

# Flood Risks Across the Country



*Many people think that if they do not live near a river or the coast, they are not in danger of flooding — not true. Flooding is the nation's number one natural disaster, and it occurs inland and on the coast. Flash floods, inland flooding and seasonal storms flood every region of the country. Twenty to 25 percent of all flood insurance claims are filed in low-to-moderate flood-risk areas.*

*Flooding causes damage and destruction across regions nationwide — wiping out homes, businesses and personal financial resources. People need to know that they can take steps to protect their property and financial security before disaster strikes. However, many eligible residents are unaware that they qualify or that affordable flood insurance is available.*

## WHAT IS A FLOOD?

Flood insurance covers direct physical loss caused by “flood.” In simple terms, a flood is an excess of water on land that is normally dry. The National Flood Insurance Program’s definition of a flood is “a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from:

- Overflow of inland or tidal waters;
- Unusual and rapid accumulation or runoff of surface waters from any source;
- Mudflow (a river of liquid and flowing mud on the surfaces of normally dry land areas); or
- Collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood as defined above.”

## CAUSES OF FLOODING


Every part of the country is at risk for flooding from several causes. Some causes are seasonal, but other causes can happen at any time and are always a possibility.

**Coastal Floods/Storm Surge:** Winds generated from intense storms can cause widespread tidal flooding and severe beach erosion along coastal areas. Storm surges are large waves pushed toward the coast by strong winds associated with the storm. When combined with the tide, storm surges can cause water levels to rise up to 15 feet or more, deluging coastal communities. Hurricane-force winds can bring these large waves crashing into coastal communities in the summer months and nor’easters can bring these waves to the Northeast in the winter.

Winter also brings strong storms to the Great Lakes. Winds can push water levels up at one end of the lake, causing a storm surge and decreased water levels at the other end of the lake. As the winds subside, a pendulum effect begins until the water levels have returned to normal. These oscillations or seiches can cause coastal flooding on both lakefronts.

**Inland Flooding:** Inland areas are also at risk for flooding from hurricanes. Slow-moving and stalled systems can dump large amounts of rain, causing devastating inland floods days after a storm makes landfall and hundreds of miles away from the initial strike zone. For example, in 2004, inland flooding from Hurricane Ivan caused more than \$115 million in paid flood losses in Pennsylvania.

**Riverine Flooding:** Riverine flooding generally occurs as a result of precipitation or snowmelt. Rivers and streams become inundated by water causing them to spill over their banks.



Riverine flooding sometimes happens seasonally as the winter snow melts. Heavy, slow-moving thunderstorms and tropical systems also can cause riverine flooding, as they drop substantial amounts of rain into the river basin. A combination of many factors, such as hurricanes, ice jams and snowmelt, often leads to the most severe riverine floods.

**Urban Flooding:** New development in urban areas can greatly affect the natural drainage patterns. Increased amounts of pavement also reduce the ability for rainwater to be absorbed, increasing the volume of runoff. Precipitation from a heavy storm can exceed the capacity of local sewer systems, forcing the excess water into streams, lakes and rivers. These bodies also can be overwhelmed leading to localized flooding and flash floods. In some cases, these floods can be devastating to a local area but may not qualify for federal or state assistance. In these cases, flood insurance may be the only financial assistance consumers can get other than personal loans.

**Ice Jams:** Long cold spells can cause the surface of rivers to freeze. A rise in the water level or a thaw breaks the ice into large chunks, which become jammed at man-made and natural obstructions. Ice jams can act as a dam, resulting in severe flooding. A sudden release of an ice jam also can cause flooding. When the water is released, it can flow downstream very quickly, causing a significant rise in water levels in a very short period of time.

**Snowmelt:** A sudden thaw of a heavy snow pack can lead to flooding. A midwinter or early spring thaw can produce high amounts of runoff in a short period of time. Because of the hard, frozen ground, water cannot penetrate and be reabsorbed. The water then runs off the surface and flows into lakes, streams and rivers. This situation can be made worse if the thaw is caused by heavy, warm rains.

Consumers can visit [FloodSmart.gov](http://FloodSmart.gov) or call **1-800-427-2419** to learn how to prepare for floods, how to purchase a flood insurance policy, and what the benefits are of protecting their homes and property against flooding.