



## Disaster and Emergency Management Resources

### Introduction to Winter Storms

Depending on their intensity and impact, winter storms have the potential to become disaster events, including:

#### **Heavy Winter Storms**

Heavy snow can immobilize a community, stranding commuters, stopping economic activities, 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. Costs associated with snow removal, damage repairs, and loss of business can have large economic impacts on local communities.

#### **Ice Storms**

Heavy accumulations of ice can bring down trees, electrical wires, telephone poles and lines, and communication towers. Communications, power, and transportation can be disrupted for days. Even small accumulations of ice can be very dangerous to both motorists and pedestrians.

#### **Extreme Cold**

Extremely cold temperatures often accompany a winter storm. Prolonged exposure to the cold can cause frostbite or hypothermia (low body temperature) and become life-threatening. Infants and elderly people are most susceptible. Pipes may freeze and burst in homes that are poorly insulated or without heat. Long cold spells can cause rivers to freeze; and ice jams may form and lead to flooding.

#### **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.

## Preparing for Winter Storms – Weather Warnings and Terms

### Winter Weather Terms

- **Freezing rain** occurs when temperatures are below 32°F and rain freezes on impact. This causes an ice coating on all exposed surfaces. If the coating is heavy, falling trees or wires can be additional hazards. Freezing rain or drizzle is called an ice storm when a substantial glaze layer accumulates.
- **Sleet** is frozen rain drops (ice pellets), which bounce on surface impact. Sleet does not stick to objects, but sufficient accumulation can cause dangerous driving conditions.
- **Traveler’s advisory** means that falling snow and/or drifting snow, strong winds, freezing rain or drizzle will make driving hazardous.
- **Heavy snow warnings** are issued when 4 or more inches are expected during a 12-hour period, or when 6 inches or more are expected during a 24-hour period.
- **Blizzard warnings** are issued when wind speeds of 35 miles per hour or more are expected with blowing or drifting snow. Blowing, falling, or loose snow on the ground can produce sizeable drifts.
- **Snow squalls** are brief, intense snowfalls accompanied by gusty surface winds.
- **Wind chill factor** is the combined effect of wind and cold. A very strong wind combined with a below freezing temperature can have the same chilling effect as a temperature almost 50 degrees lower with no wind.

### Winter Weather Watches

- “**Winter Storm Watch**” – Be alert; a storm is likely.
- “**Winter Storm Warning**” – Take action; the storm is in or entering the area.
- “**Blizzard Warning**” – Snow and strong winds combined will produce blinding snow, near zero visibility, deep drifts, and life-threatening wind chill – seek refuge immediately!
- “**Winter Weather Advisory**” – Winter weather conditions are expected to cause significant inconveniences and may be hazardous, especially to motorists.
- “**Frost/Freezing Warning**” – Below freezing temperatures are expected and may cause damage to plants, crops, or fruit trees.

*Adapted from resource material developed by the National Weather Service*