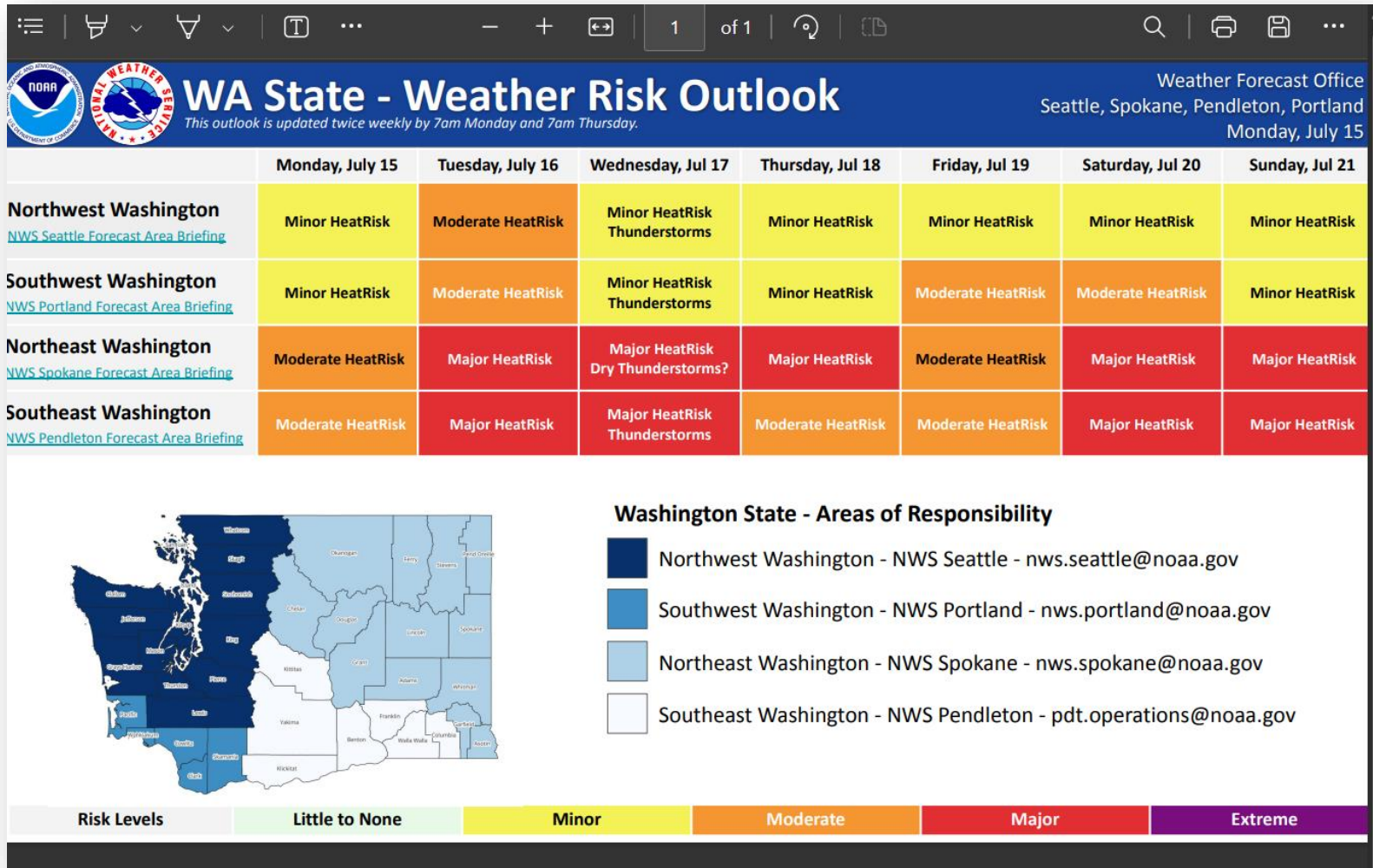




EMERGENCY PLANNING WITH DAFN CONSIDERATIONS

Claire Grant – Resiliency and Preparedness Strategist
Office of Resiliency and Health Security

Upcoming Heat Risk









Washington Guide for Public Health Actions for Extreme Heat

Examples of Actions tied to NWS HeatRisk Categories:

Green - 0 -	Prior to and during extreme heat season: <ul style="list-style-type: none"> Maintain connections with each of the four NWS Offices ((Pendleton, Portland, Seattle, and Spokane)) Stand-up the Extreme Heat Group for situational awareness. Monitor forecasts and risk for Washington State via NWS HeatRisk
Yellow - 1 -	During extreme heat season all the above recommendations, plus: <ul style="list-style-type: none"> Distribute health information to the public per HeatRisk categories and health advisories Focus outreach for sensitive groups (see CDC guidance for infants and children, athletes, older adults and people with chronic medical conditions)
Orange - 2 -	Initiate Early Warnings, Public Messaging, and Response Activities: <ul style="list-style-type: none"> Share 2-1-1 information regarding cooling centers Disseminate public health safety messages to at-risk populations and organizations serving at-risk populations
Red - 3 -	Recommend Activation of Cooling Centers & Reduction in Outdoor Activities: <ul style="list-style-type: none"> Activate daytime cooling centers Recommend cancelation of outdoor activities and events for children, camps, athletic practice and games
Magenta - 4 -	Recommend Cancelation of Outdoor Public Events and Activities: <ul style="list-style-type: none"> Recommend cancelation of outdoor activities and events during hottest time of day Recommend expanding cooling center hours to accommodate overnight use Strongly recommend everyone take steps to reduce exposure to heat

Air Quality Recommended Actions

Air Quality Index	What Should I Do?
Good 0–50	 It's a great day to be active outside and a good time to make a plan if worse air quality is in the forecast.
Moderate 51–100	 Some people are especially sensitive to lower levels of particle pollution and should reduce exposure. For example, limit time outside and avoid strenuous outdoor activity. All sensitive groups should watch for symptoms.
Unhealthy for Sensitive Groups 101–150	 Sensitive groups should take steps to reduce exposure. Limit time outside, avoid strenuous outdoor activity, and follow tips for cleaner indoor air. Everyone should watch for symptoms as a sign to reduce exposure.
Unhealthy 151–200	 Everyone should reduce exposure. Limit time outside, avoid strenuous outdoor activity, and follow tips for cleaner indoor air.
Very Unhealthy 201–300	 Everyone should reduce exposure. Stay inside and filter indoor air to keep it cleaner. Go elsewhere for cleaner air, if needed.
Hazardous >300	 Everyone should reduce exposure. Stay inside and filter indoor air to keep it cleaner. Go elsewhere for cleaner air, if needed.

<https://doh.wa.gov/community-and-environment/air-quality/smoke-fires/smoke-wildfires-toolkit>

Watch vs. Warning

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**.

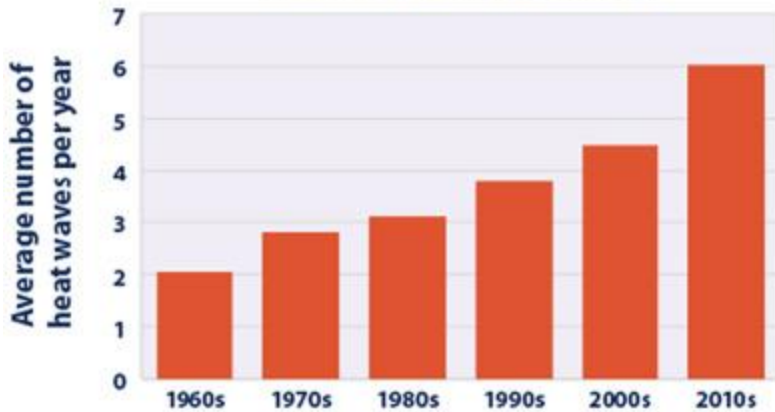
Avoid heavy activity & direct sunlight. Stay hydrated, find a cool indoor place, and check on children, elderly & pets.

Take Action!

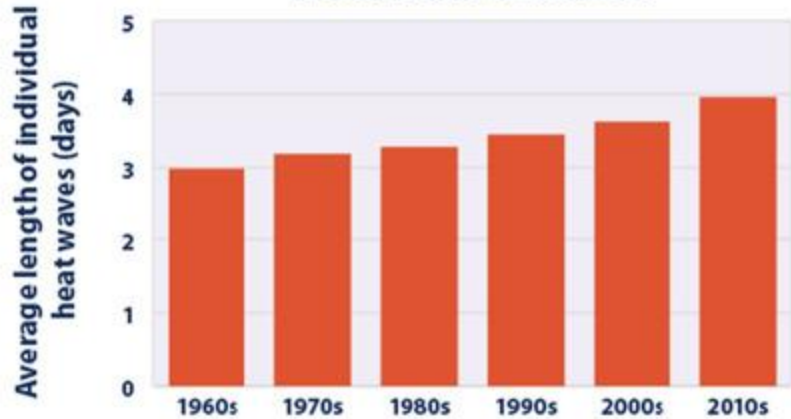


weather.gov

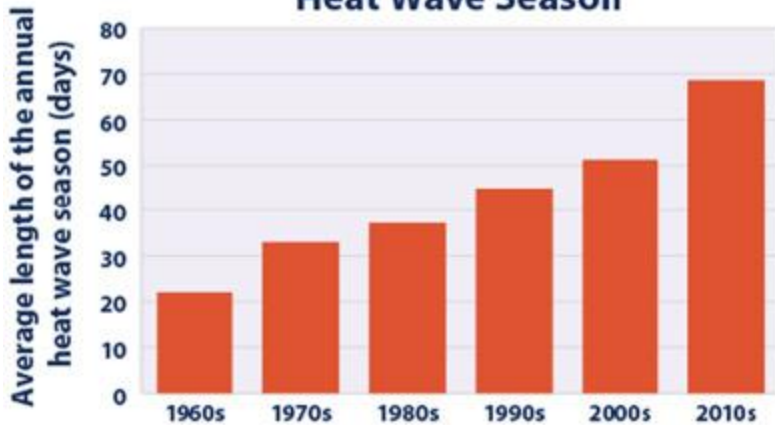
Heat Wave Frequency



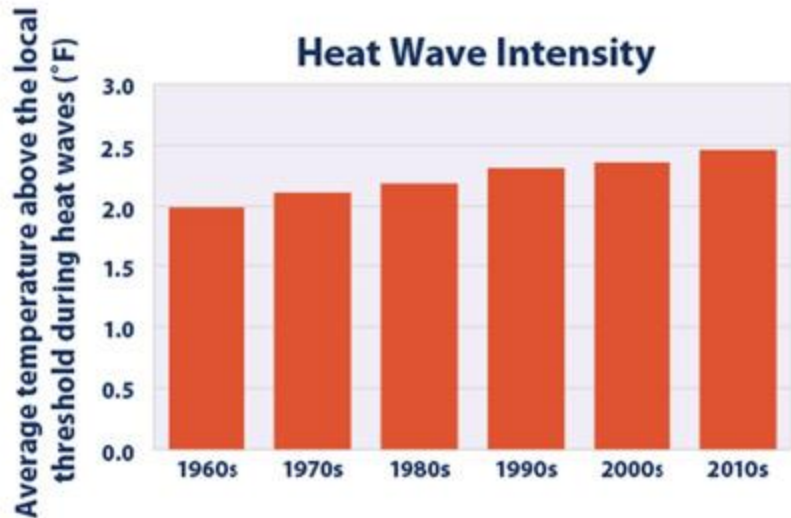
Heat Wave Duration



Heat Wave Season



Heat Wave Intensity



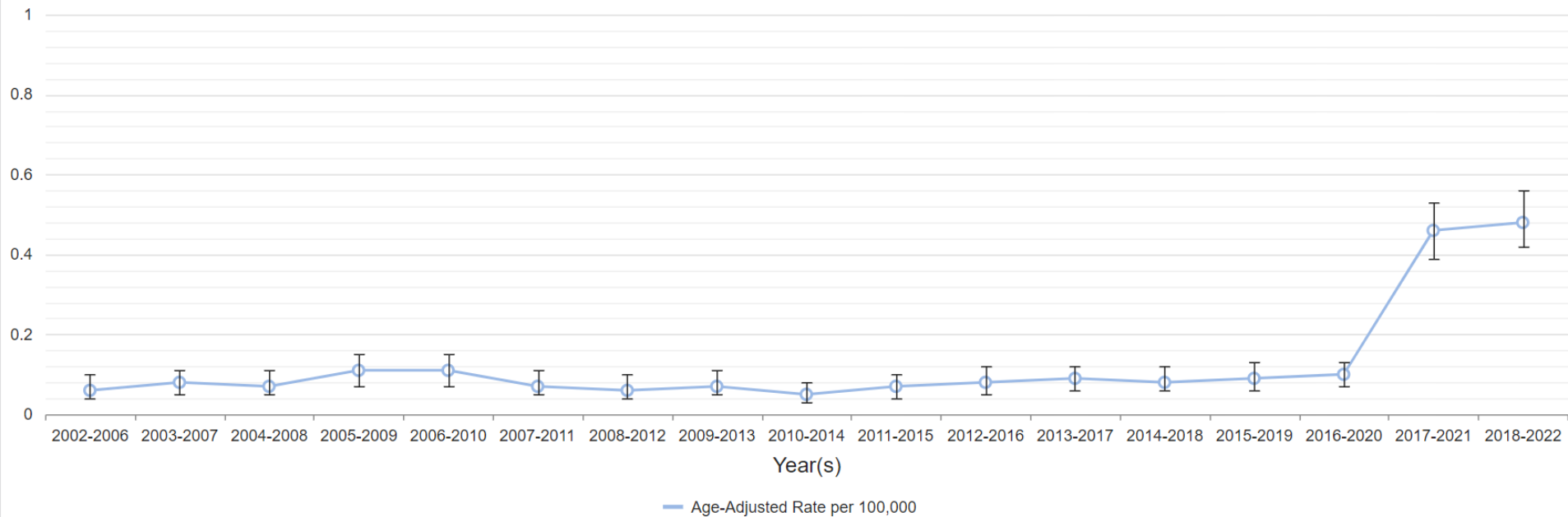
Decade

Source: EPA

Washington Tracking Network (WTN)

Heat Stress Deaths - Age-Adjusted Rate per 100,000

Geography: State, Time Period: 5 Years



Heat Exhaustion

Heat Stroke

ACT FAST

- Move to a cooler area
- Loosen clothing
- Sip cool water
- Seek medical help if symptoms don't improve

Dizziness

Thirst

Heavy Sweating

Nausea

Weakness



Confusion

Dizziness

Becomes Unconscious

ACT FAST

CALL 911

- Move person to a cooler area
- Loosen clothing and remove extra layers
- Cool with water or ice

Heat exhaustion can lead to heat stroke.

Heat stroke can cause death or permanent disability if emergency treatment is not given.



Stay Cool, Stay Hydrated, Stay Informed!



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)



Potential Increased Risk - Heat

Personal Risk Factors For Heat Stress



[OSHA.gov/heat](https://www.osha.gov/heat)

Smoke Exposure Health Risks

- Eye, nose, and throat irritation
- Cough, wheeze, shortness of breath
- Headaches
- Fatigue
- Irregular heartbeat, chest pain
- Exacerbations of chronic lung and heart conditions
- Overall increase in hospitalizations & deaths



Potential Increased Risk - Smoke

- People with health conditions
 - Lung & heart diseases
 - Respiratory illness
 - Diabetes
- People 65 years and older
- Pregnant people
- Outdoor workers
- People of color
- Tribal and indigenous people
- People with low income

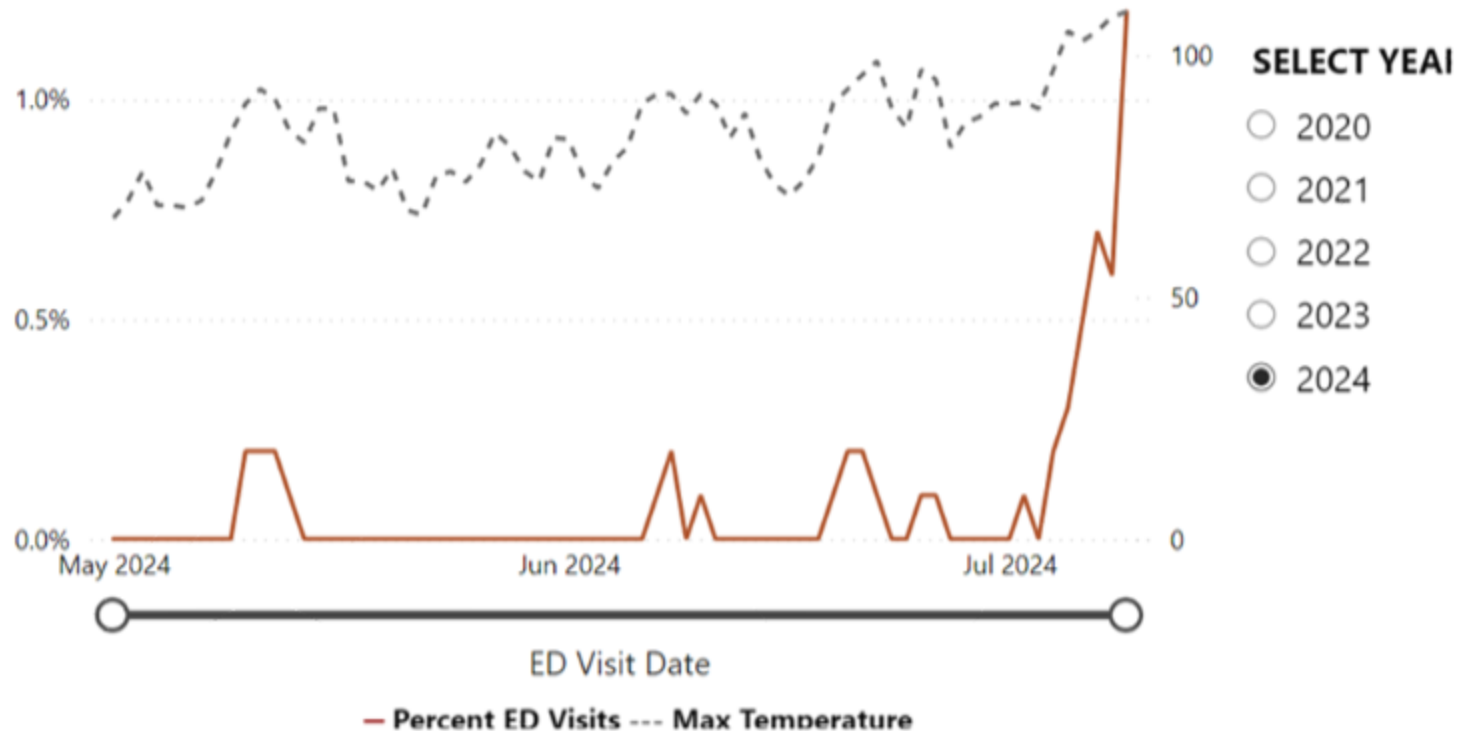


[Older Adults | Ready.gov](https://www.ready.gov/older-adults)

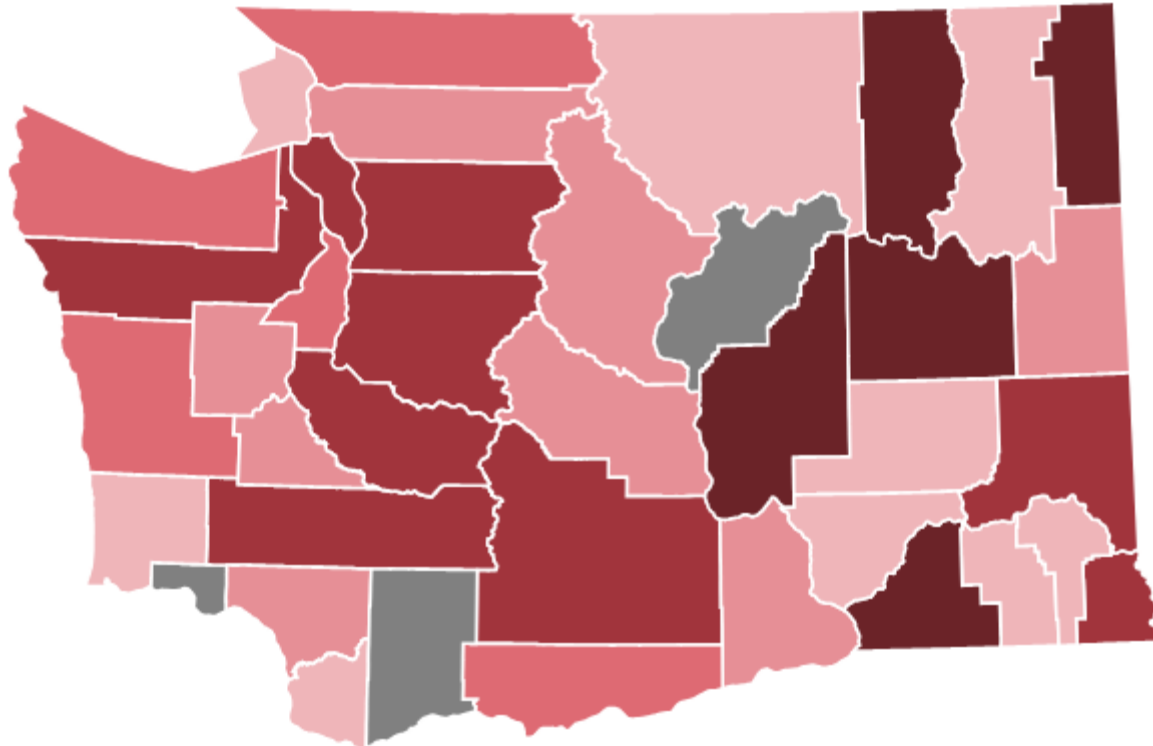
Seasonal Hazards Dashboards | Washington State Department of Health

Statewide Heat Related ED visits for the 2024 Summer Season

In this chart, we see heat related daily ED visits as a percent of all ED Visits (in red with units on the left Y-axis) with an overlay of maximum temperature (in gray with units on the right Y-axis) which is measured in degrees Fahrenheit.



Statewide Asthma Related ED visits for the Week of 7/5/2024-7/11/2024



Click on the map to select a county trend. To un-select a county, click the selected county again.



Washington Children and Youth Activities Guide for Air Quality



The following public health recommendations are to protect children and youth (18 years and younger) from fine particle air pollution (PM2.5). Apply this guide to school, child care, athletic practices and games, before and after school programs, camps, field trips, and other outdoor programming and activities.

Check current and forecast air quality at AirNow.gov or during wildfire smoke at wasmoke.blogspot.com
(See Appendix A)

Outside Air Quality Index (AQI): PM2.5

Activity Duration	Good (0-50 AQI)	Moderate (51-100 AQI)	Unhealthy for Sensitive Groups (101-150 AQI)	Unhealthy, Very Unhealthy, or Hazardous (≥151 AQI)	ADDITIONAL CONSIDERATIONS
15 mins to 1 hour (e.g., recess, PE, classes typically held outside)	No restrictions.	Allow children and youth with health conditions to opt out or stay indoors. Limit intensity of activities for these children and youth if needed.	Limit to moderate intensity activities outside. For children and youth with health conditions, further limit intensity or move to an area with safer air quality if needed.	Cancel outdoor activity or move to an area with safer air quality, either indoors with filtered air or to a different location. Limit to light intensity activities indoors if indoor PM2.5 levels are elevated.	Close windows and doors when activities are moved indoors. Pay attention to heat. Indoor air filtration can reduce elevated levels of indoor PM2.5. See Appendix C. To measure indoor PM2.5 levels, see Appendix B.
1-4 hours (e.g., athletic events and practices)	No restrictions.	Allow children and youth with health conditions to opt out or stay indoors. Limit intensity of activities for these children & youth if needed.	Limit to light intensity activities or to a 1-hour total duration with moderate intensity activities. If intensity level and time cannot be modified, consider canceling outdoor activity or move to an area with safer air quality, either indoors or to a different location. For children & youth with health conditions, further limit time or intensity if needed.	Cancel outdoor activity or move to an area with safer air quality, either indoors with filtered air or to a different location. Limit to light intensity activities indoors if indoor PM2.5 levels are elevated.	Consider time spent in transit in activity duration. All children and youth 18 and younger are considered a sensitive group. Health conditions include but are not limited to asthma and other lung disease, heart disease, diabetes, and respiratory infection (e.g., RSV and pneumonia).
> 4 hours (e.g., outdoor school or programming, day camp, overnight camp)	No restrictions.	Move children and youth with health conditions to an area with safer air quality, either indoors or to a different location if needed. Allow children and youth without health conditions to opt out or stay indoors and limit intensity of activities.	Limit to light intensity activities and under 4-hr total duration. If intensity level and time cannot be modified, cancel outdoor activity, or move it to an area with safer air quality, either indoors or to a different location. For children and youth with health conditions, further limit time or intensity if needed.	Cancel outdoor activity or move to an area with safer air quality, either indoors with filtered air or to a different location. Limit to light intensity activities indoors if indoor PM2.5 levels are elevated.	

Washington Children and Youth Activities Guide for Air Quality

Washington Air Quality Guide for Public Health Actions for Wildfire Smoke

DOH Communications Strategy for Heat Safety

[Hot Weather Precautions | Washington State Department of Health](#)

- Hot weather precautions to reduce the risk of heat exhaustion and heat stroke
- Hot weather precautions for if you go outside
- Hot weather precautions if the power goes out and/or air conditioning is not available
- **One-pager resources:** Spanish, Chinese, Korean, Russian, Somali, Ukrainian, Vietnamese, Large Font

Emergency Preparedness for Specific Groups



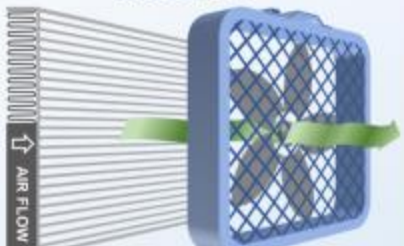
- [Children and Disasters](#)
- [Deaf and Hard of Hearing](#)
- [Medical Needs](#)
- [Mobility Disability](#)
- [Pets and Emergencies](#)
- [Psychological and Emotional Needs](#)
- [Visual Disabilities](#)

[Plan Ahead for Disasters | Ready.gov](#)

Maintaining Clean Air Indoors

DIY Air Cleaner to Reduce Wildfire Smoke Indoors

Materials



20" X 20" air filter
Suggested rating: MERV 13

20" X 20" box fan
Only use certified fans with UL or ETL marking (2012 model or newer)

Clamps or **Duct Tape** or **Bungee Cords**

Assembly

1. Attach the air filter to the back of the box fan using either clamps, duct tape or bungee cords.
2. Check the filter for the direction of the air flow (marked on the side of the filter).
3. Replace filters when dirty.

Learn about box fan safety tips:
<https://www.epa.gov/air-research/research-diy-air-cleaners-reduce-wildfire-smoke-indoors#FAQ>



<https://doh.wa.gov/community-and-environment/air-quality/indoor-air/portable-air-cleaners>

Equity Annex



An equity annex provides information on how to support communities during an emergency response

emPOWER



Transit

- Transit (ESF-1) is not 'owned' by DOH
- However, many community organizations and local health jurisdictions work with public transit companies to provide transit to and from cooling centers, etc. in the event of an emergency



CIEP & WASILC



[Center for Inclusive Emergency Planning](#)

Always have different ways to get informed during an emergency.

#BeInformed

Ready

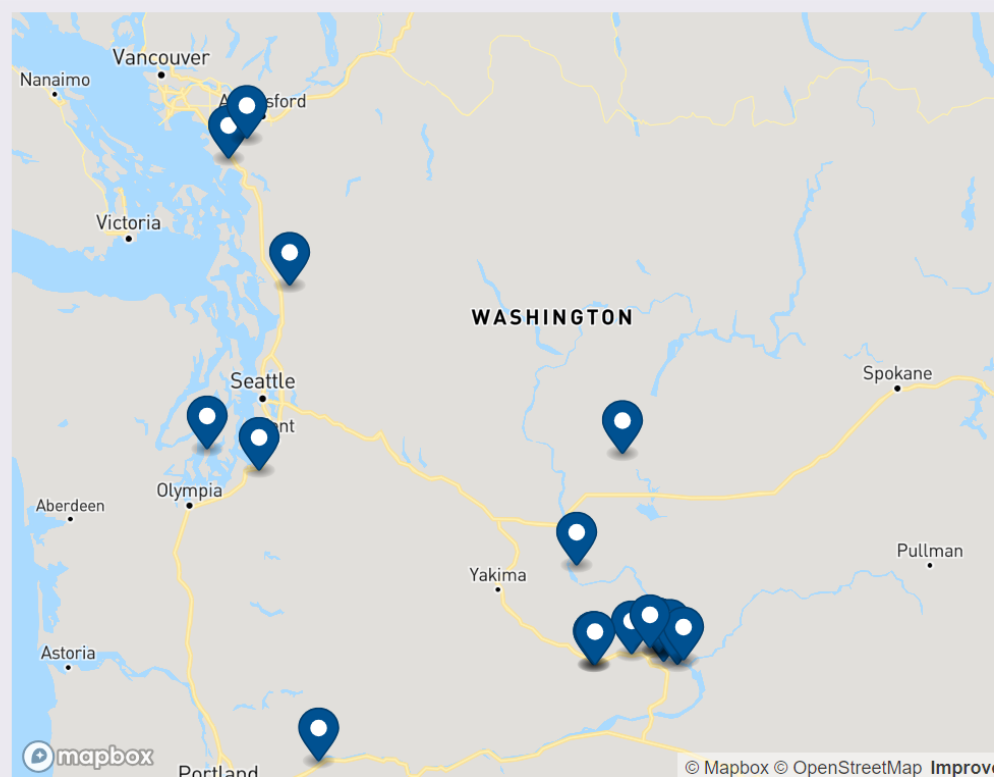
211 Cooling & Clean Air Centers



[Submit fee](#)

TH-2600.1900-180

1-25 of 344



Staying Cool Information - Lewis County

Keep Cool

- visit air-conditioned places, like malls, movie theaters, libraries or other public places
- cover windows that receive morning or afternoon sun
- dress in lightweight clothing

[Show more](#)

Questions?

Claire Grant, Resilience and Preparedness Strategist

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Head to a local cooling center to #BeatTheHeat



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.