

NATIONAL WEATHER SERVICE Building a Weather-Ready Nation

Summer Weather Safety

Know Your Risk, Take Action, Be a Force of Nature

Summer Weather Hazards

- Tornadoes
- Thunderstorms
- Lightning
- Hurricanes
- Flooding
- Excessive Heat
- Rip Currents & Beach Hazards
- Wildfires
- Air Quality
- Drought





Tornadoes

- Winds from tornadoes can exceed 200 mph
- Flying debris is very dangerous, and most often the cause of death and injuries





Tornadoes

- Seek a sturdy shelter in a basement, storm shelter, or interior room away from windows on the lowest floor and cover your head
- Every tornado should be seen as life-threatening





Tornado Sheltering Guide



Mobile homes

Vehicles

Underneath a highway overpass Large open rooms like gymnasiums

Manufactured housing

Interior room of a well-constructed home or building

Basement

Above or below ground Tornado Storm Shelter (NSSA/ICC 500 compliant)*

Specifically-designed FEMA Safe Room*

NDRR

Find another option

Stay in place until all clear

Recommended by FEMA



NATIONAL WEATHER SERVICE

NWS Tornado Products

TORNADO WATCH

A Tornado Watch is issued when a tornado is *possible*.

Know your safe place (storm shelter, basement, interior hall away from windows). Be ready to act quickly if a Warning is issued.

TORNADO WARNING

A Tornado Warning is issued when a tornado is *happening or about to happen*.

Immediately seek shelter in your safe place!

Be Prepared.

weather.gov

Take Action!



Thunderstorms

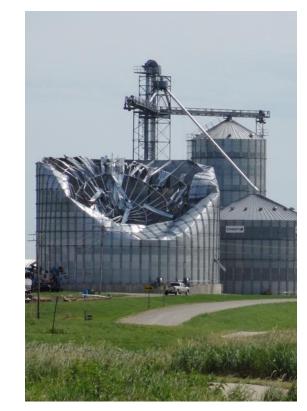
- Severe thunderstorms produce damaging wind and/or large hail
- Take shelter in a sturdy structure away from windows — a basement or cellar would be best
- Being in a vehicle is safer than being outside





Thunderstorms

- Conditions can change rapidly with thunderstorms nearby or overhead
- Don't second-guess how a thunderstorm will evolve
- Take shelter before the storm and remain there through an all-clear signal from the NWS





NWS Severe Thunderstorm Products

THUNDERSTORM WATCH

A Severe Thunderstorm Watch is issued when a severe thunderstorm is *possible*.

Stay tuned to forecast updates, monitor sky conditions, and know where to take shelter.

THUNDERSTORM WARNING

A Severe Thunderstorm Warning is issued when a severe thunderstorm is happening or about to happen.

Take shelter immediately!

Be Prepared.

Take Action!

weather.gov



Dust Storms

- Dust storms can reduce visibility and make travel difficult
- Don't drive through dust storms:
 - Pull off the road as far as possible
 - Stop and turn off all lights
 - Set the emergency brake
 - Take your foot off the brake to ensure tail lights aren't illuminated





Lightning

- All thunderstorms produce lightning
- Lightning kills an average of 30 people every year
- Take shelter inside a sturdy structure
- A hard-topped vehicle is also a safe location





Hurricanes

- Tropical storms and hurricanes can produce deadly flooding
- Storm surge is ocean water that is brought inland and floods areas along the coast
- Heavy rain can cause flooding hundreds of miles inland





Hurricanes

- Prepare your home by protecting it from flying debris
- Board up windows with plywood or approved shutters
- Bring in loose items from outside such as lawn furniture
- Secure your boat if you have one





Hurricanes

- Hurricanes can strengthen quickly
- Listen to local authorities and follow evacuation orders
- Drive carefully and contact your loved ones once you've reached your safe location





NWS Hurricane Products

HURRICANE WATCH

A Hurricane Watch is issued when **hurricane force winds are** *possible*.

Prepare your home by boarding up windows and moving loose items indoors. Have an emergency supply kit ready.

Hurricane Possible.

HURRICANE WARNING

A Hurricane Warning is issued when hurricane force winds are *expected*.

Seek shelter in a sturdy structure or evacuate if ordered.

Hurricane Expected!

weather.gov



NATIONAL WEATHER SERVICE

Flooding

- Flooding is often caused by heavy rain in the summer
- More than half of all flood fatalities are vehicle-related
- NEVER drive through floodwaters







NWS Flood Products

FLOOD WATCH

weather.gov

A Flood Watch is issued when flooding is *possible*.

Stay tuned to trusted news sources and be ready to seek higher ground.

FLOOD WARNING

A Flood Warning is issued when flooding is happening or about to happen.

Move to higher ground immediately! Never drive or walk through floodwaters.

Be Prepared.

Take Action!



Extreme Heat

- Heat and humidity take a toll on the body—know the signs of heat illness and drink plenty of water
- Reschedule outdoor work and strenuous activities until the coolest time of the day
- Seek shelter out of the sun, preferably in a location with air conditioning such as a mall





Extreme Heat

- Sunburn and heat illness can be avoided; take breaks in the shade
- Apply and reapply sunscreen to protect your skin from sunburn
- NEVER leave children, disabled adults, or pets in parked, unattended vehicles





NWS Heat Products

EXCESSIVE HEAT WATCH

An Excessive Heat Watch is issued when **dangerous heat is** *possible*.

Reschedule outdoor activities in the coming days. Make sure that children, the elderly, and pets have a place to cool off during the heat.

Be Prepared.

EXCESSIVE HEAT WARNING

An Excessive Heat Warning is issued when dangerous heat is happening or about to happen.

Avoid heavy activity & direct sunlight. Stay hydrated, find a cool indoor place, and check on children, elderly & pets.

Take Action!

weather.gov



Heat Impacts: Vulnerable Populations





NEWBORNS

Extreme heat events have been associated with adverse birth outcomes such as low birth weight, preterm birth, infant mortality, and congenital cataracts. Newborns are extra sensitive to heat because their ability to regulate body temperature is limited.



CHILDREN

Young children and infants are particularly vulnerable to heat, as their bodies are less able to adapt to heat than adults. Those under four are especially vulnerable.



ELDERLY

Older adults, especially those who have preexisting diseases, take certain medications, live alone or have limited mobility are at higher risk for heat illness.



People with chronic medical conditions are more likely to have a serious health problem during a heat wave.

Source:

The Impacts of Climate Change on Human Health in the United States, A Scientific Assessment (U.S. Global Changes Research Program)





NATIONAL WEATHER SERVICE

Rip Currents

- Millions of people will travel to the beach this summer
- Learn about rip currents before heading to the beach
- Plan your trip by checking the forecast at weather.gov/beach





RIP CURRENTS KNOW YOUR OPTIONS IF CAUGHT IN A RIP CURRENT • Relax, rip currents don't pull you under. · Don't swim against the current. · Swim out of the current, then to shore. • If you can't escape, float or tread water. · If you need help, yell or wave for assistance. CURREN CURRENT **RIP CURRENT**

Rip currents are powerful currents of water moving away from shore. They can sweep even the strongest swimmer away from shore. If at all possible, swim near a lifeguard.



Other Dangerous Currents

- Longshore currents
- Outlet currents
- Tidal currents
- Structural currents
- Learn more about these at weather.gov/safety/dangerous-currents





Wildfire

- Wildfires are most often started by lightning or humans
- Stay with your fire when camping
- Fully extinguish your fire when finished
- Never burn on dry windy days





Wildfire

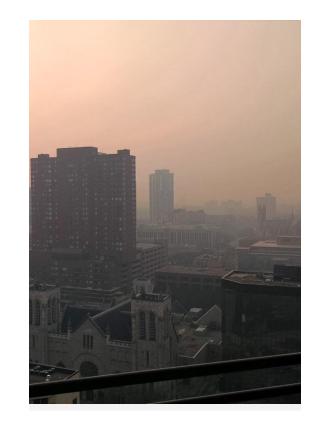
- If you encounter a wildfire, drive or walk away from the smoke and flames immediately
 - Call 911 and report the fire
- If told to evacuate, follow instructions
 from local officials
 - Follow the evacuation route and contact loved ones once you've reach safety





Air Quality and Smoke

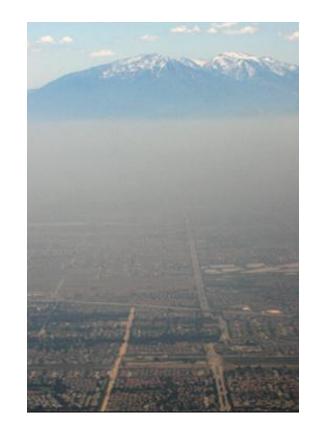
- Smoke from wildfires can travel thousands of miles and cause poor air quality
- Stay indoors and keep doors and windows closed to reduce smoke entering your home





Air Quality

- Exhaust from vehicles and particulate matter are other sources of air pollution
- Harmful buildup of ground-level ozone can enhance health problems such as asthma
- Limit time outdoors on days with poor air quality





Drought

- Dry conditions and summer heat can cause rapid onset droughts, which may impact vegetation
- Long term droughts can impact large reservoirs and the people that depend on them for drinking water
- Some places may implement water conservation efforts measures





Summer Weather Safety Resources

- weather.gov/safety/tornado
- weather.gov/safety/thunderstorm
- weather.gov/safety/lightning
- weather.gov/safety/hurricane
- weather.gov/safety/flood
- weather.gov/safety/heat
- weather.gov/safety/ripcurrent
- weather.gov/safety/wildfire
- weather.gov/safety/airquality
- weather.gov/safety/drought
- weather.gov/safety/wind-dust-storm



