KANSAS
WINTER WEATHER AWARENESS DAY
TUESDAY, NOVEMBER 14, 2000

Winter weather too often catches people unprepared. Researchers say that about 70 percent of the fatalities related to snow and ice **occur in vehicles**, and about 25 percent of all winter related deaths are **people that are caught off guard, out in a winter storm.**

Again, this year the National Weather Service in cooperation with County Emergency Managers, will observe **Winter Weather Awareness Day on Tuesday, November 14**. The day is set aside annually to prepare for the cold and snowy season, and to review winter weather information and safety rules.

What winter weather **preparations are being made in your local area**, and what are the appropriate steps to take that will ensure your winter weather safety?

The following winter weather related information from the National Weather Service **can be used in articles, newscasts, presentations and features.** The topics address winter weather safety, local preparations, winter terminology, historical information and much more that will be of interest. **We encourage you to copy and distribute the material, as necessary.**

Thank you in advance for your assistance in promoting winter weather awareness and safety.

WINTER WEATHER TERMINOLOGY

During the winter months **specific terminology** is used to communicate weather information. Knowledge of these National Weather Service terms is the first step in understanding and being prepared for winter weather. **These terms could save your life!**

Winter Weather Message: Segmented product issued every few hours giving details and explanations on winter weather warnings, watches, advisories, cancellations and safety information.

...WATCHES AND WARNINGS...

Winter Storm Watch: Severe winter weather is **possible** in the affected area. May include; snow storm, ice storm, blizzard, dangerous wind chills, or a combination of events.

Winter Storm Warning: Severe winter weather will occur, or is about to begin.

Blizzard Warning: Wind at least 35 mph with falling or blowing snow reducing visibility to under 1/4 mile for at least three hours.

Heavy Snow Warning: Snowfall of 6 inches in 12 hours and/or 8 inches in 24 hours.

High Wind Warning: Wind gusts above 57 mph or sustained winds at 40 mph or higher, for at least an hour.

Ice Storm Warning: Heavy ice accumulation will cause dangerous and damaging situations, such as downed utility lines and icy roads.

Wind Chill Warning: Wind Chill values 35 below zero or colder.

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ADVISORIES

Snow Advisory: New snowfall of 1 to 5 inches is expected.

Wind Advisory: Sustained winds to 30 mph, and/or gusts under 57 mph.

Wind Chill Advisory: Wind chills of 20 below to 35 below zero.

Freezing Drizzle Advisory: Light ice coating on roads and highways, but no damage is expected to trees/power lines.

Blowing Snow Advisory: Wind-driven snow reducing visibility to 1/4 mile or less.

Dense Fog Advisory: Widespread fog with visibility under 1/4 mile.

Winter Weather Advisory: Any combination of winter events.

Some Winter Stats.....

ALL ABOUT Snow.....

Data obtained at National Weather Service observing stations in Concordia and Topeka. Information likely to vary at other unofficial sites around north central and northeast Kansas.

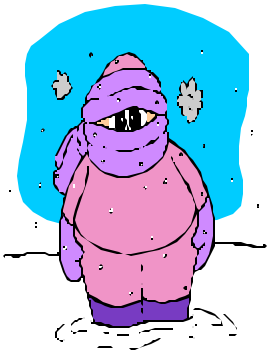
....The Five Snowiest Winters....

Concordia	Topeka
1....59.1"...1959-60	1....47.9" - 1911-12
2....54.0"...1943-44	2....44.4" - 1959-60
3....45.2"...1957-58	3....43.9" - 1992-93
4....44.0"...1970-71	4....42.9" - 1978-79
5....41.9"...1947-48	5....42.5" - 1914-15

Average Winter Snowfall:	22.2"	20.8"
1999-2000 Winter Snowfall:	**11.7"**	**11.5"**
Lowest Winter Snowfall:	6.4"/ 1980/81	7.2"/ 1991-92
Normal Snowiest Month:	February - 5.5"	January - 5.9"
Greatest Monthly Amount: (since 1950)	22.0" - Feb. 1960	23.0" - Jan. 1993
Greatest 24 hour Snowfall:	**17.7" - Feb. 1924**	**17.3" - Jan. 1993**
Earliest Measurable Snowfall:	2.5" - Oct. 7, 1992	0.7" - Oct 9, 1970
Latest Measurable Snowfall:	7.8" - Apr. 11, 1997	0.1"- Apr 11, 1997
Average Number of days with an inch or more of snow:	7.4	6.8

MORE WINTER STATS.....

HOW COLD WAS IT?? Brrrr!



....TEMPERATURE DATA.....

The Five Coldest Winters (*Dec-Feb*)

Concordia	Topeka
1...1978/79...19.9°F	1...1978/79...20.7°F
2...1977/78...21.4°	2...1977/78...22.6°
3...1904/05...22.2°	3...1983/84...26.8°
4...1935/36...23.6°	4...1984/85...27.4°
5...1886/87...23.7°	5...1992/93...29.6°

Average Winter Temperature: (***Dec-Feb***)	29.7°F	30.1°F
Warmest Winter Season: (Avg Temp)	38.2°F (1991-92)	38.7°F (1991-92)
1999/00 Average Winter Temp:	35.5°F	36.8°F
Record Lowest Temperature:	**-26°/Dec 22, 1989**	**-26°/Dec 23, 1989**
Average number of Days with low temperature below **32°F**: (per year)	125	119
Average number of Days with low temperature below **ZERO** °F: (per year)	9	8

Normal Daily High and Low:

	Concordia			Topeka		
	DEC	JAN	FEB	DEC	JAN	FEB
High:	39.3	36.0	41.7	40.5	37.0	42.6
Low:	19.8	15.7	20.3	21.0	16.3	21.7

Temp Trivia: On December 22, 1989, the mercury hit **32 below zero** at **both** Brewster and Colby in northwest Kansas.

>>>> WIND CHILL <<<<

The wind chill is based on the rate of **heat loss from exposed skin** caused by combined effects of wind and cold. As the wind increases, heat is carried away from the body at an accelerated rate, driving down the body temperature. Animals are also affected by wind chill and should also be protected.

Wind Speed Calm	Wind Chill Temperature									
	50	40	30	20	10	0	-10	-20	-30	-40
5	48	37	27	16	6	-5	-15	-26	-36	-47
10	40	28	16	4	-9	-21	-33	-46	-58	-70
15	36	22	9	-5	-18	-36	-45	-58	-72	-85
20	32	18	4	-10	-25	-39	-53	-67	-82	-96
25	30	16	0	-15	-29	-44	-59	-74	-88	-104
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116

COLD TEMPERATURES...DANGEROUS EFFECTS ON THE BODY...

FROSTBITE: Frostbite is damage to body tissue caused by **tissue being frozen**. Frostbite causes a loss of feeling and a white or pale appearance in extremities, such as fingers, toes, ear lobes or the tip of the nose. If symptoms are detected, get medical help immediately! If you must wait for help, slowly rewarm affected areas. However, if the person is also showing signs of hypothermia, warm the body core before the extremities.

HYPOTHERMIA: A dangerously low body temperature is simply called Hyperthermia. Some warning signs to look for are: **uncontrollable shivering,** memory loss, disorientation, **mental and mobile incoherence**, slurred speech, drowsiness and apparent exhaustion. To detect hypothermia, take the persons temperature. If below about 95°F, **immediately seek medical care.** If medial care is not available, begin by warming the person *slowly*. Warm the body core first. If needed, use your own body heat to help. Get the person into dry clothing, and warp them in a **warm blanket** covering the head and neck where most heat escapes. Do not give the person alcohol, drugs, coffee, or any hot beverage or food; warm broth is better. Do not warm the extremities (arms and legs) first. This drives the cold blood to the heart and can lead to heart failure and death.

>>>> SAFETY RULES

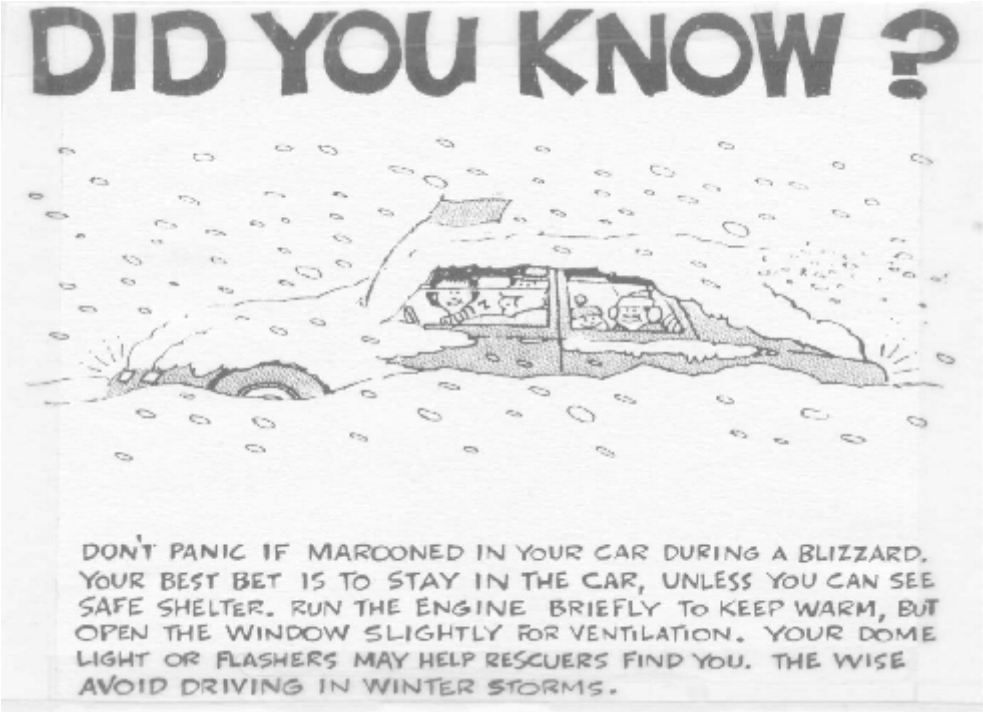
.....WHEN *CAUGHT* IN A WINTER STORM....

OUTSIDE: Find shelter, try to stay dry and cover all exposed parts of the body. If no shelter; prepare a lean-to, wind break or snow cave for protection from the wind. Build a fire for heat and to attract attention and rescue. Place rocks around the fire to absorb and reflect heat. **DO NOT EAT SNOW.** It will lower your body temperature. Melt it first.

IN A CAR OR TRUCK: Stay with the vehicle. Disorientation occurs quickly in blinding wind-driven snow and cold. Run the engine about 10 minutes each hour for heat. Open the window for fresh air to avoid carbon monoxide poisoning. Make sure the exhaust pipe is not blocked. Make yourself **visible to rescuers** by turning on the dome light at night when running the engine.

Tie a colored cloth to your car antenna or door, and raise the hood of your vehicle indicating trouble after the snow stops falling. Exercise from time to time by vigorously moving arms, legs, fingers and toes to keep blood circulating and to keep warm.

AT HOME OR IN A BUILDING: Stay inside. When using a fireplace, stove, space heater or other alternative heat **use fire safeguards and proper ventilation.** If heat is not available, close off unneeded rooms, cover windows at night, and stuff towels or rags in cracks under doors. Eat and drink since food provides the body with energy for producing heat. Keep the body replenished with fluids to prevent dehydration.

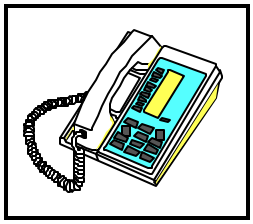


INFORMATION SOURCES

Being informed with the most up-to-date information is the best way to avoid winter storm problems. Forecasts and weather **conditions change rapidly.** Therefore, before traveling or venturing out in the winter, you **must know what is happening, and what is expected.**

The most reliable way to keep track of winter weather or any weather, is through **NOAA Weather Radio**. Weather Radio is operated and programmed **directly from local National Weather Service Offices**. The latest and most comprehensive information is available 24 hours a day, 7 days a week. Some receivers can be set to alarm when warnings or special information are broadcast. Ten National Weather Service radio stations broadcast across Kansas. Local frequencies serving northcentral Kansas are 162.550 MHz, 162.525NHz and for northeast Kansas 162.475 MHz.

Other sources of weather information include: **local** radio and TV stations and The Weather Channel cable network.



For road condition reports:

Kansas:	**800-585-ROAD**	**KS Turnpike:**	**785-266-4135**
Iowa:	515-288-1047	Nebraska:	402-471-4533
Missouri:	800-222-6400	Colorado:	877-315-ROAD

The National Weather Service in Topeka is also on the INTERNET. For forecast from adjacent states, Give us a hit at:

www.crh.noaa.gov/top

BE PREPARED...

Before the Storm Strikes

At home and at work...

Primary concerns are the potential loss of heat, power, telephone service, and a shortage of supplies if storm conditions continue for more than a day.

Have available:

- **Flashlight and extra batteries.**
- **Battery-powered NOAA Weather Radio and portable radio** to receive emergency information. *These may be your only links to the outside.*
- **Extra food and water.** High energy food, such as dried fruit or candy, and food requiring no cooking or refrigeration is best.
- **Extra medicine and baby items.**
- **First-aid supplies.**
- **Heating fuel.** Fuel carriers may not reach you for days after a severe winter storm.
- **Emergency heating source,** such as a fireplace, wood stove, space heater, etc.
  - Learn to use properly to prevent a fire.
  - Have proper ventilation.
- **Fire extinguisher and smoke detector.**
  - Test units regularly to ensure they are working properly.

On the farm...

- **Move animals to sheltered areas.** Shelter belts, properly laid out and oriented, are better protection for cattle than confining shelters, such as sheds.
- **Haul extra feed to nearby feeding areas.**
- **Have a water supply available.** Most animal deaths in winter storms are from dehydration.

In cars and trucks...

Plan your travel and check the latest weather reports to avoid the storm!

- **Fully check and winterize** your vehicle before the winter season begins.
- **Carry a WINTER STORM SURVIVAL KIT:**
  blankets/sleeping bags; flashlight with extra batteries; first-aid kit; knife; high-calorie, non-perishable food; extra clothing to keep dry; a large empty can and plastic cover with tissues and paper towels for sanitary purposes; a smaller can and water-proof matches to melt snow for drinking water; sack of sand (or cat litter); shovel; windshield scraper and brush; tool kit; tow rope; booster cables; water container; compass and road maps.
- **Keep your gas tank near full** to avoid ice in the tank and fuel lines.
- **Try not to travel alone.**
- **Let someone know** your timetable and primary and alternate routes.

DRESS TO FIT THE SEASON. Wear loose-fitting, light-weight, warm clothing in several layers. Trapped air insulates. Layers can be removed to avoid perspiration and subsequent chill. Outer garments should be tightly woven, water repellent, and hooded. Wear a hat. Half your body heat loss can be from the head. Cover your mouth to protect your lungs from extreme cold. Mittens, snug at the wrist, are better than gloves. Try to stay dry.

Example of winter storm survival kit.

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