SMOKE READY OREGON
PREPARING FOR WILDFIRE SMOKE
What is smoke?

Mixture of gases and fine particles produced when wood and other materials burn.

Fine particulate matter (PM 2.5) is the greatest health concern.

Can cause irritation, inflammation, and shortness of breath, and can worsen existing heart and lung diseases.
Particulate Matter

PM 2.5 is about 30x smaller than diameter of average human hair.
DEQ has an interactive map and the OregonAIR app!

https://oraqi.deq.state.or.us/home/map
<table>
<thead>
<tr>
<th>AQI Level of Concern</th>
<th>Numerical Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>0 to 50</td>
<td>Air quality is considered satisfactory, and air pollution poses little or no risk.</td>
</tr>
<tr>
<td>Moderate</td>
<td>51 to 100</td>
<td>Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.</td>
</tr>
<tr>
<td>Unhealthy for Sensitive Groups</td>
<td>101 to 150</td>
<td>Members of sensitive groups may experience health effects. The general public is not likely to be affected.</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>151 to 200</td>
<td>Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.</td>
</tr>
<tr>
<td>Very Unhealthy</td>
<td>201 to 300</td>
<td>Health alert: everyone may experience more serious health effects.</td>
</tr>
<tr>
<td>Hazardous</td>
<td>301 to 500</td>
<td>Health warnings of emergency condition. The entire population is more likely to be affected.</td>
</tr>
</tbody>
</table>
DEQ air monitoring sites
When there is a wildfire there is wildfire smoke.
Populations

Sensitive Groups

- Pre-existing heart and respiratory disease, allergies
- Elderly, infants and children, pregnant women (fetus)
- Healthy people can also be affected; some may not

Vulnerable Groups

- Working or living downwind of smoke
- Labored breathing (heavy work, exercise)
Health Implications

Smoke
Those with heart disease
- Heart attack
- Irregular heart rhythm
Those with lung disease
- Worsened lung function
- Asthma attack
Pregnancy outcomes
- Pre-term birth
- Low birth weight
Nuisance symptoms
- Eye irritation
- Scratchy throat
- Mild cough

Other non-smoke related concerns
- Exposure to contaminants during ash and debris cleanup
- Mental and behavioral health
- Access to safe drinking water
September 2020 Wildfire Health Effects

Graph showing:
- 24-hr. Ave. PM2.5 (µg/m³)
- Daily Asthma-Like Visits

Dates: 09Aug20 to 27Sep20

Graph indicates a peak in 24-hr. Ave. PM2.5 and Daily Asthma-Like Visits on 13Sep20.
Things to do before a wildfire

• Have a plan for food, water, medication and evacuation. Leaving voluntarily for smoke is sometimes recommended.

• Learn about respirators, like N95s, and have some on hand.

• Obtain a HEPA air cleaner or Do-It-Yourself option.

• Identify a clean air space in your home and community.

• Sign up for the DEQ air quality advisories.

• Eat well starting today. Diets rich in fiber, fruits, vegetables, and omega-3 fatty acids may reduce air pollution health effects.
Air cleaner

Do-It-Yourself

- MERV 13
- Box fan
- For safety, use only when attended and turn off if they overheat

HEPA & Electrostatic Precipitation Technologies

- For list of recommended air cleaners: https://www.ahamdir.com/room-air-cleaners/
- Pick a non-ozone producing precipitator

Respirator for wildfire smoke

- Proper fit
- Perform a leak check after putting on*
- How long to wear
- When to wear
- Precautions for health

* [Oregon OSHA YouTube video: N95 Respirator - How to Put on and Use](https://www.youtube.com/watch?v=example) | Mask, OSHA, Smoke, Respiratory Protection
During the wildfire

• Follow your local public safety, local or tribal health authority, DEQ, and OHA for recommendations.
• Implement your preparedness plan, as needed.
• Take care of yourself, pets, family, neighbors, and friends.
• OR Dept. of Agriculture recommendation for livestock*.

After a wildfire

Reduce exposure to ash (particles) and other pollutants.

- HEPA filters and DIY options
- Damp cloths to wipe surfaces
- Avoid having kids and pets play in dirt.
- Wear protective clothing and a respirator (N95 respirator or equivalent) when working outside near ash and debris.
- Remove shoes when going indoors.

Other tips

- Wash garden produce.
- Make sure the drinking (potable) water is not contaminated*.
- Take care of your mental and behavioral health. Call your health care provider or find a crisis line that fits your needs: https://www.safestrongoregon.org/mental-and-emotional-health/get-help-now/crisis-helplines

Resources

- Oregon Smoke Information blog
  oregonsmoke.blogspot.com

- OHA Wildfires page:
  healthoregon.org/wildfires

- Statewide wildfire response page
  wildfire.oregon.gov

- Download the free Oregon Air app
  on your smartphone