

Wildfires & Air Quality

Overview

Oregon is experiencing significant wildfire seasons, creating large quantities of smoke that sometimes impact communities. Recent monitoring of smoke impacts during these periods indicates very high concentrations of unhealthy air quality can occur during wildfire events. In anticipation of the upcoming fire season, the public should take precautions to avoid adverse health effects that can occur due to smoke from wildfires.

Air Quality Categories	Smell	Visibility (Miles)
Good (Green)	None	10+
Moderate (Yellow)	Perceptible	6-9
Unhealthy for Sensitive Groups (Orange)	Easy to smell	3-5
Unhealthy (Red)	Stronger	1.5-2.5
Very Unhealthy (Purple)	Strong smell	1
Hazardous (Maroon)	Very Strong	Under ¾ mile

Air quality action levels

The U.S. Environmental Protection Agency has established particulate matter (PM2.5) health standards for 24-hour and annual averages. Any value monitored above these standards can cause health problems. However, it has been generally recognized in the western United States that wildfire smoke can affect health at shorter one or eight-hour intervals. Several states issue public health advisories when PM2.5 levels exceed various one or eight-hour thresholds. Use the general visibility guidelines shown in the above table to determine how bad the air quality is for a given period of time. No symptoms are expected when air quality is in the “good” (green) category. Symptoms in all other categories may include varying degrees of repeated coughing, shortness of breath, wheezing, chest tightness, heart palpitations, nausea, unusual fatigue or lightheadedness.

Protective measures for the public

The public can protect themselves from high levels of smoke. Using the smell/visibility guidelines from the table above, the public can take protective actions as identified below. These measures are simple and easy for almost anyone to do for themselves or members of their family. Sensitive groups such as people with respiratory or heart problems, children or the elderly may need to take extra precautions should a wildfire or other significant smoke event occur. **Some communities may have “cleaner air” shelters. Check with your local government. “Cleaner air” shelters can be schools, hospitals or other public buildings with good ventilation systems.**



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Alternative formats
(such as Braille or large type) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at (503) 229-5696 for more information

Category	Protective Actions
Good Hard to See or Smell	No action necessary
Moderate Visibility 6-9 miles; smell is perceptible	<ul style="list-style-type: none"> • Avoid major smoke-impacted areas when possible • Sensitive individuals should pay attention to symptoms. If you experience symptoms, reduce your exposure to the smoke and other particulates.
Unhealthy for Sensitive Groups Easy to see smoke (3-5 miles visibility); easy to smell smoke	Limit prolonged or heavy exertion, amount of time outdoors and physical exertion. Contact your health provider if symptomatic. Asthma patients should follow their asthma management plan. <ul style="list-style-type: none"> • If sensitive to smoke, when possible, avoid exposure by leaving the area. • Keep doors and windows closed and large gaps sealed • Use filters in your home’s heating and cooling systems that eliminate fine particles (less than PM2.5). • Use ceiling fans and the recycle or recirculate mode on air conditioners in your home or car • Avoid indoor sources of pollution, including tobacco smoke, wood heat, paint solvents and adhesives • Do not fry or broil foods • Consume perishable groceries that do not require cooking • Keep a 5-day supply of medications available
Unhealthy Impaired visibility (1.5-2.5 miles); Stronger smell	Sensitive Groups: <ul style="list-style-type: none"> • Leave the smoke-impacted area if possible • Stay indoors and avoid prolonged or heavy exertion. • Stay in a “clean room” (use air purifier in room with no indoor smoke) • Go to a “cleaner air” shelter or leave the smoke-impacted area General Population: <ul style="list-style-type: none"> • Limit prolonged or heavy exertion and time outdoors • Contact your health care provider if symptoms are unusually severe • Identify potential “cleaner air” shelters
Very Unhealthy Seriously impaired visibility (1 mile); Strong smoke odor	<ul style="list-style-type: none"> • Avoid prolonged or heavy exertion • Stay indoors, avoid exertion • If symptomatic, evacuate to a cleaner air shelter or leave the smoke-impacted area if safe to do so
Hazardous Severely impaired visibility (<3/4 mile); Very strong smoke odor	<ul style="list-style-type: none"> • Leave the smoke impacted area if possible • If it is not possible to leave, avoid all outdoor activity and implement as many of the above precautions as possible.