

# Seasonal Weather Hazards and Preparedness

 **LBA Coalition Meeting**  
**Bossier City, LA**



NWS Shreveport, LA



# Getting the Word

- NOAA Weather Radio
- Internet ([weather.gov/shv](http://weather.gov/shv))
- Social Media (NWSShreveport
  -  [Facebook.com/NWSShreveport](https://www.facebook.com/NWSShreveport)
  -  [Twitter.com/NWSShreveport](https://twitter.com/NWSShreveport)
- Cell phone ([mobile.weather.gov](http://mobile.weather.gov))
- Television/Radio



# Monitor These Products



## Advisory

The weather specific

*Winter Weather*

*Strong Thunderstorms*

*Minor Flooding*

*Dense Fog*

*Elevated Winds*

*Heat*

The event is a public inconvenience and creates travel/general hazard.



## Watch

Conditions are favorable for the specified weather

*Tornado*

*Severe Thunderstorm*

*Flash Flood*

*Hurricane*

*High Winds*

*Winter Weather*

Keep a “Watch” for weather threats



## Warning

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.



# Severe Weather Preparedness



Shreveport 3/2/23

# Criteria for a Severe Thunderstorm



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



Winds of 58 mph  
(50kts) or greater

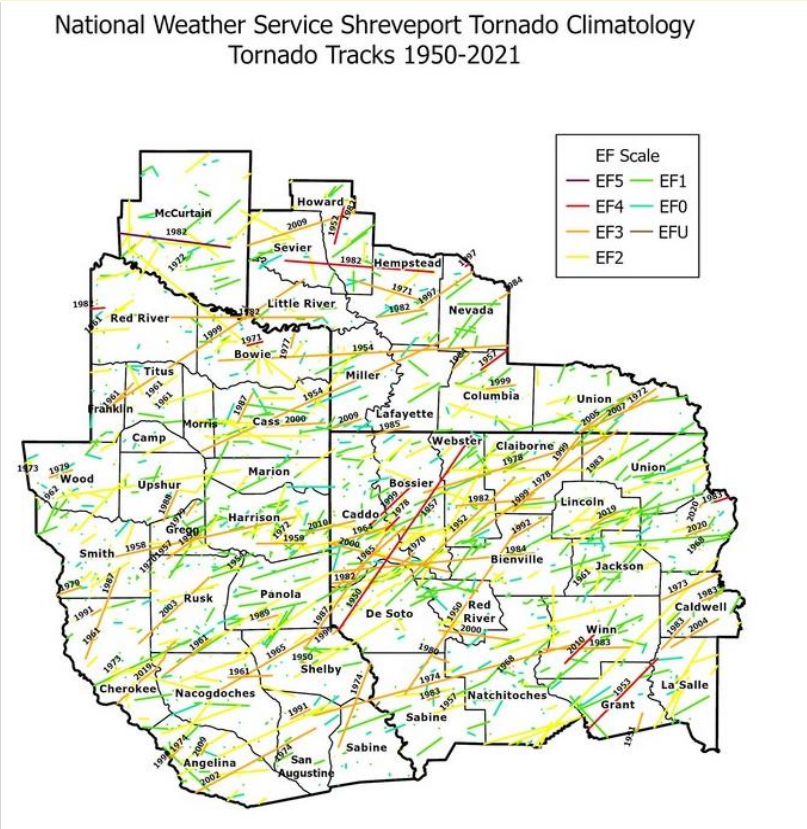
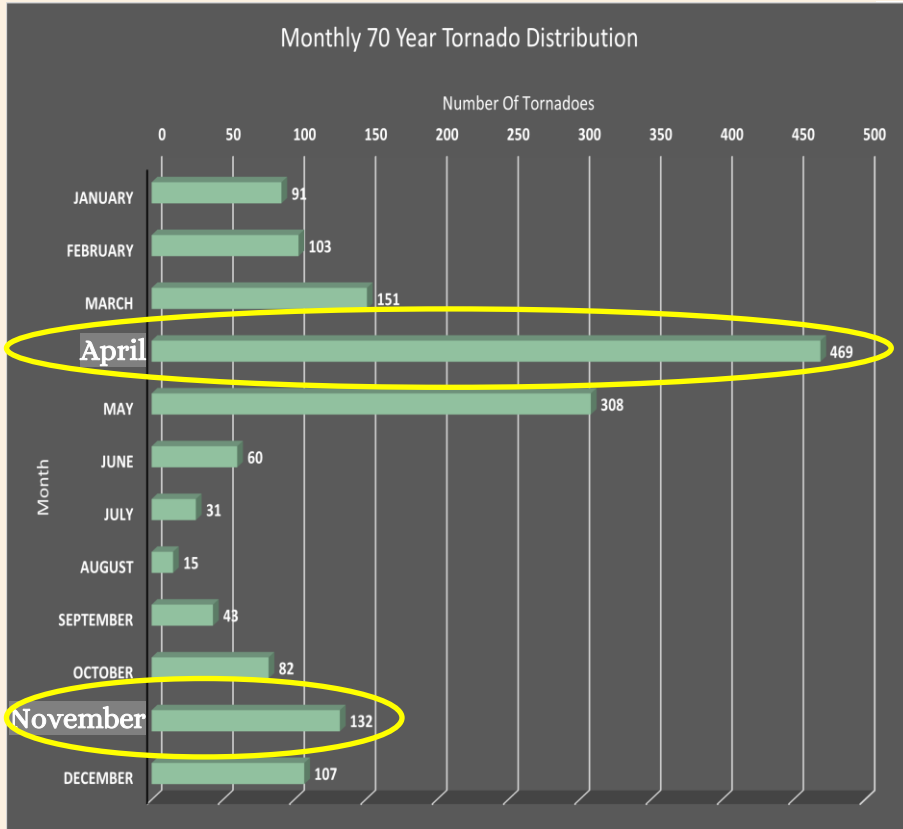


\*Tornadoes or  
Funnel Clouds\*

**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



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



# Know Where To Go

## TORNADO SAFETY FOR EMPLOYERS



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



**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](https://www.weather.gov)  
[osha.gov/tornado](https://www.osha.gov/tornado)



# LOW...CENTER...HEAD

## Know Where to Go

When Sheltering from a Tornado



If you have no basement, move to an interior room with no windows.

Top floor rooms DO NOT protect you.

Exterior rooms and rooms with windows DO NOT protect you.

NO PLACE OUTSIDE is safe from a tornado.

Quickly move to your basement and bring your emergency supply kit.



[weather.gov/tornado](https://weather.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
- **STOP** 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 SAFETY TIPS

- Flash Flooding is the **#1** weather-related killer in the US. **GET TO HIGHER GROUND!**
- **DON'T DRIVE INTO WATER.** Nearly half of all deaths occur with people in motor vehicles.
- **SIX** inches of flowing water can knock a person off their feet and **TWO** feet of water can float any vehicle.
- Be really careful, especially at night, and avoid flood prone areas. **DON'T DRIVE AROUND BARRICADES!**



---

# 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			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
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										

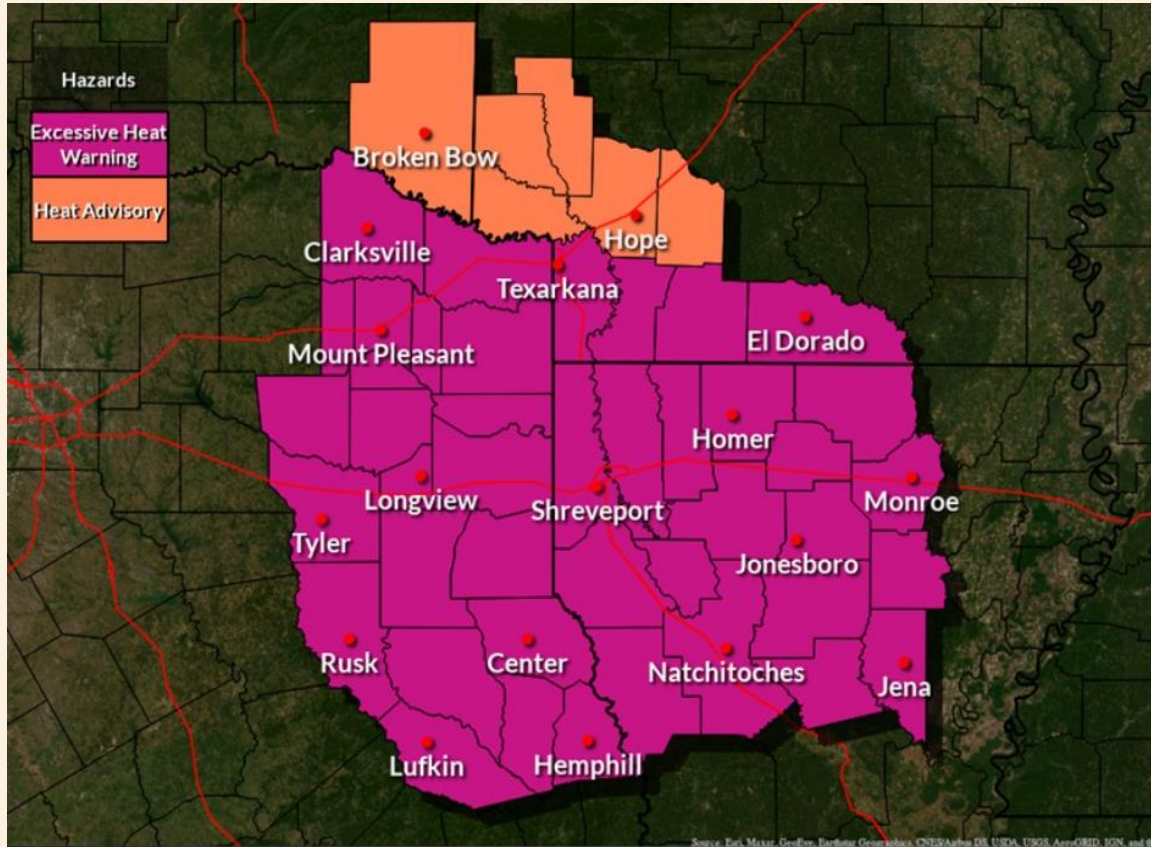
## Likelihood of Heat Disorders with Prolonged Exposure and/or Strenuous Activity

■ Caution    
 ■ Extreme Caution    
 ■ Danger    
 ■ Extreme Danger

The Heat Index, 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.

**Know the signs and symptoms of heat exhaustion and heat stroke**



# Stay Heat Safe This Summer



# Heat Illness Signs

## Heat Exhaustion

### ACT FAST

- Move to a cooler area
- Loosen clothing
- Sip cool water
- **Seek medical help if symptoms don't improve**

*Dizziness*

*Thirst*

*Heavy Sweating*

*Nausea*

*Weakness*



## Heat Stroke

### ACT FAST

# CALL 911

- Move person to a cooler area
- Loosen clothing and remove extra layers
- Cool with water or ice

*Confusion*

*Dizziness*

*Becomes Unconscious*

*Heat exhaustion can lead to heat stroke.*

*Heat stroke can cause death or permanent disability if emergency treatment is not given.*



Stay Cool, Stay Hydrated, Stay Informed!

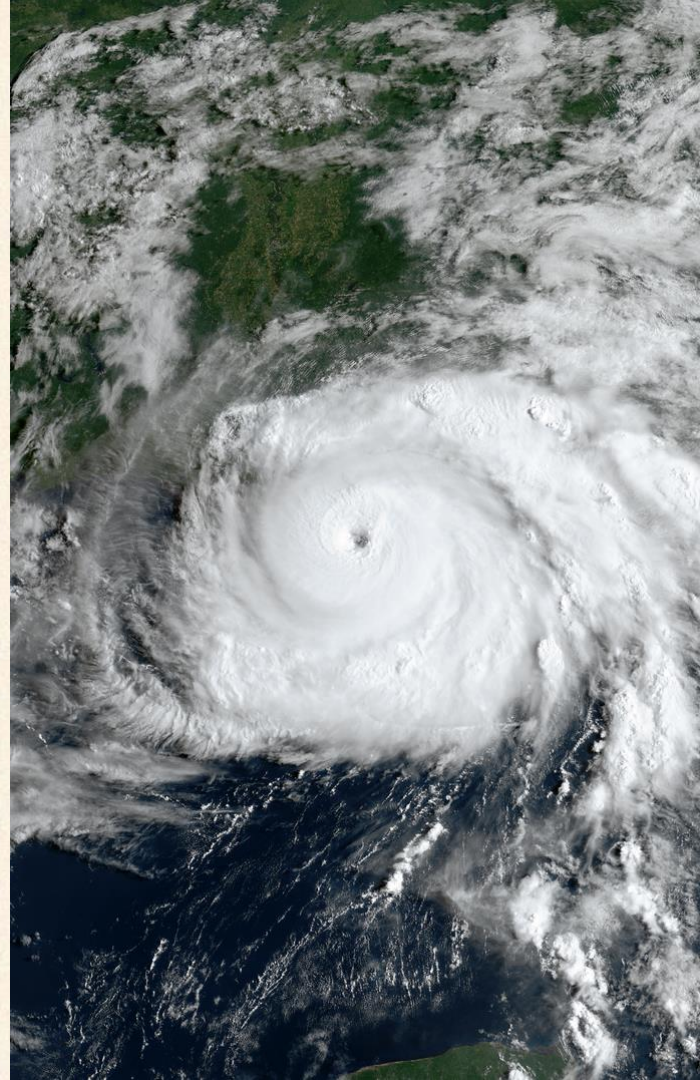




---

# Hurricane Preparedness

2024 Hurricane Season



# A Look Back at 2023

## 4th Most active season on record

Behind only 2020 (30 named storms), 2005 (28), 2021 (21), Tied with 1933 (20)

## 20 Named storms

Average is 14. Exhausted the list of names for the second year in a row

## 7 Hurricanes & 3 Major Hurricanes

Average is 7 and 3

## 3 US landfalls

Including 1 Major Hurricane (Idalia-Cat.3) in Florida, and 2 Tropical Storms (Harold and Ophelia) in South Texas and North Carolina respectively. No storms impacted Louisiana.



---

# 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**

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



# No official CPC forecast until May

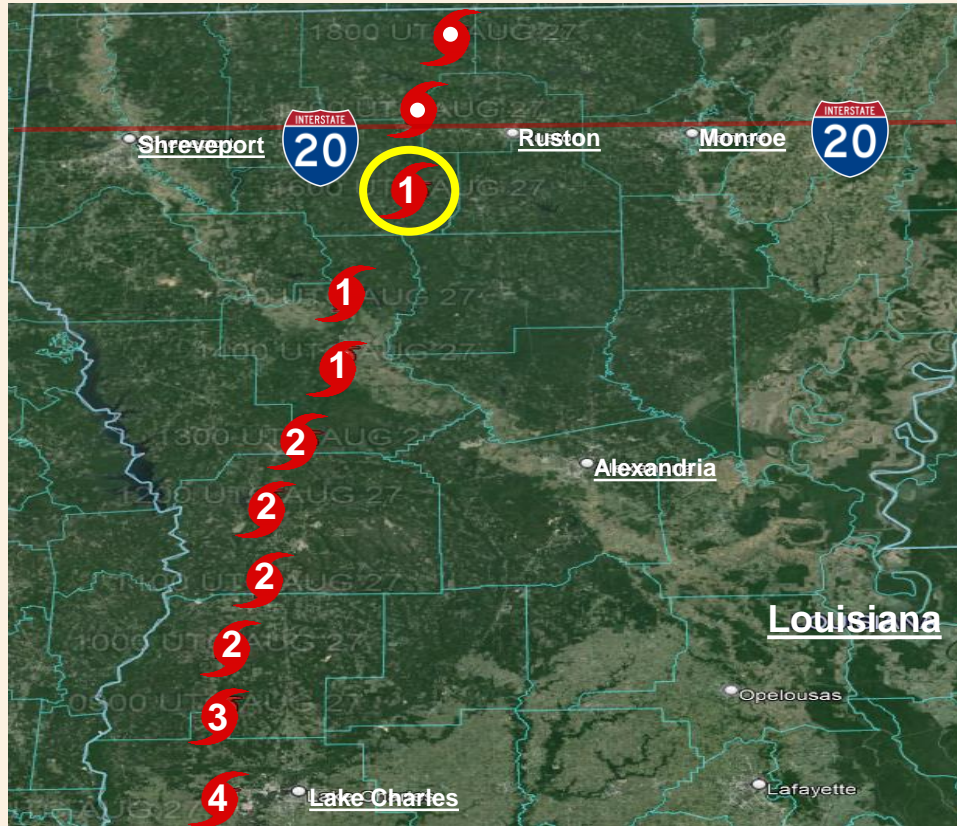
- We are in a El Nina with “likely chance” (83%) to transition to ENSO Neutral between April and June.
  - ◆ 2020 and 2021 were strong La Nina, 2005 was Neutral, and 2023 was and El Nino season
- 62% chance La Nina develop from June through August
- “Could” mean a more storms, but remember, no matter the ENSO forecast.....



*It only takes one **1** 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 cyclones have moved across Northern Louisiana
  - 2002-Lili (as a Tropical Storm)
  - 2004-Matthew (as a Tropical Depression)
  - 2005-Rita (as a Tropical Storm)
  - 2007-Humberto (as a Tropical Depression)
  - 2008-Gustav (as a Tropical Depression)
  - 2012-Issac (as a Tropical Depression)
  - 2017-Cindy & Harvey (as a Tropical Depressions)
  - 2019-Barry (as a Tropical Storm)
  - 2020-Cristobal, Laura, Delta (Laura was still a hurricane as it reached Interstate 20 corridor)



# Impacts from Tropical Systems (Hurricane Laura)

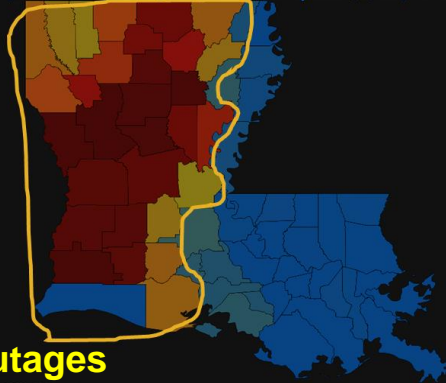
Lowered Heat Advisory Criteria to >100F

## Louisiana

Customers Tracked: 2,119,899

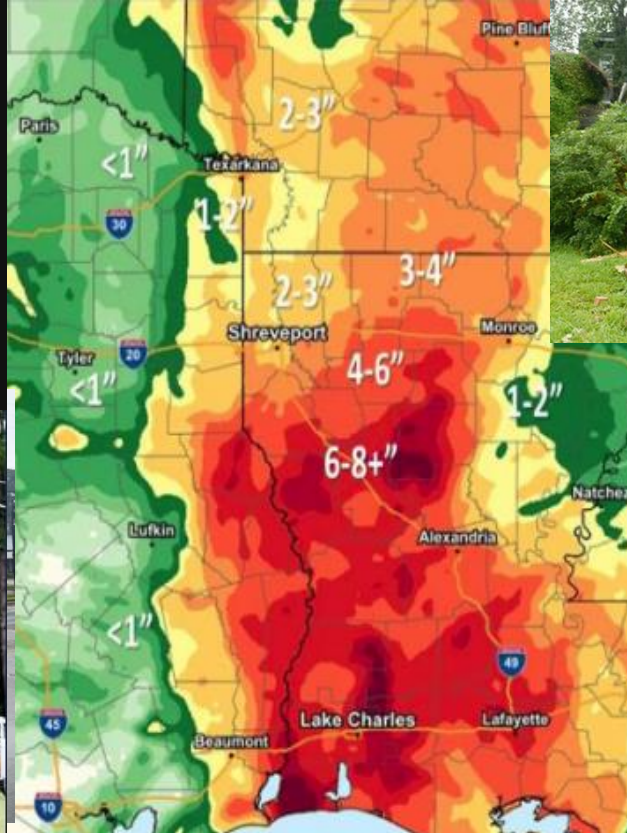
State Outages: 420,836

Last Updated: 8/29/2020, 10:31:30 AM

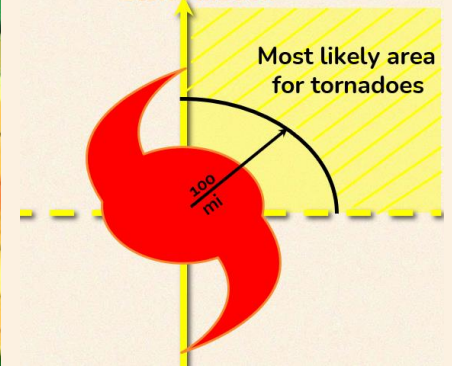


## Observed Precipitation

Valid Ending Friday August 28th, 2020 at 4 PM CDT



## Storm Motion Tornadoes



# 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



Medicine & prescriptions



Keep gas tank full



Radio, batteries, phone chargers



Cash on hand



Outdoor Generator



# Winter Weather Preparedness

SKY  
VIEW 6

01/15/2024



Shreveport, LA  
Courtesy of NBC 6



# Winter Weather Warnings/Advisories



## Freeze/Hard Freeze Warnings

Freeze Warning: Issued when temperatures are expected to fall at or below  $32^{\circ}\text{F}$  for first time during cold season. May be issued in late Winter/Early Spring after a long period of unusually warm weather

Hard Freeze Warning: Issued when temperatures fall below  $19^{\circ}\text{F}$  during anytime of the cold season

## CRITERIA BLIZZARD WARNING

Winds  $\geq 35$  mph, Falling or Blowing snow w/visibility of  $\frac{1}{4}$  mile or less for 3 hours or more

## ICE STORM WARNING

$\geq \frac{1}{4}$ " of freezing drizzle/freezing rain accumulations

## WINTER STORM WARNING

$\geq 2$ " snow or  $\geq 0.50$ " sleet for any duration. The snow and sleet may occur in combination and with freezing rain/freezing drizzle accumulations. If freezing rain occurs alone, an Ice Storm Warning should be considered.

Forecaster discretion (Impacts)

## WINTER WEATHER ADVISORY

$< 1$ - $2$ " or snow,  $< 0.50$ " sleet, or  $< 0.25$ " freezing rain/freezing drizzle

Forecaster discretion (Impacts)

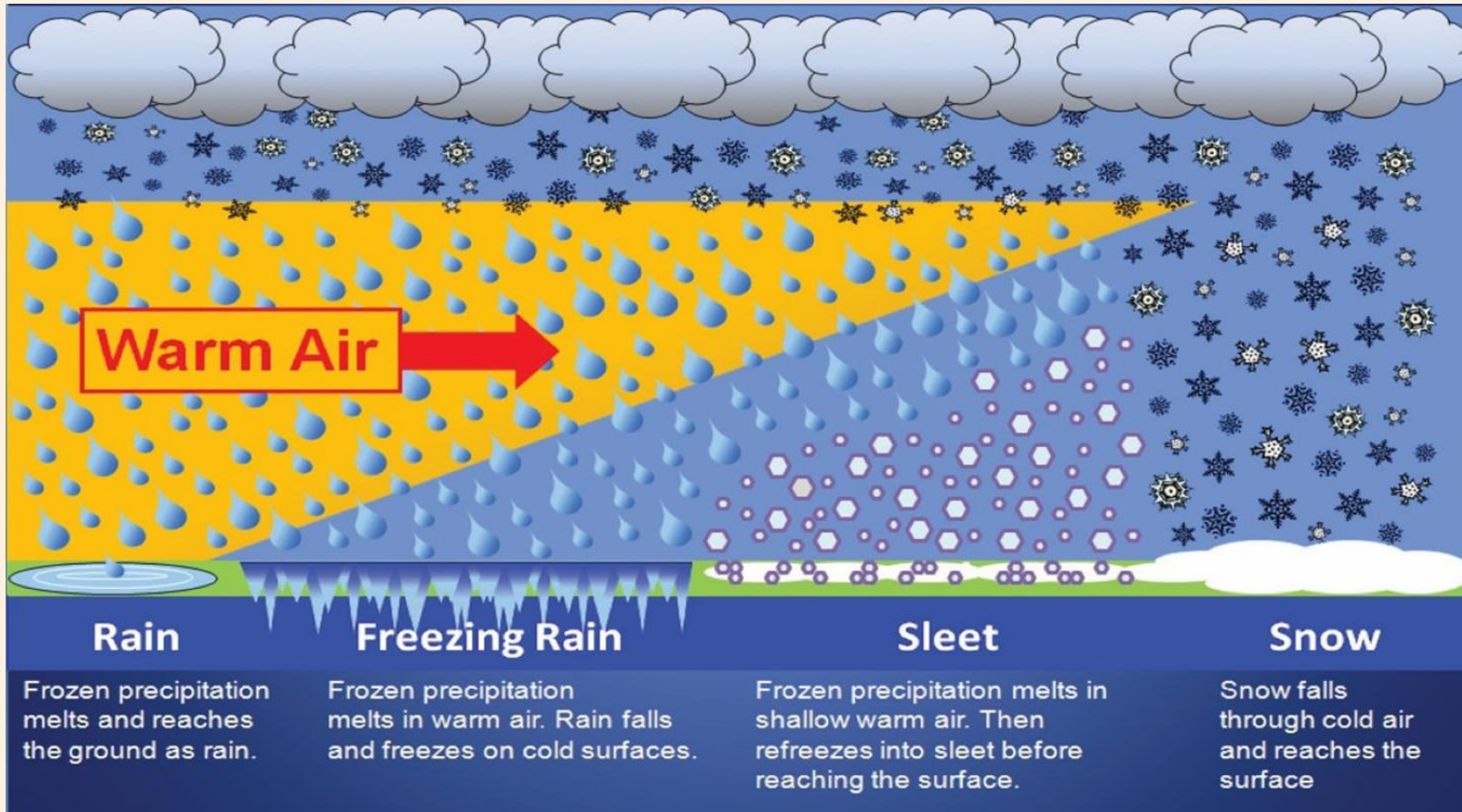
## WIND CHILL

Advisory: wind chill of  $+9$  to  $-14$  degrees with a sustained wind  $\geq 10$  MPH for 2 hours or more

Warning: wind chill of  $-15$  degrees or lower with a sustained wind  $\geq 10$  mph for any length of time



# Winter Weather Precipitation Types



# Winter Weather Preparedness

Prepare your home!



Prepare for a power outage!



Prepare your vehicle!



# 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.

DID YOU  
KNOW?



**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.



weather.gov



# 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.



weather.gov



# 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



## Warning Signs of Hypothermia



Confusion



Shivering



Difficulty Speaking



Sleepiness



Stiff Muscles

# 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.

# We Need You to Report...

- Tornadoes, funnel clouds, and wall clouds
- Hail
  - At least ½ inch in diameter
- Damaging winds
  - 50 MPH or greater
- Flooding or heavy rainfall
  - An inch or more per hour
- Anything else YOU feel is important...
  - Winter Precipitation, Lightning Damage , River flooding, Weather impacted road conditions, Dense Fog, etc...
- **Stay safe! Your safety is more important than any report!**





# How Do I Relay These Reports?

- **Phone:** 1.800.551.8338
- **Amateur Radio:** K5SHV
- **Local Law Enforcement**
- **Local Emergency Management**
- **Internet**
  - <https://weather.gov/shv>
  - <https://www.weather.gov/shv/submitLSR?site=shv>
  - [Spotternetwork.org](http://Spotternetwork.org)



## Have Pictures?



NWSShreveport



@NWSShreveport



sr-shv.skywarn@noaa.gov

In ALL cases, be *SURE* to identify yourself as a trained spotter!



# Thank You! Questions?

## NWS Shreveport

5655 Hollywood Ave.  
Shreveport, LA 71109

Phone: (318) 631-3669/1-800 -551-8338

Email: [sr-shv.skywarn@noaa.gov](mailto:sr-shv.skywarn@noaa.gov)



NWSShreveport



@NWSShreveport



NWSShreveport



<https://weather.gov/shv>



Open/Service  
24/7-365 Days