

Fact Sheet - Severe Winter Storms



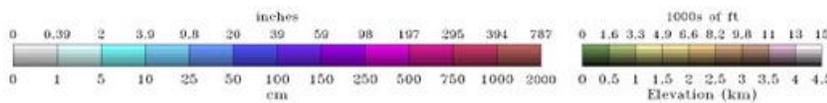
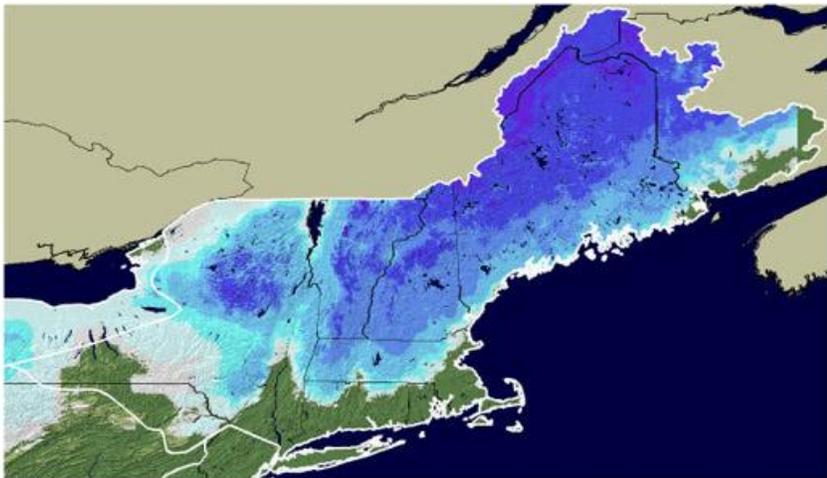
What Makes a Winter Storm?

COLD AIR: Below freezing temperatures in the clouds and near the ground are necessary to make snow and/or ice.

MOISTURE: To form clouds and precipitation. Air blowing across a body of water, such as a large lake or the ocean, is an excellent source of moisture.

LIFT: Something to raise the moist air to form the clouds and cause precipitation. An example of lift is warm air colliding with cold air and being forced to rise over the cold dome. The boundary between the warm and cold air masses is called a front. Another example of lift is air flowing up a mountain side.

Snow Depth
2007-04-06 06



Severe winter storms are the most frequent natural hazard event in Maine. Severe winter storms include snow and ice storms, heavy snowfall, ice storms, and freezing rain.



Storms with Strong Winds

Sometimes winter storms are accompanied by strong winds creating blizzard conditions with blinding wind-driven snow, severe drifting, and dangerous wind chill. Strong winds with these intense storms and cold fronts can knock down trees, utility poles, and power lines. Storms near the coast can cause coastal flooding and beach erosion as well as sink ships at sea. In the West and Alaska, winds descending off the mountains can gust to 100 mph or more damaging roofs and other structures.

Extreme Cold

Extreme cold often accompanies a winter storm or is left in its wake. Prolonged exposure to the cold can cause frostbite or hypothermia and become life-threatening. Infants and elderly people are most susceptible. What constitutes extreme cold and its effect varies across different areas of the United States. In areas unaccustomed to winter weather, near freezing temperatures are considered "extreme cold." Freezing temperatures can cause severe damage to citrus fruit crops and other vegetation. Pipes may freeze and burst in homes and businesses that are poorly insulated or without heat. In the north, below zero temperatures may be considered as "extreme cold." Long cold spells can cause rivers to freeze, disrupting shipping. Ice jams may form and lead to flooding.

Ice Storms

Heavy accumulations of ice can bring down trees, electrical wires, telephone poles and lines, and communication towers. Communications and power can be disrupted for days while utility companies work to repair the extensive damage. Even small accumulations of ice may cause extreme hazards to motorists and pedestrians.



Heavy Snow Storms

Heavy snow can immobilize a region and paralyze a city, stranding commuters, stopping the flow of supplies, and disrupting emergency and medical services. Accumulations of snow can collapse buildings and knock down trees and power lines. In rural areas, homes and farms may be isolated for days, and unprotected livestock may be lost. In the mountains, heavy snow can lead to avalanches. The cost of snow removal, repairing damages, and loss of business can have large economic impacts on cities and towns.



Winter Deaths

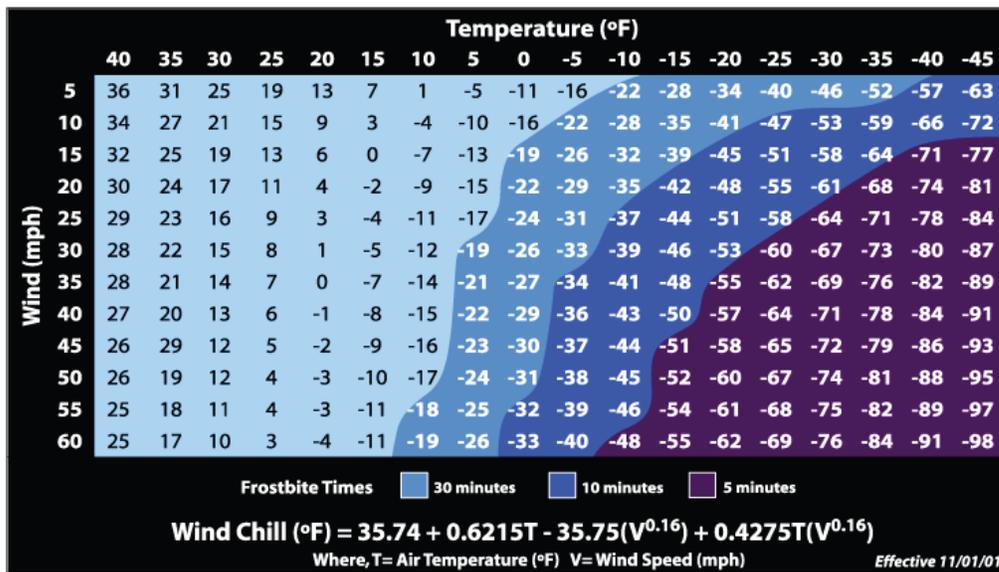
Everyone is potentially at risk during winter storms. The actual threat to you depends on your specific situation. Recent observations indicate the following:

- Related to ice and snow:
 - About 70% occur in automobiles.
 - About 25% are people caught out in the storm.
- Related to exposure to cold:
 - 50% are people over 60 years old.
 - Over 75% are males.
 - About 20% occur in the home.

WINTER STORMS ARE CONSIDERED *DECEPTIVE* KILLERS ... BECAUSE MOST DEATHS ARE *INDIRECTLY* RELATED TO THE STORM



Wind Chill Chart





Know the Difference:

DEFINITIONS:

FROST/FREEZE WARNING:

Below freezing temperatures are expected and may[Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Text Box Tools tab to change the formatting of the pull quote text box.]

cause significant damage to plants, crops, or fruit trees. In areas unaccustomed to freezing temperatures, people who have homes without heat need to take added precautions.

WINTER WEATHER ADVISORY:

A winter storm is anticipated with accumulations of up to 4 inches.

WINTER STORM WATCH:

A winter storm is expected within the next 36 to 48 hours with accumulations of over 4 inches and includes severe weather conditions.

WINTER STORM WARNING:

A winter storm is occurring or about to occur. Same conditions as a winter storm watch. Stay inside!