

Heavy Snow and Ice

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. 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 the loss of business can have severe economic impacts on cities and towns.

Injuries Due To Ice and Snow

- About 70% result from vehicle accidents
- About 25% occur in people caught out in a storm
- Most happen to males over 40 years old

BLIZZARD: Winds of 35 mph or more with snow and blowing snow reducing visibility to less than $\frac{1}{4}$ mile for 3 hours or more.

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.

Information from Cornell University:

Snow Loading is the downward force exerted on structures by the weight of accumulated snow, may result in damage to roofs or the actual collapse of the roof itself. In addition to snow accumulation there are other conditions that may contribute to snow loading problems and the potential for roof collapse:

- Adding insulation to the roof without ventilation may cause condensation & eventual rotting of the rafters or deck;
- Re-roofing with three or more layers of shingles;
- Not correcting observable symptoms of structural problems.

[Attic condensation problems and ice dams](#) can lead to extensive damage to home roofs.

[Heavy Snow Loads](#) can lead to barn roof failure.

Ice

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. Even small accumulations of ice can be extremely dangerous to motorists and pedestrians. Bridges and overpasses are particularly dangerous because they freeze before other surfaces.

Ice Dams: [Attic condensation problems and ice dams](#) can lead to extensive damage to home roofs.