

When a Winter Storm WARNING is Issued...

- Stay indoors during the storm.
- If you must go outside, several layers of lightweight clothing will keep you warmer than a single heavy coat. Gloves (or mittens) and a hat will prevent loss of body heat. Cover your mouth to protect your lungs.
- Understand the hazards of wind chill, which combines the cooling effect of wind and cold temperatures on exposed skin.
- As the wind increases, heat is carried away from a person's body at an accelerated rate, driving down the body temperature.
- Walk carefully on snowy, icy, sidewalks.
- After the storm, if you shovel snow, be extremely careful. It is physically strenuous work, so take frequent breaks. Avoid overexertion.
- Avoid traveling by car in a storm, but if you must...
 - Carry a [Disaster Supplies Kit](#) in the trunk.
 - Keep your car's gas tank full for emergency use and to keep the fuel line from freezing.
 - Let someone know your destination, your route, and when you expect to arrive. If your car gets stuck along the way, help can be sent along your predetermined route.

What is Wind Chill?

One of the gravest dangers of winter weather is wind chill. The wind chill is based on the rate of heat loss from exposed skin 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.

Wind Chill is not the actual temperature but rather how wind and cold feel on exposed skin. 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; however, cars, plants and other objects are not.

New Wind Chill Chart

Wind (mph)

Temperature (°F)	Calm	5	10	15	20	25	30	35	40	45	50	55	60
40	36	34	32	30	29	28	28	27	26	26	25	25	
35	31	27	25	24	23	22	21	20	19	19	18	17	
30	25	21	19	17	16	15	14	13	12	12	11	10	
25	19	15	13	11	9	8	7	6	5	4	4	3	
20	13	9	6	4	3	1	0	-1	-2	-3	-3	-4	
15	7	3	0	-2	-4	-5	-7	-8	-9	-10	-11	-11	
10	1	-4	-7	-9	-11	-12	-14	-15	-16	-17	-18	-19	
5	-5	-10	-13	-15	-17	-19	-21	-22	-23	-24	-25	-26	
0	-11	-16	-19	-22	-24	-26	-27	-29	-30	-31	-32	-33	
-5	-16	-22	-26	-29	-31	-33	-34	-36	-37	-38	-39	-40	
-10	-22	-28	-32	-35	-37	-39	-41	-43	-44	-45	-46	-48	
-15	-28	-35	-39	-42	-44	-46	-48	-50	-51	-52	-54	-55	
-20	-34	-41	-45	-48	-51	-53	-55	-57	-58	-60	-61	-62	
-25	-40	-47	-51	-55	-58	-60	-62	-64	-65	-67	-68	-69	
-30	-46	-53	-58	-61	-64	-67	-69	-71	-72	-74	-75	-76	
-35	-52	-59	-64	-68	-71	-73	-76	-78	-79	-81	-82	-84	
-40	-57	-66	-71	-74	-78	-80	-82	-84	-86	-88	-89	-91	
-45	-63	-72	-77	-81	-84	-87	-89	-91	-93	-95	-97	-98	

Frostbite occurs in 15 minutes or less

$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

Where, T = Air Temperature (°F)

V = Wind Speed (mph)

Each year, dozens of Americans die due to exposure to cold. Add to that number, vehicle accidents and fatalities, fires due to dangerous use of heaters and other winter weather fatalities and you have a significant threat.

A major winter storm can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall and cold temperatures.

Threats, such as hypothermia and frostbite, can lead to loss of fingers and toes or cause permanent kidney, pancreas and liver injury and even death. You must prepare properly to avoid these extreme dangers. You also need to know what to do if you see symptoms of these threats

The aftermath of a winter storm can have an impact on a community or region for days, weeks or even months.

Extremely cold temperatures, heavy snow and coastal flooding can cause hazardous conditions and hidden problems.

Heavy snow can immobilize a region and paralyze a city, stranding commuters, closing airports, stopping the flow of supplies, and disrupting emergency and medical services. Accumulations of snow can cause roofs to collapse and knock down trees and power lines.

BLIZZARD: Winds of 35 mph or more with snow and blowing snow reducing visibility to less than ¼ mile for at least 3 hours

BLOWING SNOW: Wind-driven snow that reduces visibility. Blowing snow may be falling snow and/or snow on the ground picked up by the wind.

SNOW SQUALLS: Brief, intense snow showers accompanied by strong, gusty winds. Accumulation may be significant.

SNOW SHOWERS: Snow falling at varying intensities for brief periods of time. Some accumulation is possible.

SNOW FLURRIES: Light snow falling for short durations with little or no accumulation.

Heavy accumulations of ice can bring down trees and topple utility poles and communication towers. Ice can disrupt communications and power for days while utility companies repair extensive damage.

COASTAL FLOODS: Winds generated from intense winter storms can cause widespread tidal flooding and severe beach erosion along coastal areas.



Hypothermia is a condition brought on when the body temperature drops to less than 95°F. It can kill. For those who survive, there are likely to be lasting kidney, liver and pancreas problems. Warning signs include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness and apparent exhaustion. Take the person's temperature. If below 95°F, seek medical care immediately!

Frostbite is damage to body tissue caused by extreme cold. A wind chill of -20° Fahrenheit (F) will cause frostbite in just 30 minutes. 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.

Injuries Related to Cold

- 50% happen to people over 60 years old
- More than 75% happen to males
- About 20% occur in the home



Hypothermia occurs when the extremities are excessively cold (blue)



Improperly warming the body will drive cold blood from the extremities to the heart, leading to heart failure

NOAA Weather Radio is the best means to receive warnings from the National Weather Service. The National Weather Service continuously broadcasts warnings and forecasts that can be received by NOAA Weather Radios, which are sold in many stores. The average range is 40 miles, depending on topography. Purchase a radio that has a battery back-up and a Specific Area Message Encoder feature, which automatically alerts you when a watch or warning is issued for your county or parish.

OUTLOOK: Winter storm conditions are possible in the next 2-5 days.
Stay tuned to local media for updates.

WATCH: Winter storm conditions are possible within the next 36-48 hours.
Prepare now!

WARNING: Life-threatening severe winter conditions have begun or will
begin within 24 hours. Act now!

ADVISORY: Winter weather conditions are expected to cause significant
inconveniences and may be hazardous. If you are cautious,
these situations should not be life threatening.