# Spotter Reference Guide — 2019

#### **HOW TO REPORT**

Spotter Line:



#### Other methods:

• Facebook:

**NWSDetroit** 



Twitter:

@NWSDetroit



- County Net
- · Winlink:

K8DTX@winlink.org

• E-mail:

nwslidtx@noaa.gov

Mobile App: MPing

https://mping.nssl.noaa.gov/

### **On Reverse Side**

Wind Scale

Hail Correlation

4 Season Reporting

# **NOAA's National Weather Service Detroit/Pontiac Mi**

#### WHAT TO REPORT

- · Wind gusts of 40 mph or greater
  - Remember winds greater than 58 mph are severe
- Hail ½ inch diameter or greater
- Tornados, waterspouts, or funnel clouds
- Post-storm damage
  - Even if the storm has long passed
- Water that covers roads or threatens property
- Rainfall rates greater than 1 inch per hour

### **OTHER NWS REQUIREMENTS**

- When reporting either wind or hail, please tell us whether it is **measured** or **estimated**.
- Time the event occurred (not what time you are reporting).
- Location of where the event occurred:

Distance and direction from nearest town or

Major street intersections or

Latitude and longitude (if available)



### WEB SITES OF INTEREST ...

www.weather.gov/dtx (NWS Detroit/Pontiac Homepage)

www.weather.gov/dtx/spot\_train (Spotter Resources)

www.weather.gov/dtx/skywarncert (Skywarn Spotter Certificate)

www.spc.noaa.gov (NWS Storm Prediction Center)

www.ready.gov (Storm Preparedness)

www.weather.gov/owlie/publication\_brochures (NWS Brouchures)

www.weather.gov/safety/ (NWS Safety Infographics)





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#### WIND SCALE

| MPH     | Description  |                                |  |  |
|---------|--|--------------------------------|--|--|
| 25-31   | Large branches in motion; whistling heard in telephone wires       |                                |  |  |
| 32-38   | Whole trees in motion; inconvenience felt walking through the wind |                                |  |  |
| 39-54   | Twigs break off trees; wind generally impedes progress             |                                |  |  |
| 55-72   | Damage to chimneys, TV antennas; shallow-rooted trees toppled      |                                |  |  |
| 73-112  | Peels surfaces off roofs; windows broken; light mobile homes       |                                |  |  |
|         | overturned; moving cars pushed off road                            |                                |  |  |
| 113-157 | Roofs torn off houses; cars lifted off ground                      | Bold = Severe Warning Criteria |  |  |

#### HAIL CORRELATION

| Quarter   | 1.00 inch | Tennis Ball | 2.50 inches | CD/DVD      | 4.75/5 inches |
|-----------|-----------|-------------|-------------|-------------|---------------|
| Nickel    | 0.88 inch | Lime        | 2.00 inches | Grapefruit  | 4.50 inches   |
| Penny     | 0.75 inch | Golf Ball   | 1.75 inches | Softball    | 4.00 inches   |
| Plain M&M | 0.50 inch | Ping Pong   | 1.50 inches | Large Apple | 3.00 inches   |
| Pea       | 0.25 inch | Half Dollar | 1.25 inches | Baseball    | 2.75 inches   |

#### **4 SEASON REPORTING**

- Snow Report when first inch has fallen, each additional 2 inches, storm total, and 12 hour totals ending at 7 am/pm
- Rain Report amounts of 1 inch or greater in 24 hours
- Freezing Rain / Sleet Estimate the amount of glazing (i.e. ¼ inch, ½ inch)
- Flooding and Ice Jams Water covering roads or threatening property
- Non-Thunderstorm Wind Gusts 40+ mph or damage caused by strong winds
- Fog Report when visibility reaches ¼ mile or lower





#### NATIONAL WEATHER SERVICE DETROIT/PONTIAC

# **WEATHER SAFETY**

# **Hazardous Weather & Staying Safe**

Michigan residents are faced with hazardous weather conditions numerous times every year. It is important for people to know what hazards are possible so they can take the appropriate precautions. Creating a plan that can be swiftly executed is the first step in protecting yourself and your family from dangerous weather conditions.

## Severe Local Storm Watches & Warnings

Watches: issued up to 6 hours before storms are expected

**Warnings:** issued for a 10-60 minute window when strong storms are imminent in your community

#### Severe Thunderstorms

- Greatest threat that Michigan residents face due to rapid development
- Can produce: straight line winds over 60mph, large hail, flooding, lightning, & tornadoes
- Southeast Michigan averages 30-40 thunderstorm days per year
- Most deaths & injuries result form straight line winds in Michigan

**Severe Thunderstorm Warning:** Hail larger than 1 inch in diameter or winds greater than 58 mph

#### **Tornadoes**

- Michigan averages 15 tornadoes a year, with largest number of tornadoes during the warm months from April-September
- Possible day or night at any hour, even during winter months under rare conditions

**Tornado Warning:** Issued when Doppler radar indicates rotation descending towards the ground or when a reliable tornado report is received

# **Take Action & Be Prepared!**

Michigan residents are encouraged to practice tornado drills at home, work, and schools every spring during Severe Weather Awareness week. Safest place to be in a tornado is below ground in a basement. Please reference the instructions on the back for where to seek shelter if a basement is not available.

#### Prepare. Plan. Stay Informed.

Visit www.Ready.gov to find out how you can prepare for different weather and non-weather related emergencies. There are 3 easy steps to follow!

- 1) Get a Kit
- 2) Make a Plan
- 3) Be Informed

#### **MISSION STATEMENT**

The National Weather Service issues weather forecasts & warnings for the protection of life and property and to enhance the National economy.

#### **DID YOU KNOW?**

The National Weather Service is the only agency able to issue weather watches and warnings in the United States.

### SKYWARN SPOTTERS



Skywarn Weather Spotters provide a valuable service to the National Weather Service by reporting storm damage, precipitation, and other observed weather phenomena. Please contact the NWS to find out when the next training class will be offered in your area.

# NATIONAL WEATHER SERVICE DETROIT/PONTIAC

9200 White Lake Rd White Lake, MI 48386 Phone: 248-625-3309 FAX: 248-625-4834

#### **Have a Plan!**

#### Where to seek shelter from a Tornado?

Always seek shelter in a basement. If no basement is available then:

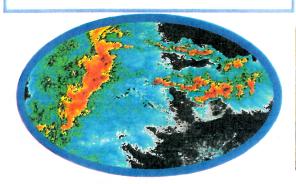
- Seek shelter on the lowest level of the building (in a designated tornado shelter if available).
- 2. Avoid windows and exterior walls.
- Get into a small interior room such as a bathroom or closet.
- Get under something sturdy like a desk or stairwell.
- Use pillows, blankets, or clothing to shelter yourself from debris.

If you are driving or in a mobile home:

- Get into a sturdy building as quickly as possible.
- 2. Do not attempt to out run a tornado.

If you can not make it to a sturdy building and encounter flying debris while driving, as a last resort your options are:

- Stay in the car with the seat belt on. Put your head down below the windows, covering with your hands and a blanket if possible.
- If you can safely get noticeably lower than the level of the roadway, exit your car and lie in that area, covering your head with your hands.



NOAA Weather Radio ALL Hazards is a 24-hour continuous broadcast of weather information that can be heard on specially designed receivers, available to the public. During rapidly changing conditions, tune to the NOAA Weather Radio All Hazards for the latest forecasts and warnings. These radios may be programmed to sound an alarm when a warning is issued for the county you live in. Through partnerships with local governments, these radios will also alert the public to nonweather related emergencies such as 911 telephone outages, blackouts, or hazardous material releases. These radios are manufactured by several different companies and are sold at most electronics stores.



#### Websites

www.weather.gov/dtx-Local Detroit/Pontiac NWS Office

www.spc.noaa.gov-Storm Prediction Center

www.noaa.gov-National Oceanic and Atmospheric Administration (NOAA)

www.wpc.ncep.noaa.gov- Weather Prediction Center

www.weather.gov/safety.php-National Weather Service Safety Education Page

www.lightningsafety.noaa.gov-Lightning Safety Awareness Week

www.floodsafety.noaa.gov-Flood Safety Awareness Week

www.ready.gov- FEMA emergency preparedness page

#### **Lightning Safety**

- It is never safe to be outdoors during thunderstorms.
- It does not have to be raining to get struck by lightning.
- Avoid showering
- Do not use telephones with cords
- Picnic shelters do not offer protection from thunderstorms.



 Hard topped vehicles do offer protection from non-severe thunderstorms.



#### Flooding Safety

Flooding is responsible for the most fatalities of any weather related hazard nationwide. Rushing water can be extremely powerful and can wash out roads. A car may float in only 12-24 inches of water, causing a motorist to lose control of their vehicle. Aside from being dangerous, this can also cause significant damage to your engine. The National Weather Service recommends never driving into water covered roads. It is always better to

find another route and be



#### Winter Weather

Many hazards threaten Michigan residents during the winter months including strong winds, heavy snow, dangerous wind chills, extreme cold, and even ice jams on local rivers. The National Weather Service issues Watches, Warnings, and Advisories to alert the public to the threat of dangerous conditions.

**Watches** will be issued 24-48 hours before the hazardous weather arrives. The Watch gives people time to make preparations and alter plans before the hazard occurs.

Advisories will be issued 12-24 hours in advance for winter weather, wind chills, and strong winds. A winter weather advisory is generally issued when winter weather has an impact on travel.

Warnings will be issued 12-24 hour in advance and indicate a greater threat than an advisory. Travel is strongly discouraged when Winter Storm, Ice Storm, or Blizzard Warnings are in effect.

Extreme Cold is one of the most under -rated threats that Michigan residents face every year. Children and the elderly are the most susceptible to cold related illnesses and should be especially careful when temperatures drop.

