



National Weather Service Pittsburgh

Weather Spotter Quick Reference Guide

Your reports are critical to helping the NWS achieve its mission of saving lives and property through the issuance of timely warnings. The **NWS needs these reports**: tornadoes, funnel clouds, hail of any size, wind gusts (estimated or measured) of 50 mph or higher, flooding (water closing roads or entering buildings), and impact of damage (property, trees, power-lines, etc). Being an effective weather spotter may take years to master, and takes practice. **Remember, you are mobile! Report severe weather or damage wherever you are!**



NWS Pittsburgh, PA Contact Information

Trained Spotter Phone Number: 412-262-2170

E-mail: pbz-skywarn@noaa.gov

Website: <http://weather.gov/pittsburgh>

Facebook: [NWSPittsburgh](https://www.facebook.com/NWSPittsburgh)

Twitter: [@NWSPittsburgh](https://twitter.com/NWSPittsburgh)



Tips for Providing Useful Reports

- Safety first (report is #2 priority). Never put yourself or others in harm's way.
- Know what you're reporting. False reports do more harm than no report at all. Not sure? – Don't report.
- Tools to help you provide accurate reports include:
 - NOAA Weather Radio -Accurate Clock
 - Map/GPS -Paper and Pencil
 - Ruler -This Guide Sheet
- **Report the Time, Event and Location (TEL) of event:**
 - Exact **Time** event *occurred* and time of call.
 - **Event** details, including any damage, injuries and fatalities.
 - **Location** of Event – Address, Lat/Lon, or distance and direction from a landmark (city, intersection, etc).
 - (Optional) Your name, e-mail , or phone number, so we can contact you if we have questions.
- **An example of an accurate report to the NWS:**
"My name is Joe Smith and I am a trained weather spotter. At 558 pm, I observed straight-line wind gusts estimated at 65 mph about 1.2 miles south of Any Town, PA in Any County. A tree fell onto a house injuring 2 people near the intersection of A and B Streets."



What to Report

Severe Thunderstorm Winds (severe criteria: 58 mph winds or greater)

- 1) Estimated or measured winds of 58 mph or higher (can estimate using Straight-line Wind Gust Estimate Table on back page)
- 2) Downed power lines, trees or limbs (include diameter of tree limbs)
- 3) Any structural damage, including type of structure damaged

Tornadoes and Funnel Clouds

- 1) What is the exact location of the tornado or funnel cloud?
- 2) Is cloud rotation evident?
- 3) Is there damage on the ground?
- 4) What direction is the tornado or funnel cloud moving?
- 5) If known, how long has it been on the ground?

Hail (severe criteria: 1 inch diameter hail or larger)

- 1) Report hail of any size (use the largest hail stone) and any damage
- 2) To estimate size, compare hail to well known objects such as coins or balls, but not to marbles, or measure the hail with a ruler (see Hail Chart on back page)

Significant Flooding

- 1) Roads impassable or closed due to high water
- 2) Water entering homes or businesses



Watch/Warning Definitions

Severe Thunderstorm Watch - Conditions are favorable for thunderstorms to produce large hail in excess of 1 inch, and/or damaging winds 58+ mph; Isolated tornado possible.

Severe Thunderstorm Warning - Radar has detected, or a report has indicated, a severe thunderstorm producing large hail or damaging winds in progress or imminent.

Tornado Watch - Conditions are favorable for tornadoes.

Tornado Warning - Radar has indicated a possible tornado or a report has indicated a tornado in progress.



To receive spotter certificate/update contact information: weather.gov/pbz/skywarn



Weather Hazards and Safety



Severe Thunderstorm Wind Safety

- Keep a firm grip on vehicle's steering wheel for control.
- If you can, point your vehicle into the wind to minimize risk of vehicle overturning.
- Watch for sudden low visibility (heavy rain, dust, etc.)
- If inside, move away from windows
- Look up! Stay away from trees, power lines, etc. that can fall.



Tornado Safety

- Go to a basement or small interior room on the lowest floor.
- Get out of mobile homes and vehicles.
- NEVER try to outrun tornadoes in your car.
- Don't take shelter under bridges or overpasses



Hail Safety

- Sturdy structures & buildings offer the best protection
- If in a vehicle, avoid parts of storm where large hail is occurring.
- Hard-top vehicles offer the best protection from hail up to golf-ball size.
- Larger hail will damage or break out windshields.
- Remember large hail can break and bring down items from above such as signs, tree limbs, power lines, etc.



Flash Flood Safety

- **TURN AROUND...DON'T DROWN!**
- Never try to cross a flooded road or low water crossing as you can't be sure of the water's depth and the road may be washed out!
- 2 feet of moving water will carry away most vehicles.
- 6 inches of moving water can knock you off your feet.
- If your vehicle is suddenly caught in rising water, leave it immediately if you can, get to higher ground.
- Be especially vigilant at night when flash floods are harder to see and recognize.



Lightning Safety

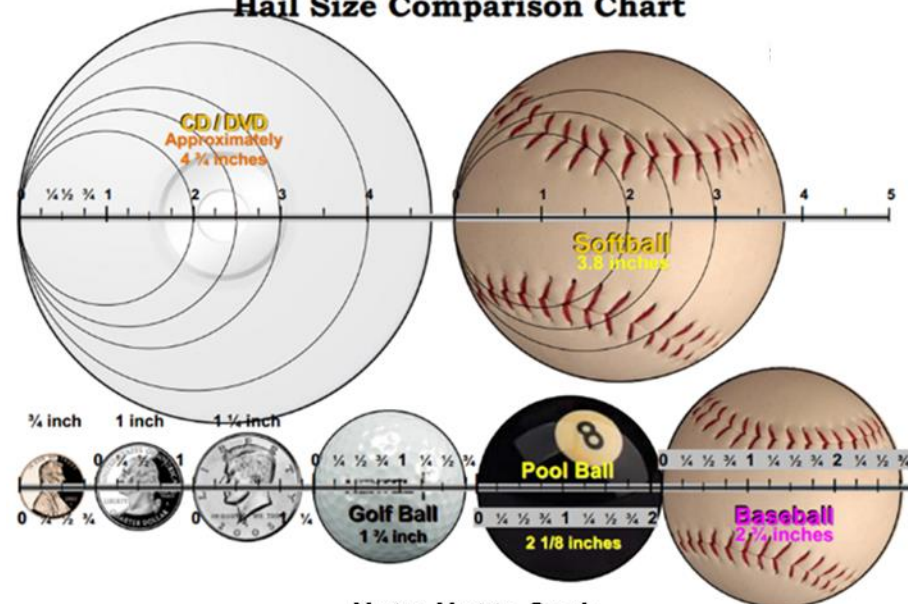
- Avoid being the tallest object!
- Stay away from water and metal.
- Best protection is in sturdy buildings.
- Stay off radios, corded phones, stay away from windows & appliances
- If inside a hard-tipped vehicle, avoid contact with metal frame
- Stay under cover until 30 minutes after last clap of thunder.



Reference Tables and Charts

Straight-line Wind Gust Estimates	
45-57 mph (39-49 kts)	Non Severe - Large trees bend; twigs, small limbs break, and a few larger dead or weak branches may break. Old/weak structures (e.g., sheds, barns) may sustain minor damage (roof, doors). Some loose shingles may be removed from houses.
58-74 mph (50-64 kts)	Severe - Large limbs break; shallow rooted trees pushed over. Semi-trucks overturned. More significant damage to old / weak structures. Shingles, awnings removed from houses; damage to chimneys and antennas; mobile homes, carports incur minor structural damage; large billboard signs may be toppled.
75-89 mph (65-77 kts)	Hurricane Force - Widespread tree damage (trees either broken or uprooted). Mobile homes may incur more significant structural damage; be pushed off foundations or overturned. Roofs may be partially peeled off industrial/commercial/warehouse buildings. Some minor roof damage to homes. Weak or open structures (e.g. farm buildings, airplane hangars) may be severely damaged.
90+ mph (78+ kts)	Significant Severe - Groves of trees flattened. Mobile homes severely damaged; moderate roof damage to homes. Roofs partially peeled off homes and buildings. Barns and sheds completely demolished.

Hail Size Comparison Chart



Note: Not to Scale