

Winter Weather Advisories

The National Weather Service (NWS) has a number of winter weather advisories that depend on the particular situation at hand. Below is a list of common winter weather advisories. Please note this list is not exhaustive. Go to www.weather.gov/help-map for a complete list of all weather watches and warnings.

Winter Weather Advisory

Issued when a weather system is bringing in winter weather (snow, sleet, freezing rain) that could pose a hazard.

Winter Storm Watch

Issued when there is a potential for significant snow or ice accumulations in the next 24-36 hours.

Winter Storm Warning

Issued when a winter storm is or is forecasted to produce significant snow or ice accumulation.

Blizzard Watch

Issued when a winter storm has the potential to produce winds over 35 mph and blowing/falling snow that reduces visibility to less than a quarter mile.

Blizzard Warning

Issued when a winter storm has winds over 35 mph and blowing/falling snow that reduces visibility to less than a quarter mile for three hours or more.

Freezing Rain Advisory

Issued when freezing rain or freezing drizzle is forecast but accumulation is not expected to be significant.

Ice Storm Warning

Issued when a freezing rain produces a significant or damaging amount of ice.

Blizzard and Extreme Cold Safety and Precautions

Like all hazardous weather, it is important to be safe during blizzards and the extreme cold. The following tips can help you stay safe and warm during these winter hazards.

- Stay indoors! It is important to stay indoors in a well-insulated building, and to only leave if you must, especially in extremely cold temperatures and wind chills.
- If you must leave, be sure to leave as little exposed skin as possible. Remember to wear such articles as hats, gloves/mittens, scarves, heavy coats, boots, and warm socks.
- When drive on snow-packed, icy roads, or there is low visibility, drive slowly and do not brake fast. If you are a passenger, do not distract the driver and let him or her focus on the road.
- Warm up your car before driving. This will allow your engine to warm up to safe operating temperatures. However, DO NOT heat your car open in a closed garage. This can lead to carbon monoxide (an invisible poison gas) filling your garage.
- Leave your home's faucets dripping. This will movement in your pipes and will prevent them from freezing.

For more info on Winter Storms, go to:
<http://www.nws.noaa.gov/os/winter/>

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Winter Weather, Blizzards, and Wind Chill



Snow Covered Park in Washington, DC.

What are the types of winter weather?
What is a blizzard?
What is a wind chill?
How do I stay safe in a blizzard?

StormReady in a Box
Supplemental Information Pamphlet
NWS Twin Cities
Chanhassen, MN

Winter Precipitation

Winter precipitation includes more than just snow. Sleet, freezing rain, freezing drizzle, and snow are all types of winter precipitation besides snow. Below are definitions for types of winter precipitation.

Freezing rain is liquid precipitation that freezes on contact with a surface. Typically, the air temperature is just above freezing, but the ground temperature is just below freezing. This produces significant icing and can make travel difficult.

Freezing drizzle is similar to freezing rain. However, the difference is that freezing drizzle falls in much smaller droplet sizes. It also makes travel difficult.

Sleet are ice pellets that typically form from a melted snowflake that refroze. Sleet sometimes referred to, simply, as ice pellets.

Snow is frozen precipitation, typically falling in a dendritic form, composed of ice crystals. Snow forms via freezing of water vapor in the air.

Many are surprised to know that winter precipitation has occurred in all fifty states, including Hawaii! Hawaii's snowfall comes on top of the very high volcanic mountains on the island chain. However, it should be noted that snowfall along the gulf coast, in Florida, the southwest Californian coast, and near the Mexican border is rare.

Winter Storms and Blizzards

A **Winter Storm** is a storm system that causes the accumulation of snow and ice. Typically, winter storms are accompanied by cold temperatures and wind.

A **Blizzard** is defined by the National Weather Service as the following occurring for three hours or more:

- A system having sustained winds or gusts of greater than or equal to 35 mph
- Considerable falling OR blowing snow

The criteria for both of these types of storms varies by location. For example, for a winter storm warning to be issued, the snowfall requirements are significantly higher in Minneapolis, MN compared to Birmingham, AL.

Winter Storms and Blizzards usually occur during the winter season, but winter precipitation can occur year-round, particularly on mountain tops. For most parts of the northern and northeastern United States, the threat of winter weather begins in late October and ends in late March. In the Southern portion of the United States, the threat for winter weather is primarily from January to early March.



Winter Storms can make life and travel difficult.

Wind Chills and Extreme Cold

The only threats during the winter aren't from precipitation. The cold temperatures and wind can also pose significant hazards in the winter months. Temperatures below zero have been recorded in every state besides Hawaii (the lowest there is 12°F). When you combine low temperatures with wind, your skin will feel a different temperature. A **wind chill** is the temperatures that the human body feels due to both the actual temperature and wind effects.

Cold temperatures and wind chills pose a significant hazard. Two of the most prevalent causes of deaths due to cold are hypothermia and frostbite. **Hypothermia** is the medical term for very low body temperature. **Frostbite** is a term meaning that a part of the body is frozen. Actual temperatures or wind chill temperatures of less than -48°F can cause frostbite on exposed skin in five minutes or less.

The National Weather Service also issues advisories for extremely cold temperature and wind chills. A **Wind Chill Watch**, may be issued if there is a threat for extremely low wind chills. A **Wind Chill Advisory or Wind Chill Warning** maybe issued if extremely low wind chills are occurring or imminent. The exact thresholds for these advisories vary by location.