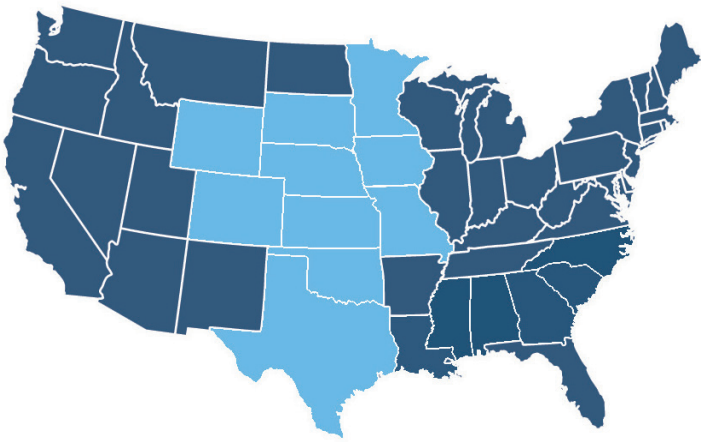
Insurance Institute for Business & Home Safety ®

Hail Facts

- Hail causes about $1 billion dollars in damage to property and crops each year, according to the National Oceanic and Atmospheric Administration (NOAA).

- In 2012, the second most costly natural catastrophes for U.S. insurers were thunderstorms that occurred between March and July. Sandy caused the most insured losses with approximately $25 billion in claims expected, and thunderstorms were right behind at $23.5 billion. Losses from thunderstorms include claims for hail and wind damage. Source: Munich Re NatCatSERVICE

- According to NOAA's Severe Storm database, the states that typically have the highest hail risk include Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, Oklahoma, South Dakota, Texas, and Wyoming. Peak months for high hail activity are historically March, April, May, and June.



States that typically have the highest hail risk, according to NOAA's Severe Storm database.

- According to the Texas Department of Insurance, hail was the number one cause of homeowners insurance losses in Texas during the period from 1999-2011, at $10.4 billion. Water-related losses were second at $8.9B, followed by hurricane-related losses at $6.7B, and fire-related losses at $5.9B.

- The largest hailstone in terms of diameter and weight ever recorded in the U.S. fell on July 23, 2010, in Vivian, South Dakota; it measured 8 inches in diameter and 18.62 inches in circumference, weighing in at 1.93 pounds. This broke the previous record for diameter set by a hailstone 7 inches diameter and 18.75 inches circumference (still the greatest circumference hailstone), which fell in Aurora, Nebraska in the U.S. on June 22, 2003, as well as the record for weight, set by a hailstone of 1.67 pounds that fell in Coffeyville, Kansas in 1970.

The largest hailstone recorded in the U.S. at 8 inches in diameter and 18.62 inches in circumference. Photo courtesy of NOAA.

- Hailstorms do not usually cause fatalities, but approximately 24 people are injured each year by hail in the U.S. The last fatality in the U.S. attributed to hail was in Lake Worth Village, Texas on March 28, 2000. A 19-year old man was struck by softball sized hail while trying to move a new car. He died the following day from associated head injuries.

- Hail can originate from any thunderstorm, but large hail is most common in rotating thunderstorms called supercells. Nearly all supercells produce hail, while less than 30% of supercells produce tornadoes.

- Hailstones can vary from pea size up to grapefruit size or larger. Estimating hail size (diameter):

Pea = ¼ inch

Mothball = ½ inch

Dime/Penny = ¾ inch

Nickel = 7/8 inch

Quarter = 1 inch

Ping-Pong Ball = 1 ½ inches

Golf Ball = 1 ¾ inches

Tennis Ball = 2 ½ inches

- National Weather Service (NWS) Dual-Polarization Doppler Radar can estimate the size of hail by the characteristics of the energy scattered back to the radar from within a thunderstorm. Although not 100% accurate, new radar algorithms are currently being developed and improved upon to increase the hail detection accuracy.

- Hail one-inch (quarter size) or larger is considered "severe" by the NWS.

Baseball = 2 ¾ inches

Tea Cup = 3 inches

Grapefruit = 4 inches

Softball = 4 ½ inches