



**HEALTH ADVISORY: Wildfire Smoke
INFORMATION AND GUIDELINES FOR OUTDOOR ACTIVITY
Lane County Public Health Department
August 7, 2017**

Preventing Wildfire Smoke Inhalation

Multiple forest fires across the region continue to affect air quality in Lane County. Forecasts for continued hot, dry, and unstable weather may result in heightened fire activity and **continued smoke production over the next several days**. Wildfires affect air quality, which may have important health implications for many people. While most persons can protect themselves from a day or two of poor air quality, when poor air quality persists for many days health risks increase significantly. Certain people (the elderly, infants, and those with chronic heart or lung diseases such as asthma) may be particularly sensitive to declines in air quality. Poor air quality conditions are a health threat and should be avoided by all residents in smoky communities. Remember, local smoke levels can rise and fall rapidly depending on weather factors, including wind direction.

Lane County health officials are providing the following information to help local providers and others proactively advise people in order to avoid illness from wildfire smoke inhalation:

1. Be aware of smoke concentrations in your area. Fine particulate matter (particle size <2.5 microns, or "PM_{2.5}") is a particular concern. Exposure to elevated levels of PM_{2.5} increase the risk of acute cardiac and pulmonary events in people with these conditions.
 - If PM_{2.5} levels increase for a day or two due to wildfires, people with increased sensitivity to wildfire smoke can often protect themselves by staying indoors, away from smoke
 - Visit the Lane Regional Air Protection Agency website for hourly measurements on the Air Quality Index for our area at: <http://www.lrapa.org/>
2. Avoid outdoor exertion during such conditions. Avoid strenuous outdoor activity including sports practice, work and recreation.
 - For guidance on WHEN TO CANCEL OUTDOOR ACTIVITIES: Please refer to the attached table from the Oregon Health Authority
3. Stay hydrated- drinking lots of water can keep airways moist which may help reduce symptoms of respiratory irritation such as scratchy throat, runny nose and coughing.
4. Try to avoid driving in smoky areas. If you do need to drive in these areas, keep your windows rolled up and vents closed. If you need air conditioning, make sure you set your system on "re-circulate" to avoid bringing smoke into your car.
5. Avoid smoke by staying indoors, closing all windows and doors and use a filter in your heating/cooling system that removes very fine particulate matter.
6. For persons with concerning heart and lung conditions, please consider the following:
 - Review your breathing management plan with your healthcare provider
 - Assess medications and ensure enough are available for an extended poor air quality event
 - Review your respiratory emergency plan, including key contacts and phone numbers
 - Communicate with healthcare providers as necessary (e.g., daily peak flow measurements)
 - If your community experiences sustained elevations of PM_{2.5}, public health may issue health advisories suggesting that people with these conditions consider leaving the area until air quality improves.

7. Visibility Scale: In addition to the AQI, you can use your own observations to determine the air conditions in your area. To do a visual inspection:
- Go outside
 - Face away from the sun
 - Determine the limit of your visible range by looking at objects at known distances (miles). Visible range is the point at which even high contrast objects totally disappear.

Other helpful links:

[Oregon Smoke blog](#), for the latest on fires and air quality across the state.

[Oregon Health Authority](#): fact sheets, FAQ's and more about the health threats from wildfire smoke.



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FACT SHEET

Public Health Guidance for School Outdoor Activities During Wildfire Events

Check the local Air Quality Index (AQI) online (www.deq.state.or.us/aqi/index.aspx) and do a visual inspection outside.* Compare the AQI and visibility test to determine the air conditions in your community. Then, use the guide below to determine activity level for your students.

Air Quality Index	Visibility Scale	Recess (15 min)	P.E. (1 hr)	Athletic Events and Practices (2–3 hrs)
Good	Over 15 miles	Great day to be active outdoors!	Great day to be active outdoors!	Great day to be active outdoors!
Moderate	5–15 miles	It is a good day for students to be active outside. Watch students who are unusually sensitive to air pollution for symptoms of shortness of breath or coughing.	Watch students who are unusually sensitive to air pollution. Look for symptoms of shortness of breath or coughing. Monitor symptoms and reduce or cease activity if symptoms arise.	Watch students who are unusually sensitive to air pollution. Look for symptoms of shortness of breath or coughing. Increase rest periods and make substitutions for these students as needed. Monitor symptoms and reduce or cease activity if symptoms arise.
Unhealthy for Sensitive Groups	3–5 miles	It is an OK day for students to be active outside. Allow students who are unusually sensitive to air pollution to stay indoors if they'd like.	Move activities for students sensitive to air pollution indoors. Limit other students to light outdoor activities or move them indoors. Increase rest periods and make substitutions. Monitor symptoms and reduce or cease activities if symptoms arise.	Move activities for students sensitive to air pollution indoors. Limit other students to light outdoor activities or move them indoors. Increase rest periods and make substitutions. Monitor symptoms and reduce or cease activities if symptoms arise.
Unhealthy	1–3 miles	Consider keeping all students indoors or allowing only light outdoor activity. Move activities for students sensitive to air pollution indoors.	Move activities for students sensitive to air pollution indoors. Consider moving all activities indoors. Limit all students to light activities. Increase rest periods and make substitutions.	Consider any of the following: cancel the event. Move the event indoors. Postpone the event. Move the event to an area with "good" air quality.
Very Unhealthy/Hazardous	1 mile or less	Keep all students indoors.	Move all activities indoors. Limit all students to light activities. Increase rest periods and make substitutions.	Do any of the following: cancel the event. Move the event indoors. Postpone the event. Move the event to an area with "good" air quality.

*If you get conflicting results when you compare the AQI to your visual inspection, err on the side of caution. Follow the recommendations for the worse of the two assessments.

***Students with asthma action plans should follow them closely. They should monitor their breathing and exposure to wildfire smoke. Anyone experiencing symptoms should contact a health care provider for further advice. They should call 911 in an emergency.

Watch for symptoms

Wildfire smoke can make asthma symptoms worse. It can trigger asthma attacks. Symptoms of asthma include coughing, shortness of breath, wheezing and chest tightness. Even students without known asthma can have symptoms when exposed to unhealthy levels of wildfire smoke pollution.

Students with asthma should follow their Asthma Action Plan. This will help them decide if they need to take special precautions while engaging in outdoor activities. Athletes with asthma should have rescue inhalers readily available. Use should be as directed by their health care provider. Anyone experiencing symptoms should contact a health care provider. Call 911 in an emergency.

Air Quality Index

How clean or polluted the air is and the level of health concern is in the Air Quality Index (AQI). The AQI categorizes air quality based on air measures collected from Department of Environmental Quality (DEQ) air monitors. For more about AQI in Oregon and how the AQI is calculated, go to www.deq.state.or.us/aqi/index.aspx.

Visibility Scale

In addition to the AQI, you can use your own observations to determine the air conditions in your area. To do a visual inspection:

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Children and Air Pollution

Children are particularly sensitive to smoke because their respiratory systems are still developing. In addition, their airways are smaller, and they breathe in more air per pound body weight. Children who may be more sensitive to air pollution include those with:

- Asthma
- Respiratory infection
- Lung or heart disease

Parents of these children should follow their health care providers advice about prevention and treatment of symptoms. Parents should also watch the smoke forecast to decide when to limit their child's activities.

School closures

School closures are the decision of the individual school district, usually in consultation with the local health department. Consult your local health department if you have questions about air pollution and health.

More information

For more information on how wildfire can affect your health, see: <http://public.health.oregon.gov/Preparedness/Prepare/Pages/PrepareForWildfire.aspx>.

Consult with your local or tribal health authority if you have questions about air pollution and health.

OHA website: <http://public.health.oregon.gov/Preparedness/Prepare/Pages/PrepareForWildfire.aspx>
OHA Facebook: www.facebook.com/OregonHealthAuthority
OHA Twitter: www.twitter.com/OHAOregon

You can get this document in other languages, large print, braille or a format you prefer. Contact Health Security, Preparedness and Response at 971-673-1315 or email health_security@state.or.us. We accept all relay calls or you can dial 711.