

Weather Related Reference Guide for Emergency Personnel

This guide was put together to provide Emergency Managers, Dispatchers, Police and Sheriff Officers, Fire Fighters, and other county and state officials with weather information that is critical to both your local agency and the National Weather Service (NWS). **Timely information freely shared between your agency and the NWS can literally mean the difference between life and death.**

Critical weather information is broken down into categories for easy reference below. When providing a report please provide the following information

1. Who you are.
2. Location and time of event.
3. What was seen and/or damage witnessed.

Tornados	Flooding	Winter Weather
<ul style="list-style-type: none"> Tornado Funnel Cloud Wall Cloud Persistent Cloud Rotation Any Damage 	<ul style="list-style-type: none"> Flooding that results in evacuations High water rescues Water: <ul style="list-style-type: none"> rapidly rising entering homes, not just basements Roads: <ul style="list-style-type: none"> closed due to high water impassable due to high water Small Streams overflowing their banks ≥ 1” of rain measured, in an hour 	<ul style="list-style-type: none"> Any Freezing Rain or Drizzle Thunder associated with Snow, Sleet, or Freezing Rain ≥ 1” of Snow in the past 24 hours ≥ 1” of Snow in the past hour.
Severe Thunderstorms		
<ul style="list-style-type: none"> Hail ≥ ½ inch Tree uprooted or downed More than 1 large limb downed. Any Structural Damage 		

<p>Hail Estimates (inches)</p> <ul style="list-style-type: none"> Pea 0.25 Penny 0.75 Quarter 1.00 Half-Dollar 1.25 Walnut 1.50 Golf Ball 1.75 Tennis Ball 2.50 Baseball 2.75 Grapefruit 4.00 	<p>Wind Speed Estimates (mph)</p> <ul style="list-style-type: none"> 39-54 Small limbs break off trees 55-72 Downed shallow rooted trees 73-112 Minor structural damage, Trailers overturned 113+ Major structural damage, Trailers destroyed
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Information You Can Use:

Phone Number

Public Information line – 1-937-383-0031

Web Site – <http://weather.gov/iln>

Headline Definitions:

- **Outlook** – Potential for significant weather during the next 7 days.
- **Watch** – Conditions are favorable for weather event in or near the watch area. Watches may be issued for weather events listed under Warnings.
- **Warning** – Weather event is imminent or occurring in warned area.
 - **Tornado** – A violently rotating column of air extending from a thunderstorm and in contact with the ground.
 - **Severe Thunderstorm** – Thunderstorm that produces hail $\geq \frac{3}{4}$ " and/or wind gusts ≥ 58 mph.
 - **Flash Flood** – Rapid rise of water resulting in: Rushing water over roads, Water entering main level of homes and businesses, and/or a Dam Break.
 - **Flood** – Rise of water that results in water covering roads or spilling out of stream banks. Not as rapid or extreme as flash flooding. Longer-term flooding (lasting ≥ 6 hours).
 - **Winter Weather** –
 - **Blizzard** –
 - Sustained wind or frequent gusts ≥ 35 mph accompanied by falling, and/or
 - Blowing snow which frequently reduces visibilities $\leq \frac{1}{4}$ mile, and
 - Duration 3 or more hours.
 - **Snow** – 4" in 12 hours or 6" in 24 hours.
 - **Ice** – $\geq \frac{1}{4}$ " in 24 hours.
 - **Wind Chill** – $\leq 25^\circ$ F with wind > 10 mph.
 - **Heat** –
 - **Montgomery and Hamilton counties** –
 - 1 day – Heat Index ≥ 105 .
 - 2 day – Heat Index 100-104.
 - **Rest of Forecast Area** –
 - 1 day - Heat Index ≥ 105 .
 - **High Wind** – Sustained wind blowing at 40 mph and/or gust to 58 mph.
 - **Red Flag (Fire Weather)** –
 - **Kentucky and Indiana** –
 - 10 hour fuel moisture $\leq 8\%$,
 - Minimum relative humidity $< 25\%$, and
 - Wind greater than 15 mph.
 - **Ohio** –
 - 10 hour fuel moisture $\leq 8\%$,
 - Minimum relative humidity $< 25\%$, and/or
 - Wind greater than 15 mph.
- **Advisory**
 - **Flood Advisory** – Inconvenience flooding - streams just above bankfull, some minor underpass flooding.
 - **Winter Weather** –
 - **Snow** – 2" in 12 hours.
 - **Ice** – $< \frac{1}{4}$ " in 24 hours
 - **Snow and Blowing Snow** –
 - Sustained wind or frequent gust of 25 to 34 mph,
 - Falling/blowing snow, which occasionally reduces visibility to $\leq \frac{1}{4}$ mile, and
 - Duration 3 or more hours.
 - **Blowing Snow** – Widespread or localized blowing snow reducing visibilities to $\leq \frac{1}{4}$ mile with winds < 35 mph.
 - **Wind Chill** – $\leq 25^\circ$ F with wind > 10 mph.
 - **Heat** –
 - **Montgomery, Hamilton, and the Rest of Forecast Area** –
 - Heat Index 100-104.
 - **Wind** – Sustained wind blowing 31 to 39 mph and/or gust 46 to 57 mph.
 - **Dense Fog** – Widespread Visibilities $\leq \frac{1}{4}$ mile.