

...HIGH WIND, COASTAL FLOODING AND EROSION, AND DENSE FOG THREATS...

In addition to snow, sleet, freezing rain and rain, winter storms bring the threat of high winds and coastal flooding to northern New England. Dense fog, caused by warm air moving over cold snow-covered ground, is also a frequent hazard in northern New England during the winter and early spring.

...High winds...

High winds can occur before, during, and after major winter storms and can make driving difficult and dangerous, especially if you drive a high profile vehicle. If your vehicle starts to swerve due to the wind, slow down. High winds can cause snow to blow and drift, reducing visibilities and causing slippery conditions on the roadways. Also, high winds bring increased danger from falling trees, which can lead to power outages.

To alert the public to potentially dangerous wind events, the National Weather Service issues HIGH WIND WATCHES, HIGH WIND WARNINGS, and WIND ADVISORIES. These alerts are based on the following criteria.

HIGH WIND WATCH - Sustained winds of 40 mph or greater or frequent gusts to 58 mph or greater are possible within the next 24 to 48 hours.

HIGH WIND WARNING - Sustained winds of 40 mph or greater or frequent gusts to 58 mph or greater are likely within the next 24.

WIND ADVISORY - Sustained winds of 31 to 39 mph or frequent gusts to between 46 and 57 mph are likely within the next 24 hours.

In addition, WINTER WEATHER ADVISORIES are issued when blowing and drifting snow reduces visibilities to 1/4 mile or less creating a significant hazard on the roadways.

...Coastal flooding and beach erosion...

Coastal flooding can precede or accompany major winter storms. Strong south, southeast, east, and northeast winds can cause water to pile up along the Maine and New Hampshire coastlines causing tide levels to rise above normal. In addition to abnormally high tides, large waves associated with a storm can cause substantial beach erosion along the coastline.

To alert the public to the potential for coastal flooding, the National Weather Service issues COASTAL FLOOD WATCHES and COASTAL FLOOD WARNINGS. In determining the potential threat from a particular storm, the National Weather Service considers the timing and height of the normal tides, the timing of the storm, and the expected storm surge that will accompany the storm.

COASTAL FLOOD WATCH - Coastal flooding possible within the next 24 to 48 hours.

COASTAL FLOOD WARNING - Coastal flooding likely within the next 24 hours.

Note that beach erosion can occur from large storm-generated waves even though the tide levels may not be above flood levels. In these cases, the likelihood and severity of any beach erosion is addressed in the public forecast product.

...Dense fog...

During late winter and early spring, warm air moving northward from areas to our south, often encounters the cold snow-covered ground in northern New England. This combination of warm air moving over a cold surface often results in the formation of dense fog. Precipitation will also enhance the likelihood of dense fog formation. Motorists should be extremely careful when driving in these conditions. Visibilities may change from good to near-zero visibility in a matter of feet. In some cases, the fog may be so dense that it may be difficult to even see the edge of the road. In addition, dense fog may hide other hazards such as deer or moose in the roadway, stopped motorists, or flooding. Be especially careful at night.

To alert the public to these dangerous conditions, the National Weather Service issues DENSE FOG ADVISORIES. DENSE FOG ADVISORIES are issued for cases when widespread dense fog creates near-zero visibility over a large area.

PREPAREDNESS TIP FOR THE DAY:

One of the greatest dangers during high wind events is from falling trees and/or tree limbs. To reduce the danger from high winds, cut down any dead or diseased trees and prune any tree limbs that could potentially fall on someone or something before they fall.

QUESTION OF THE DAY:

Do hurricanes or winter storms cause the highest storm surges along the Maine and New Hampshire coastlines?

ANSWER: Both hurricanes and winter/spring storms can cause significant storm surges along the Maine and New Hampshire coastlines. However, because the coast gets hit by many more winter storms than hurricanes, the greatest surges in the past have come from winter or spring storms. In fact, of the top ten surges recorded in Portland, nine were from winter/spring storms while only one was from a hurricane (Hurricane Carol, 1954, tie for 8th highest surge). The greatest surge reported in Portland was 4.3 feet on March 3, 1947. This compares with the 3.3 ft surge observed with Hurricane Carol.

On February 2, 1976, an intense winter storm caused a storm surge along the mid and Downeast coast of Maine from Brunswick to Eastport. After reaching the coast, the surge of water funneled up the Penobscot River causing a surge of over 10 ft in the city of Bangor. Reportedly, at around 11 am, the water level in the city rose more than 12 ft in just 15 minutes, submerging approximately 200 vehicles. Many people were trapped in buildings by the frigid water, and some

had to be rescued quickly from the tops of their cars.