

Definitions



SEVERE THUNDERSTORM DEFINITION: A severe thunderstorm as defined by the National Weather Service is a storm with hail = or > than 3/4" in diameter or convective wind gusts = or > than 58 mph. Even if a storm is not severe, it still remains a potential killer. Lightning, flash flooding, wind blown hail (even small hail), and general thunderstorm wind gusts pose a threat to life and / or property. Severe thunderstorms also have the potential of producing a tornado with little or no advanced tornado warning.

NOAA WATCH AND WARNING DEFINITIONS:

SEVERE THUNDERSTORM WATCH- The conditions are favorable for the development of thunderstorms that will contain hail = or > than 3/4" in diameter or convective wind gusts = or > than 58 mph. Severe thunderstorms are also capable of producing a tornado

TORNADO WATCH- The conditions are favorable for the development of tornadic storms

SEVERE THUNDERSTORM WARNING- A severe thunderstorm has been spotted by a valid storm spotter or there is strong evidence from radar data that a severe thunderstorm is occurring

TORNADO WARNING- A tornado has been spotted by a valid storm spotter or there is strong evidence from radar data that a tornado is occurring



A tornado - is a "violently rotating column of air in association with a cumulonimbus cloud that is in contact with the earth's surface".

The **Fujita Scale** is the standard scale for rating the severity of a tornado as measured by the damage it causes. A tornado is usually accompanied by thunder, lightning, heavy rain, and a loud "freight train" noise. In comparison with a cyclone or hurricane, a tornado covers a much smaller area but can be more violent and destructive.

Hazard Mitigation -any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards"

Natural Disaster - any condition affecting or threatening public health, welfare, safety or security including, but not limited to flood, tornado, earthquake, wind, storm, winter storm or other natural cause.

Manmade Disaster - shall mean incidents such as dam failure, power failure, structural fires, hazardous materials both fixed facility and transportation, radiological both fixed facility and transportation, transportation accidents such as air, rail, highway, water, and other incidents which are beyond the control of regular forces.

Winter Weather Definitions



Black Ice- thin, new ice that forms on fresh water or dew covered surfaces; it is common on roadways during the fall and early winter and appears "black" because of its transparency.

Blizzard- Includes winter storm conditions of sustained winds or frequent gusts of 35 mph or more that cause major blowing and drifting of snow, reducing visibility to less than one-quarter mile for 3 or more hours. Extremely cold temperatures often are associated with dangerous blizzard conditions.

Blowing Snow- Wind driven snow that reduces visibility to six miles or less causing significant drifting. Blowing snow may be snow that is falling and/or loose snow on the ground picked up by the wind.

Brisk- Wind in the range of 15 to 25 mph when the temperature is cold.

Flurries- Light snow falling for short durations. No accumulation or just a light dusting is all that is expected.

Freeze- Occurs when the surface air temperature is expected to be 32 degrees Fahrenheit or below over a widespread area for a significant period of time.

Freezing Drizzle- Drizzle that falls in liquid form and then freezes upon impact with the ground or an item with a temperature of 32 degrees Fahrenheit or less, possibly producing a thin coating of ice. Even in small amounts, freezing drizzle may cause traveling problems.

Freezing Rain- Rain that freezes on objects such as trees, cars and roads, forming a coating or glaze of ice. Temperatures at higher levels are warm enough for rain to form, but surface temperatures are below 32 degrees Fahrenheit, causing the rain to freeze on impact. Frost- The formation of thin ice crystals on the ground or other surfaces. Frost develops when the temperature of the exposed surface falls below 32 degrees Fahrenheit and water vapor is deposited as a solid.

Heavy snow- Depending on the region of the USA, this generally means that four or more inches of snow has accumulated in 12 hours, or six or more inches of snow in 24 hours.

Ice Storm- Liquid rain falling and freezing on contact with cold objects creating ice build-ups of 1/4th inch or more that can cause severe damage.

Wind Chill- The additional cooling effect resulting from wind blowing on bare skin. The wind chill is based on the rate of heat loss from exposed skin caused by the combined effects of wind and cold. The (equivalent) wind chill temperature is the temperature the body "feels" for a certain combination of wind and air temperature.

Flood: An overflow of water onto normally dry land. The inundation of a normally dry area caused by rising water in an existing waterway, such as a river, stream, or drainage ditch. Ponding of water at or near the point where the rain fell. Flooding is a longer term event than flash flooding: it may last days or weeks.



Flash flood: A flood caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Flash floods are usually characterized by raging torrents after heavy rains that rip through river beds, urban streets, or mountain canyons sweeping everything before them. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen, for instance after a levee or dam has failed, or after a sudden release of water by a debris or ice jam.