



Winter Weather Definitions

The following are some definitions of weather terms that sometimes appear in statements and forecasts issued by the National Weather Service during adverse winter weather.

Advisory: Issued by the National Weather Service to indicate that winter weather is expected to cause significant inconveniences and could become hazardous. If precautions are taken, these situations should not become life threatening. The greatest hazard is often to motorists, so it normally is advisable to avoid unnecessary travel or at least use extra caution and allow extra travel time.

Black Ice: Patches of solid clear ice that form on road surfaces and typically appear darker than nearby dry surfaces. Black ice often is a significant hazard to motorists.

Blizzard: A combination of wind and snow resulting in extremely hazardous weather. Technically, a blizzard must have sustained winds or frequent gusts over 35 mph and visibility frequently less than 1/4 mile in falling and/or blowing snow, along with life-threatening wind chills. These conditions must prevail for three hours or more before a winter storm becomes a blizzard.

Flurries: Light snow falling for short durations and resulting in little or no accumulation.

Freezing Rain: Liquid rain that falls into a layer of sub-freezing air near the ground, and therefore freezes on contact with objects that have cooled to below freezing. If the layer of cold air near the ground is deep enough or cold enough, the raindrops may freeze into ice pellets or sleet before reaching the ground.

Graupel: Same as snow pellets.

Heavy Snow (accumulation): Defined in Michigan as an accumulation of 6 inches or more in 12 hours, or 8 inches or more in 24 hours for lower Michigan, and 8 inches or more in 12 hours, or 10 inches or more in 24 hours in for upper Michigan.

Heavy Snow (observations): Falling snow that reduces the visibility to 1/4 mile or less.

Ice Pellets: Same as sleet.

Ice Storm: Heavy accumulations of ice resulting in significant structural damage, including downed tree limbs and/or utility lines. Significant disruption of travel can be expected.

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Light Snow: In weather observations this refers to falling snow in which visibility is $\frac{5}{8}$ of a mile or more. In forecasts it refers to a relatively steady fall of snow that generally results in light accumulations or none at all.

Moderate Snow: In weather observations this refers to falling snow that reduces the visibility to less than $\frac{5}{8}$ of a mile but more than $\frac{1}{4}$ mile.

Sleet: Pellets of ice resulting from raindrops falling into a layer of subfreezing air, and therefore freezing before reaching the ground. If the raindrops do not freeze before reaching the ground, they may freeze upon contact with the ground resulting in freezing rain.

Snow Grains: These are small, white particles of ice. They are similar to snow pellets except they are smaller and do not shatter or bounce when they hit a hard surface.

Snow Pellets: Precipitation consisting of white, opaque particles (unlike ice pellets or sleet, which normally are clear) that are typically round or conical in shape. They often resemble miniature snowballs, and unlike snow grains will normally bounce or break up when they fall on a hard surface. Also sometimes called graupel or tapioca snow.

Wind Chill: A measure of the combined effects of cold air and wind on exposed skin. As wind increases, heat is carried away from the body at a faster rate making it feel even colder. The wind chill temperature is the same as the air temperature as long as the wind speed is 3 mph or less. Otherwise, it is less than the air temperature.

Winter Storm Warning: Issued by the National Weather Service to indicate that hazardous and life-threatening winter weather, such as heavy snow or an ice storm, either is occurring, will soon begin, or has a very high probability of occurrence. Stay indoors unless absolutely necessary to go outside.

Winter Storm Watch: Issued by the National Weather Service to indicate that the risk of hazardous and life-threatening winter weather has increased significantly, but its occurrence, location, or timing are still uncertain. Begin preparations and listen for further information.