



# NATIONAL WEATHER SERVICE

Building a Weather-Ready Nation

# Summer Weather Safety



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

[weather.gov/safety](https://weather.gov/safety)

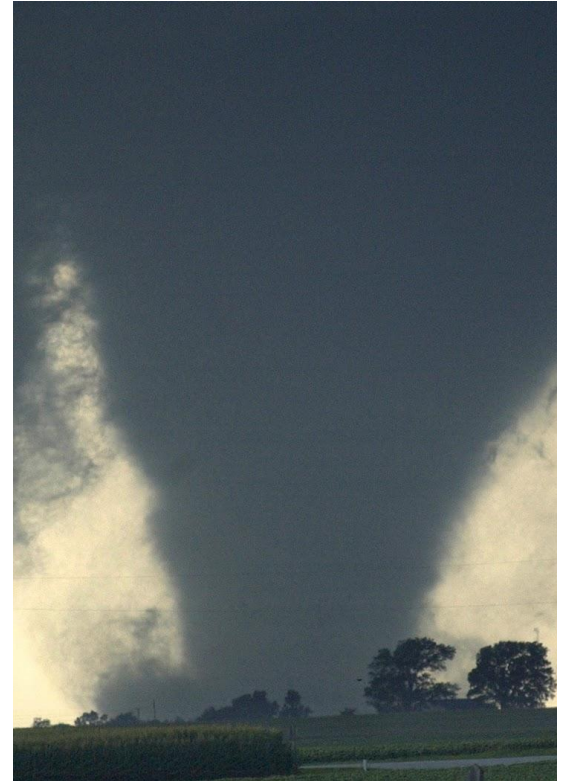
# Summer Weather Hazards

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



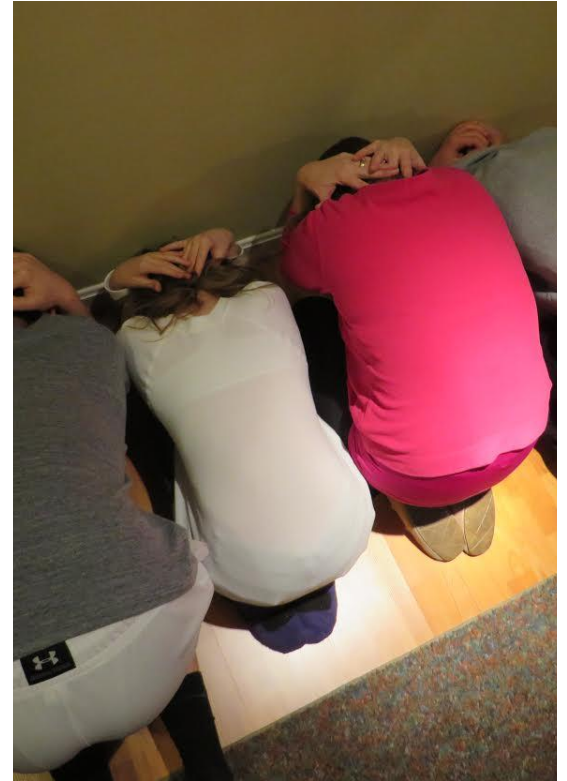
# Tornadoes

- 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

## Tornado Sheltering Guidelines

Seek the best available refuge area **immediately** when a Tornado Warning is issued.  
Your chance of surviving a tornado is excellent if you follow these guidelines.

### WORST OPTIONS

Mobile homes

Vehicles

Underneath a  
highway overpass

### BAD OPTIONS

Large open rooms  
like gymnasiums

Manufactured housing

### GOOD OPTIONS

Interior room  
of a well-constructed  
home or building

Basement

### BEST OPTIONS

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

Specifically-designed  
FEMA Safe Room\*

Find another option



Stay in place until all clear

PHOTO: U.S. Air Force - Tech. Sgt. Bradley C. Church

\*Recommended by FEMA



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# NWS Tornado Products

## TORNADO WATCH

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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.

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### Be Prepared.

## TORNADO WARNING

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

Immediately seek shelter in your safe place!

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### Take Action!



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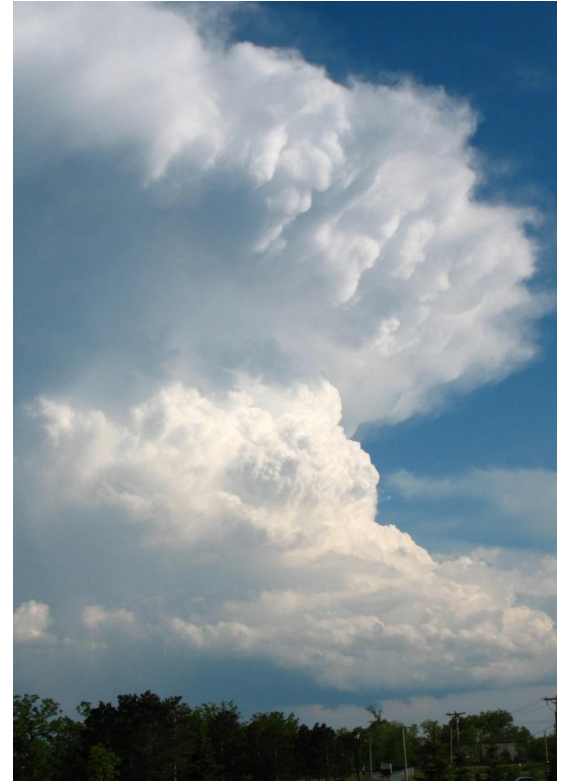


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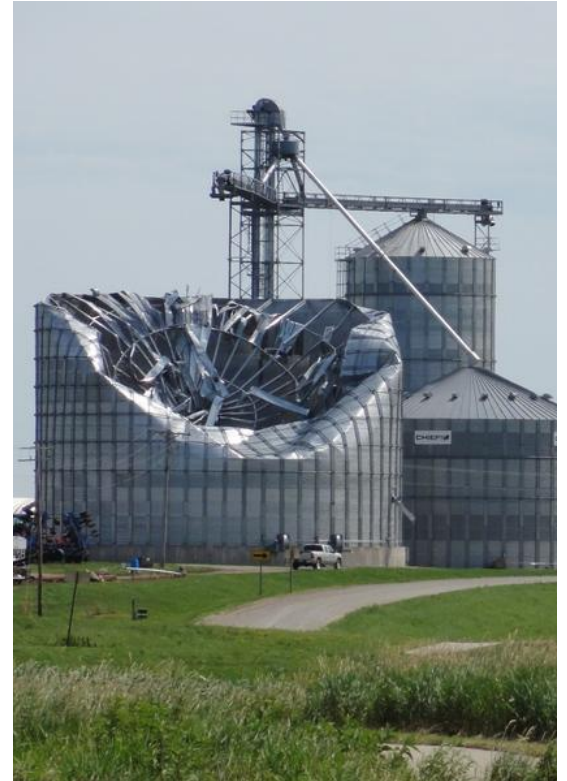
# Thunderstorms

- 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





# Thunderstorms (Dust Storms)

- Strong wind gusts from thunderstorms can create dust storms
- Dust storms can reduce visibility and make travel difficult
- If travelling, prepare to reduce speed and pull over to the side of the road



# 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.

**Be Prepared.**

## THUNDERSTORM WARNING

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

Take shelter immediately!

**Take Action!**



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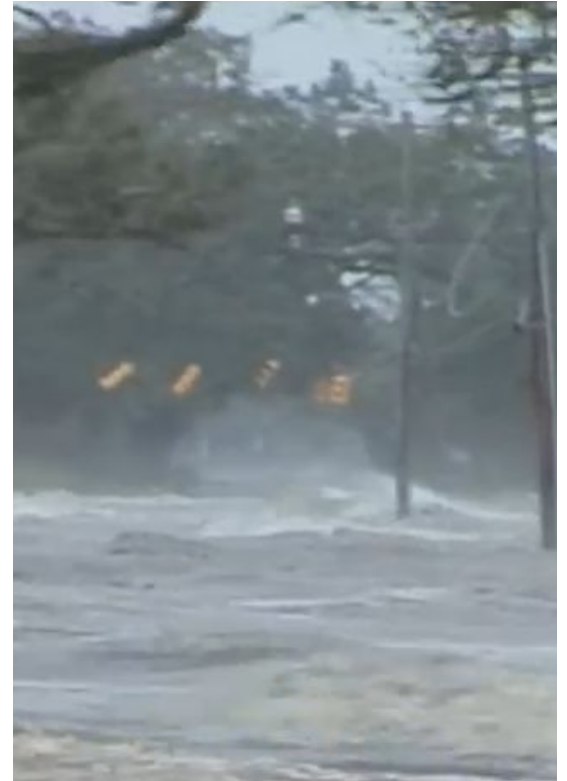
# Lightning

- 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!**



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# 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

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

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

**Be Prepared.**



[weather.gov](https://www.weather.gov)

## 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.

**Take Action!**

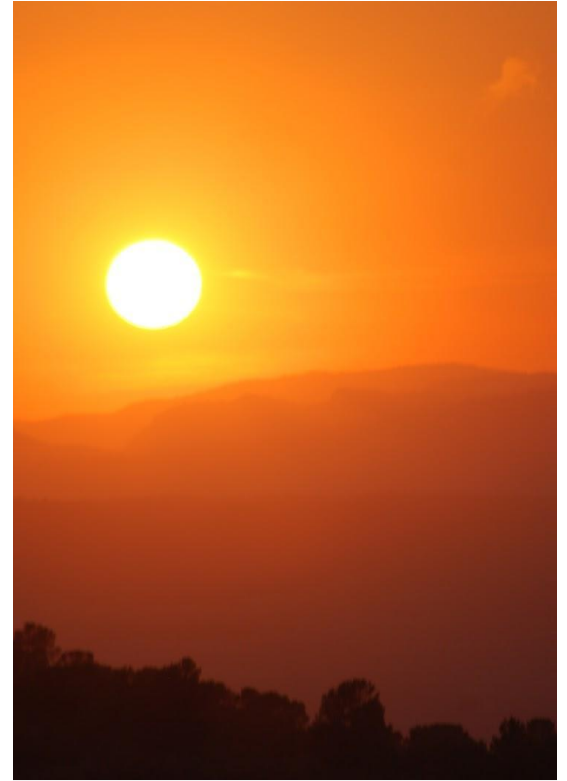


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[weather.gov/safety](https://www.weather.gov/safety)

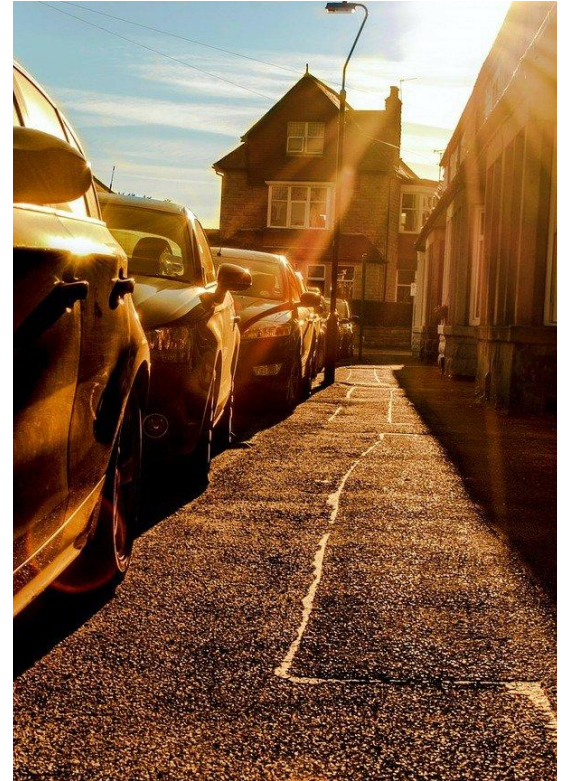
# Extreme Heat

- Heat and humidity take a toll on the body
- Know the signs of heat illness
- Reschedule outdoor work and strenuous activities until the coolest time of the day
- Drink plenty of water



# Extreme Heat

- Sunburn and heat illness can be avoided
- 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!**



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[weather.gov/safety](https://www.weather.gov/safety)

# Heat Impacts: Vulnerable Populations



## PREGNANT

Extreme heat events have been associated with adverse birth outcomes such as low birth weight, preterm birth, infant mortality, and congenital cataracts.



## NEWBORNS

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.



## CHRONIC 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)*

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# 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](https://www.weather.gov/beach)

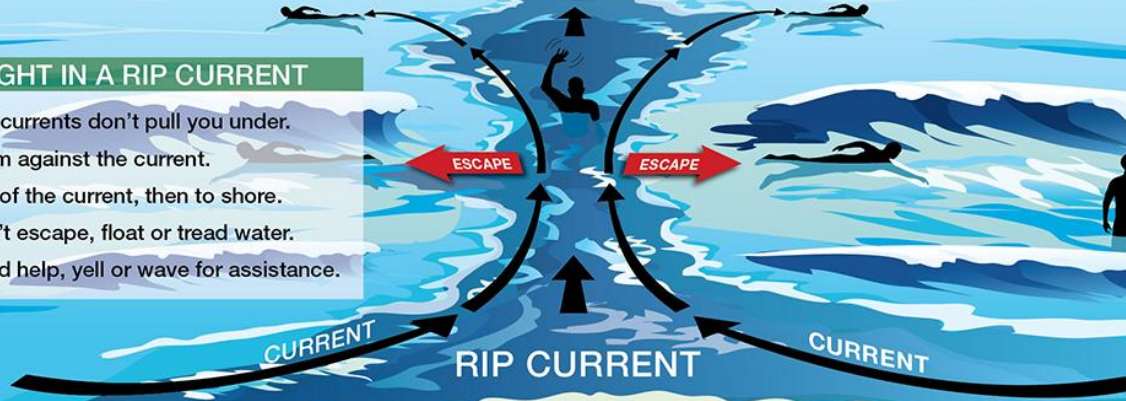


# RIP CURRENTS

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.



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.

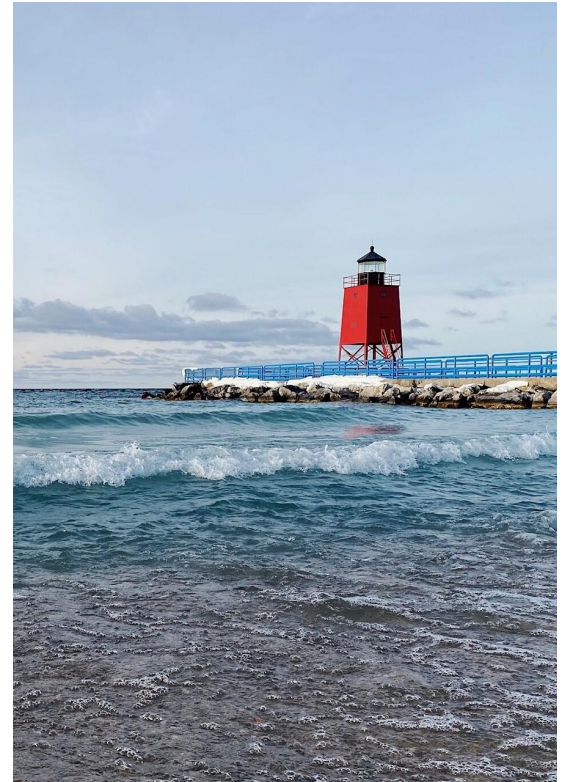


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[weather.gov/safety](https://www.weather.gov/safety)

# Other Dangerous Currents

- Longshore currents
- Outlet currents
- Tidal currents
- Structural currents
- Learn more about these at [weather.gov/safety/dangerous-currents](https://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



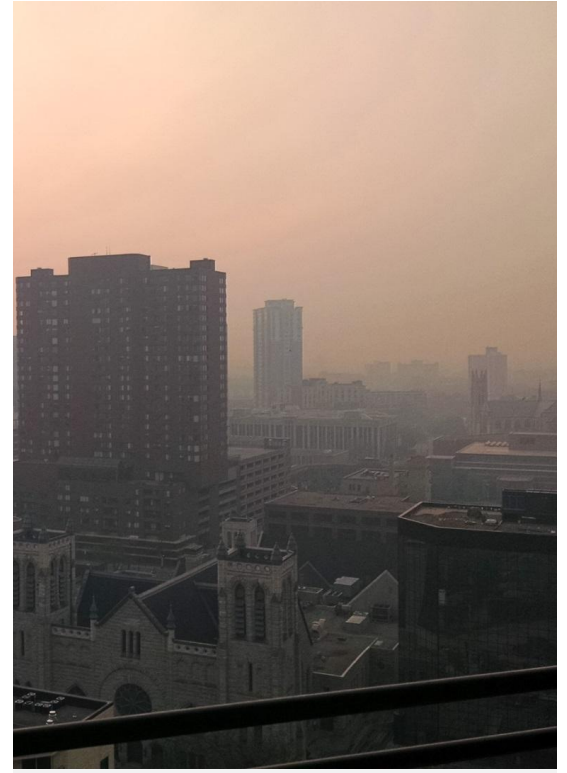
# Wildfire

- 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



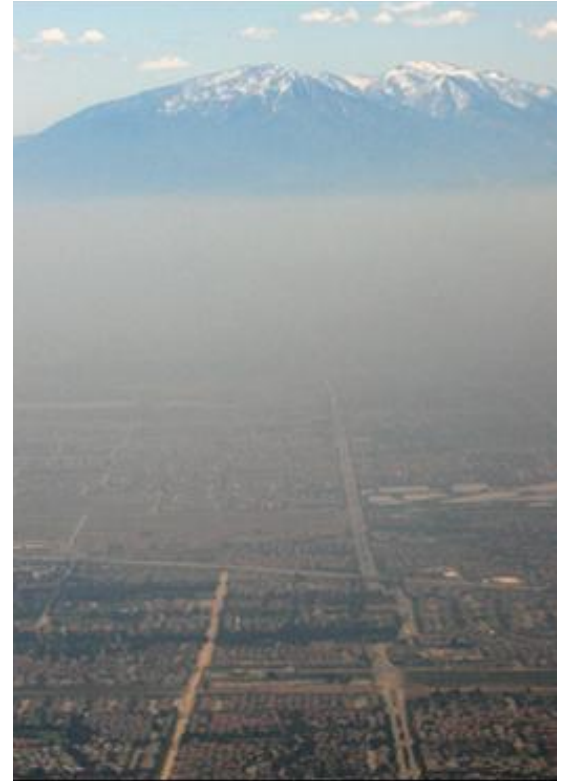
# Air Quality and Smoke

- 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

- The heat of summer can cause short-term droughts which affect vegetation and agriculture
- Long term droughts can impact large reservoirs and the people that depend on them
- Implement water conservation efforts to minimize drought



# Summer Weather Safety Resources

- [weather.gov/safety/tornado](https://weather.gov/safety/tornado)
- [weather.gov/safety/thunderstorm](https://weather.gov/safety/thunderstorm)
- [weather.gov/safety/lightning](https://weather.gov/safety/lightning)
- [weather.gov/safety/hurricane](https://weather.gov/safety/hurricane)
- [weather.gov/safety/flood](https://weather.gov/safety/flood)
- [weather.gov/safety/heat](https://weather.gov/safety/heat)
- [weather.gov/safety/ripcurrent](https://weather.gov/safety/ripcurrent)
- [weather.gov/safety/wildfire](https://weather.gov/safety/wildfire)
- [weather.gov/safety/airquality](https://weather.gov/safety/airquality)
- [weather.gov/safety/drought](https://weather.gov/safety/drought)

