



Chelan-Douglas Health District

200 Valley Mall Parkway, East Wenatchee, WA 98802

Wildfire Smoke



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Chelan-Douglas Health District

Wildfires in North Central Washington



Wildfires in North Central Washington have increased in size, severity and duration over the past decade. With warming climates, regular drought conditions and trees dying from pine beetle infection, the forests in the region are particularly susceptible to fire.

The Center for Disease Control (CDC) recognizes wildfire smoke as a public health hazard. A local public health response to wildfire smoke events must be rapid, effective and informed.

Wildfire Smoke

Wildfire smoke is a complex mixture of particles and gasses and are referred to as particulate matter (PM_{2.5})

A number of health effects are associated with wildfire smoke, depending on smoke concentration, duration of exposure, and composition of smoke. When wildfires are very close to communities, people may be exposed to very high concentrations of Particulate Matter (PM).



Responses to Wildfire Smoke

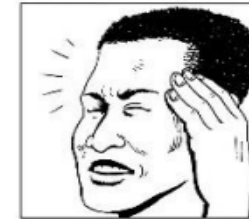
Respuestas al Humo de Incendios Forestales

Minor to deadly responses to wildfire smoke

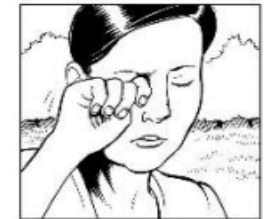
- Eye, nose, and throat irritation
- Cough, wheeze, shortness of breath
- Headaches
- Fatigue
- Irregular heartbeat, chest pain
- Overall increase in hospitalizations & deaths



sore throat



headaches



burning eyes



coughing



wheezing



shortness of
breath

High-risk and Sensitive Populations

Some people are more susceptible to the dangerous effects of wildfire smoke due to chronic illness, age, occupation or their access to resources to remain safe and healthy.

High-risk Populations Include:

- Children (18 years of age and younger) because their lungs and organs are still developing
- Older adults (65 years of age and older) because their lung capacity may be lower
- All persons with chronic lung and heart conditions, including asthma, chronic obstructive lung disease (COPD), emphysema, heart failure, abnormal heart rhythms like atrial fibrillation, history of heart attack, history of stroke and diabetes

High Risk and Sensitive Populations

- People who are pregnant because smoke is dangerous to the growing baby
- People who work outdoors
- People who have less access to healthcare and resources for health and safety, including housing instability, low economic levels, and racial and ethnic minority populations



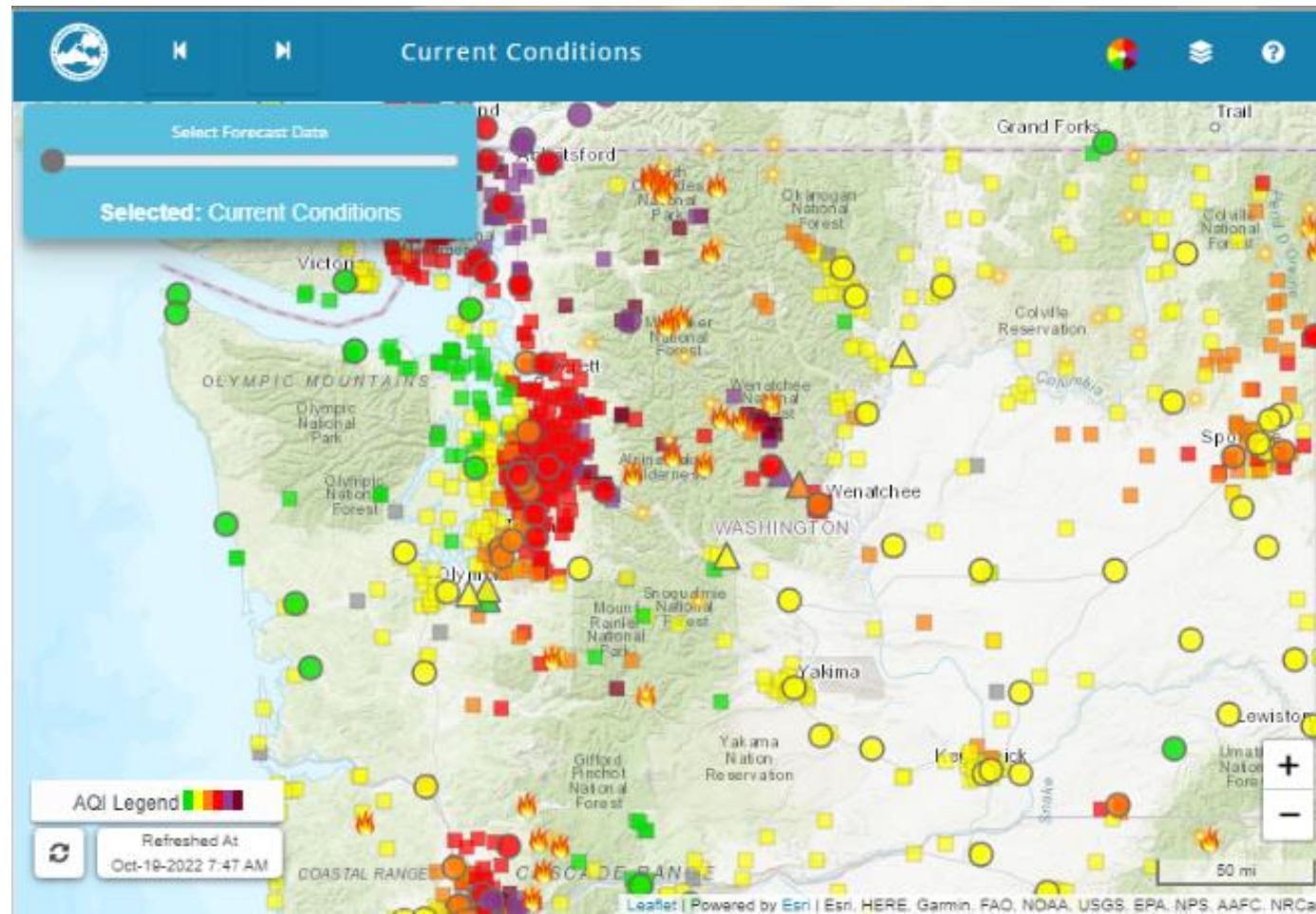
Protect Yourself, Your Family and Employees

- Avoiding outdoor activities.
- Staying indoors with windows and doors shut.
- Encouraging employers to reduce outdoor work.
- Offering respiratory protection (N-95 masks to outdoor workers).
- Using portable air cleaners (HEPA filters or box-fans with attached filters).









Air Quality Monitoring

The Washington smoke blog site also known as [Washington Smoke Information \(wasmoke.blogspot.com\)](http://Wasmoke.blogspot.com) shows real-time air quality monitoring on an interactive map.



Air Quality Index

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.

The air quality index (AQI) is a measurement of air pollutants with values from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concern.

Health advisories are often issued when smoke concentrations in an area have reached, or may reach levels over 150 PM_{2.5}.

Health Advisories & Recommended Interventions

During “unhealthy” or “hazardous” AQI levels, advisements are likely to be made by the health department to include recommended interventions to avoid the smoke.

This would include limiting time spent outdoors, limiting physical activity outdoors, wearing a mask and the potential need to seek out a clean air shelter or temporarily relocate to a region with cleaner air.

Steps to reduce exposure to smoke

1. Stay updated on current and forecast air quality

- Check the air quality index (AQI)

2. Reduce exposure

- Avoid strenuous outdoor physical activity
- Limit time outdoors

3. Stay inside with cleaner indoor air

- Close windows and doors, unless its too hot to maintain safe temperatures
- Don't add to indoor air pollution
- Filter indoor air
 - HVAC system with a MERV 13 filter
 - Portable air cleaner with a HEPA filter
 - DIY box fan filter
- If unable to maintain clean air at home, go elsewhere for cleaner air, such as a friend's or public space

4. Pay attention to symptoms

- Seek medical help if needed



N-95 Mask Distribution Points

Chelan-Douglas Counties



Mask Distribution Locations / Lugares de distribución de máscaras
BRIDGEPORT
➤ Bridgeport City Hall- 1206 Columbia Ave, 98813
➤ Bridgeport Post Office- 1011 Columbia Ave, 98813
CHELAN
➤ Chelan Fire and Rescue- 232 E Wapato Ave, 98816
➤ Chelan Public Library- 216 N Emerson St, 98816
CASHMERE
➤ Cashmere Public Library- 300 Woodring St, 98815
EAST WENATCHEE
➤ Chelan-Douglas Health District (Mon-Thurs) 200 Valley Mall Parkway, 98802
➤ Aging and Adult Care of Central WA (Mon-Fri)- 50 Simon St SE, East Wenatchee, WA 98802
➤ Confluence Health Walk-in Clinic (Sat)- 100 Highline Dr, East Wenatchee, WA 98802
ENTIAT
➤ Entiat City Hall- 14070 Kinzel, 98822
➤ Entiat Community Services- 2084 Entiat Way, 98822
LAKE WENATCHEE
➤ Lake Wenatchee Fire Station- 21696 Lake Wenatchee HWY Leavenworth, Washington 98826
➤ Midway Grocery- 14193 Chiwawa Loop Rd, Leavenworth, WA 98826
LEAVENWORTH
➤ Leavenworth Fire Station- 228 Chumstick Hwy. Leavenworth, WA 98826
MANSFIELD
➤ Mansfield Post Office- 38 Main St. 98830
MANSON
➤ Manson Fire Department- 250 Manson Blvd, Manson, WA 98831
➤ Manson Post Office- 85 W Wapato Way, Manson, WA 98831
➤ Manson Public Library- 80 Wapato Way, Manson, WA 98831
PLAIN
➤ Plain Grocery- 18632 Beaver Valley Rd, Leavenworth, WA 98826
WENATCHEE
➤ Chelan Co. Emergency Management- 206 Easy Street Wenatchee, Washington 98801 (M-F 8 to 5)
➤ Wenatchee Library- 310 Douglas St, Wenatchee, WA 98801
➤ Confluence Health / Wenatchee Valley Hospital – Outside of the Walk-in Clinic (Info Desk)
➤ Confluence Health / Wenatchee Valley Hospital / Mares Building – Main Entrance (Info Desk)
➤ Confluence Health / Central WA Hospital – Main Entrance (Volunteers/Information Desk)
➤ Confluence Health / Central WA Hospital – Emergency Department (Admitting Desk)
➤ Confluence Health / Central WA Hospital – Pre-Op/Pre-Admitting Entrance (Admitting Desk)
➤ Wenatchee Valley Fire/Station 10- 731 N. Wenatchee Avenue (M-F 8 to 5)
WATERVILLE
➤ Waterville Post Office- 113 E Locust St, Waterville, WA 98858



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Additional Resources on Wildfires and Smoke:

WA Smoke Blog Website: [Wa Smoke Blogspot](#)

Washington Labor and Industries Wildfire Smoke website: [Labor and Industries](#)

Washington Department of Health: [Washington Air Quality Guide for Particle Pollution](#)



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Questions?