

***Summer Weather Definitions:**

Watch means conditions are right in the atmosphere for severe weather to develop. Watch for sudden changes in the weather and be prepared to act quickly. Watches are issued for tornadoes, severe thunderstorms, and floods. They are usually valid for a long time (6 hours) and for a large area (half the state of ND).

Warning means severe weather has been reported, or based on radar and other data, meteorologists at your National Weather Service believe it is occurring. Get to a safe shelter immediately if you are in the warned area. Warnings are issued for tornadoes, severe thunderstorms, and flash floods. They are usually issued for a short time (an hour or less) and for small areas (a county or smaller). Note that flash flood warnings may be issued for several hours and for a few counties.

Funnel Cloud is a rotating column of air not in contact with the ground.

Tornado is a violently rotating column of air extending from a thunderstorm to the ground. A visible funnel is not needed. Look for rotation on the ground.

Severe Thunderstorm is a thunderstorm that produces 58 mph (or higher) wind and 1” (or larger) diameter hail. Note that a quarter is 1” in diameter. Hail the size of a quarter, or larger, meets the severe criteria.

****Flash Flood**

A flash flood is a rapid rise of water along a stream or low-lying urban area. Flash flood damage and most fatalities tend to occur in areas immediately adjacent to a stream or arroyo, due to a combination of heavy rain, dam break, levee failure, rapid snowmelt, and ice jams. Additionally, heavy rain falling on steep terrain can weaken soil and cause debris flow, damaging homes, roads, and property.

Flash floods can be produced when slow moving or multiple thunderstorms occur over the same area. When storms move faster, flash flooding is less likely since the rain is distributed over a broader area.

Densely populated areas have a high risk for flash floods. The construction of buildings, highways, driveways, and parking lots increases runoff by reducing the amount of rain absorbed by the ground. This runoff increases the flash flood potential. Sometimes, streams through cities and towns are routed underground into storm drains. During periods of heavy rainfall, storm drains may become overwhelmed and flood roads and buildings. Low spots, such as underpasses, underground parking garages, and basements can become death traps.

*from Dakota Skies, 2010 NWS publication

**From the NWS “Floods – the Awesome Power” publication. March 2005