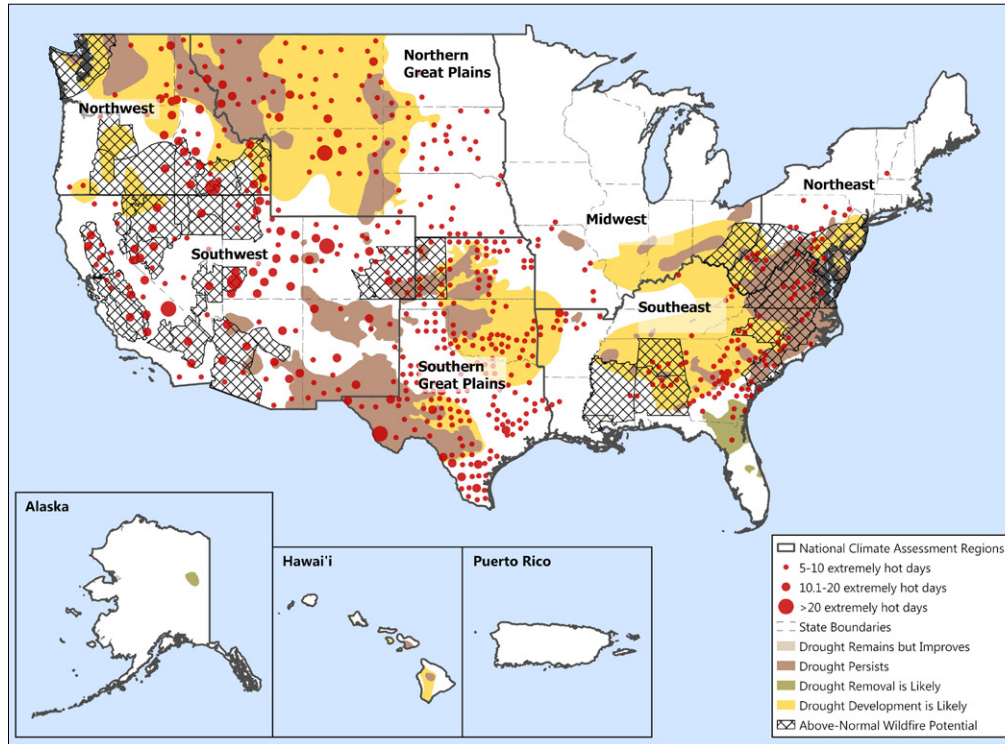


Highlights for this edition:

- Forecasts for heat, drought, wildfire along with discussion of populations at elevated risk for health impacts
- Guidance on protecting health from these climate hazards plus tornadoes, flooding, & hurricanes

July Regional Climate Hazard Forecasts:



Northwest: 30 counties in ID, 8 counties in WA, and 7 counties in OR are expected to have five or more extreme heat days*. Drought persistence is favored for existing drought regions in WA and northern ID, with additional drought development forecast across portions of the interior Northwest. Above-normal significant wildfire** potential is forecast for central and southeast OR, western WA, and southern ID.

Southwest: 120 counties across CA (26), CO (26), UT (23), NV (15), NM (15), and AZ (15) are expected to have five or more extreme heat days. Drought persistence is forecast to persist in existing drought regions in NM, AZ, and CO, with some drought development forecast in small areas in northern CA and northwestern NV. Above-normal significant wildfire potential is forecast for much of CA, NV, and AZ plus northwest and southwest UT and southeast CO.

Southern Great Plains: 126 counties in TX, 38 counties in KS, and 37 counties in OK are expected to have five or more extreme heat days. Drought persistence is forecast for the existing drought over portions of KS, OK, and TX with coincident development favored in parts of these states. Above-normal significant wildfire potential is forecast for western KS.

Northeast: 23 counties across PA (12), WV (7), MD (3), and VT (1) are expected to have five or more extreme heat days. Drought persistence is predicted for existing drought areas in the Mid-Atlantic with additional potential development across MD, WV, DE, PA, and NJ. Above-normal significant wildfire potential is forecast across all of MD, WV, and DE plus most of NJ and southern PA.

Southeast: 101 counties across GA (32), SC (16), VA (14), AL (11), AR (11), NC (11), KY (2), LA (2), MS (1), and TN (1) are expected to have five or more extreme heat days. Drought persistence is predicted for the existing drought areas across VA, NC, SC, AL, MS, AR, TN, and northern GA with additional potential development in parts of these states plus KY. Drought removal is favored for FL and southern GA. Above-normal significant wildfire potential is forecast for much of AL, MS, VA, and NC plus parts of SC and LA. The Atlantic basin is highly likely to have an above-normal hurricane season.

Check out additional forecasts on our [webpage](#).


Heat
 Hurricane
 Drought
 Wildfire


*An "extremely hot day" is defined by having an expected temperature above the 95th percentile value of the historical temperature distribution for the month and county. For more information, check out the Centers for Disease Control and Prevention's (CDC's) [National Environmental Public Health Tracking Network](#) documentation.


**Smoke from wildfires can impact health hundreds of miles from the site of the fire.

Heat forecasts are derived from [CDC's Heat & Health Tracker](#), hurricane forecasts from [NOAA's 2024 Hurricane Season Outlook](#), drought forecasts from NOAA's [National Integrated Drought Information System](#), and wildfire forecasts from the [National Interagency Coordination Center](#).

Spotlight on Counties with Compounding Hazards Forecast for July 2024

 Many counties in Idaho have extreme heat, wildfire potential, and drought forecast for July. Twin Falls County, ID is forecast to experience 22.7 days of extreme heat and has above-normal significant wildland fire potential.

 Many counties along the CO-KS border have extreme heat, wildfire potential, and drought forecast for July. Baca County, CO is forecast to experience 7.4 days of extreme heat plus persisting or developing drought, and has above-normal significant wildland fire potential.


 Many counties across MD, VA, WV, NC, SC, and AL have extreme heat, wildfire potential, and drought forecast for July. Hanover & Powhatan Counties, VA are forecast to experience 7.5 days of extreme heat plus persisting drought, and have above-normal significant wildland fire potential.

Find your county's forecast hazards along with its population's risk factors on our [portal](#).

Additional Climate Hazards Without Specific Forecasts for July 2024

Tornadoes

Tornadoes can happen anywhere and anytime. In the U.S., the highest tornado threat shifts from the Southeast in the cooler months, toward the southern and central Plains in May and June, and to the northern Plains and Midwest during early summer. [About 1,200 tornadoes hit the U.S. yearly](#), and storms are generally increasing in frequency and intensity with climate change.

 During a tornado, people face hazards from extremely high winds and risk being struck by flying objects. After a tornado, the damage left behind poses additional **injury risks**.




It's normal for people to experience **emotional distress** regarding tornadoes, including due to their unpredictable nature and damage.

Stay informed by paying attention to [emergency alerts](#) and downloading the [FEMA App](#) for real-time alerts from the National Weather Service. Take protective actions and learn how to recover with guidance from [CDC](#), [Ready.gov](#), and [FEMA](#). Learn more about [warning signs for emotional distress](#) and call or text 1-800-985-5990 if you need support for distress related to any disaster. This SAMHSA [Helpline and Text Service](#) is available 24/7, free, and staffed by trained crisis counselors.

Flooding

More U.S. communities, both coastal and inland, are experiencing flooding with increasingly extreme precipitation events, drier soils, sinking land, the loss of natural barriers, and sea level rise, and there are disproportionate impacts on racial minorities and low-income households.

 Contaminated floodwaters pose risks of **injuries, infections**, and more. Floods are the [second leading cause of weather-related deaths](#) in the U.S. (after heat).




Homes damaged by floodwaters may experience the growth of mold and other microbes that can harm respiratory health and worsen **allergies** and **asthma**.

Check out your area's [flood maps](#) and [risk assessments](#) from FEMA. Minimize your risk by learning more about [how to stay safe during and after a flood](#), [how to clean mold safely](#), and [how to protect yourself from floodwaters](#).

Hurricanes

Hurricanes bring high winds, coastal storm surges, intense rains, and increased risk of flooding, which can lead to compounding effects of a natural disaster. The Atlantic Hurricane Season, which typically impacts the southern and eastern coastal U.S. is predicted to be an above-normal hurricane season in 2024. The Central Pacific Hurricane Season, which typically impacts Hawai'i and other pacific islands, is predicted to have a below-normal season in 2024.

 Hurricanes often cause flooding which poses **drowning risks**. [Storm surge](#), one type of flooding hurricanes can cause via storm winds pushing coastal water inland, historically is the leading cause of hurricane-related deaths in the U.S.








Loss of power is likely during hurricanes which leads many people to use generators. Using generators improperly can cause carbon monoxide exposure, which can lead to **loss of consciousness** and **death**.

Learn how to prepare for a hurricane with resources from [ASPR TRACIE](#), [CDC](#), and [FEMA](#). In case the power goes out, learn [how to safely use a generator](#). Check out specific recommendations for people with [access and functional needs](#), with [disabilities](#), with [diabetes](#), and [people experiencing homelessness](#). After a hurricane has passed, use CDC resources to [safely return home](#) and [protect yourself from power outages](#).

Extreme Heat

Heat Affects Health in Many Ways

Warmer temperatures increase the risk for a diverse range of health risks. For example:

-  An increased risk of **heart disease hospitalization**.
-  **Heat exhaustion**, which can lead to **heat stroke** that, if not treated, can cause critical illness, brain injury, and even death.
-  Worsening **asthma** and **chronic obstructive pulmonary disease (COPD)** as heat increases the production of ground-level ozone.
-  Dehydration, which can lead to **kidney injury** and blood pressure problems.
-  Mental health and substance use risks, including **loss of sleep** and **slowing of brain cognition**, and heightened risk of **increased acute psychiatric and substance use symptoms** among people with chronic behavioral health conditions.

People at Elevated Health Risk from Extreme Heat Exposure

According to [HEAT.gov](https://www.heat.gov) and [CDC](https://www.cdc.gov) include those who:

- Have increased exposure (e.g., are experiencing homelessness; are emergency responders; are athletes; and/or work outdoors, or indoors with insufficient cooling);
- Have increased biologic sensitivity (e.g., are under age 5; are age 65 or over; are pregnant; and/or have chronic health conditions such as a mental illness, diabetes, or a cardiovascular condition); and/or
- Face high socioeconomic burden and/or barriers to accessing cooling or healthcare (e.g., live in a low-income community and/or have one or more disabilities).

Check out your heat forecast for July along with top risk factors of concern in your county with our [Climate and Health Outlook Portal](#) and [learn how to protect people at elevated risk](#).

Resources to Reduce Health Risks Associated With Heat

- Check out [HEAT.gov](https://www.heat.gov); the premier source of heat and health information for the nation to reduce the health, economic, and infrastructural impacts of extreme heat.
- Explore historical temperature, heat-related illness, and community characteristics data at the ZIP code level with the new [Heat & Health Index \(HHI\)](#).
- Visit the [CDC-NWS HeatRisk Forecast Tool](#) for a nationwide seven-day heat forecast that identifies when temperatures may reach potentially harmful levels.

For more, please review this 2-pager with curated [HHS Resources on Heat and Health](#) in 2024.

From SAMHSA's "Taking Action: Building a More Resilient World"

Changes in climate and extreme weather affect behavioral health in ways ranging from higher rates of climate anxiety, trauma, depression, and substance misuse to higher rates of acute health concerns and hospitalizations. Research suggests ways many groups can help build community connections and foster resilience.

What can healthcare professionals and organizations do?

- Recognize the whole person in primary care and behavioral healthcare settings. Develop easy-to-access information on how people can stay healthy during extremely warm temperatures, especially if they use medications or substances.
- Name a disaster preparedness deputy for substance use treatment programs to maintain patients' contact information and lead other aspects of planning and communicating service changes during and after disaster.
- When possible, use tele-behavioral health to reduce the U.S. healthcare system's carbon footprint and meet public need.
- Teach healthcare professionals about the psychosocial impacts of disaster.

See more recommendations at [Taking Action: Building a More Resilient World](#).

Drought

Drought Affects Health in Many Ways

Drought increases the risk for a diverse range of health outcomes. For example:



Low crop yields can result in rising food prices and shortages, potentially leading to **malnutrition**.



Dry soil can increase the number of particulates such as **dust and pollen** that are suspended in the air, which can irritate the respiratory system.



If there isn't enough water to flow, waterways may become stagnant breeding grounds for **disease vectors** such as mosquitoes.



Drought's complex economic consequences can increase **mood disorders, domestic violence, and suicide**.

People at Elevated Health Risk From Drought Exposure

According to [NOAA](#) & [CDC](#), include those who:

- Have increased exposure to dust (e.g., are experiencing homelessness, work outdoors, or live/work in agricultural communities);
- Rely on water from private wells or small or poorly maintained municipal systems, the quality of which is more susceptible to environmental changes; and/or
- Have increased biologic sensitivity (e.g. are under age 5, are age 65 or over, are pregnant, have chronic health conditions, and/or have special needs in the event of a public health emergency).

Check out your drought forecast for July, along with top risk factors of concern in your county with our [Climate and Health Outlook Portal](#) and [learn more about health impacts and how to prevent them](#).

Resources to Reduce Health Risks Associated With Drought

- Learn about the health implications of drought and how to prepare from the [CDC Drought and Health site](#) and [Ready.gov Drought site](#).
- Call or text 1-800-985-5990 to get help and support for any distress that you or someone you care about may be feeling related to any disaster. This SAMHSA [Helpline and Text Service](#) is available 24/7, free, and staffed by trained crisis counselors.

Wildfire

People at Elevated Health Risk From Wildfire Smoke Exposure

According to [EPA](#) include those who:

- Have increased biologic sensitivity (e.g., are under age 5, are age 65 or over, are pregnant, and/or have chronic health conditions such as asthma or another lung disease or a cardiovascular disease); and/or
- Face economic, social, environmental, and/or other burdens that may limit their ability to reduce exposure (e.g., identify as a racial or ethnic minority, have low-income, have one or more disabilities, and/or work outdoors).

Check out your wildfire forecast for July, along with top risk factors of concern in your county with our [Climate and Health Outlook Portal](#) and [learn how to protect people at elevated risk](#).

Resources to Reduce Health Risks Associated With Wildfire

- Learn about how to prepare for wildfires, stay safe during a fire, and return home after a fire with resources from [FEMA's Ready.gov](#), [CDC](#), and [EPA](#).
- Download the [FEMA App](#) to receive real-time weather and emergency alerts from the National Weather Service and help you find a nearby shelter in case of evacuation.
- Check out [EPA & CDC's Wildfire Smoke and Your Patients' Health course](#) for actions to help patients reduce exposure.
- Discover specific recommendations for [older adults](#), [people experiencing homelessness](#), [people with access and functional needs](#), and [people with disabilities](#).

Wildfires Affect Health in Many Ways

Wildland fire increases the risk for a diverse range of health outcomes from both the fire itself and smoke. For example:



Due to the nature of their work, firefighters are at risk of developing severe heat-related illness (such as **heat stroke**) and rhabdomyolysis (**muscle breakdown**).



Wildfire can cause **burns** through contact with flames and hot surfaces.



Wildfire smoke can lead to disorders including **reduced lung function, bronchitis**, exacerbation of **asthma**, and cardiovascular effects like **heart failure**.



For pregnant people, smoke exposure may increase the risk of **reduced birth weight** and **preterm birth**.



Wildfire smoke may affect the immune system, potentially leading to increased vulnerability to **lung infections**.



Smoke from wildfires can travel downwind and affect air quality hundreds of miles away from the fire.

THANK YOU to the partners who provide invaluable information, expertise, and data for the Climate and Health Outlook series:

