



2010 KANSAS

SEVERE WEATHER AWARENESS WEEK

MARCH 8-12, 2010

TORNADO SAFETY DRILL THURSDAY, MAR 11th

1:30 PM CST



INFORMATION PACKET

National Weather Service

Dear Emergency Management and Media Partners,

The National Weather Service, the Kansas Emergency Management Association, and the Kansas Division of Emergency Management request your participation in “**Kansas Severe Weather Awareness Week**” activities from March 8 – 12, 2010. The annual statewide tornado drill will take place at 130 pm CST on Thursday, March 11th. Test tornado warnings will be issued via NOAA Weather Radio and the EAS system for distribution statewide.

Enclosed is tornado and severe weather information that can be used for preparedness activities in your local jurisdiction. Feel free to duplicate and distribute this information as necessary.

While 2009 was not a record breaking year for tornadoes in the state of Kansas, numerous other High Impact Weather Events did occur causing millions of dollars in damage to homes, property and infrastructure. Those High Impact Events include, a Blizzard, a Derecho, numerous Severe Thunderstorms flooding and flash flooding.

Kansans live with the threat of severe weather year round. Kansas Severe Weather Awareness Week is the ideal time to prepare for severe weather. Families should practice their severe weather safety plan at home, work, school or other public locations that they frequent. They should develop a safety plan for times when they are participating in outdoor recreation activities, sporting events, or working outdoors. Each Kansan should know where to go should severe weather strike their location.

All Hazards NOAA Weather Radio is like having your personal tornado siren in your home or vehicle. We encourage Kansans to purchase a weather radio and have it programmed to their county and/or surrounding counties to receive severe weather warnings and information directly from the National Weather Service. Now is a great time to replace the back-up battery in your NOAA All Hazards Weather Radio so that you get severe weather information even if the power goes out.

As always, the National Weather Service offices that serve the state of Kansas look forward to partnering with you to help Kansans prepare for severe weather. Please contact the Warning Coordination Meteorologist at your local office if you have any questions or comments regarding this packet. Visit our webpages for the latest forecasts and severe weather information.

www.weather.gov/topeka

www.weather.gov/wichita

www.weather.gov/dodgecity

www.weather.gov/goodland

www.weather.gov/kansascity

www.weather.gov/springfield

www.weather.gov/hastings



**KANSAS SEVERE WEATHER AWARENESS WEEK
MARCH 8 - 12, 2010**

2009 Kansas Tornado Facts

Tornadoes: 103 (43 above the 1950-2009 average of 60)
 (28 above the past 30 year average of 75)
 (7 above the past 20 year average of 96)

Fatalities: 0 **Injuries:** 6

Longest Track: 12.6 miles (Bourbon County, May 13, EF1)

Strongest: EF2 (Finney County, April 18 and Stafford County, June 15)

Most in a county: 11 (Butler)

Days of occurrence: 24 (also called Tornado Days)

Most in one day: 21 (June 15)

Most in one month: 46 (June. This was the 4th highest total for any June)

First tornado of the year: March 7 (Reno County, 4:13 pm CST, EF0, 1.32 mile length, 75 yard width)

Last tornado of the year: August 2 (Haskell-Seward County, 8:50 pm CDT, EF1, 3.5 mile length, 75 yard width)



Supercell packing baseball hail and 80 mph winds.
 Photo courtesy Doug Whitson, Sherman County law enforcement.

----- 2009 Monthly Tornado Totals -----

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Total	0	0	13	18	10	46	14	2	0	0	0	0	103	100%
Percent	0	0	13	18	10	45	14	2	0	0	0	0		
EF5	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
EF4	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
EF3	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
EF2	0	0	0	1	0	1	0	0	0	0	0	0	2	2%
EF1	0	0	1	7	1	11	0	1	0	0	0	0	21	20%
EF0	0	0	12	10	9	34	14	1	0	0	0	0	80	78%

Weak (EF0, EF1) tornadoes in green, strong (EF2, EF3) in yellow, violent (EF4, EF5) in red, month totals in blue.
 Percent values may not add to 100% due to rounding.

Yearly Summary: The Kansas 2009 tornado year did not stand out in the historical database in terms of extremes. The 103 tornadoes reported remained above the 60-year average, but was close to the most recent 20-year average, and fell far short of last year's record of 187 tornadoes. There were no violent (EF4-EF5) tornadoes in the state in 2009, and only two strong (EF2-EF3) tornadoes. Fortunately, there was no loss of life directly attributable to Kansas tornadoes in 2009, and only 6 injuries were reported.

The Kansas tornado season ended early in 2009. No tornadoes were reported during the last four months of the year. In the past 60 years, only 11 other years have not had a tornado report after September 1st. August 2, 2009 was the last day with a tornado report when two tornadoes developed during the evening hours in southwest Kansas.

KANSAS TORNADO STATISTICS

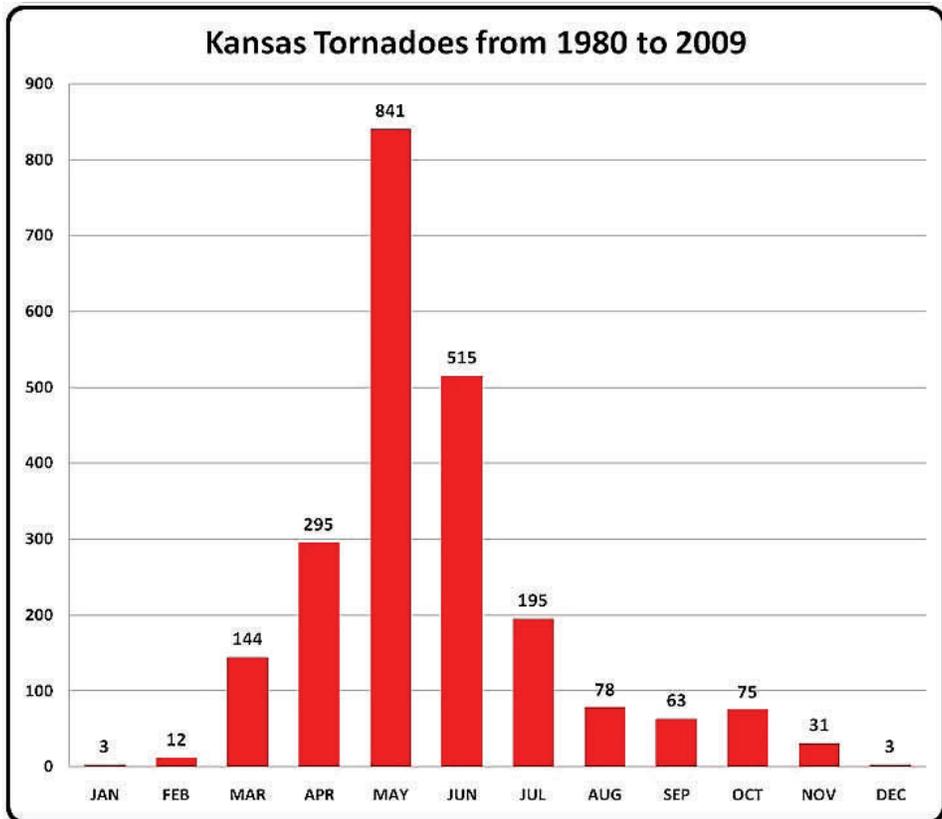
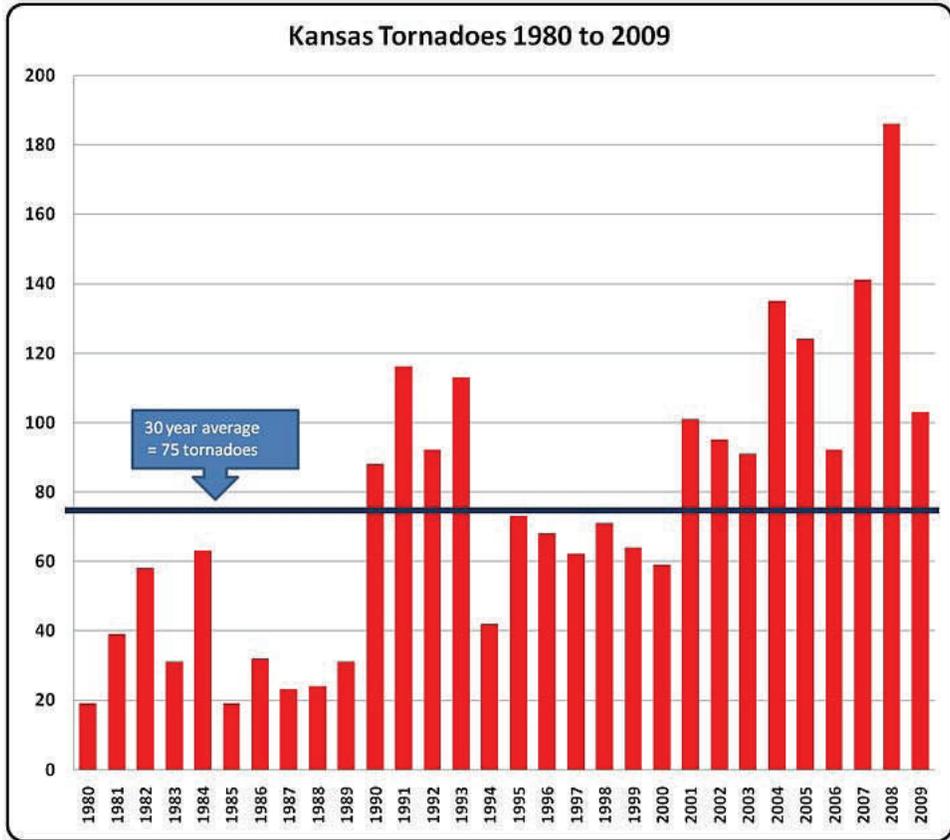
by County

1950 - 2009

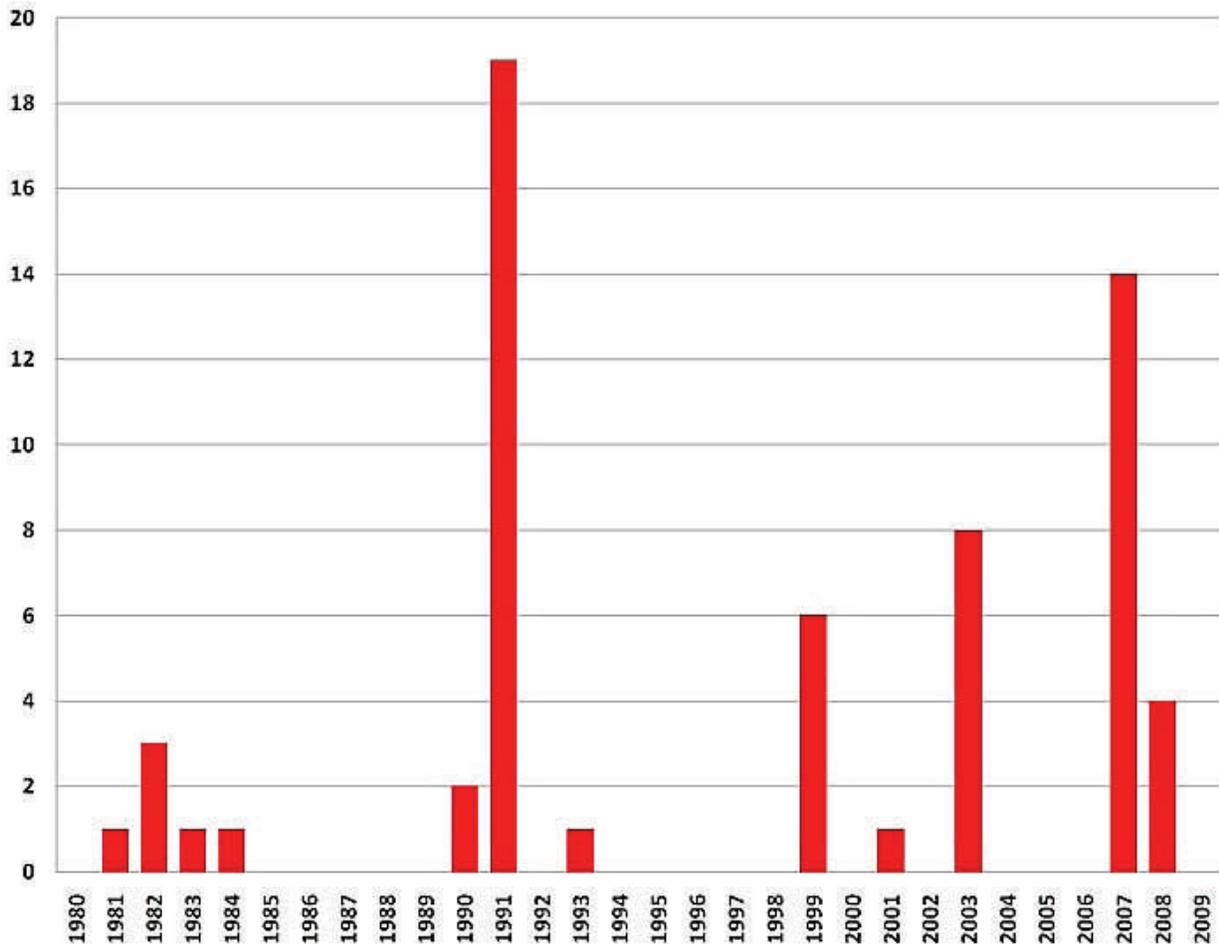
TORNADOES, FATALITIES, AND INJURIES

County	Tor	Fat	Inj	County	Tor	Fat	Inj	County	Tor	Fat	Inj
Allen	27	0	4	Greenwood	36	0	10	Pawnee	43	0	1
Anderson	14	3	12	Hamilton	21	0	1	Phillips	37	0	1
Atchison	15	0	11	Harper	57	0	1	Pottawatomie	31	0	5
Barber	32	0	2	Harvey	47	1	63	Pratt	65	3	10
Barton	86	2	37	Haskell	27	0	10	Rawlins	46	0	4
Bourbon	17	0	7	Hodgeman	43	0	4	Reno	73	0	22
Brown	43	0	5	Jackson	29	4	17	Republic	49	0	1
Butler	72	28	225	Jefferson	39	0	101	Rice	39	0	6
Chase	38	0	2	Jewell	33	0	1	Riley	27	0	51
Chautauqua	15	0	0	Johnson	35	4	12	Rooks	48	0	6
Cherokee	34	4	41	Kearny	30	0	0	Rush	33	0	8
Cheyenne	39	0	0	Kingman	47	0	1	Russell	63	1	7
Clark	37	0	0	Kiowa	51	11	74	Saline	31	0	66
Clay	36	1	31	Labette	34	1	29	Scott	36	1	1
Cloud	45	1	8	Lane	30	0	2	Sedgwick	78	13	321
Coffey	22	0	5	Leavenworth	30	2	30	Seward	34	0	15
Comanche	35	0	2	Lincoln	29	0	2	Shawnee	45	18	528
Cowley	57	77	293	Linn	13	0	3	Sheridan	32	0	0
Crawford	33	4	43	Logan	21	0	0	Sherman	95	0	0
Decatur	43	0	5	Lyon	40	6	217	Smith	40	0	1
Dickinson	34	1	12	McPherson	43	1	16	Stafford	63	1	4
Doniphan	18	0	2	Marion	45	1	2	Stanton	19	0	0
Douglas	37	1	48	Marshall	31	0	1	Stevens	24	1	5
Edwards	43	0	7	Meade	44	0	0	Sumner	76	5	14
Elk	23	2	8	Miami	18	0	9	Thomas	40	0	1
Ellis	51	0	6	Mitchell	46	0	5	Trego	57	5	101
Ellsworth	46	0	0	Montgomery	31	1	1	Wabaunsee	31	0	14
Finney	84	1	41	Morris	28	0	7	Wallace	35	0	4
Ford	79	0	0	Morton	18	1	2	Washington	33	2	12
Franklin	26	3	34	Nemaha	33	0	1	Wichita	23	3	4
Geary	17	0	3	Neosho	31	0	4	Wilson	15	0	0
Gove	38	0	3	Ness	41	0	4	Woodson	12	0	8
Graham	34	0	0	Norton	19	0	0	Wyandotte	10	2	36
Grant	24	0	9	Osage	37	17	6				
Gray	32	0	3	Osborne	40	0	13				
Greeley	31	0	0	Ottawa	24	2	9	Total	3961	235	2824

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Kansas Tornado Deaths from 1980 to 2009



Did you know that there are seven National Weather Service offices that serve portions of Kansas?

The NWS offices are located in Goodland, Dodge City, Wichita, Topeka, Hastings, Nebraska, Pleasant Hill, Missouri and Springfield, Missouri. Each office is staffed by a team of highly trained meteorologists, technicians, electronics technicians, information technology specialists, hydrologists and administrative assistants. The NWS offices are staffed 24 hours a day, seven days a week, 365 days a year.

Contact the NWS office in your area to learn more about weather, weather safety, NOAA Weather Radio, for office tours or to learn more about careers in meteorology, in the NWS or in NOAA. We are here to serve you!

**KANSAS SEVERE WEATHER AWARENESS WEEK
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2009 Severe Weather Summary

Northeast and North Central Kansas

National Weather Service-Topeka, KS

The 2009 severe weather season for northeast Kansas was unusually quiet, with only 8 tornadoes reported in 5 counties. The average number of tornadoes the previous 10 years (1999-2008) in the NWS-Topeka county warning area was 15. The 8 tornadoes were rated either EF-0 or EF-1. Severe weather events otherwise ran the gamut across northeast Kansas, with large hail, strong winds, and flash flooding all reported at some point during the traditional severe weather season from March to June. July, August, and September had their share of severe weather as well, most notable across east central Kansas where up 90-100mph were reported on August 10th. A sample of the more significant severe weather impacts that affected the NWS-Topeka county warning area follows.

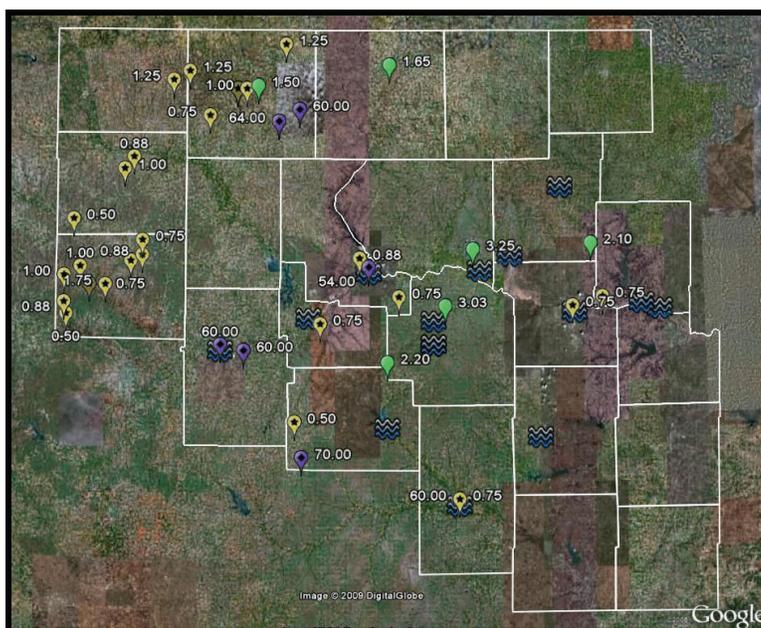
March 23rd: Severe thunderstorms developed ahead of a dry line and cold front during the afternoon hours. Discrete thunderstorms merged into a squall line that barreled through northeast Kansas. Hail from the size of quarters to golf balls blanketed portions of the region, while downburst winds up to 70mph were recorded. Several tornado reports were received from storm spotters in Nemaha County. A NWS storm survey team traveled to an area 3 miles west of Oneida, KS, where it was



The roof was torn from a metal building in Nemaha County by an EF-1 tornado on March 23rd.

determined that a tornado caused minor damage to several homes and other buildings along an 8.5 mile path.

April 25-26th: Discrete supercell thunderstorms embedded within a multi-cellular line of convection moved across northeast Kansas during the late morning and early afternoon on the 26th. Large hail up to the size of golf balls pummeled much of north central, and portions of northeast Kansas. Thunderstorm winds of 60mph to 70mph were also reported, which blew down power lines and forced power outages in Morris County during the event on the 26th. Also notable was a severe weather



Hail, labeled by size are in yellow, wind reports, labeled by magnitude are in purple, and green and blue icons are rain-fall and flooding reports from April 26th.

event that occurred on April 25th when a supercell thunderstorm lifted through Douglas County. Tornado warnings were issued for Lawrence and surrounding locales, based upon a strong tornadic signature on the radar, and several storm spotter reports of a rotating wall cloud. The KMBC (Kansas City) news chopper was also able to film and broadcast the base of the thunderstorm in real-time, which was displayed on the NWS-Topeka situational awareness display. A tornado did eventually develop once the supercell moved out of Douglas County, which impacted portions of Interstate 70 and surrounding homes and buildings. Beyond the large hail and strong winds, the storms on April 26th dumped heavy rainfall of 2 to 4 inches of across portions of the area. Roadways and intersections in the city of Topeka, and along portions of Hwy 99 through Wabaunsee and Jefferson counties were the most adversely impacted. Rescue teams were dispatched to the intersection of 29th and Kansas in Topeka where a car was reported to be floating in the roadway. Two feet of water inundated other city streets. A second water rescue was necessary northwest of Paxico just east of Hwy 99. Flood waters two feet deep have the ability to float and move a car, and 6 inches of fast moving water can knock a person off their feet!

May 15th-16th: Thunderstorms developed along a northward lifting warm front. Large hail was the primary threat with these thunderstorms. Baseball size hail was reported in Pottawatomie County. Copious available atmospheric moisture made the thunderstorms efficient rain producers. Add in the fact that the storms persisted for much of the day—having been initiated by the warm front and reinforced in the afternoon as a piece of upper level energy moved through the area—and flash flooding became an issue. Storm spotters and cooperative observers across the area reported a storm total 3 to 5 inches of rain. The ground had been moist thanks to two rounds



Rotating wall cloud and inflow tail (off to the right) of a supercell thunderstorm May 15th.

of wet weather already during the month. Several roads were closed in response to water flowing over the roadway.

June 15th and June 17th: Strong thunderstorms developed near a stationary boundary parked along the southern edge of the NWS-Topeka county warning area. This cluster of storms produced large hail to the size of baseballs and winds gusts to nearly 70mph. The wind driven hail smashed through the bay window of at least one home, and knocked down several 2-4" diameter branches. One large tree was reported to have fallen onto a house on the northeast side of Manhattan. The storms congealed into a mesoscale



Tree branches down in Nemaha County on June 17th after a weak tornado moved through.

convective system, and raced through the east central portion of the state. Widespread wind damage impacted much of Lyon, Coffey, Osage, Franklin, and Anderson counties, but sites as far north as Brown County also reported strong winds with the thunderstorm line as it moved through. The most common damage reported was to tree branches. Several power outages resulted, namely in Hartford, Burlington, and Westphalia. The largest tree reported down was 24" in diameter, located just west of Greeley. Thunderstorms along the line and those trailing produced a swath of 2-4" of rainfall, which led to some flood and flash flooding concerns. Several intersections were closed throughout Morris County due to running water over the roadways. The northern half of the county warning area was pummeled by hail up to 3 inches in diameter just 2 days later on the 17th. Supercell thunderstorms tracked along the Kansas/Nebraska border. Two tornadoes were reported—one that crossed the Washington/Marshall County border from north of Hanover to northeast of Bremen, and a second brief tornado north of Beattie in Marshall County were confirmed by a National Weather Service storm survey.



A large tree down in Manhattan July 12th.

July 12th: Widespread severe weather didn't occur across the forecast area, but the city of Manhattan and portions of Topeka were hit by 60 -70 mph winds during the morning hours of the 12th. A mesoscale convective complex that had developed over the high plains states moved across north central and northeast Kansas. The storms persisted for much of the early morning, but little more than a handful of non-severe wind reports were received at the National Weather Service in Topeka. Once the storms hit Manhattan though, it's theorized that the morning inversion had mixed just enough to allow for the 60 to 70 mph winds associated with the convection to translate down to the surface. Several

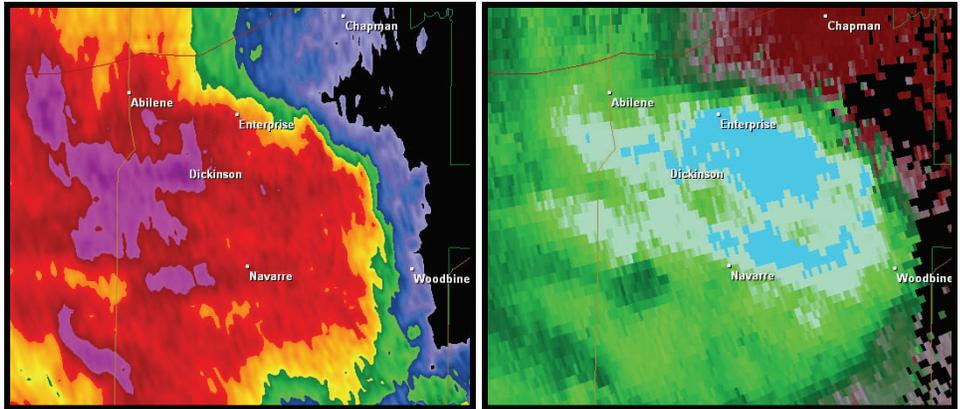
large trees were blown down, and roofs were torn off of several buildings!

August 10th: A bowing line segment of a severe thunderstorm cluster picked up speed as it raced through Dickinson, Geary, and Morris counties. Small trees snapped at their bases, and in one instance south of Junction City, bark was peeled off a tree trunk by the wind. Wind driven quarter size hail was also responsible for blowing the windows out of a handful of homes southeast in Abilene. Several power poles were knocked down. A trained storm spotter in Enterprise estimated wind speeds of 90 to 100mph. Numerous trees were down in and around his property in Enterprise, and metal buildings were demolished, their pieces thrown and wrapped around tree trunks. The powerful storm then drove 70 to 90mph through portions of Osage, Lyon, Franklin, and Anderson counties. Large oak trees were snapped at their bases northeast of Reading and in Allen, a two foot diameter oak tree was snapped at its base.

The last two significant severe weather events across the area on August 19th and September 3rd didn't bring much in the way of damage to the region. But, a supercell thunderstorm on August 19th at the southern end of a convective line tracked along the northern tier of counties in northeast Kansas. This monster rotating storm produced baseball to grapefruit size hail. Trained storm spotters reported one and a half to two inch hail that fell for 20 continuous minutes! Sep-

September 3rd, Residents of north central Kansas were hit by one last severe weather event the first week in September. Hail to the size of golfballs and 60 to 70mph winds pushed through Republic, Cloud, and Ottawa counties.

A statistic of note as well for the National Weather Service-Topeka is that no severe weather events in the local county warning area resulted in direct injuries or deaths in 2009.



Bowing line segment. At top, KTWX WSR-88d 0.5° reflectivity. At bottom, KTWX WSR-88d 0.5° base velocity. 90 to 100 mph winds were reported in Enterprise (white dot) just before this radar image was taken.

Severe Weather Terminology

- Severe Thunderstorm – The National Weather Service issues severe thunderstorm warnings for thunderstorms that are currently producing or are capable of producing winds of 60 mph or stronger and/or hail one inch in diameter or larger. Oftentimes, severe thunderstorms may be much stronger than this minimum criteria, so it is a good idea to take severe thunderstorm warnings seriously.
- Tornado – A tornado is a rotating column of air that descends from the base of a thunderstorm and is in contact with the ground. A funnel cloud may or may not be attached to the base of a thunderstorm and it does not come in contact with the ground.
- Flash Flood – A flash flood is flooding that occurs very rapidly, usually within 6 hours of heavy rainfall. Flash flooding may occur along creeks, rivers or streams. It can also occur in low lying or urban areas where drainage is poor. With flash flooding, water levels can rise very quickly, even at locations that did not receive the heavy rainfall but are located downstream from areas that received an extreme amount of rainfall. Flash flooding can occur in the winter months, when rain falls on existing snowpack and causes it to melt rapidly. Flooding is the number one severe weather killer in the U.S.



Have you ever sat down with your family to discuss and plan what you would do in case of an immediate weather threat? If you haven't, now would be an excellent time to sit down with your family and devise a plan. Finding the time to do this can be difficult, but taking the 15 minutes to develop and practice a plan could save the lives of ones you love. Please remember these tips when planning and carrying out your actions.

Tornado Safety Tips

Before the storm:

- Develop a plan of action
- Have frequent drills
- Have a NOAA Weather Radio with a warning alarm tone
- Listen to radio and television for information
- If planning a trip outdoors, listen to forecasts

In Homes or Small Buildings:

Go to the basement or to an interior room on the lowest floor (e.g. closet or bathroom). Upper floors are unsafe. If there is no time to descend, go to a closet, a small room with strong walls or an inside hallway. Wrap yourself in overcoats or blankets to protect yourself from flying debris.

In Schools, Hospitals, Factories, or Shopping Centers:

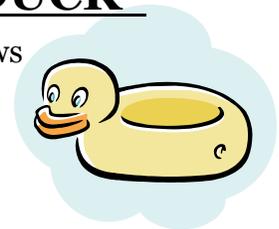
Go to interior rooms and halls on the lowest floor. Stay away from glass enclosed places or areas with wide span roofs such as auditoriums and warehouses. Crouch down and cover your head. Don't take shelter in halls that open to the south or the west. Centrally-located stairwells are good shelter.

If a warning is issued or threatening weather approaches

- Always remember **“DUCK”**
- Stay away from windows

“DUCK”

**Down to the lowest level
Under something sturdy
Cover your head
Keep in the shelter until
the storm has passed**



In High-Rise Buildings:

Go to interior small rooms or halls. Stay away from exterior walls or areas with glass.

In Mobile Homes:

ABANDON THEM IMMEDIATELY!!!

Many deaths occur in mobile homes. If you are in a mobile home when severe weather approaches, leave it immediately and go to a substantial structure or designated tornado shelter. Determine your shelter ahead of time so you don't have to think about it when weather strikes. If no shelter is available, get in your vehicle and drive to the nearest shelter.

Sirens Are An Outdoor Warning System

Every year the National Weather Service and the Emergency Management communities get together and provide severe weather information for the public. Every year we emphasize the fact that the Outdoor Sirens are just that...an Outdoor Warning System. Every year we get a multitude of calls telling us that the sirens can't be heard while in the house.

Severe weather season usually begins in the early spring in Kansas. We all need to be prepared for severe weather at any time of the day or night and at any time of year. The National Weather Service, Emergency Management, Law Enforcement, the 9-1-1 Center, and the Fire Department cannot notify every individual of the possibility of severe weather in their town. The local media outlets and All Hazards NOAA Weather Radio are your best sources for information concerning severe weather watches and warnings. Do not wait for the sirens to be your warning system at home, sirens may not be working if the power is out and oftentimes cannot be heard indoors. Sirens may not be activated for other severe threats such as damaging straight line winds in excess of 60 mph, large hail and flooding. Monitor NOAA Weather Radio and local media and then take the appropriate action for the severe weather threat. If it appears that a severe thunderstorm is approaching your location, do not wait for the outdoor sirens, take immediate action to protect your life and the lives of others in your home.



Hundreds of volunteer storm spotters, amateur radio operators, and first responders put their lives on the line every time there is severe weather in the local area. They do this because they care about the people in their communities and want to make sure those people are given the best chance at survival. The storm spotters, emergency managers, law enforcement and other volunteers immediately relay severe weather reports to the National Weather Service. The National Weather Service in turn disseminates that information to the media and public through warnings, statements and local storm reports. Getting the word out to the public in a timely manner may save lives. When severe weather threatens at night, when most people are sleeping, it can be especially dangerous. Oftentimes, in the heat of the spring and summer, we cannot hear outdoor sirens over running air conditioners. A NOAA Weather Radio with a back-up battery can make the difference for you and your family.

Take responsibility...listen to the media...take protective action...survive to enjoy the wonderful warm sunny days that also come this time of year.

Tornadoes and Traveling

If you observe an approaching tornado while driving, you should attempt seek shelter in a basement, shelter, or sturdy building. If no shelter is available and you are unable to safely drive away and flying debris is approaching:

- Pull over and park. Now you have the following options as a last resort:
- Stay in the car with the seat belt on. Put your head down below the windows, covering with your hands and a blanket if possible.
- If you can safely get noticeably lower than the level of the roadway, exit your car and lie in that area, covering your head with your hands.
- Your choice in this last resort situation should be driven by your specific circumstances.

Do **NOT** take shelter under highway overpasses!

Lightning Safety

- Watch for developing thunderstorms and be ready to act when thunder is heard.
- Lightning can strike as far as 10 miles from an area where it is raining. That's about the distance you can hear thunder.

If you can hear thunder, you are within striking distance. Seek safe shelter IMMEDIATELY!

- Outdoor Activities: Minimize the risk of being struck by moving indoors or to vehicles at the first roar of thunder.
- Inside Activities: Things to avoid
 - Corded phones
 - Computers
 - Other electrical equipment
 - Indoor/Outdoor pools
 - Tubs and showers and other things connected to metal plumbing
- **Wait 30 minutes after the last roar of thunder before going outside again.**
- Help a Lightning Victim: Call 911 and get help immediately. You are in no danger when helping a lightning victim. The charge will not affect you.

When Thunder Roars, Go Indoors!

Flood Safety

- Floods, especially Flash Floods kill more people each year than any other weather phenomenon.
- As little as 6 inches of fast moving water can sweep you off of your feet.
- As little as 18-24 inches of water is enough to float a car and carry it away.
- If you see a road barrier across a flooded roadway....

TURN AROUND. DON'T DROWN!

- Tune to the NOAA Weather Radio, or your favorite news source for all flood and any other weather related information.
- Leave areas subject to flooding, such as dips, low spots and underpasses.
- Do not attempt to cross flowing streams, you don't know how deep the water could be.
- Never drive through flooded roadways.
- If your vehicle is suddenly caught in rising water, leave it immediately and seek higher ground.
- Report any flooding to your local authorities or to the National Weather Service.

Turn Around. Don't Drown!

National Weather Service Kansas



Disaster Kit

www.weather.gov

Are you ready?

When Disaster strikes, it pays to be prepared. Having a Disaster Kit prepared will save you time and could save your life. A disaster kit should be in your *designated shelter* and it would also be helpful to have a *smaller version in a small backpack or other containers that are easily carried if you need to evacuate your home*. Disaster kits should be reviewed annually to be kept up-to-date with your family's needs. Items in your kit should include, but are not limited to:

Staple Items

- 3 day supply of Water (1 gallon per person per day)
- 3 day supply of nonperishable, ready to eat food items and manual can opener
 - High Energy Foods, e.g. Peanut Butter
 - Juices, dried Milk
 - Sugar, Salt, Pepper
- First Aid Kit (see list for individual items)
- Flashlight and extra batteries, or ones that generate their own energy by shaking them
- Battery operated or Hand Crank Radio
 - NOAA All-Hazard Weather Radio
- Clothing— Think about the climate; warm and/or cool season clothes
- Shoes
- Sanitation and Hygiene items (such as hand sanitizer, moist towelettes and toilet paper)
- Matches in waterproof container
- Whistle
- Blankets
- Other tools (e.g. hammer, pliers)
- Cash and coins
- Photocopies of important documents, personal ID's and credit cards
- Baby needs
- Special Needs
 - Prescription medications, eye glasses,
 - Contact lens solution, etc.
- Games to pass the time (e.g. cards)

A graphic with the words "BE PREPARED" in large, bold, black letters. The word "BE" is positioned above "PREPARED". The text is set against a yellow sunburst background with a dotted pattern.

First Aid Kit

- Sterile adhesive bandages in assorted sizes
- 2-inch and 4-inch sterile gauze pads
- Hypoallergenic adhesive tape
- Triangular bandages
- Scissors & Tweezers
- 2-inch and 3-inch sterile roll bandages
- Waterless alcohol-based hand sanitizer
- Antiseptic Wipes
- Petroleum Jelly or other lubricant
- Latex Gloves
- Anti-bacterial Ointment
- Aspirin or non-aspirin pain reliever
- Antacid (for upset stomach)
- Cold pack



Americans live in the most severe weather-prone country on Earth and the state of Kansas is no exception. Each year a startling 10,000 thunderstorms, 2,500 floods, 1,000 tornadoes, and 10 hurricanes impact the United States. Potentially deadly severe weather impacts every American. Communities can rely on the National Weather Service's StormReady program to help them guard against the ravages of Mother Nature.

What is StormReady?

Ninety percent of all presidentially declared disasters are weather related. Through the StormReady program, NOAA's National Weather Service gives communities the skills and education needed to survive severe weather – before and during the event. StormReady helps community leaders and emergency managers strengthen their local hazardous weather operations.

StormReady Does Not Mean Storm Proof

StormReady communities are better prepared to save lives from the onslaught of severe weather through better planning, education and awareness. Communities have fewer fatalities and property damage if they plan before dangerous weather arrives. No community is storm proof, but StormReady can help communities save lives.

How Can My Community Become StormReady?

The entire community – from the mayor and emergency managers, to business leaders and civic groups – can take the lead on becoming StormReady. Local National Weather Service forecast offices work with communities to complete an application and review process. To be recognized as StormReady, a community must:

- ✓ Establish a 24-hour warning point and emergency operations center.
- ✓ Have more than one way to receive severe weather warnings and forecasts and to alert the public.
- ✓ Create a system that monitors local weather conditions.
- ✓ Promote the importance of public readiness through community seminars.
- ✓ Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

Go to <http://www.stormready.noaa.gov> for more information.

Check out a Storm Spotter and Weather Safety Training presentation near you this spring...

Each spring the National Weather Service offices that serve the state of Kansas, conduct storm spotter and weather safety training sessions in each county. The sessions are free and open to the public. You are not required to become a storm spotter, nor will you have to take a test; however the presentations provide a great deal of information on severe weather in Kansas. They cover severe weather safety, ways to get weather information from the National Weather Service and you can meet a meteorologist from your local National Weather Service office.

The schedule for storm spotter training sessions varies in each community, please check out www.weather.gov for more information on a training session in your area.

Kansas Tornado Facts

Days with more than 20 tornadoes

<u>Date</u>	<u>#Tornadoes</u>
05/23/08	70
06/15/92	39
05/05/07	36
06/04/55	33
05/29/04	28
10/26/06	28
05/25/97	25
06/09/05	25
05/15/91	24
07/07/04	23
04/26/91	21
06/15/09	21

Kansas Tornado Count By Decade

1950s: 560
1960s: 457
1970s: 303
1980s: 339
1990s: 789
2000s: 1192 (thru 2009)

Most Tornadoes in One Episode

May 23, 2008	70 Tornadoes
June 15-16, 1992	41 Tornadoes