



Installation Office of Emergency Management

Newsletter

Second (2nd) Quarter, 2026

INSIDE THIS ISSUE

Severe Weather Threats and Preparedness

I. Introduction

Severe weather can occur at any time and in any part of the country. Being prepared and knowing how to react is critical to ensuring your safety. This newsletter provides a framework for severe weather preparation, focusing on three key areas: making a family emergency plan, building a disaster kit, and staying informed through reliable alerts. It will also detail specific weather threats, such as tornadoes, flooding, and thunderstorms, with additional context relevant to the Dayton, Ohio, and Wright-Patterson AFB region.

II. Severe Weather Threats

A. Understanding Watches, Warnings, and Advisories

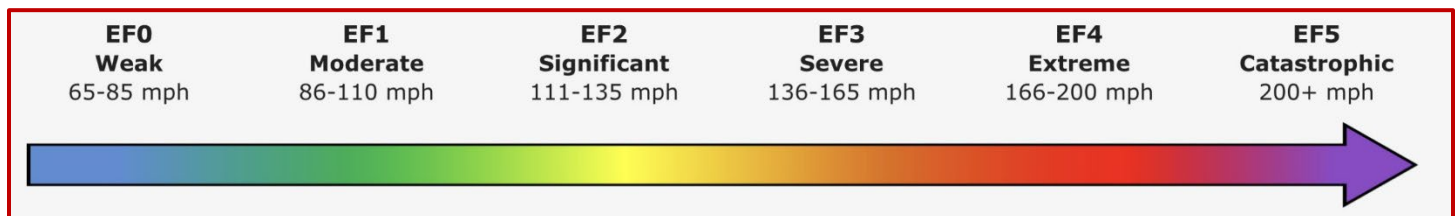
- **Watch:** Conditions are favorable for the development of severe weather. This is the time to prepare and review your safety plan.
- **Warning:** Severe weather is imminent or is already occurring in your area. Take immediate action and seek shelter.
- **Advisory:** A less serious weather event is occurring or likely to occur, which could cause significant inconvenience if precautions are not taken.



B. Tornadoes

Tornadoes are violently rotating columns of air that extend from a thunderstorm to the ground, with winds that can exceed 200 mph.

- **Geographic Context:** The Dayton, Ohio area is in a region susceptible to tornadoes, particularly during the spring and summer months. The region has a history of significant tornado events, including the Memorial Day outbreak of 2019, which produced several strong tornadoes in the Dayton metropolitan area.
- **Enhanced Fujita (EF) Scale:** The intensity of a tornado is measured by the [EF Scale](#), which is based on observed damage.



C. Flooding

Flooding is a temporary overflow of water on land that is normally dry.

- **Geographic Context:** The Great Miami River flows through Dayton, and while it is protected by an extensive system of levees and dams built after the Great Dayton Flood of 1913, localized and flash flooding remains a significant threat from heavy rainfall.
- **Types of Floods:**
 - **Flash Floods:** Caused by heavy or excessive rainfall in a short period of time. They can occur with little to no warning.
 - **River Floods:** Occur when river levels rise and overflow their banks. This is a slower process and is often forecast in advance.
 - **Urban Flooding:** Occurs when drainage systems in urban areas are overwhelmed by heavy rain, leading to street and property flooding.
- **Key Safety Message: Turn Around, Don't Drown!** Never walk, swim, or drive through flood waters. Just six inches of moving water can knock you off your feet, and one foot can sweep a vehicle away.



D. Thunderstorms, Lightning, and Associated Threats

- **Lightning:** A major danger during any thunderstorm.
 - **Safety Rule: When Thunder Roars, Go Indoors.** If you can hear thunder, you are close enough to be struck by lightning.
 - **30-30 Rule:** Seek shelter if the time between seeing a lightning flash and hearing the thunder is **30 seconds or less**. Remain in a safe location for at least 30 minutes after the last clap of thunder.
- **Damaging Winds (Straight-Line Winds):** These are winds that come from a thunderstorm and travel in a straight line. They can be just as destructive as a tornado, reaching speeds of over 100 mph. They are a much more common threat than tornadoes.
- **Hail:** Lumps of ice produced by thunderstorms. Hail can range from the size of a pea to a softball and can cause significant damage to property, vehicles, and crops, as well as cause serious injury.



III. Personal Protective Actions

(Taking proactive steps to prepare for severe weather is the most effective way to protect yourself and your family.)

A. Make a Family Emergency Plan

Your family may not be together when a disaster strikes. It is crucial to plan: how you will contact one another, how you will get back together, and what you will do in different situations.

- **Communication:** Designate an out-of-town contact that each family member can call or text. It's often easier to make a long-distance call than a local one during an emergency.
- **Meeting Places:** Establish a meeting place right outside your home in case of a sudden emergency (like a fire) and a location outside your neighborhood in case you cannot return home.
- **Shelter:** Identify the safest location in your home for each type of severe weather. For tornadoes or high winds, this should be a basement, storm cellar, or a small interior room on the lowest level away from windows.
- **Special Needs:** Consider the specific needs of your family members, including the elderly, infants, and individuals with disabilities. Plan for any necessary medical equipment or prescriptions.
- **Pets:** Include pets in your plan. Identify pet-friendly shelters or hotels in case of evacuation.

B. Build a Disaster Kit

A disaster kit is a collection of basic items your household may need in the event of an emergency. Your kit should be ready to go and accessible at a moment's notice.

Basic Supplies:

- **Water:** One gallon of water per person per day for at least three days.
- **Food:** At least a three-day supply of non-perishable food.
- **First Aid Kit:** Include bandages, antiseptic wipes, pain relievers, and any personal medications.
- **Tools:** Manual can opener, wrench or pliers to turn off utilities, and a whistle to signal for help.
- **Lighting:** Flashlight and extra batteries. Avoid candles as they are a fire hazard.

Additional Items:

- Battery-powered or hand-crank radio (NOAA Weather Radio is recommended).
- Cell phone with chargers and a backup battery.
- Local maps.
- Dust masks to help filter contaminated air.
- Moist towelettes, garbage bags, and plastic ties for personal sanitation.

Essential Items for a Severe Weather Preparedness Kit:

A basic emergency supply kit should include the following recommended items:

- **Water:** One gallon of water per person per day for at least three days, for drinking and sanitation.
- **Food:** At least a three-day supply of non-perishable food.
- **First-Aid Kit:** Include bandages, antiseptic wipes, pain relievers, and any personal medications.
- **Tools & Safety Items:**
 - Manual can opener for food.
 - Wrench or pliers to turn off utilities.
 - Whistle to signal for help.
 - Dust mask to help filter contaminated air.
- **Lighting & Communication:**
 - Flashlight and extra batteries.
 - Battery-powered or hand-crank radio and a NOAA Weather Radio with tone alert.
- **Personal Items:**
 - Moist towelettes, garbage bags, and plastic ties for personal sanitation.
 - Cell phones with chargers and a backup battery.

Additional Items to Consider:

- **Documents:** Copies of important documents such as insurance policies, identification, and bank account records stored electronically or in a waterproof, portable container.
- **Cash:** Have extra cash on hand.
- **Special Needs:**
 - For Infants: Formula and diapers.
 - For Pets: Pet food and extra water.
- **Clothing & Bedding:** A change of clothes and a sleeping bag or warm blanket for each person.

It's recommended to store these items in a backpack or a storage tub that is easy to carry. You should check your kit at least once every six months to replace expired items.

C. Stay Informed

Knowing when severe weather is approaching is the first step to staying safe.

- **NOAA Weather Radio:** A nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. It is the most reliable source for severe weather watches and warnings.
- **Emergency Alert System (EAS):** A national public warning system that allows the President to address the nation within 10 minutes during a national emergency. State and local authorities may also use the system to deliver important emergency information.
- **Wireless Emergency Alerts (WEA):** Free text messages sent to cell phones in a specific geographic area, alerting them to imminent threats.
- **Outdoor Warning Sirens (Specific to Dayton/WPAFB):** Most municipalities in this area have outdoor warning sirens. These are designed to alert people who are outdoors to seek shelter immediately. They are not intended to be heard inside a building. When you hear a siren, go inside and turn to a local news source or NOAA Weather Radio for more information.



Key Tornado Safety Messages *(The central goal during a tornado is to put as many walls as possible between you and the outside.)*

- **Go To Your Safe Place:** When a tornado warning is issued, do not hesitate. Go immediately to your pre-designated safe place, such as a basement, storm cellar, or a small, interior room on the lowest level of a sturdy building.
- **Get In, Get Down, and Cover Up:** Once in your safe place, get down on the floor, crouch low, and cover your head and neck with your arms. If possible, get under a sturdy piece of furniture like a heavy table or desk.
- **Stay Away from Windows:** Avoid windows at all costs. Flying glass and debris cause the most injuries during a tornado.
- **If in a Vehicle or Mobile Home:** GET OUT ... Never try to outrun a tornado in a vehicle. Mobile homes and vehicles are not safe. Abandon them immediately and get to the lowest floor of a sturdy nearby building or a storm shelter.
- **If Caught Outside with No Shelter:** Lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding. Do not get under an overpass or bridge, as the wind can be stronger in these confined spaces.

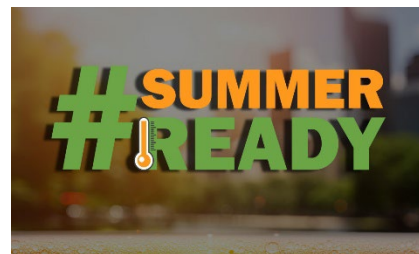
Key Flood Safety Messages *(The most important concept to remember for flooding is that a small amount of water can be deceptively powerful and dangerous.)*

- **Turn Around, Don't Drown!®:** This is the most critical flood safety rule. Never walk, swim, or drive through floodwater. As little as six inches of moving water can knock you off your feet, and just one foot of water can sweep your vehicle away.
- **Get to Higher Ground:** If you are in a flood-prone area or a flood warning is issued for your location, move immediately to higher ground.
- **Stay Informed:** Listen to NOAA Weather Radio or local news channels for the latest information and evacuation orders. If advised to evacuate, do so immediately.
- **Avoid Floodwaters:** Floodwater can be contaminated with sewage, chemicals, and other hazardous materials. It may also hide dangers like debris, downed power lines, or washed-out roadways.
- **Do Not Camp or Park Along Streams:** When in hilly or mountainous terrain, be aware that flash floods can occur with little warning. Avoid setting up camp or parking your vehicle along streams, rivers, or creeks, especially during threatening conditions.

Key Lightning Safety Messages

- No Place Outside is Safe: When you hear thunder, you are in danger. Immediately move to a substantial, enclosed building.
- "When Thunder Roars, Go Indoors": This is the most important rule. Don't wait for the rain or for the storm to be directly overhead.
- The 30-Minute Rule: After the last clap of thunder, wait at least 30 minutes before resuming any outdoor activities.
- Indoor Safety: Once inside, stay away from windows, doors, and anything that conducts electricity, such as corded phones, plumbing (sinks, showers), and appliances.
- If Caught Outside: If you are unable to get to a safe building, a hard-topped metal vehicle is the next best option. Avoid open structures, tall trees, and open fields.

Upcoming Events or Items of Interest



Until next time ...

Thank you for being an integral part of the Wright-Patterson AFB Team. Together, we can continue to build a disaster resilient community. If you have any questions, comments, or suggestions, please don't hesitate to reach out to us.

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