

Precipitation Definitions

- **Rain:** Falling drops of water larger than 0.02 inches in diameter. In forecasts, "rain" usually implies that the rain will fall steadily over a period of time. See "showers" below.
- **Light rain:** Falls at the rate of 0.1 inch or less an hour.
- **Moderate rain:** Falls at the rate of 0.11 to 0.30 inches an hour.
- **Heavy rain:** Falls at the rate of 0.30 inches an hour or more.
- **Drizzle:** Falling drops of water smaller than 0.02 inch in diameter. They appear to float in air currents, but unlike fog, do fall to the ground.
- **Light drizzle:** Drizzle with visibility of more than 5/8 of a mile.
- **Moderate drizzle:** Drizzle with visibility from 5/16 to 5/8 of a mile.
- **Heavy drizzle:** Drizzle with visibility of less than 5/16 of a mile.
- **Showers:** Rain that falls intermittently over a small area. The rain from an individual shower can be heavy or light, but doesn't cover a large area or last more than an hour or so.
- **Snow:** Falling ice composed of crystals in complex hexagonal forms. Snow forms mainly when water vapor turns directly to ice without going through the liquid stage, a process called sublimation.
- **Snowflakes:** Aggregations of snow crystals.
- **Snow flurries:** Light showers of snow that do not cover large areas and do not fall steadily for long periods of time.
- **Snow grains:** Very small snow crystals. The ice equivalent of drizzle.
- **Snow pellets:** White, opaque ice particles that form as ice crystals fall through cloud droplets that are below freezing but still liquid (supercooled). The cloud droplets freeze to the crystals forming a lumpy mass. Scientists call snow pellets "graupel." Such pellets falling from thunderstorms are often called "soft hail."
- **Sleet:** Drops of rain or drizzle that freeze into ice as they fall. They are usually smaller than 0.3 inches in diameter. Official weather observations list sleet as "ice pellets." In some parts of the country "sleet" refers to a mixture of ice pellets and freezing rain.
- **Freezing rain or drizzle:** Falling rain or drizzle that cools below 32 degrees F, but does not turn to ice in the air. The water is "supercooled." When the drops hit anything they instantly turn into ice.
- **Ice storm:** A storm with large amounts of freezing rain that coats trees, power lines and roadways with ice. Often the ice is heavy enough to pull down trees and power lines.
- **Hail:** Falling ice in roughly round shapes at least 0.2 of an inch in diameter. Hail comes from thunderstorms and is larger than sleet. Hailstones form when upward moving air -- updrafts -- in a thunderstorm keep pieces of graupel from falling. Drops of supercooled water hit and freeze to the graupel, causing it to grow. When the balls of ice become too heavy for the updrafts to continue supporting them, they fall as hailstones. Sleet, in contrast, consists of raindrops that freeze on the way down.
- **Thunderstorm:** A rain or snow shower in which there is lightning. Thunder is always caused by lightning. In general, the upward and downward winds, updrafts

and downdrafts, in thunderstorms are more violent than those in ordinary showers.

- **Thundersnow:** A thunderstorm with snow instead of rain falling on the ground.
- **Severe thunderstorm:** A thunderstorm with winds of 57 mph or faster or hail more than 3/4 inch in diameter reaching the ground. Severe thunderstorms can also produce tornadoes.