

# Public Health Emergency Preparedness & Response (PHEPR) Program Update



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PHEPR Supervisor

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Resources Specialist  
PHEPR

# Our PHEPR Team



# What is KPHD's Role in an Emergency?

## Our Mission

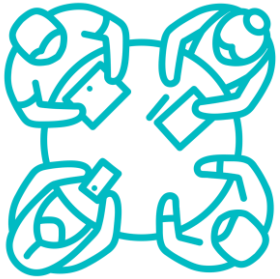
Prevent disease and protect and promote the health of all people in Kitsap County.

## Our Mission in an Emergency

Prevent disease and protect and promote the health of all people in Kitsap County.

The difference? **Our priorities** depending on how the disaster affects our health.

# Key Response Activities



**Internal  
Coordination**



**Interagency  
Coordination**



**Information  
Sharing**



**Public  
Information**



**Disease  
Containment**



**Injury  
Prevention**



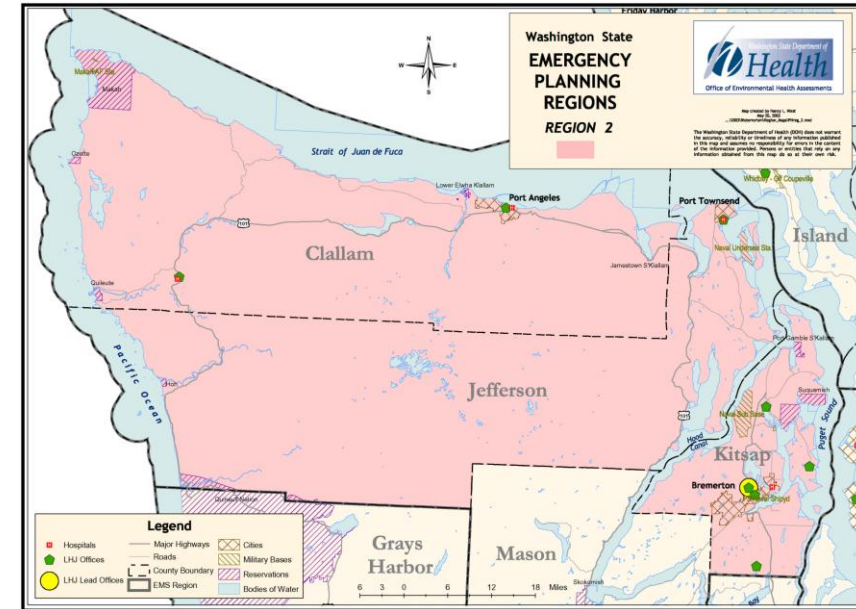
**Staff  
Safety**



**Continuity of  
Operations**



## Health and Medical Services Coordination (ESF-8) for County Emergency Operations Center

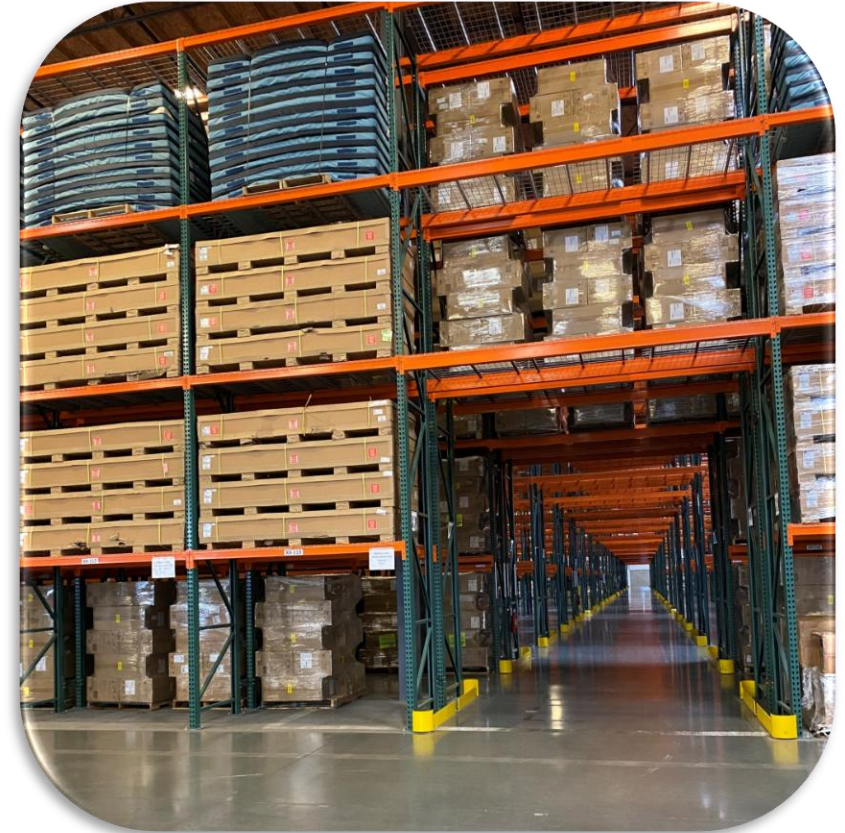


## Regional Public Health Planning, Training, & Exercise Support

- 2009 H1N1 Response (2009–2010)
- Ebola Prep (2014)
- Horseshoe Lake GI Illness Response (2018)
- Longterm Care Facility GI Illness Response (2019)
- Measles Prep (2019)
- COVID-19 (2020–2023)
- MPOX (2022)
- Tuberculosis (2022)

# How PHEPR Helps KPHD Prepare

- **Plans**, procedures, and systems
- **Training** and **exercises**
- **Partnerships** with local, tribal, regional, and state organizations
- **Communications** systems
- **Medical countermeasures** and other emergency supplies
- **Staying informed** about best practices
- **Employee preparedness** activities



WA Department of Health Warehouse



**Nathan Anderson**  
*Planning Specialist*

- Response plans & procedures
- Floor monitor program
- Duty officer
- Climate change (acute response)



**Amy Anderson**  
*Training & Exercise Specialist*

- Emergency response training
- Emergency response exercises
- Alternate communications (ham radio)



**Quynh Sample**  
*Resources Specialist*

- Medical Reserve Corps
- Medical countermeasures and medical materiel
- Outreach
- Employee preparedness

# Recent and Current Initiatives

- Plans “Refresh” – KPHD and County
- Exercises – “Stinky Tornado”, Network Outage, JCPH
- Outreach – Kids Events, Heat & Wildfire
- Employee Preparedness
- Alternate Communications (Winlink, Ham, Zoleo)
- 2026 FIFA World Cup Planning



# Some of our partners include...



## Health Hazards

For information on how to stay safe and healthy during some of the most likely hazards we see or will likely experience in Kitsap County, check out the links below.

Visit the [Kitsap County Department of Emergency Management website](#) to learn more about local disaster preparedness and [sign up for alerts](#). More resources are available at [Ready.gov](#).



### Storms & Flooding

Storms, floods, and power outages cause health hazards.

[Learn More](#)



### Wildfire Smoke

Protect your health when air quality is poor.

[Learn More](#)



### Earthquakes

Earthquakes can happen at any time. Be ready!

[Learn More](#)



### Extreme Heat

Stay safe and cool during hot weather.

[Learn More](#)

## Storms & Flooding

Storms can cause power outages, flooding, sewage pollution, and other hazards.

Learn how to safely use generators, keep food safe to eat, make water safe to drink, and take care of your septic system during a storm.

By being prepared, you can protect yourself and your loved ones.



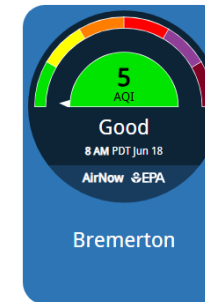
> [Generator Use During a Power Outage](#)

> [Food Safety During a Power Outage](#)

> [Drinking Water Safety and Disinfection](#)

> [Onsite Sewage \(Septic Systems\)](#)

> [Dealing with Floodwater](#)



[Click here](#) to view current air quality if graphic does not load.

## Checking Air Quality

For current air quality conditions in Kitsap County, go to:

- [Puget Sound Clean Air Agency](#)
- [Washington Department of Ecology](#)
- [AirNow.gov](#)

For updates on wildfire activity and smoke forecasts, visit [Smoke Information blog](#)

## Mobile Apps

You can get local air quality updates on your phone by installing the [WA app](#), available for Android and Apple devices.

# THANK YOU!

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[prepare@kitsappublichealth.org](mailto:prepare@kitsappublichealth.org)



[kitsappublichealth.org](http://kitsappublichealth.org)

# PUBLIC HEALTH HEAT & WILDFIRE SMOKE PREPAREDNESS



**Nathan Anderson, MPA**  
Planning Specialist  
Public Health Emergency  
Response & Preparedness

# Health and medical impacts of **Extreme Heat**

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Prolonged exposure to heat impedes our ability to regulate internal temperature

## **Heat-related illnesses**

Heat cramps, heat exhaustion, heatstroke, hyperthermia

## **Chronic conditions**

Cardiovascular, respiratory, cerebrovascular diseases and diabetes-related conditions

## **Occupational injuries**

Drownings, food and waterborne disease, marine algal blooms

## **Mental health and psychological stress**

Stress, irritability, interaction with psychiatric medications

# Health and medical impacts of **Wildfire Smoke**

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Exposure to  
smoke can cause  
or worsen health  
problems

**Eye, nose, and throat irritation**

**Fatigue, headaches, and coughing**

**Wheezing and shortness of breath**

**Mental health and psychological stress**

# Health and medical impacts of **Heat and Smoke**

Exposure to smoke and heat can make anyone sick, but some people have a higher risk of getting sick



*Babies and children*



*Older adults (65 and older)*



*People who are pregnant*



*People who are unhoused*



*People with health conditions, such as heart or breathing problems*



*Households that do not have air conditioning*



*People who work or exercise outdoors*

# Climate Outlook

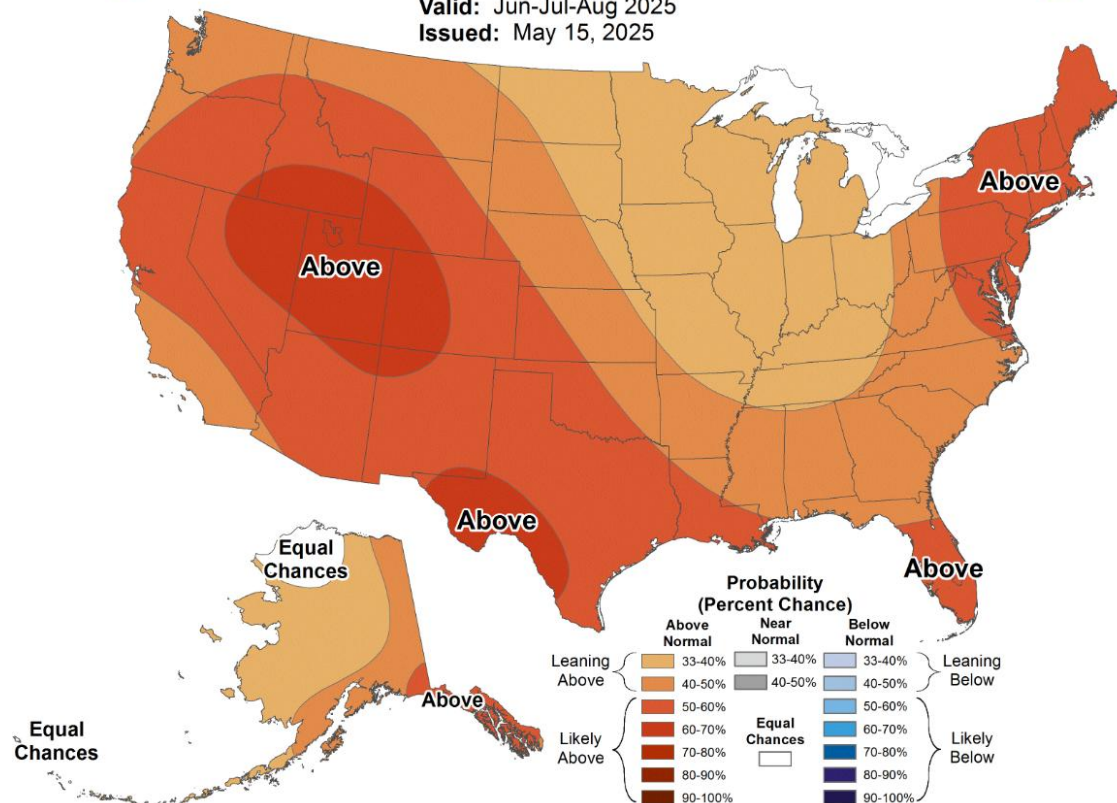
## Heat and smoke forecasts for the summer



### Seasonal Temperature Outlook



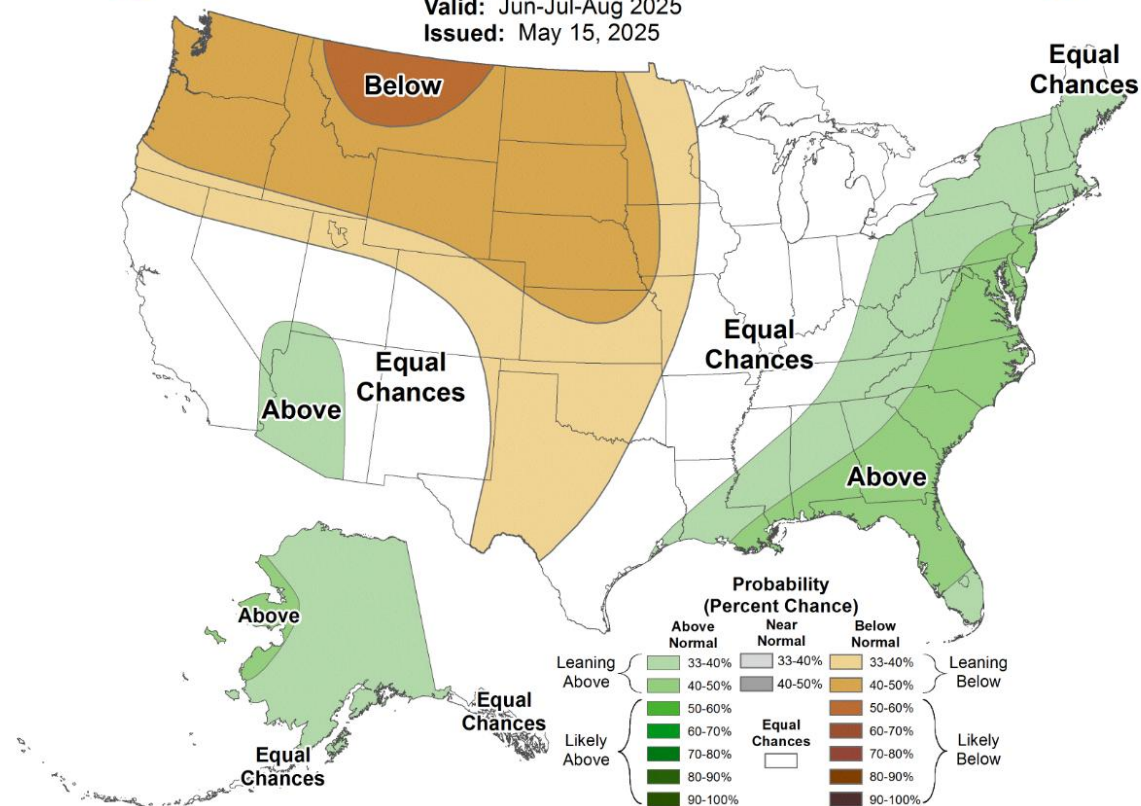
Valid: Jun-Jul-Aug 2025  
Issued: May 15, 2025



### Seasonal Precipitation Outlook



Valid: Jun-Jul-Aug 2025  
Issued: May 15, 2025

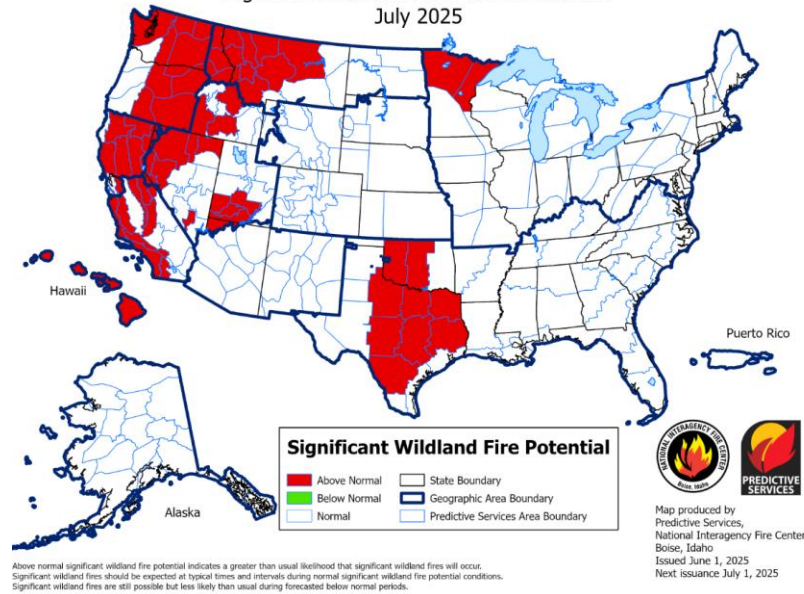


Source: <https://www.cpc.ncep.noaa.gov/>

[kitsappublichealth.org](https://kitsappublichealth.org)

## Heat and smoke forecasts for the summer

Significant Wildland Fire Potential Outlook  
July 2025



Significant Wildland Fire Potential Outlook  
August 2025



Significant Wildland Fire Potential Outlook  
September 2025



# What is KPHD Doing?

## Maintain awareness of evidence-based and best practices for public health interventions

### Welcome to HEAT.gov

Heat related illnesses and death are largely preventable with proper planning, education, and action. Heat.gov serves as the premier source of heat and health information for the nation to reduce the health, economic, and infrastructural impacts of extreme heat.

Heat.gov is the web portal for the National Integrated Heat Health Information System (NIHHS)

### Community-based heat adaptation interventions for improving heat literacy, behaviours, and health outcomes: a systematic review

*Hamimatunnisa Johar, Fatima Ibrahim Abdulsalam, Yuming Guo, Till Baernighausen, Nowrozy Kamar Jahan, Jessica Watterson, Karin Leder, Darwin Gouwanda, G R Letchuman Ramanathan, Kenneth Kwing Chin Lee, Norlen Mohamed, Thahirahtul Asma' Zakaria, Sandra Barteit, Tin Tin Su*

### Excessive Heat Events Guidebook

EPA 430-B-16-001 | June 2006  
Updated Appendix A | March 2016

United States Environmental Protection Agency  
Office of Atmospheric Programs (6207J)  
1200 Pennsylvania Avenue NW, Washington, DC 20460



Examining the effectiveness of public health interventions to address wildfire smoke, combined heat-smoke events and pollutants

28 July 2023

## WILDFIRE SMOKE: A GUIDE FOR PUBLIC HEALTH OFFICIALS

### Washington Smoke Blog

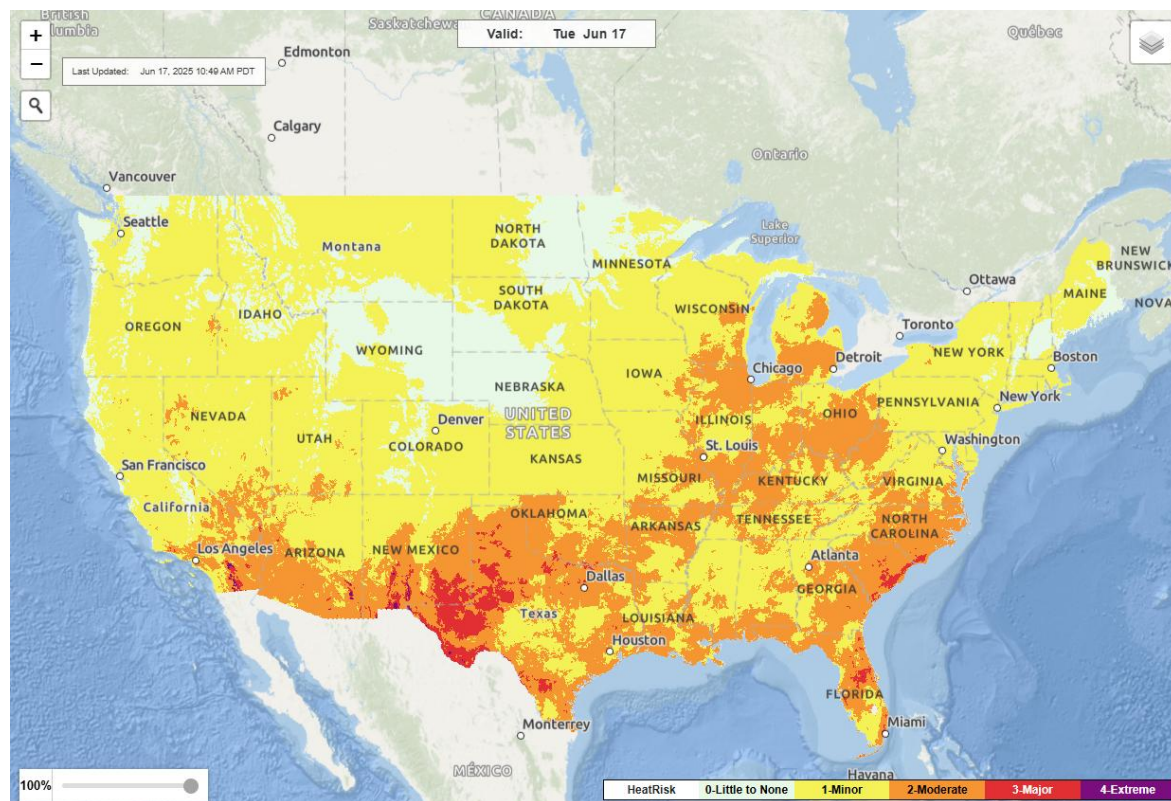
Welcome to the Washington Smoke blog, a partnership between state, county, and federal agencies, and Tribes. We coordinate to collectively share information for Washington communities affected by wildfire smoke.

**Sources:** [heat.gov](https://heat.gov), [airnow.gov](https://airnow.gov), [wasmoke.blogspot.com](https://wasmoke.blogspot.com), [epa.gov](https://epa.gov)

[kitsappublichealth.org](https://kitsappublichealth.org)

# What is KPHD Doing?

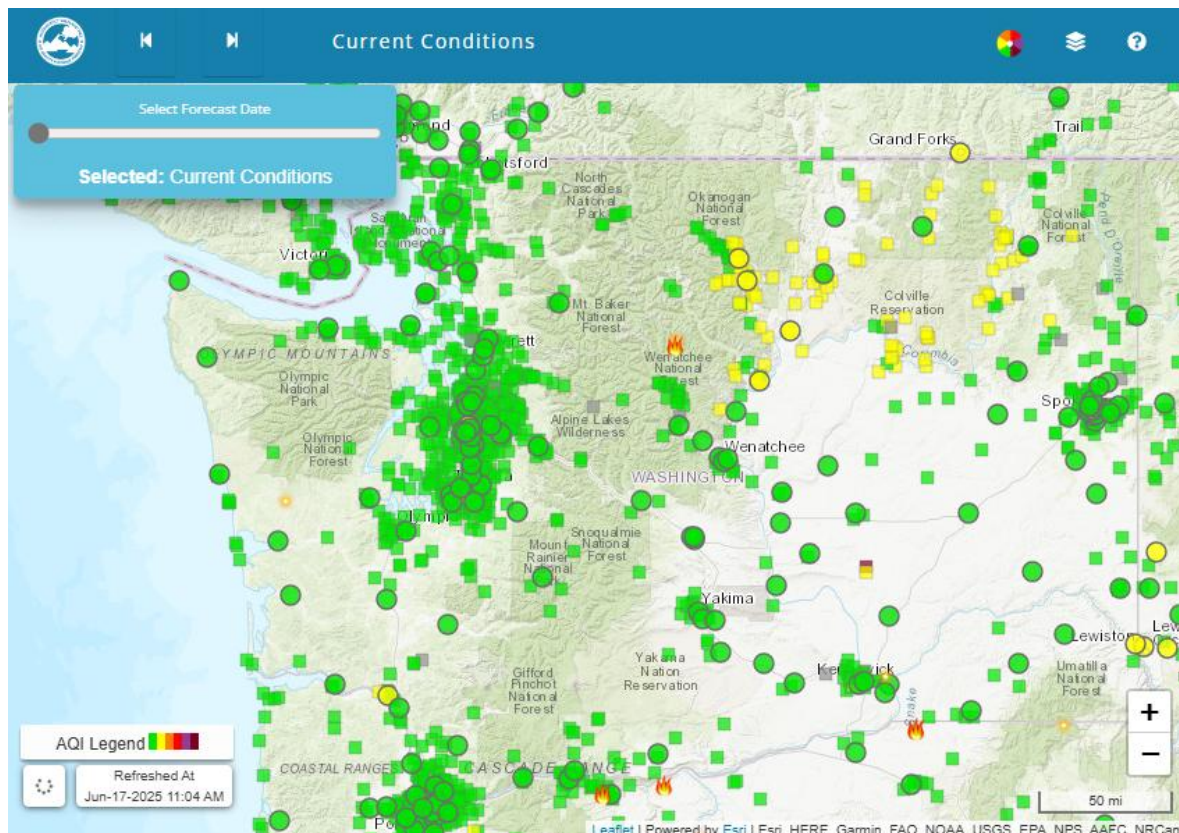
## Monitoring conditions and sharing recommended public health actions



| NWS HeatRisk Values       | Public Health Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2<br>Moderate             | <b>INITIATE EARLY WARNING, PUBLIC MESSAGING, AND RESPONSE ACTIVITIES</b> <ul style="list-style-type: none"><li>• <b>Recommend</b> sharing information about publicly available cooling locations where general population can go to access air conditioning or cooling features such as water recreation facilities or other public places</li><li>• <b>Recommend</b> sharing key public health heat safety messaging and risk communications to at-risk populations, including those experiencing homelessness, older adults, children, and outdoor workers</li><li>• <b>Consider</b> reductions in strenuous outdoor activities during the hottest part of the day</li><li>• <b>Consider</b> cancellation and/or rescheduling of outdoor children's activities, day-camps, athletic practice, and games or moving them indoors during the hottest part of the day</li><li>• <b>Promote</b> people going to public spaces that are air conditioned</li><li>• <b>Monitor</b> NWS HeatRisk forecast and alerts until forecast conditions become more favorable (e.g., HeatRisk Value of 1 - yellow - or lower).</li></ul> |
| 3<br>High                 | <b>ACTIVATION OF COOLING CENTERS &amp; REDUCTION IN OUTDOOR ACTIVITIES</b> <ul style="list-style-type: none"><li>• <b>Recommend</b> cancellation of outdoor activities and events during hottest times of the day</li><li>• <b>Recommend</b> cancellation and/or rescheduling of outdoor children's activities, day-camps, athletic practice, and games</li><li>• If school is in session, <b>consider</b> capabilities of schools to maintain cooler indoor air temperatures; <b>Public Health will recommend closure if indoor temperatures cannot be maintained reasonably free of excessive heat (WAC § 246-366-080)</b></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4<br>Very High to Extreme | <b>RECOMMEND CANCELATION OF OUTDOOR EVENTS AND ACTIVITIES</b> <ul style="list-style-type: none"><li>• <b>KCDEM – Consider expanding</b> hours of operation for cooling centers and/or opening overnight cooling shelters</li><li>• <b>KPHD - Emphasize</b> cancellation and/or rescheduling of outdoor children's activities, day-camps, athletic practice, and games</li><li>• <b>KPHD – Consider declaring</b> a public health emergency after notification and discussion with the Health Board</li><li>• <b>KCDEM – Consider making</b> an emergency proclamation due to KPHD's emergency declaration</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

# What is KPHD Doing?

## Monitoring conditions and sharing recommended public health actions



### Washington Guide for Public Health Actions for Wildfire Smoke

This guide is designed for air quality, public health, and other officials making local decisions.



#### Air Quality Index: PM2.5

#### Recommended Public Health Actions

Check current and forecasted air quality at [wasmoke.blogspot.com](http://wasmoke.blogspot.com)

#### Unhealthy (151-200)

##### Above recommendations, plus:

- Recommend everyone take steps to reduce exposure (limit time outside, avoid strenuous outdoor activity, and follow tips for cleaner indoor air).
- Recommend everyone spend time in an identified cleaner air setting in the community, such as a library, if they cannot maintain cleaner air in their residence.
- Consider canceling outdoor public events and activities: [Wildfire Smoke Guidance for Canceling Outdoor Events or Activities and Closing Schools](#).
- For an extended duration of smoke, consider opening a cleaner air shelter for the public.

#### Very Unhealthy (201-300)

##### Above recommendations, plus:

- Strongly recommend everyone take steps to reduce exposure (stay inside and filter indoor air to keep it cleaner; go elsewhere for cleaner air if needed and possible).
- Cancel outdoor public events and activities: [Wildfire Smoke Guidance for Canceling Outdoor Events or Activities and Closing Schools](#).
- If school is in session, discuss school closure with administrators if indoor air cannot be kept lower than  $PM_{2.5}$   $125.5 \mu g/m^3$  (AQI value of 201): [Wildfire Smoke Guidance for Canceling Outdoor Events or Activities and Closing Schools](#).
- Distribute NIOSH-approved particulate respirators, such as N95 masks, as available, for limited use outside. Include [training material](#) for proper fit and use.
- For an extended duration of smoke, consider recommending that sensitive groups voluntarily relocate to an unimpacted area.

#### Hazardous (>300)

##### Above recommendations, plus:

- For an extended duration of smoke, consider recommending that everyone voluntarily relocate to an unimpacted area.

**Sources:** [wasmoke.blogspot.com](http://wasmoke.blogspot.com)  
[doh.wa.gov/community-and-environment/air-quality/smoke-fires/partner-toolkit](http://doh.wa.gov/community-and-environment/air-quality/smoke-fires/partner-toolkit)

[kitsappublichealth.org](http://kitsappublichealth.org)

# What is KPHD Doing?

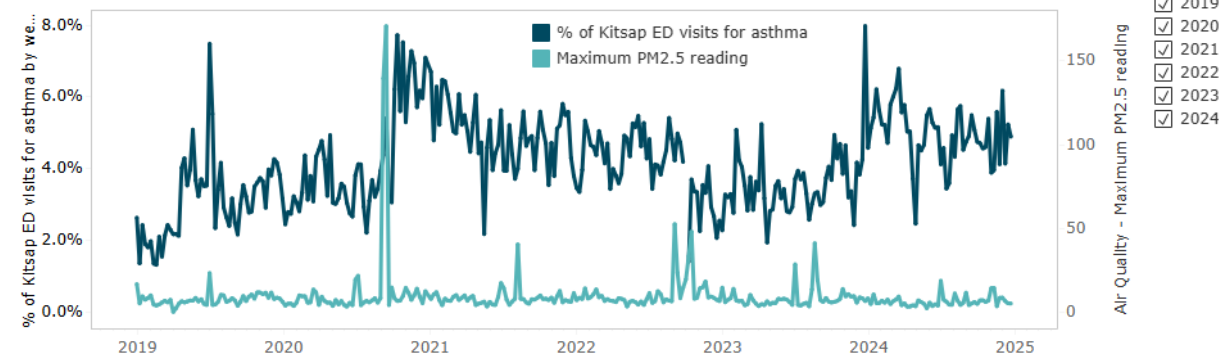
## Monitoring conditions and sharing recommended public health actions

### AIR QUALITY & ASTHMA VISITS TO KITSAP EMERGENCY DEPARTMENTS

Updated January 10, 2025

**Definition:** The dark blue line is the percentage of Kitsap County emergency department (ED) visits for the week that were for asthma-related symptoms, as identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, CDC Asthma CCDD v1, among chief complaints and discharge diagnoses. The lighter blue line is the maximum PM2.5 reading in Kitsap for the week.

#### Asthma-related ED Visits (as a percentage of all visits) and the Maximum PM2.5 Reading



### TEMPERATURE & HEAT-RELATED VISITS TO KITSAP EMERGENCY DEPARTMENTS

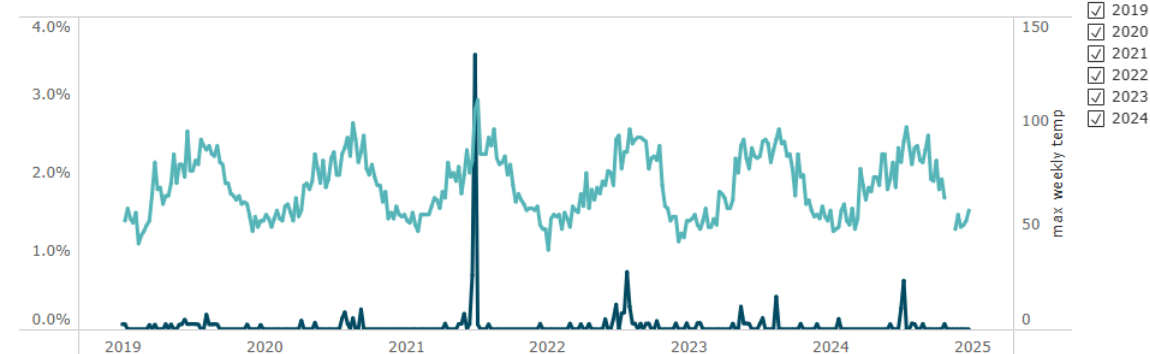
Updated January 13, 2025

**Definition:** The dark blue line is the percentage of Kitsap County emergency department (ED) visits that were for heat-related symptoms, as identified through the CDC ESSENCE Chief Complaint Discharge Diagnosis (CCDD) query category, Heat-Related Illness V2, among chief complaints and discharge diagnoses. The lighter blue line is the maximum temperature recorded in Kitsap for the week during each summer.

The CDC defines Heat Related Illness as the following: Heat Stroke, Heat Exhaustion, Rhabdomyolysis, Heat Syncope, Heat Cramps and Heat Rash.

The light blue line is the max temperature observed for each week for each year. These readings were taken from the maximum temperature between two monitoring stations in Bremerton for each day.

#### Heat-related ED visits (as a percentage of all visits) & Maximum Temperature Recorded



# What is KPHD Doing?

## Conducting public information and community outreach in collaboration with our communications program

**PROTECT YOUR HEALTH FROM WILDFIRE SMOKE**

**Smoke from fires is unhealthy**

 Tiny particles from wood smoke can get into your eyes and lungs and cause serious health problems.

**Some people are at higher risk from smoke, including:**

 Babies and children

 Older adults (65 and older)

 People who are pregnant

 People with health conditions, such as heart or breathing problems

**How to check air quality**

The Puget Sound Clean Air agency monitors air quality in our region. Go to:

**pscleanair.gov**

- Air quality reports and forecasts for Kitsap County.
- Health recommendations based on current air quality and risk factors.

**When the air is smoky**

Health risks from wildfire smoke vary depending on how much smoke is in the air and your personal risk factors. In general, you can protect your health by:

- Staying indoors as much as possible.
- Avoiding vigorous outdoor activities, such as running or biking.
- Keeping air in your home as clean as possible:
  - Close windows and doors as much as possible.
  - Use an air cleaner with HEPA filter if available.
  - Use fans or an air conditioner (AC) to cool your home. Set AC to recirculate.
  - Avoid activities that make air quality worse, such as vacuuming or frying foods.

**Prepare for wildfire smoke**

**Plan ahead!** Supplies such as fans and filters can be harder to purchase during the summer.

- Create a space in your home where you can keep air cleaner and cooler.
- Seal gaps around doors and windows.
- Consider getting an air purifier for your home and/or work.
- Talk to your healthcare provider if someone in your household is at higher risk. If you have a breathing condition such as asthma, make sure you have an inhaler and any medications you might need.
- Plan indoor activities for smoky days.

**MAKING A BOX FAN FILTER**

 You can make a filter to clean air in your home by attaching a furnace filter to the back of a box fan. For instructions, scan the code at left using a smartphone camera, or go to:

[ecology.wa.gov/Air-Climate/Air-quality/Smoke-fire](https://ecology.wa.gov/Air-Climate/Air-quality/Smoke-fire)

**MASKS AND SMOKE**

- Staying indoors is the best way to protect your health from smoke.
- If you have to be outside, consider wearing a high-quality respirator such as an N95 or KN95.
- Make sure the mask fits snugly over your mouth and nose. Loose-fitting masks, surgical masks, and cloth masks will not filter smoke.

**MAKING A BOX FAN FILTER**

- Contact your healthcare provider if you experience concerning symptoms related to smoke. Call 911 if you experience severe symptoms.
- If you do not have a safe place to stay indoors, go to a public indoor space.
- Cleaner air and/or cooling stations may be opened in Kitsap County when unhealthy air quality or extreme heat is expected. For information or to sign up for notifications, go to [kitsapdem.com](https://kitsapdem.com) or call 2-1-1.

**LEARN MORE:** [wasmoke.blogspot.com](https://wasmoke.blogspot.com) | [pscleanair.gov](https://pscleanair.gov) | [kitsappublichealth.org](https://kitsappublichealth.org) | 360-728-2235

**PUBLIC HEALTH NEWS**



July 24, 2024

**With wildfires increasing in the Northwest, prepare for smoke**

Hotter and drier weather in the Pacific Northwest this summer could set the stage for a long and intense summer wildfire season, according to the Washington State Department of Health. More wildfires create the potential for more smoke to drift into our region, increasing health risks for people of all ages. As of July 24, there are six large fires burning statewide.

Now is the time to prepare your home and workplace for smoky days ahead. Keep in mind that some supplies, such as fans, filters, and air conditioners, could be more difficult to find as summer progresses. Scroll down for more tips and resources or visit our [Air Quality and Smoke Page](https://kitsappublichealth.org).

**STAYING HEALTHY ON HOT DAYS**



Getting too hot can make you sick. Take steps to stay cool when the weather is hot and know the warning signs of heat-related illness. **People at higher risk for getting sick from heat include:**

 Babies and children

 Pregnant people

 Older adults (65 and older)

 People who work or exercise outdoors

 People with chronic health conditions

 Households that do not have air conditioning

**Know the warning signs**

**Signs of HEAT EXHAUSTION can include:**

- Heavy sweating
- Cold, clammy skin
- Fast, weak pulse
- Nausea or vomiting
- Muscle cramps
- Tiredness/weakness
- Dizziness
- Headache
- Loss of consciousness (passing out)

**Signs of HEAT STROKE can include:**

- High body temperature (103° or higher)
- Hot, red skin
- Fast, strong pulse
- Headache
- Dizziness or nausea
- Confusion
- Loss of consciousness (passing out)

**Seek medical help for heat exhaustion** if the person is throwing up, their symptoms are getting worse, or symptoms last longer than an hour.

**CALL 911 if you think someone has heat stroke.** Heat stroke is a medical emergency.

**Tips to cool off when it's hot**

- Stay in cool, indoor spaces as much as you can. If you are not able to stay cool in your home, go to a public space with air conditioning.
- Drink plenty of water. Limit caffeine, alcohol, and sugary drinks.
- Wear loose, lightweight, light-colored clothing. Cool yourself with wet clothing. Use sunscreen.
- Pace yourself when working or exercising outside. Try to plan activities in the mornings. Take breaks.
- Take cool showers or baths, or visit a pool, lake or swimming beach. For current beach advisories, go to [kitsappublichealth.org/beaches](https://kitsappublichealth.org/beaches) or call 360-728-2235.
- Check on neighbors and loved ones. Visit or call at least twice a day, and encourage them to follow these tips.

**Watch the weather forecast**

Check your favorite local news source or the National Weather Service:

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

 206-526-6087

**Learn about cooling centers**

Cooling centers may be open when the weather is extremely hot. Learn more:

 [kitsapdem.com](https://kitsapdem.com)  211

**LEARN MORE:** [cdc.gov/extreme-heat](https://cdc.gov/extreme-heat) | [weather.gov](https://weather.gov) | [kitsapdem.com](https://kitsapdem.com) | [kitsappublichealth.org](https://kitsappublichealth.org) | 360-728-2235

**PUBLIC HEALTH NEWS**



June 20, 2024

**How to stay healthy on hot days**

Heat-related illnesses and deaths happen every year in the United States, though they are preventable. Learn how to protect yourself from heat risks.

Right now, a heat wave is blanketing the United States from the Midwest to the Northeast. Many cities are experiencing record-breaking temperatures that pose dangerous health risks — especially to those who don't have a cool place to go.

Though the weather is not as hot here in the Pacific Northwest, our region is expected to experience above-average temperatures this summer.

Getting too hot can make you sick. Heat-related illnesses, like heat exhaustion or heat stroke, can happen to anyone and are most likely to affect:

Source: <https://kitsappublichealth.org/media>

[kitsappublichealth.org](https://kitsappublichealth.org)

# What is KPHD Doing?

**Helping to distribute supplies when resources are available**

- **Portable Air Cleaners from Washington Department of Health**
- **Other materials as available**

For inquiries about availability, email:

**[prepare@kitsappublichealth.org](mailto:prepare@kitsappublichealth.org)**

# THANK YOU!

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[nathan.anderson@kitsappublichealth.org](mailto:nathan.anderson@kitsappublichealth.org)



[kitsappublichealth.org](http://kitsappublichealth.org)