNADO WARNINGS** are issued for Tornadoes and Funnel Clouds **SEVERE THUNDERSTORM WARNINGS** are issued for Winds and/or Hail



### Tornadoes Can Happen Anytime/Anywhere



National Weather Service Shreveport Tornado Climatology Tornado Tracks 1950-2021





Peak Tornado Season Occurs in Spring (April), with secondary peak in Fall (November)

### LOW...CENTER...HEAD





### Know Where To Go

## TORNADO SAFETY FOR EMPLOYERS

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Label Shelter Locations: Use small interior rooms or hallways on the lowest level (away from windows, doors).

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**Ensure Accountability**: Develop an emergency response plan and checklists to assign roles and account for everyone onsite.



Have Disaster Supplies: Keep first aid kits, food, water, and more in all shelters.



**Train Staff:** Ensure everyone knows what to do during emergencies. Regularly practice sheltering exercises.



weather.gov osha.gov/tornado





### **Bank Vaults Saves Lives**



Fourteen Tinker Federal Credit Union workers in Moore, Oklahoma hid in the vault with eight customers (May 2013)



### When Thunder Roars, Go Indoors!



### Lightning Is Deadly

- Lightning is one of the top three storm-related killers in the US and can strike as far as 10 miles away from a storm
- > **<u>STOP</u>** all outdoor activities
- Seek shelter in a substantial building (not a tent or open air building) or a hard-topped vehicle
- Wait 30 minutes after the storm to resume activities, if no other storms are in the area



\*Warnings are not issued for Lightning\*

### Turn Around Don't Drown!



### **FLOOD SAFTETY TIPS**

- Flash Flooding is the <u>#1</u> weatherrelated killer in the US.
- DON'T DRIVE INTO WATER. Nearly half of all deaths occur with people in motor vehicles. Don't drive around barricades.
- SIX inches of flowing water can knock a person off their feet and <u>TWO</u> feet of water can float any vehicle.
- Be really careful, especially at night, and avoid flood prone areas. GET TO HIGHER GROUND!



# Heat Preparedness



### What is the Heat Index?

Temperature (°F)

		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
(%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
dity	60	82	84	88	91	95	100	105	110	116	123	129	137				
Relative Humidity	65	82	85	89	93	98	103	108	114	121	128	136					
еH	70	83	86	90	95	100	105	112	119	126	134						
ativ	75	84	88	92	97	103	109	116	124	132							
Rel	80	84	89	94	100	106	113	121	129								
	85	85	90	96	102	110	117	126	135								
	90	86	91	98	105	113	122	131									
	95	86	93	100	108	117	127										
	100	87	95	103	112	121	132										

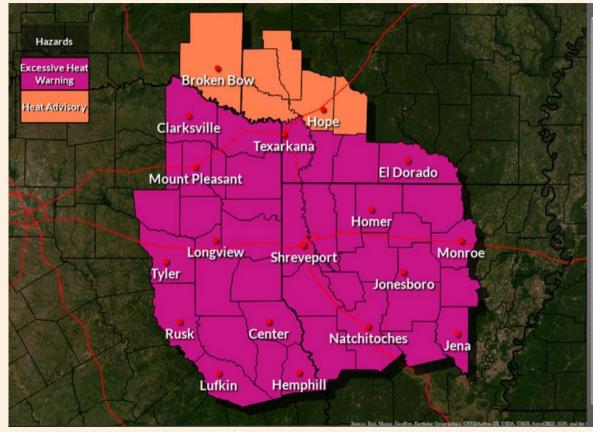
Likelihood of Heat Disorders with Prolonged Exposure and/or Strenuous Activity

Caution Extreme Caution Danger Extreme Danger

The <u>Heat Index</u>, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature.



### **Excessive Heat Warning/Heat Advisory**



Excessive Heat Warning Heat index values of 110° or higher are expected.

### Heat Advisory

Heat index values between 105° and 109° are expected.

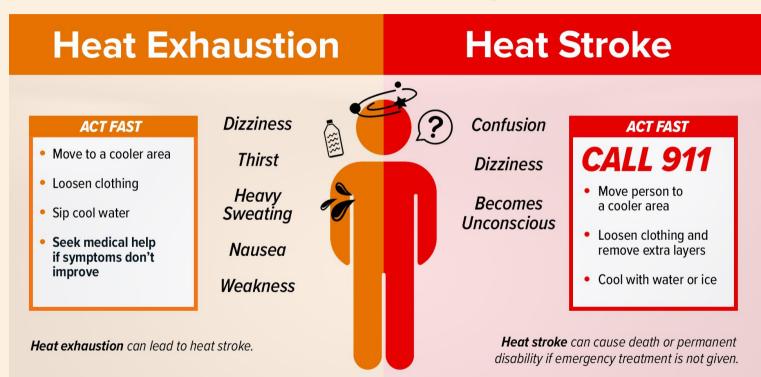
### **Safety Actions**

Drink plenty of fluids, stay in an air-conditioned room, stay out of the sun, and check on pets.

<u>Know the signs and symptoms of heat exhaustion and heat stroke</u>



### Heat Illness Signs





Stay Cool, Stay Hydrated, Stay Informed!





### **Stay Heat Safe This Summer**





# Hurricane Preparedness

### 2024 Hurricane Season



## 2024 Atlantic Hurricane Names

Alberto	Helene	Oscar
Beryl	Isaac	Patty
Chris	Joyce	Rafael
Debby	Kirk	Sara
Ernesto	Leslie	Tony
Francine	Milton	Valerie
Gordon	Nadine	William

names,

If we run out of names on the main list, we will go to the supplemental list of names, rather than the Greek alphabet

### Hurricane Forecast





It only takes one



storm to make it a bad season!



### Do Tropical Systems Impact North Louisiana?

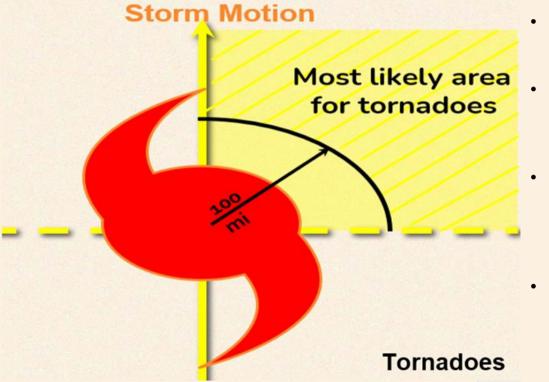


Path of Hurricane Laura (2020) across the state of Louisiana

Short Answer....YES

- Since 2000, several tropical cylones have moved across Northern Louisiana
  - <u>2002-Lili (</u>as a Tropical Storm)
  - <u>2004-Matthew</u> (as a Tropical Depression)
  - <u>2005-Rita</u> (as a Tropical Storm)
  - <u>2007-Humberto</u> (as a Tropical Depression)
  - <u>2008-Gustav</u> (as a Tropical Depression)
  - <u>2012-Issac</u> (as a Tropical Depression)
  - <u>2017-Cindy & Harvey</u> (as a Tropical Depressions)
  - <u>2019-Barry</u> (as a Tropical Storm)
  - <u>2020-Cristobal, Laura, Delta</u> (Laura was still a hurricane as it reached Interstate 20 corridor )

## **Tropical Systems Impacts**



#### <u>Wind Damage</u>

- Widespread Trees/Powerlines downed
- Monroe-62 mph (Hurricane Laura)

#### Power Outages

- No Air Condition or Refrigeration
- Heat Advisory Criteria Lowered due to being in Summer Months

### **Excessive Rainfall**

- Flooding is common w/Tropical Systems
- Monroe's 2<sup>nd</sup> highest 1-day Rainfall Total occurred with Tropical Depression Gustav in September 2008. (7.40 inches)

#### • <u>Tornadoes</u>

 Tropical Cyclone Ike produced Fifteen EF-0 tornadoes across North Louisiana



## Hurricane Preparedness ASSEMBLE DISASTER SUPPLIES



Make a list of supplies and assemble them before hurricane season begins. Have enough food and water for each person for at least three days. Fill your prescriptions and have medicine on hand. Radios, batteries and phone chargers are also must-haves. Gas up your vehicle and have cash on hand.



Food & water







Radio, batteries, phone chargers

Medicine &

prescriptions



Outdoor Generator

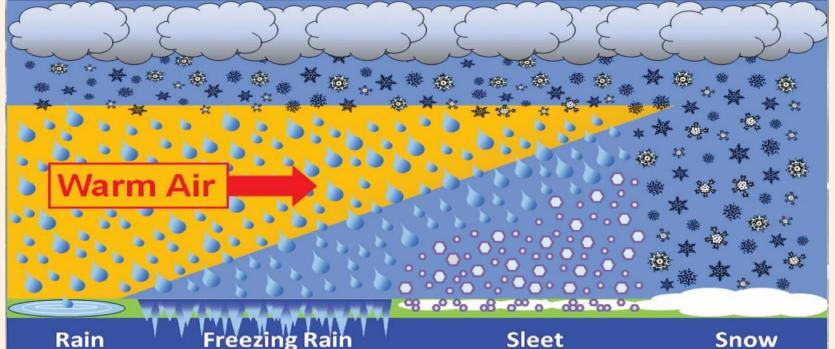


# Winter Weather Preparedness



Courtesy of Heath Albrittor

### Winter Weather Precipitation Types



#### Frozen precipitation melts and reaches the ground as rain.

Frozen precipitation melts in warm air. Rain falls and freezes on cold surfaces.

#### Sleet

Frozen precipitation melts in shallow warm air. Then refreezes into sleet before reaching the surface.

#### Snow

Snow falls through cold air and reaches the surface



### Winter Weather Preparedness





### Winter Driving Tips

# ICE & SNOW, TAKE IT SLOW

Each year in the U.S., there are over 1,000 deaths and 100,000 injuries due to vehicle crashes during winter weather.





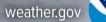
Clean off your vehicle before driving. Flying snow from cars causes accidents.



Keep it slow, and don't use cruise control. Roads can be slick even if they just look wet.



Leave extra distance between vehicles. Stay especially far from snow plows.





### **Power Outage Tips**

### After the Winter Storm: **POWER OUTAGE**



#### Be careful with heat sources

Candles and space heaters are a fire risk. Also stay warm by bundling up and keeping doors closed, placing towels in cracks.



#### Practice portable generator safety

Use outdoors, at least 20 feet away from doors/windows/garages to avoid carbon monoxide poisoning. Follow instructions on proper use.

#### Check on neighbors

Once your family is safe, check on your neighbors and the vulnerable to make sure they are OK.



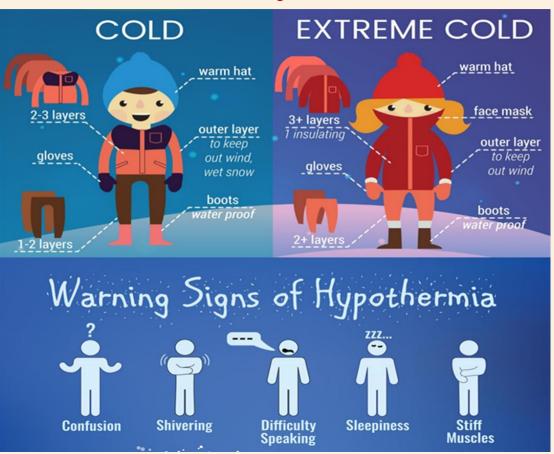


### **Cold Weather Safety**

### COLD WEATHER SAFETY

. . . . .

- Limit time outdoors if at all possible
- Monitor for signs of frostbite & hypothermia
- ✓ Dress in layers
- ✓ Cover exposed skin
- ✓ Keep pets indoors





### Remember the 4 P's

## **Protect People, Pets, Pipes, & Plants** from cold weather



### People

Minimize time outdoors.

Prepare for power outages.

Check on elderly & other vulnerable people to make sure they're ok.

### Pets

Keep your pets warm, dry & indoors as much as possible.

Ensure their food & water doesn't freeze.

Limit outside time & keep them bundled up.

### Pipes

Insulate pipes if possible.

Open up sink cabinets to expose pipes to heated air.

Disconnect hoses & turn off water to sprinklers.

### Plants

Know their temperature thresholds.

If possible, cover them before the cold weather sets in to help retain some heat.





### Social <u>Media</u>-rologist

### **Social Media and Winter Weather**

Social media is a great way to share weather information, but we all need to be responsible, especially with winter weather in the forecast. Here are some important tips to remember:

#### Think Twice Before You Share!

If you don't believe information is coming from a reliable source, think twice before sharing it! Anyone can post graphics with outrageous forecasts just to get attention.

#### Know Your Meteorologist!

Find a reliable source of information that you know and trust. Consider sharing their information and encourage others to do the same.

#### Computer Models are NOT the Forecast!

Many computer model graphics find their way onto social media and can cause a lot of confusion without proper context. These typically do not represent the actual forecast.

#### **Represent Your Community!**

Share you pictures and reports with your local NWS office and ALL your favorite meteorologists! We need ground-truth information to verify what we are seeing on our computers.

We all need to work together to make sure social media is a reliable source of information for everyone!



### Winter Weather Climate across NE Louisiana



#### **Courtesy of Ted Bailey**

Snow at American Legion Hall in Monroe, LA (Feb.2021)

- Avg. Date of 1<sup>st</sup> Freeze Monroe, LA
  - November 13<sup>th</sup>
- Avg. Date of Last Freeze Monroe, LA
  - March 7<sup>th</sup>
- All-Time Coldest Temperature Monroe, LA
  - -2°F (February 2, 1951)
- Avg. Snow/Sleet per season Monroe, LA
  - 0.8 in. *(30 year average 1994-2024)*
- Avg. # of Snow/Sleet events Monroe, LA
  - Approx One (1) *per cold season (Nov-Apr)*
  - Earliest Measured Snow: Nov.14, 2018 (0.4 in)
  - Latest Measured Snow: Mar.22, 1968 (3.0 in)

#### Most Snowfall Day/Season

- <u>Day:</u> 9.2 in. *(Jan 30, 1949)*
- <u>Season:</u> 13.0 in *(Winter 1929-1930)* \*5<sup>th</sup> highest (7.5 in. 2020-2021)\*



## Thank You! Questions?



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