Oregon Wildfire Response Protocol for Severe Smoke Episodes

June 18, 2025

The following agencies collaborated on this guidance document:

Oregon Department of Environmental Quality
Lane Regional Air Protection Authority
Oregon Department of Human Services
Oregon Health Authority
Oregon Occupational Safety and Health Administration
Oregon Emergency Management
Oregon Department of Forestry
U.S. Forest Service Pacific Northwest Region
U.S. Bureau of Land Management Oregon State Office





Cover photos from: InciWeb.gov

Based on an agreement between the participating agencies, the original version of this multi- agency document is maintained by DEQ.

All parties may collaborate on updates.

Revision History	Date	Revision Summary
Version 1.0	May 28, 2013	Protocol developed
Version 1.1	Aug. 27, 2013	Agencies added, contact list updated
Version 2.0	June 3, 2014	Revised Table 4 recommended health actions, changed Visibility Index to the 5-3-1 Visibility Index, added Wildfire Communications Plan section, added Indoor Air Monitoring section, added 211info Service information, updated contact list, added out-of-state contact list
Version 3.0 to	June 16, 2015 –	Updated contact list, added conference call info, checked and
Version 5.2	June 29, 2017	updated all website links, updated appendices and added Appendix C and D, various corrections
Version 5.3	June 28, 2018	Updated links, contacts, and information involving DEQ's upgraded AQI, use of EPA AirNow system to guide public health
Version 6	June 7, 2019	Updated links, photographs, revised the call agenda, minor edits and corrections
Version 7	June 10, 2020	Formatting updates, revisions to contacts lists, COVID-19 response and impacts, and other minor edits and corrections
Version 8	June 17, 2021	Updated Appendix E –COVID-19 and Wildfire Smoke, updates to Table 4 respirator information and other minor edits and corrections
Version 9	June 3, 2022	Revised call agenda, air quality advisory template, Appendix E respirator and mask guidance, contact information, formatting updates.
Version 10	June 30, 2023	Revised call agenda. Updated contact information. Added Appendix G for Oregon ARA welcome letter. Updated process for smoke notices that do not meet advisory thresholds. Updated Covid language.
Version 11	July 1, 2024	Updating NWS information sharing procedures, Update contacts as appropriate. Added appendix with draft social media posts.
Version 12	June 18, 2025	Added Call Host rotation list to Appendix D. Moved list of links and resources in section 11 to Appendix F and removed archived links. Updated Section 8.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.oregon.gov.

Table of Contents

Contents

1.	Purpose	1
2.	Participating Agencies and Organizations	1
	Table 1: Participating Agencies	1
3.	Agency Areas of Expertise and Involvement	2
	Table 2: Agency Areas of Expertise and Involvement	2
4.	Agency Actions and Desired Outcomes	5
	Table 3: Agency Actions and Desired Outcomes	5
5.	Recommended Public Health Actions, Based on Level and Anticipated Duration Smoke Exposure	
	Table 4: AQI and Recommended Public Health Actions	8
6.	Oregon Smoke Blog Website	
	Annual Pre-Wildfire Season Conference Call	
8.	As-Needed Wildfire Conference Calls and Briefings	11
9.	Air Quality Advisory Coordination with National Weather Service	13
10	D. Indoor Air Monitoring Equipment	14
11	1. Other Air Monitoring Networks, AQI Pages and Apps	14
12	2. Resources and Guidance Documents for Public Health Officials	15
13	3. Appendices	
	Appendix A – Protocol Contacts	
	Appenix A.1 – Oregon Protocol Contact List	16
	Appendix A.2 – Out of State Contact List	20
	Appendix B – Example Air Quality Advisory News Release	21
	Appendix C – Oregon 2025 Monitor Network	23
	Appendix D – Oregon DEQ Staffing Schedule: Wildfire Season 2024	24
	Appendix E – Respiratory Illnesses and Wildfire Smoke	27
	Appendix F – Resources and Links	29
	Appendix G – Oregon Air Resource Advisor – State Welcome Packet	31
	Appendix H – Facebook and X/Twitter Air Quality Advisory Templates – Wildfire Smoke Response	33

1. Purpose

This protocol is intended to provide guidance for the local, state, tribal, and federal agencies in Oregon who respond to severe smoke episodes caused by large or long-duration wildfires and to ensure a coordinated response to mitigate impacts on public health. This protocol also identifies other organizations and partners with whom these agencies must coordinate during severe smoke episodes. For all parties, this protocol highlights general duties and responsibilities, provides examples of agency actions and assistance needed, lists desired outcomes, and recommends public health actions based on the level and duration of smoke exposure. This protocol is intended to guide the use of resources in response to air quality due to major wildfires. It does not replace, interfere with, or limit any action taken by a public agency while performing its official duties.

2. Participating Agencies and Organizations

Table 1 identifies the participants that utilize this protocol. Participating agencies, organizations and offices include but are not limited to:

Table 1: Participating Agencies

AGENCY OR ORGANIZATION				
Federal				
1. Federal Land Managers: Includes U.S. Forest Service (USFS) and U.S. Bureau of Land Management (BLM)	USFS Region 6 office in Portland or Area BLM, Oregon State Office in Portland			
2. Federal Emergency Management Agency (FEMA)	Region 10 office Bothell, Wash.			
3. Environmental Protection Agency (EPA)	Region 10 office in Seattle			
4. National Weather Service (NWS)	Boise, Medford, Portland, and Pendleton offices			
Tribal				
5. Tribal Government	Any tribal lands affected by wildfire smoke See <i>Appendix A</i> for contact information			
National				
6. Air Resource Advisor (ARA)	Interagency Wildland Fire Air Quality Response Program			
7. American Red Cross	Five regional offices in Oregon			
State				
8. Oregon Department of Environmental Quality (DEQ)	DEQ Headquarters in Portland and regional offices			
9. Oregon Health Authority (OHA)	Public Health Division in Portland			
10. Oregon Emergency Management (OEM)	Offices in Salem			
11. Oregon Occupational Safety and Health Administration (Oregon OSHA)	Oregon OSHA Headquarters in Salem, field offices around the state			
12. Oregon Department of Forestry (ODF)	ODF Headquarters in Salem, field offices around the state			
13. Oregon State Fire Marshal (OSFM)	Offices in Salem			
14. Oregon Department of Transportation (ODOT)	Located in Salem and around the state			
15. Oregon Governor's Office	Located in Salem			
16. Governor's Office Regional Solutions Centers	Located in different regions of the state			
17. 211info	Located in counties			
18. Oregon Department of Human Services	Located in Salem and around the state			
Local				
18. Local Public Health Authorities	See <i>Appendix A</i> for locations and contact information			
19. Lane Regional Air Protection Agency (LRAPA)	Located in Springfield, Lane County			
20. School Districts	In counties affected by wildfire smoke			

3. Agency Areas of Expertise and Involvement

Table 2 identifies the general areas of expertise of each agency or organization as an indication of the assistance that would be provided, and the level of involvement anticipated. The level of involvement is relative to the severity of the wildfire smoke and the effect on air quality. Some agencies would be expected to play a leading role, requiring more frequent daily communication and coordination, while other agencies would be involved as needed.

Table 2: Agency Areas of Expertise and Involvement

General Area of Expertise/Assistance	Anticipated Level of Involvement
Wildfire management on federal lands.	Extensive – depends on size of fire, often the lead agency.
Federal response agency for natural disasters.	Low – unless smoke levels and fire danger pose an extreme threat.
Coordination with tribes, related to air quality on tribal lands/reservations.	Low – unless smoke levels are affecting tribal lands and reservations.
Coordinates with federal, state and tribal governments in the Pacific Northwest Area (Oregon, Washington and Idaho) as it relates to weather.	Extensive – provides weather briefing during smoke coordination call and disseminates air quality alerts on public websites, social media and other NWS communication systems.
Technical specialist who works with Incident Command Team during major wildfires and has expertise in air quality forecasting, monitoring, assist with public health messaging, transportation safety, and firefighter safety.	Extensive – these positions provide assistance during incidents and facilitate state response to air quality smoke impacts from major wildfires See Appendix G for an Oregon ARA welcome packet.
Provides aid and assistance for natural disasters, mass care support for sheltering, feeding and distributing relief supplies	Depends on severity of smoke impact and risk to public health.
Provides a statewide "go-to public phone number" for health information about wildfire smoke impacts and available resources for the public.	Depends on severity of smoke impact and risk to public health.
Coordinates with other agencies and national partners to determine health risk from smoke, need to cancel outdoor events, tribal safety issues, and notify local businesses. Shares information with community about health effects, mitigation, strategies, and notify public and media of health risks from smoke.	High – if wildfire impact is severe and smoke is affecting tribal lands/ reservations.
	Federal response agency for natural disasters. Coordination with tribes, related to air quality on tribal lands/reservations. Coordinates with federal, state and tribal governments in the Pacific Northwest Area (Oregon, Washington and Idaho) as it relates to weather. Technical specialist who works with Incident Command Team during major wildfires and has expertise in air quality forecasting, monitoring, assist with public health messaging, transportation safety, and firefighter safety. Provides aid and assistance for natural disasters, mass care support for sheltering, feeding and distributing relief supplies Provides a statewide "go-to public phone number" for health information about wildfire smoke impacts and available resources for the public. Coordinates with other agencies and national partners to determine health risk from smoke, need to cancel outdoor events, tribal safety issues, and notify local businesses. Shares information with community about health effects, mitigation, strategies, and notify public

Contact Agency	General Area of Expertise/Assistance	Anticipated Level of Involvement
9. DEQ (For wildfire smoke affecting Lane County, contact LRAPA . See #19 above and Appendix A #13)	Monitors outdoor air quality in the state*, determining if health standards are being exceeded, identifying areas at greatest risk, public/media outreach and coordination with Federal Land Managers, OHA, ODF, county health departments, others as needed. (*except Lane County see LRAPA)	Extensive – during periods of elevated smoke levels hosts smoke coordination calls, provides air quality forecasting, and leads advisory development.
10. OHA	Advises state, federal, tribal, and local authorities on health risk from smoke and potential public health interventions to mitigate it. Assists DEQ, Oregon OSHA, and local and tribal health departments in communication and outreach. Assesses health impacts as indicated by the situation.	Extensive - depends on severity and extent to which local and tribal health officials need assistance, or whether a local or tribal health authority has primary jurisdiction in the affected areas and provides hosting support. Assists with scheduling and hosting smoke coordination calls. The Tribal Liaison and Regional Emergency Coordinators support to Local Public Health upon request, helping them assess needs and resources and identify mechanisms to fill public health gaps.
ODHS	Mass care Mass care (food, water, shelter, hygiene), coordination with Red Cross on mass care needs, community cleaner air spaces (shelter piece, not indoor AQ).	Varies - Depends on severity and duration of smoke event and level of activity related to any displacements caused by wildfire evacuations. Helps build local capacity for cleaner air spaces in community/public spaces and other types of mass care shelters. Can activate all-hazards contract with 211INFO. Encourages local partners inform 211 of available cleaner air spaces via grant
		mechanisms. May be able to deploy air scrubbers to affected communities.
11. OEM	Coordinates and facilitates emergency planning, with state emergency support function, and local emergency services agencies and organizations.	Low – unless smoke levels and fire danger pose an extreme threat or there is a specific request by local emergency management agencies for state assets. High – if Governor declares state of emergency.

Contact Agency	General Area of Expertise/Assistance	Anticipated Level of Involvement
12. Oregon OSHA	Address health and safety of workers and state/private firefighters through consultation and/or enforcement of Oregon OSHA's permanent rules for protection from wildfire smoke. Can assist in evaluating air quality concerns in employment settings.	Depends on severity and specific requests for worker protection.
13. ODF	Provide current fire operations and activity information from Pacific Northwest Incident Command Group meetings to DEQ. Provides incident information for fires on ODF protected land.	Variable – depends on fire location.
14. State Fire Marshal	Lead agency for response to structural protection for Conflagrations in Wildland Urban Interface (WUI) Fires. Coordinates the same as ODF to provide the Incident Management Team (IMT) updates as needed to required agencies.	Low – primary response to fire danger and suppression, less on smoke risk.
15. ODOT	Provides safety information for roads and possible closures, travel hazards. Provides traffic management where needed.	Moderate – provides safety updates on calls and provides similar information for the smoke blog.
16. Oregon Governor's Office	Coordinate with multiple agencies, especially if Governor declares a state of emergency.	Low – updated on as-needed basis, unless state of emergency is declared.
17. Governor's Office, Regional Solution Centers	Coordinate with multiple agencies, especially if Governor declares a state of emergency.	Low – updated on as-needed basis, unless state of emergency is declared.
18. Oregon Department of Land Conservation and Development (DLCD)	Help to coordinate on Natural Hazards Mitigation with Tribes and local agencies or counties.	Low – primary response is to help Tribes and agencies prepare plans and coordinate activities in anticipation of emergencies.
Local		
19. Local Public Health Authorities (LPHAs)	Notify public and media of health risk from smoke. Coordinate with DEQ, OHA, Federal Land Managers and Oregon OSHA to determine health risk to community.	Extensive – during periods of unhealthy to hazardous smoke levels. Can provide current information on local smoke impacts.
20. School Districts	With assistance, determine if student health is at risk, the need to modify or cancel school activities/events or announce school closures.	Low – as-needed basis during periods of unhealthy to hazardous smoke levels.
21. City and Local Government	With assistance help coordinate public safety, need to modify or cancel outdoor events, notify local businesses, alert fire and police to the health risks.	Low – as-needed basis during periods of unhealthy to hazardous smoke levels.
22. ODHS Community cleaner air space and resilience hubs and	Information about their own cleaner air space's location, hours of operations, contact, etc.	Varies - Involvement will depend on organizational capacity, duration and severity of smoke event. Minimally

Contact Agency	General Area of Expertise/Assistance	Anticipated Level of Involvement
networks grantees		responsible for ensuring 211 has space information.

4. Agency Actions and Desired Outcomes

Table 3 describes the different actions needed during major wildfires, the agency or organization expected to take such action and the desired outcome.

Table 3: Agency Actions and Desired Outcomes

Action Needed	Lead Agency and Action Taken	Desired Outcome		
1. Air Monitoring				
Measuring ambient air quality.	Mostly DEQ as lead agency, but ARA s may provide additional monitoring equipment via national cache resources and assist in deployment and data collection. These monitors are shown on the EPA Fire & Smoke Map.	Ability to track ambient air quality levels in populated areas as well as in communities receiving the heaviest smoke impact and identify smoke-free areas where air quality is good.		
Indoor air quality exposure.	Oregon OSHA is lead agency to evaluate air quality concerns for workers. DEQ and OHA can provide advice regarding outdoor activities and non-occupational settings.	Ability to monitor indoor smoke levels in work environments and schools.		
2. Smoke and Weather F	orecasting			
Weather Forecast.	NWS (meteorologists) is the lead agency. DEQ assists in coordination. NWS can also be contacted to provide "spot weather forecasts" for wildfire.	Complementary to smoke forecasting.		
Smoke Forecasting.	DEQ provides smoke forecasting and compares estimates to advisory threshold. ARAs provide daily smoke outlooks for the areas adjacent to their assigned fires.	Provide advance notice of possible smoke movement and impacts, improve public notification, reduce risk of public exposure to high smoke levels.		
3. Issuing Health Warnings				
Provide public with frequent smoke updates, potential health risk, and recommended public health actions via the web and other media.	Coordination between the Incident Management Team, DEQ, ARA, OHA, Tribes, LPHA, local government, and 211info. Assistance from federal land managers on fire status and from wildfire forecasting.	Frequent, coordinated updates provided to the public via Oregon Smoke Blog, DEQ, OHA, local government websites, press releases and media outreach. 211info is provided current health-related information.		

Action Needed	Lead Agency and Action Taken	Desired Outcome
Provide air quality	Coordination between NWS offices,	Discuss current AQ conditions,
advisories to specific areas	DEQ, LRAPA, SWCAA, Dept. of	forecasted smoke transport, location
and on multiple agency	Ecology, and other local air programs and	of likely impacts and duration to
media platforms.	local public health authorities.	coordinate advisory messaging on
		NWS platforms and AQ Agency
		information outlets
4. Website Management		
Updating the Oregon	Blog updated by DEQ Public Affairs	Provide the public with
Smoke Blog and DEQ	staff on behalf of protocol participants,	comprehensive "one-stop"
social media (see	and local and tribal partners.	website/social media on wildfire
description under section		status, air quality levels, health risk,
6).		cleaner air spaces, press releases and
		other critical info.
Updating DEQ, OHA,	Managed by respective agency and	Complements the above website.
ODF and local websites	supplements the Oregon Smoke Blog.	
and media platforms.		
5. Public Actions		
Cancel or modify public	Decision made within affected	Prompt action taken, via notification
events, outdoor and	jurisdiction, by local or city government	of media, 211info, and posting info
business activities.	in consultation with local and tribal	on Oregon Smoke Blog and other
	public health authorities, or by local	websites and notification of
	and tribal public health authorities, and as needed, in consultation with DEQ,	community partners through local outreach.
	ARA, OHA, federal land managers, and	outreach.
	possibly Oregon OSHA.	
Consult with schools on	Decision made within affected	Identification of measures to protect
limited hours or closure.	jurisdiction, by local or tribal public	schools and users of public buildings
Decisions about protecting	health authorities, or city government	from smoke.
schools or other public	in consultation with local or tribal health,	
buildings from smoke	OHA, ARA, DEQ, or Oregon OSHA as	
intrusion.	needed.	
Set up general population	ODHS and Red Cross may support local	When determined necessary, general
shelters.	officials in the setup and management of	population shelters will be
	general population shelters based on	established and opened in
	decisions by local health officials.	coordination with local public health
		authority and emergency
Establish and dant's and 11'	Decisions made within affects 1	management.
Establish or identify public	Decisions made within affected	When necessary, prompt action taken
cleaner air spaces.	jurisdiction, by local or tribal public health authorities with support from	to set up or identify cleaner air spaces, using guidance for
	ODHS and in consultation with DEQ,	"Identification of Cleaner Air Spaces
	ARA, OHA, or Oregon OSHA as needed.	for Protection from Wildfire Smoke"
	and the second s	https://www.oregon.gov/oha/PH/PR
		EPAREDNESS/PREPARE/Docume
		nts/IdentificationOfCleanAirShelters.
		pdf. Some communities may have a
		Community Response Plan for
		prescribed fires in addition to
		wildfire response plans. These plans
		may contain guidance on setting up
		cleaner air spaces.

Action Needed	Lead Agency and Action Taken	Desired Outcome
Recommended	Decision made at local level, by health	Prompt action taken if dangerous
evacuation/relocation of	officials and tribal/local government	smoke levels are expected to persist
sensitive populations or	(Sheriff or local emergency	for a prolonged period. Requires
populations in general.	management), in consultation with	close communication with DEQ,
	OEM, DEQ, ARA, OHA, ODHS, federal	OHA, ODHS, federal land managers,
	land managers and possibly Oregon	OEM, Oregon OSHA, 211info, and
	OSHA.	possibly Red Cross, State Fire
		Marshal and State Police.

5. Recommended Public Health Actions, Based on Level and Anticipated Duration of Smoke Exposure

Wildfire smoke is a mixture of gases and fine particles that can irritate the eyes, nose, throat and lungs, worsen chronic heart and respiratory diseases, and precipitate other poor health outcomes. The amount and duration of smoke exposure, as well as a person's age and baseline health status, play a role in determining if someone will experience smoke-related health effects. People with pre-existing health conditions (e.g., asthma, COPD, cardiovascular disease, etc.), those older than 65 or less than 18 years of age, pregnant women, and smokers are particularly sensitive to smoke. Increased exposure risk due to living and working conditions may impact people who live or work outdoors including migrant and seasonal farm workers; people experiencing houselessness; people with access and functional needs; and those with low income who are more likely to live in housing that does not provide adequate protection from smoke. Communities of color and those with lower income tend to experience these vulnerabilities more often due to inequities in social determinants of health. Sensitivity and subpopulations' potential exposures should be considered in providing alerts and conducting outreach.

Particulate matter is a mixture of small, airborne, solid particles and liquid droplets found in the air. These particles may be visible (e.g., dust, dirt, soot, smoke), while others are too small to see with your eyes. Particulate matter in smoke poses a serious risk to public health. The potential health effects vary depending on the size of the particles and composition of the smoke. Particles larger than 10 micrometers usually irritate the eyes, nose, and throat. Particles 10 micrometers and smaller (PM10) are inhalable and the larger particles in this group can be deposited in the upper airways of the lungs and cause tissue damage and lung inflammation. Particles 2.5 micrometers and smaller (PM2.5), the smallest fraction within PM10, can be inhaled deeply into the lungs and some of these particles or their components can enter the bloodstream, increasing the risk of cardiovascular and respiratory problems. When smoke levels are high, even healthy people may experience symptoms.

Research on mental health and wildfire PM2.5 remains limited. Yet, some studies are beginning to show linkages between all-cause mental health conditions and increased levels of PM2.5. Studies suggest that PM2.5's ability to reach the brain, cause inflammation, vascular damage and other physiological processes may be at play. Females may be at higher risk of mental health effects due to PM2.5's role in endocrine disruption. Children, youth and people of color also appear to be at higher risk. Some studies suggest a lag between ED visits and air quality. Multiple studies suggest increases in visits for every 10-µg/m³ increase in PM 2.5 concentration.

Table 4 is designed for use by affected jurisdictions in consultation with the Oregon Department of Environmental Quality, Oregon Health Authority and other parties to this protocol. The table identifies recommended public health actions based on the concentration and expected duration of smoke exposure. The Air Quality Index levels in **Table 4** are based on the U.S. Environmental Protection Agency's NowCast method and integrated into the AirNow network. They account for the level of key air pollutants over the prior 12 hours, as well as the most recent rapid increases or decreases in air pollution. Decisions about which public health actions to recommend are based on monitoring data and the projected smoke duration. The duration of smoke exposure noted in the table uses a cut-off of twenty-four hours as the basis for two sets of recommended health actions.

Recommendations in *Table 4* are for cumulative smoke exposure time within a severe smoke episode. The recommended actions for each increasing level and duration of exposure should be followed in addition to the

lower Air Quality Index (AQI) level recommendations unless the listed actions supersede previous ones. There is no safe level of PM2.5. Partners may wish to adapt the guidance to fit their community. OHA encourages partners who choose to adapt the guidance to work toward a more precautionary approach rather than a less protective approach when feasible. Further, communities which experience more chronic exposures due to the cyclical pattern of prescribed burns, woodfire stove use and wildfire seasons, may choose to take a more protective approach to account for these additional exposures.

In the absence of any PM2.5 monitoring data, a visual evaluation can be made by using the visibility index (based on the viewing distance) in the column next to the Air Quality Index category. This index is referred to as the "5-3-1 Visibility Index" for estimating smoke levels and is described after *Table 4*. The Air Quality Index category and 5-3-1 Visibility Index are intended to be used together to identify the public health risk and mitigation actions.

Table 4: AQI and Recommended Public Health Actions

		Recommended Public Health Actions	
Air Quality Index Category	Index	Projected Smoke Exposure Under 24 Hours	Projected Smoke Exposure Over 24 Hours
Good/Green (0-50)	> 5 Miles with no noticeable haze in the air	 If a smoke event is forecasted in your area, we suggest reviewing: This Protocol, The <u>Crisis and Emergency Risk Communication Toolkit for Wildfires</u>², Frequently Asked Questions about Wildfire Smoke and Public Health tips on the <u>Oregon Public Health Division wildfire webpage</u>.³ The Oregon Smoke Blog for the latest air quality and other wildfire information: http://oregonsmoke.org 	
Moderate/Yellow (51-100)	5-15 Miles with noticeable haze in the air	 Distribute information (i.e., FAQs²) to public health partners and the public. Identify and provide information to smoke sensitive groups and populations with a high risk of exposure. Refer people to Oregon Smoke Blog for more information. Recommend sensitive groups use an air cleaner at home during wildfires². 	Follow recommended actions to the left and in the rows above, plus: • Respond to media inquiries. Use the Crisis and Emergency Risk Communication toolkit² for support.
Unhealthy for Sensitive Groups/ Orange (101-150)	3-5 Miles	 Above, plus: LPHA issues a press release stating recommended protective actions for sensitive groups and populations at high risk of exposure and encouraging them to reduce exposure. Use the Crisis and Emergency Risk Communication toolkit and FAQs² document for guidance and see Appendix B for a template. If school is in session or an outdoor function with children is planned, refer to Air Quality and Outdoor Activity. Guidance for Infants, Children and Youth². 	Follow actions to the left & above, plus: In the release, include consideration of sensitive groups leaving area until air quality improves or if that is not feasible, using an air cleaner at home ⁴ or spending time in a cleaner air space in the community (e.g., air-conditioned library). Consider opening cleaner air spaces for sensitive groups and populations at high risk of exposure. OHA or DEQ may convene a wildfire smoke advisory call and DEQ may issue an air quality advisory. ⁵

	5-3-1 Visibility	Recommended Public Health Actions	
Air Quality Index Category	Index	Projected Smoke Exposure Under 24 Hours	Projected Smoke Exposure Over 24 Hours
Unhealthy/Red (151-200)	1-3 Miles	 Above, plus: Consider rescheduling, moving, or cancelling public events held outdoors. Recommend the public limit strenuous outdoor activities. Recommend that smoke sensitive groups shelter in place using an air cleaner⁴ or consider leaving area until air quality improves. If they can't, recommend spending time in a cleaner air space in the community (i.e., air-conditioned library)² or sheltering in place at home. Recommend groups at higher risk of exposure to smoke limit outdoor labor, use of adequate PPE and seek cleaner air sheltering. 	Follow recommended actions to the left and above, plus: Consider opening and publicizing cleaner air spaces. While there is community spread of respiratory illnesses (e.g. Influenza, RSV, COVID-19), accommodate appropriate mitigation. (e.g. physical distancing in such spaces). Review health benefits for sensitive groups of leaving area until air quality improves or using an air cleaner, and that intermittent time in cleaner air spaces or sheltering in-place without an air cleaner might not be as protective. Provide information on the benefits and limitations of respirators; ensure information on proper use is available (e.g. EPA palm card and Oregon OSHA video) ² for those choosing to wear one.
Very Unhealthy/ Purple (201-300)	1 Mile	 Above, plus: Reschedule, move, or cancel outdoor events. If school is in session, measure indoor air quality, if possible, discuss whether closure is appropriate with school administrators. Recommend shelter-in-place for general population. Share information about periods of improved air quality to guide essential outdoor activity and ventilation of dwellings (refer to FAQs² for more information). 	Follow recommended actions to the left and above, plus: • Open and publicize cleaner air spaces for the public. While there is community spread of respiratory illness, accommodate appropriate mitigation in such spaces. Consider strategies for adequate air changes inside including the use of portable or integrated air cleaners. • Share information about periods of improved air quality to guide essential outdoor activity and ventilation of dwellings (refer to FAQs² for more information).
Hazardous/ Maroon (301+)	<1 Mile	Above, plus: • Recommend voluntary evacuation for sensitive and vulnerable groups Provide information on the benefits and limitations of respirators; ensure information on proper use is available (e.g. EPA palm card and OR OSHA video²) for those choosing to wear one.	Follow recommended actions to the left and above, plus: • Open and publicize cleaner air spaces for the public While there is community spread of respiratory illness, accommodate appropriate mitigation in such spaces. Consider strategies for adequate air changes inside including the use of portable or integrated air cleaners.

¹For use of the **5-3-1 Visibility Index**, see below. The visibility test is not appropriate or effective in areas with high humidity, such as in Western Oregon near or on the coast, where water vapor (fog) may limit visibility.

- FAQs available in multiple languages
- Air Quality and Outdoor Activity Guidance for Infants, Children and Youth
- Guidance for clinicians "Clean Air at Home" a fact sheet about using air filters at home. Guidance for the Identification of Cleaner Air Shelters/Spaces for Protection from Wildfire Smoke.
- EPA Palm Card

² Crisis and Emergency Risk Communication Toolkit for Wildfires: <u>www.healthoregon.org/cerc</u> The kit includes many tools including:

• Link to OR OSHA video on how to wear respirators www.youtube.com/watch?v=ucmx hj1SW8

Most tools are available in ten or more languages.

- Full guide: https://www.epa.gov/sites/production/files/2018-07/documents/guide to air cleaners in the home 2nd edition.pdf
- Full Guide in Spanish: Guía de purificadores de aire en el hogar, 2ª edición, agosto de 2018
- Two-page handout: https://www.airnow.gov/sites/default/files/2020-10/indoor-air-filtration-factsheet_1.pdf

⁵ DEQ and programs are no longer resourced to host calls or issue new advisories on weekends or holidays. Efforts are made to forecast smoke and determine advisory needs in advance. However, local agencies may need to deliver messaging to their community when smoke concentrations exceed forecasted conditions over weekends or holidays, especially with large, fast growing, or new fires.

Considerations that may influence implementation of the above mitigating actions:

- Clear/predictable fluctuations in air quality throughout the day can allow for modifications in the recommendations from the above table. For example, schools could delay recess instead of canceling it if there is a pattern of clearing in the afternoon. Also, if cleaner air spaces are provided, they should be open and available at the times of day that smoke is heaviest, including at night when possible.
- If smoke is predicted to be heavy for short durations (i.e., a few hours) the public health messaging should encourage people to avoid spending time outdoors during those times.
- Indoor air quality may be poor in older dwellings. These may include schools, community centers, nursing homes, or group homes. When air quality is "unhealthy" for an extended duration, it may be worthwhile to assess indoor air quality for these and other types of facilities where people who are sensitive to smoke live or stay. Oregon OSHA can assist employers in assessing indoor air quality where employees are present. Consider strategies for adequate air changes inside including the use of portable or integrated air cleaners. Consider HVAC or other systems to control indoor air temperature during smoke events that coincide with high temperatures.
- The ability of the jurisdiction to implement smoke guidance and respiratory guidance simultaneously. See CDC's COVID-19 Ventilation in Buildings webpage and OHA's COVID-19 webpage for more detailed information and guidance https://govstatus.egov.com/OR-OHA-COVID-19. It must be stressed that NIOSH-approved N95 and P100 respirators and comparable or better devices are currently the only masks that may offer some protection from fine particulate matter (PM_{2.5}) in the air or from smoke. Common face coverings like cloth masks and dust masks offer little or no protection from PM_{2.5} in these situations.
- The ability to assess and balance the needs created by concurrent hazards (e.g.-wildfires, heat, airborne diseases). Weatherized buildings with adequate heating, ventilation and cooling systems with appropriate filtration may be able to meet the needs created by concurrent hazards. Buildings without both appropriate cooling and filtration systems may create dilemmas when attempting to implement health guidance. For example, wildfire smoke guidance may suggest closing doors and windows to keep smoke out, while maintaining adequate air exchange to reduce virus particles or a safe indoor temperature may require opening them. Likewise, heat guidance may suggest opening windows during cooler parts of the day which may not be advisable during poor air quality events. In more complex settings, layering health protections and consulting multi-disciplinary teams can be helpful in determining the best way to implement guidance and minimize risk.

Using the 5-3-1 Visibility Index

Since wildfires often occur in remote areas, air monitoring equipment may not be available. Smoke levels can rise and fall rapidly depending on weather conditions including wind direction. Making visual observations using the 5-3-1 visibility index is a simple way to estimate smoke levels and what precautions to take, as noted in *Table 4*. While this method can be useful, you should always use caution and avoid spending time outside if visibility is limited, especially if you are sensitive to smoke.

³ Public Health Division wildfires webpage: <u>www.healthoregon.org/wildfires</u>.

⁴ Detailed guides to air cleaners (EPA):

The procedure for using this visibility index is as follows:

- 1. Determine the limit of your visual range by looking for distant targets or familiar landmarks such as mountains, mesas, hills, or buildings at known distances. The visual range is that point at which these targets are no longer visible. Generally, if you can clearly see the outlines of individual trees on the horizon it is less than five miles away.
- 2. Ideally, looking at distant targets should be done with the sun behind you. Looking into the sun or at an angle increases the ability of sunlight to reflect off the smoke, making the visibility estimate less reliable and appearing worse than it is.
- 3. Once distance has been determined, follow this simple guide:
 - A. If visibility is well over five miles with no noticeable haze in the air, the air quality can be considered generally good.
 - B. Even if visibility is five miles away but generally hazy, air quality could be considered moderate and beginning to deteriorate, and is generally healthy, except possibly for smoke-sensitive persons. The general public should avoid prolonged exposure if conditions are smoky to the point where visibility is closer to the five-mile range. See *Table 4*.
 - C. If under five miles, the air quality is unhealthy for young children, adults over age 65, pregnant women, and people with heart or lung disease, asthma, or other respiratory illness. These people should minimize outdoor activity. See *Table 4*.
 - D. If under three miles, air quality is unhealthy for everyone. Young children, adults over age 65, pregnant women, and people with heart or lung disease, asthma, or other respiratory illness should avoid all outdoor activities. See *Table 4*.
 - E. If under one mile, the air quality is hazardous. Everyone should avoid all outdoor activities. See *Table 4*.

6. Oregon Smoke Blog Website

The Oregon Smoke Blog (www.oregonsmoke.org) is managed by DEQ and provides current air quality and health information on smoke impacts from wildfires. It features the Fire and Smoke map that shows active fires and current air quality readings. The Smoke Blog provides links to various agency websites and important guidance documents. Federal and state agencies, and local and tribal public health authorities may contribute content through DEQ. DEQ also maintains a related X (Twitter) account (@ORSmokeInfo) to distribute information. The schedule and contact information for DEQ Public Affairs staff during wildfire season are in *Appendix D*.

7. Annual Pre-Wildfire Season Conference Call

Each year prior to the summer wildfire season, in late May or early June, representatives from the participating agencies and organizations listed in this protocol will hold a conference call to prepare for the upcoming season. The purpose of this call is to review this protocol, discuss any changes or specific preparation needs for the summer, and update the contact list of staff expected to be using this protocol if major wildfires occur. The contact list for lead agencies is provided in *Appendix A*.

8. As-Needed Wildfire Conference Calls and Briefings

The threshold for issuing an air quality advisory resulting from wildfire smoke is when the 24-hr average concentration of PM2.5 is forecasted to meet or exceed 35.5 μ g/m³, or Unhealthy for Sensitive Groups. If smoke is present at levels below this threshold, local jurisdictions are encouraged to follow *Table 4* and any community smoke response plans in distributing messaging regarding actions the public can take to protect themselves from smoke. Sign up for the call distribution list here:

https://app.smartsheet.com/b/form/16db39a4335f4e24a098b36c4c8323c1

a. Conference calls will be held as needed during major wildfires when forecasts indicate the air quality advisory threshold may be met. The lead agencies hosting calls are DEQ and OHA. A conference call and briefing can be requested by any party, with concurrence then sought out amongst OHA, DEQ, USFS and NWS as available, and will usually take place in the morning. Unless otherwise announced, conference calls will be held on an as-needed basis from 8:30-9:30 A.M.

The calls will include updates on the status of major on-going wildfires and provide an opportunity to discuss current air quality conditions, smoke forecasts, local health impacts, recommended public actions, communications, emergency actions (such as evacuation) and any other relevant topic. These briefings will include a wildfire status update from public information officers associated with Incident Command (if available) and any Air Resource Advisor assigned to the wildfire.

For major wildfires in neighboring states (Washington, Idaho, Nevada, and California) that are affecting Oregon, the daily briefing may include the appropriate contacts in those states that have essential information. In situations where a smaller group conference call is needed, such as between state and local health officials to discuss specific local public health issues, or with DEQ to discuss local air quality levels in areas being heavily affected by wildfire smoke, the calls will be convened as needed. Requests for such calls should be made to either DEQ or OHA, depending on the primary topic of concern. These smaller group calls will typically be held during dynamic smoke events impacting one to two jurisdictions.

- b. If an advisory is being extended and no additional areas are being impacted, decisions regarding the extension may be done through email communications instead of by hosting a call. If an advisory is being extended with the same or fewer areas of impact, decisions regarding the extension may also be limited to emails. If new areas are being considered for inclusion in the advisory extension, an advisory call will be hosted. Advisory extension notices will be sent by DEQ PIO's using the same steps as a full advisory. Local jurisdictions should continue to follow *Table 4* and consult their smoke response plans in these situations to guide their local communication efforts.
- c. When wildfire smoke is present, but air quality is not impacted to the extent that a DEQ-issued air quality advisory is warranted, it is considered a situation with intermittent smoke. Intermittent smoke conditions may result in an elevated AQI for a period of time, but the 24-hour average is not forecasted to reach Unhealthy for Sensitive Groups or higher. DEQ, OHA, and/or local public health authorities may determine public messaging is warranted. DEQ messaging may include social media posts but will not include a full DEQ advisory or posting to the DEQ Smoke Blog. Local jurisdictions should continue to follow *Table 4* and consult their smoke response plans in these situations to guide their local communication efforts.

Below is an agenda outline for the calls. The order of the agenda may be changed to accommodate those who have time constraints. An email announcing the call will be sent by the call host to the participants the day before the call. Hosts will try to have a notification out by 3:30 the day prior to, however, in rapidly evolving conditions notification may come after hours. Any participant who wishes to suggest additional discussion topics for the agenda should inform the host in advance. Unless previously arranged, discussions should be limited to the participating protocol entities.

Oregon Wildfire Conference Call, Briefings Agenda Example 8:30 –9:30 a.m. Pacific Time

AGENDA		
8:30 – 9:30 a.m. (Pacific)		
Торіс	Anticipated Discussion Leader	
Opening/Intro	Host	
Statewide Weather Briefing	NWS	
The current fire situation (location, size, etc.) and maps showing fire locations and detail as available	Incident Command PIO, ARA, USFS staff	
Smoke and Air Quality Forecast (Location, duration, and concentration)	DEQ	
Current Epidemiological Report (Focus on Impact Areas)	OHA	
Community needs and any emergency issues for all to be aware	OEM/ODOT/OHA/OSHA/Tribes/LPHA Note that local entities (e.g schools) are asked to route updates or questions through their local public health agency for health concerns and county emergency management for other concerns.	
Air Quality Advisory Development and Public Health & Safety Message Coordination (yes/no, impacted area, duration, etc.). Plan for issuing advisory and news release. Supplemental information for smoke blog, Tribes and local public health authority press releases.	DEQ with additional on-the ground input from: tribal governments and LPHA DEQ PIO with OHA PIO, ODOT PIO if issuing jointly.	
Set date and time of next call as needed and adjourn	Host	

9. Air Quality Advisory Coordination with National Weather Service

The National Weather Service offices and air quality agencies in Oregon and Southwest Washington developed a procedure for the coordination of air quality events (advisories and alerts) and the associated messaging. Events which may create the need for a coordination call between the National Weather Service offices and air quality agencies include:

- Forest fires and associated transport of smoke
- Air quality approaching unhealthy levels
- Weather pattern conducive to deteriorating air quality
- 1. During weekends if conditions improve to the point of good or a green AQI category and are expected to remain stable for an area with an existing advisory, the National Weather Service offices considering dropping or expiring their advisory will attempt to contact the responsible air quality agencies to evaluate the situation. If no contact can be made, the National Weather Service offices can proceed to stop messaging and drop the advisory from their dissemination systems. The National Weather Service offices will not originate an advisory for smoke impacts on their own. If conditions are deteriorating to unhealthy levels over the weekend, local agencies will need to determine if they will deliver smoke and air quality messaging or issue their own advisory.

- 2. The National Weather Service system of messaging includes web services, email distribution, social media, National Oceanic and Atmospheric Administration (NOAA) Port, NOAA Weather Wire and several others that reach the public, broadcast media, social media outlets, emergency managers, and many more. The air quality agencies agree to email the press release containing the air quality advisory message to the National Weather Service offices. The National Weather Service agrees to disseminate air quality advisories from the air quality agencies as a National Weather Service product. National Weather Service offices will give attribution to the air quality agency and include a link to the air quality website in the product. The National Weather Service product amplifies the message from the air quality agencies to further reach the public with important information involving weather.
- 3. In the event of a prolonged smoke event, an advisory may be issued "until further notice". The NWS will use their maximum advisory length of 7 days as a placeholder. Changes will be communicated from air quality agencies to NWS as frequently as possible (every 2 days preferred), but no later than within 24-hours prior to the end date. Agencies can communicate with NWS via agreed upon communication channels.

10. Indoor Air Monitoring Equipment

Wildfire smoke can affect indoor air quality. Research has shown that high levels of outdoor smoke can result in a significant amount of smoke infiltrating buildings, even when windows and doors are closed. Many commercial buildings and schools mechanically draw in the outdoor air through air filtration systems. Heating and cooling systems with MERV-13 or better filtration can remove ultrafine smoke particles. However, standard filtration generally will not remove most of the ultrafine smoke particles. Home heating and cooling systems may not be compatible with MERV-13 or better filtration. More information about the use of air filters, cleaners and other ways to reduce indoor smoke levels can be found in the document *Wildfire Smoke: A Guide for Public Officials* (2019).

There are different types of indoor air monitors that can be used to indicate the potential health risk when indoors. This monitoring equipment is generally focused on PM2.5 but may also detect carbon monoxide and other toxic gases. Other features include measuring temperature and relative humidity. Indoor monitoring equipment is typically less expensive than outdoor equipment, is relatively low maintenance, and can provide the same real-time measurements in micrograms per cubic meter, via handheld or portable monitors. These monitors can be purchased, or in some cases rented, during wildfires. US EPA has additional background on air quality sensors and monitors: https://www.epa.gov/indoor-air-quality-iaq/low-cost-air-pollution-monitors-and-indoor-air-quality. As noted in *Table 3* of the protocol, DEQ is responsible for monitoring outdoor air quality and does not have equipment for indoor air monitoring. For questions about employee health and possible indoor air monitoring in the workplace, contact an Oregon OSHA field office (Oregon OSHA Field Office) or visit OR-OSHA Wildfires: Addressing Worker Concerns.

11. Other Air Monitoring Networks, AQI Pages and Apps

DEQ primarily recommends checking air quality via the following sources:

- Oregon Smoke Blog www.oregonsmoke.org
- OregonAir app available on Apple and Android app stores
- Oregon DEQ AQI webmap https://aqi.oregon.gov/
- EPA Fire and Smoke Map https://fire.airnow.gov/

Other air monitoring networks or sites showing AQI values are available online. These are private networks or data displaying systems that measure or show $PM_{2.5}$ to varying degrees of accuracy. One network more known than others is the PurpleAir network. It has good data once it has been adjusted; however, is generally not presented in an adjusted or corrected manner. It has been found to report values 1.5 to 2 times higher in Oregon than actual $PM_{2.5}$ values. Viewing this data should be done in a cautious manner and it may be used for possible trending information, such as where smoke is and if concentrations are improving or deteriorating.

Exercise caution when viewing other AQI apps or monitoring networks. Only the data represented on DEQ's website, the OregonAir app, <u>EPA's AirNow</u> website, and as shown on the <u>Oregon Smoke Blog</u> should be considered valid.

12. Resources and Guidance Documents for Public Health Officials

- Oregon Health Authority Wildfires and Smoke website: www.healthoregon.org/wildfires
- Oregon Health Authority Crisis and Emergency Risk Communication Toolkit: www.healthoregon.org/cerc
- Oregon OSHA Wildfire Smoke Rule: https://osha.oregon.gov/pages/topics/wildfires.aspx
- Oregon OSHA Heat Rule: https://osha.oregon.gov/pages/topics/heat-stress.aspx
- Centers for Disease Control and Prevention: Wildfires: https://www.cdc.gov/wildfires/about/index.html
- EPA: Wildfire Smoke- A guide for Public Health Officials: https://www.airnow.gov/publications/wildfire-smoke-guide/wildfire-smoke-a-guide-for-public-health-officials/

13. Appendices

Appendix A: Protocol Contacts. *Appendix A* of this protocol is a contact list of representatives from the agencies and organizations identified in this protocol. Annual updating of this contact list will be necessary and should be conducted at the annual pre-wildfire season conference call, as noted in *section 7* above.

Appendix B – Example Air Quality Advisory News Release. *Appendix B* of this protocol provides an example of DEQ's public announcement/press releases from prior years, which can be used as a guide for future announcements.

Appendix C – **Oregon 2024 Monitor Network.** The monitoring network and current data can be viewed on the DEQ webpages as shown in the wildfire related websites link and the locations can be viewed in the appendix for general information. The locations of the various monitors for 2025 are shown here in **Appendix** C. When additional PM 2.5 estimate monitors are installed and updates made to the OregonAir app, our AQI monitoring web pages and the wildfire blog will update accordingly, but changes may not be reflected in this protocol map until the next annual review.

Appendix D – Oregon DEQ Staffing Schedule: Wildfire Season 2024. *Appendix D* of this protocol outlines the rotating schedule of Public Affairs Specialists assigned during the 2025 wildfire season.

Appendix E – **Respiratory Illnesses and Wildfire Smoke.** *Appendix E* of this protocol outlines available resources and messaging around smoke guidance as it related to COVID-19 response efforts.

Appendix G – Oregon Air Resource Advisor – State Welcome Packet. ARA's are technical specialists assigned to incidents along with Incident Management Teams. ARA's provide timely smoke impact and forecast information and may install and operate temporary air quality monitors near fire perimeters. They can provide state and local agencies information on fire activity and projected smoke production. ARA's draft Smoke Forecast Outlooks that are published to the following website: https://outlooks.wildlandfiresmoke.net/outlook

Appendix H – Facebook and X/Twitter Air Quality Advisory Templates – Wildfire Smoke Response. Sample messaging for Facebook and X are included in *Appendix H*, including hashtags that are commonly used on DEQ posts. These templates can be used by local public health or other agencies that want to post their own air quality and smoke messaging.

Appendix A – Protocol Contacts

Appenix A.1 – Oregon Protocol Contact List

Agency/Organization	Staff Contact		
1. Federal Land	Trevor Miller, Regional Fuels Program Manager		
Managers (USFS &	(541) 604-5625		
BLM)	Simon.miller1@usda.gov		
2. Air Resource Advisor	n/a (if assigned to major wildfire event)		
National Coordinator	Pete Lahm, Wildland Fire Air Quality Response Program (USFS)		
	202-205-1084, cell: 602-432-2614		
	plahm@fs.fed.us		
	Pete.lahm@gmail.com		
3. NWS	Medford		
	Bradley Schaaf, Warning Coordination Meteorologist		
	4003 Cirrus Drive, Medford, OR 97504		
	541-773-1067		
	bradley.schaaf@noaa.gov		
	www.weather.gov/Medford		
	Please send all Air Quality Alerts to mfr.operations@noaa.gov or call 541-776-		
	4326 or 541-773-1067.		
	Portland		
	Treena Jensen, Warning Coordination Meteorologist		
	NOAA's National Weather Service		
	5241 NE 122 nd Ave., Portland, Oregon 97230		
	503-326-2340 ext. 223, cell: 503-853-4121		
	treena.jensen@noaa.gov		
	Discourse 1 - 11 A in Oracli to Allerta to account of a 10 mars and		
	Please send all Air Quality Alerts to nws.portland@noaa.gov ,		
	Colby.neuman@noaa.gov, and treena.jensen@noaa.gov or call 503-326-2356.		
	Pendleton Natur Prophers Warning Coordination Metagralagist		
	Katy Branham , Warning Coordination Meteorologist National Weather Service, Pendleton, Oregon		
	541-276-7832 ext 223		
	katy.branham@noaa.gov		
	<u>katy.orumamoenouu.gov</u>		
	To post air quality alerts, please call or send e-mail to: pdt.operations@noaa.gov		
	Boise		
	Jay Breidenbach, Warning Coordination Meteorologist (Administration)		
	National Weather Service, Boise, Idaho		
	208-334-9861 ext. 223		
	jay.breidenbach@noaa.gov		
	To post air quality alerts, please call or send e-mail to Boise Operations:		
	boise.weather@noaa.gov		
	208-334-9518 or 208-334-9508		

4. American Red Cross	Chad Carter, Regional Communications Director		
"Timerican rea eross	971-978-9353		
	chad.carter@redcross.org		
	To any Del Company of the Park		
	To request Red Cross response assistance, contact the Red Cross Duty Officer: 1-888-680-1455 (duty officer)		
5. DEQ	Jennifer Horton, Air Quality Planner		
3. DEQ	cell: 503-333-5812		
	jennifer.horton@deq.oregon.gov		
	Russell Graham, Community Air Quality Coordinator, Eastern Region		
	cell: 503-933-7515		
	russell.graham@deq.oregon.gov		
	Neda Khosravi, Meteorologist, DEQ Lab Cell: 503-933-8336		
	Neda.khosravi@deq.oregon.gov		
	Matthew Shrensel, Air Quality Monitoring Laboratory Manager		
	971-806-4993		
	matthew.shrensel@deq.oregon.gov		
	Daniel Johnson, Air Quality Monitoring Section		
	503-693-5713, cell: 971-806-5323		
	daniel.johnson@deq.oregon.gov		
	Lauren Wirtis, Communications Manager		
	cell: 503-229-6494		
	lauren.wirtis@deq.oregon.gov Chwig Vanlay Dublic Affaire Portland Office Northwest Region		
	Chris Varley, Public Affairs, Portland Office, Northwest Region Cell: 503-933-05141		
	Cen: 303-933-03141 Chris.varley@deq.oregon.gov		
	Antony Sparrow, Public Affairs, Bend Office, Eastern Region		
	cell: 503-887-9113		
	antony.sparrow@deq.oregon.gov		
	Dylan Darling, Public Affairs, Eugene Office, Western Region		
	cell: 541-600-6119		
	dylan.darling@deq.oregon.gov		
	Michael Loch, Public Affairs, Portland Office, Northwest Region		
	cell: 503-737-9435 michael.loch@deq.oregon.gov		
	Laura Gleim, project manager, Regional Solutions, Bend Office, Eastern Region cell: 503-577-3697		
	laura.gleim@deq.oregon.gov		
	Jennifer Flynt, Public Affairs, Headquarters		
	cell: 503-730-5924 cell		
	jennifer.flynt.@deq.oregon.gov		
	Susan Mills, Public Affairs, Headquarters, social media		
	cell: 503-956-9648		
	susan.mills@deq.oregon.gov		

6. OHA Jamie Bash, Risk Communications Analyst, Health Security Preparedness and Response cell: 503-754-3190 jamie.p.bash@oha.oregon.gov **On-call Public Health Emergency Preparedness Duty Officer** cell: 971-246-1789 PHP.DUTY-OFFICER@odhsoha.oregon.gov Jonathan Modie, Media Relations Officer, External Relations Division cell: 971-246-9139 jonathan.n.modie@oha.oregon.gov On-call PIO: PHD.Communications@oha.oregon.gov Carol Trenga, Surveillance Epidemiologist, Environmental Health 971-599-0081 Carol.a.trenga@oha.oregon.gov Ali Hamade, Deputy State Epidemiologist, Environmental Toxicologist 971-673-5390 ali.k.hamade@oha.oregon.gov 7. Tribal Government **Confederated Tribes of the Umatilla Indian Reservation** and Indian Health Caleb Minthorn, Energy and Environmental Sciences Program 541-969-3151 Service calebminthorn@ctuir.org **Confederated Tribes of Warm Springs** Danny Martinez, Air Quality 541-553-3345 danny.martinez@wstribes.org Matthew Ellis, US Public Health Service, Emergency Management Coordinator Indian Health Services Matthew.Ellis@ihs.gov Cow Creek Band of Umpqua Tribe of Indians Susan Ferris, Public Information Officer 503-539-6343 s.ferris@cowcreek.com Confederated Tribes of Coos, Lower Umpqua, & Siuslaw Indians Carter Thomas, Air and Water Protection Specialist 541-751-3282 cthomas@ctclusi.org Armando Martinez II, Emergency Management Coordinator 541-435-7228, cell 541-999-4151

Klamath Tribes

amartinez@ctclusi.org

Steve Rondeau, Director of Natural Resources

steve.rondeau@klamathtribes.com

For other tribal contacts ¹: Legislative Commission on Indian Services - <u>Natural Resources Cluster - Tribal Contacts</u>

8. Oregon Department	Erin Zysett, Public Information Officer		
of Emergency	971-304-5450		
Management	erin.c.zysett@oem.oregon.gov		
0	Shirley Blake, Public Affairs Officer		
	971-388-5382		
	Shirley.Blake@oem.oregon.gov		
	OEM Duty Officer		
	Oregon Emergency Response System (OERS)		
0.0	1-800-452-0311 Or 503-378-6377		
9. Oregon OSHA	Aaron Corvin, Public Information Officer cell: 971-718-6973		
	Aaron.corvin@dcbs.oregon.gov		
	Penny Wolf-McCormick, Statewide Health Enforcement Manager		
	cell: 971-707-0867 Penny.l.wolf-mcmormick@dcbs.oregon.gov		
	Penny.1.won-memorinick@dcos.oregon.gov		
	Dave McLaughlin, Standards and Appeals Manager		
	971-701-5491		
	dave.mclaughlin@dcbs.oregon.gov		
10. ODF	Stacy Mcarter, Mitigation Program Manager		
	(503) 701-0236		
	stacy.mccarter@odf.oregon.gov Jessica Prakke, Public Information Officer		
	503-983-3367		
	jessica.prakke@odf.Oregon.gov		
11. Governor's Office			
Regional Solutions	http://www.oregon.gov/gov/admin/regional-solutions/Pages/default.aspx		
Centers			
	Christina LeClerc, ODOT Emergency Operations Coordinator 503-986-4488		
	Christina.LECLERC@odot.state.or.us		
12. ODOT	Jessica Gourley, State Emergency Operations Manager		
	503-986-3020		
	Jessica.K.Gourley@odot.state.or.us		
13. Office of State Fire	Mariana Ruiz-Temple, Oregon State Fire Marshal		
Marshal	503-934-8238		
	mariana.ruiz-temple@osfm.oregon.gov		
14. Lane Regional Air	Travis Knudsen, Executive Director		
Protection Agency	541-736-1056 ext. 217, cell: 303-523-2661		
	<u>tknudsen@lrapa-or.gov</u>		
	Matt Sorensen, Public Affairs and Project Manager		
	541-736-1056 ext. 209		
15 Local Duklia Haalii	msorensen@lrapa-or.gov		
15. Local Public Health Authorities	Call OHA's contacts above for wildfire-specific local contacts.		
Authornes	As a backup, each Oregon County has general points of contact listed at		
	115 a backap, each Oregon County has general points of contact listed at		

	http://public.health.oregon.gov/ProviderPartnerResources/LocalHealthDepartment Resources/Pages/lhd.aspx	
16. 211info	Ciara Doyle, MSW, CIRS, Director of Contract Center and Programs 503-416-2704, cell: 919-434-5458 ciara.doyle@211info.org www.211info.org/	
17. EPA Region 10	Randall Ruddick, Smoke Management Coordinator 206-553-1999 ruddick.randall@epa.gov Althea Godfrey, Tribal Air Team 206-553-1604 Godfrey.Althea@epa.gov	

¹Oregon Tribal Contact List - may not be the actual contact for wildfire smoke and air quality issues.

Appendix A.2 – Out of State Contact List

Agency/Organization	Staff Contact		
18. Idaho Department of	Boise, ID		
Environmental	Tami Aslett, Smoke Management Supervisor		
Quality	Air Quality Division		
	208-373-0443		
	tami.aslett@deq.idaho.gov		
	Boise, ID		
	Sally Hunter, Smoke Management Analyst		
	Air Quality Division		
	208-373-0181		
	Sally.hunter@deq.idaho.gov		
19. Washington	Yakima, WA		
Department of	Sean Hopkins, Smoke Management Team Lead		
Ecology	Central Regional Office		
	509-575-2804		
	sean.hopkins@ecy.wa.gov		
20. Southwest Clean Air	Vancouver, WA		
Agency	Uri Papish, Executive Director		
	360-574-3058 x112		
	<u>Uri@swcleanair.org</u>		
21. Nevada Division of	Elizabeth Grainey, Ambient Air Monitoring Supervisor		
Environmental	775-790-7877		
Protection	egraineysfontaine@ndep.nv.gov		
22 C V2			
22. California Air	Sacramento, CA		
Resources Board	Charles Pearson, Incident Air Monitoring Section		
	279-208-7322, cell: 916-541-9026		
	charles.pearson@arb.ca.gov		

Appendix A – Example Air Quality Advisory News Release



D ~	1	date:
ĸe	iease	uate:

Air quality advisory for ____ [Aviso sobre la calidad del aire]

QUICK FACTS
Location:
End date:
Smoke source:

The Oregon Department of Environmental Quality [and Lane Regional Air Protection Agency/Washington Southwest Clean Air Agency] [extended/issued] an air quality advisory [day of week] for [area/location under advisory] due to smoke from [name/location of fires].

** Información en español **

DEQ expects the air quality advisory to last until at least [day of week, morning/afternoon/evening]. DEQ and partner agencies will continue to monitor smoke in the area. [DEQ expects intermittent smoke [in area/location]. Air quality may improve [during the morning/afternoon/evening or day of week] but smoke is likely to return [morning/afternoon/evening or day of week].

Smoke levels can change rapidly depending on weather. Check current conditions on the <u>Oregon Smoke Information Blog</u>, <u>DEQ's Air Quality Index</u>, or by downloading the free <u>OregonAir app</u> on your smartphone.

Smoke can irritate the eyes and lungs and worsen some medical conditions. People most at risk include infants and young children, people with heart or lung disease, older adults and pregnant women.

Protect yourself and your family when smoke levels are high:

- Stay inside if possible. Keep windows and doors closed. If it's too hot, run air conditioning on recirculate or consider moving to a cooler location.
- Avoid strenuous outdoor activity.
- Use high efficiency particulate air (HEPA) filters in indoor ventilation systems or portable air purifiers. Or create your own air purifying filter by following these instructions.
- Be aware of smoke in your area and avoid places with the highest levels of smoke.

- When air quality improves to moderate or healthy (yellow or green on the Air Quality Index), open windows and doors to air out homes and businesses.
- If you have a breathing plan for a medical condition, be sure to follow it and keep any needed medications refilled.

Cloth, dust and surgical masks don't protect from the harmful particles in smoke. Certain respirators approved by NIOSH can offer protection, but they must be properly selected and worn. Select a NIOSH-approved respirator with a N, R, or P alongside the number 95, 99 or 100. Learn how to put on and use a respirator. Respirators won't work for small children as they don't come in children's sizes. Older children may fit into an adult extra-small. People with heart or lung conditions should consult their health care provider before wearing a respirator.

Additional resources:

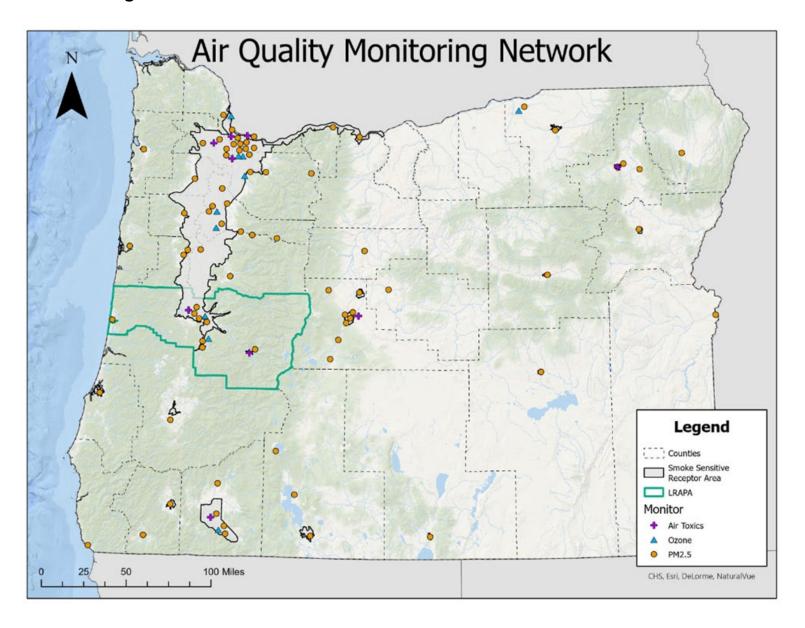
- Find a cleaner air space in your area: Visit <u>211info.org</u>, click "Find Resources" and search in the Community Resource Database for "Wildfire Related Clean Air Shelters." Or call 211 any time or day.
- Learn more about protecting your health during wildfires

Media contacts:

- Name, DEQ public affairs specialist, phone, email
- Local and Tribal contacts

##

Appendix B – Oregon 2025 Monitor Network



Appendix C - Oregon DEQ Staffing Schedule: Wildfire Season 2024

Updated: June 18, 2025

Meeting Host Staffing Schedule – 2025

DEQ and OHA work together to share hosting duties during wildfire season. The on-call host monitors fire conditions, forecasts, and current air quality. The host is responsible for sending out invitations to the Wildfire Smoke Coordination Call and ensuring the call follows the agenda and all parties are able to share relevant information or get questions answered. Similar to 2024, calls will not be held over weekends or on holidays.

Host Contact Information:

DEQ: Jennifer Horton, 503-333-5812, jennifer.horton@deq.oregon.gov Russell Graham, 503-933-7515, russell.graham@deq.oregon.gov

OHA: Jamie Bash, 503-754-3190, <u>Jamie.p.bash@oha.oregon.gov</u>
Amanda Faulkner, 971-673-1129, <u>Amanda.e.faulkner@oha.oregon.gov</u>
Public Health Duty Officer, cell: 971-246-1789, PHP.DUTY-OFFICER@odhsoha.oregon.gov

Date	Host	Backup		
June 1 - 9	Jennifer	Jamie		
June 10 - 16	Jamie Jennifer			
June 17 - 23	Jennifer (Russell 6/23)	Jamie		
Thursday, June 19	Thursday, June 19 is the Juneteenth holiday.			
June 24 - 30	Amanda Russell			
July 1 - 7	Russell	Amanda 7/-7/3 OHA Duty Officer 7/4-7/7		
Thursday, July 4 is the Independence Day holiday.				
July 8 - 14	Jamie	Russell		
July 15 - 21	Jennifer	Amanda		
July 22 - 28	Jamie	Jennifer		
July 29 – Aug 4	Jennifer	Jamie		
Aug 5 – 7	Amanda	Russell		
Aug 12 - 18	Russell	Jamie		
Aug 19 - 25	Amanda	Jennifer		
Aug 26 – Sep 1	Jennifer	Amanda 8/26-8/29 OHA DO 8/30-9/1		
Monday, Sept. 2 is the Labor Day holiday.				
Sep 2 - 8	Jamie	Russell		
Sep 9 - 15	Jennifer Jamie			
Sep 16 - 22	Amanda (Jamie 9/16) Russell			

Sep 23 - 29	Russell	Jamie
Sep 30 – Oct 6	Jamie	Jennifer
Oct 7 – 13	Jennifer	Amanda (Jamie 10/7)
Oct 14 – 20	Jamie	Jennifer
Oct 21 – 31	Russell	Amanda

Public Affairs Staffing Schedule - 2025

To provide consistent and nimble communications support during the wildfire season, DEQ has established a rotating schedule of public affairs specialists to handle news releases, blog updates and other needs. This information may be updated throughout wildfire season. Coverage will not be available on weekends or holidays.

Date	On duty	Contact	Backup
June 2 – 13	Jennifer	503-730-5924 jennifer.flynt@deq.oregon.gov	Antony
June 16 – 27	Antony	503-887-9113 antony.sparrow@deq.oregon.gov	Michael
Wednesday, June	19 is the Juneteent	th holiday.	
June 30 – July 11	Michael	503-737-9435 michael.loch@deq.oregon.gov	Chris
Thursday, July 4 i	s the Independence	e Day holiday.	
July 14 – 25	Chris	503-933-0514 chris.varley@deq.oregon.gov	Dylan
July 28 – Aug 8	Dylan	541-600-6119 dylan.darling@deq.oregon.gov	Jennifer
Aug 11 – 22	Jennifer	503-730-5924 jennifer.flynt@deq.oregon.gov	Antony
Aug 25 – Sep 5	Antony	503-887-9113 antony.sparrow@deq.oregon.gov	Michael
Monday, Sept. 2 is	the Labor Day hol	liday.	
Sep 8 – 19	Michael	503-737-9435 michael.loch@deq.oregon.gov	Chris
Sept 22 – Oct 3	Chris	503-933-0514 chris.varley@deq.oregon.gov	Dylan
Oct 6 – 17	Dylan	541-600-6119 dylan.darling@deq.oregon.gov	Jennifer
Oct 20 – 31	Chris	503-933-0514 chris.varley@deq.oregon.gov	N/A

AQI Monitoring and Maintenance Staffing Schedule – 2025

Air Quality Monitoring will be monitoring the AQI daily and troubleshooting if a station goes down. Here is a list of who's doing what:

- Kathleen Schuckman (cell 503-509-6383): lead on maintaining the AQI.
- Dan Johnson (cell 971-806-5323): lead on answering AQI questions and backup for Kathleen the AQI web page includes an email box and phone number AQM.Questions@deq.oregon.gov or call 503-693-5861. For general questions please refer to the Frequently Asked Questions and Health Impacts tabs on the AQI: https://aqi.oregon.gov/, or our fabulous Oregon Smoke Blog https://oregonsmoke.org
- Patrick Irvine (cell 971-200-9822) is our IT lead on posting air advisories to the AQI, Nelly Bernuy (cell 971-563-6370) is backup.
- Matthew Shrensel: Air Quality Monitoring manager (cell 971-806-4993)
- Shane Sevey: Lab IT staff manager (cell 503-933-2806)

AQI maintenance on-call weekend coverage:

Date	Staff	Contact
May 31, June 1	Matt Shrensel	971-806-4993
June 7,8	Kathleen Schuckman	503-509-6383
June 14,15	Dan Johnson	971-806-5323
June 21,22	Ken Moody	503-367-4159
June 28,29	Ben Ayres	971-303-2537
July 4,5,6	Zach Koch	971-806-3161
July 12,13	Matt Shrensel	971-806-4993
July 19,20	Kathleen Schuckman	503-509-6383
July 26,27	Dan Johnson	971-806-5323
Aug 2,3	Ken Moody	503-367-4159
Aug 9,10	Matt Shrensel	971-806-4993
Aug 16,17	Zach Koch	971-806-3161
Aug 23,24	Ben Ayres	971-303-2537
Aug 30,31, Sept 1	Kathleen Schuckman	503-509-6383
Sept 6,7	Dan Johnson	971-806-5323
Sept 13,14	Ken Moody	503-367-4159
Sept 20,21	Zach Koch	971-806-3161

Appendix D - Respiratory Illnesses and Wildfire Smoke

It is important to avoid wildfire smoke while also slowing the spread of respiratory illnesses such as Flu, RSV and COVID-19. Some strategies used to reduce exposure to wildfire smoke, such as use of respirators and air filtration systems, are like those used to slow the spread of respiratory illnesses. Unless adapted, other strategies used to minimize smoke exposure could increase opportunities for respiratory illnesses to spread.

Cleaner air spaces are an important way to protect the public's health against wildfire smoke. Not everyone is able to create a cleaner air space at home, particularly people with low incomes or who lack permanent housing. Those who cannot create a cleaner air space at home often use public spaces to access cleaner air. Respiratory illness precautions remain an important consideration at community cleaner air spaces, particularly while respiratory illnesses are circulating broadly. In some cases, this includes the need for masking and physical distancing in some circumstances. As described in *Table 3* of this protocol, local or tribal public health authorities should consult with DEQ, ARA, OHA and OR-OSHA to determine if a cleaner air space should be opened, or if there are other protective strategies that should be deployed. If you open a cleaner air space in your jurisdiction, provide clear messaging about the capacity of the space, disease prevention measures that will be taken, and other strategies people can use to limit health effects from smoke.

People who can create a cleaner air space at home should be encouraged to do so. Staying home helps minimize the risk of exposure to respiratory diseases. The harmful particles found in smoke, known as PM2.5, can only be filtered out of indoor air with high efficiency particulate filters (HEPA) or electrostatic precipitator (ESP) filters. Make sure to use the non-ozone producing type. This level of filtration is especially important for people in smoke-sensitive groups, many of which overlap with groups at higher risk of respiratory illnesses. An appropriate level of filtration can be achieved using HEPA air filters on compatible heating and cooling systems, or portable HEPA and non-ozone producing ESP devices.

There are several strategies for avoiding respiratory illnesses. These include being vaccinated against those diseases for which a vaccine exists (e.g. flu, COVID-19, RSV) washing hands frequently, and avoiding close contact with people who are ill with fever, cough, difficulty breathing, or other respiratory symptoms.

For individuals who must be outdoors during a smoke event, particle filtering respirators, commonly known as N95s may offer some protection from the harmful particles found in smoke. Care should be taken to select a NIOSH-approved respirator with a 'N', 'R', or 'P' alongside the number 95, 99 or 100. Users should become familiar with their limitations and proper use. People with pre-existing health conditions should speak with their healthcare provider prior to using a particulate respirator. Wearers need to select a respirator that fits properly to ensure a protective seal around the face. The type of respirator that filters out harmful smoke particles is not available in children's sizes. For the most protection it is important to understand how to put a respirator on, properly position it on your face and how to remove it. Please note that the emergency use authorization from the US Food and Drug Administration has been rescinded for KN95s. KN95s are no longer permitted under their smoke rules because the EUA is no longer in place, and because the more reliable, NIOSH approved respirators are no longer in short supply.

N95 or equivalent respirators are important personal protective equipment for healthcare and essential workers who must continue to work with regular public interactions. Supplies of these respirators have improved. As with any product, supply may change with time based on demand and the ability of the supply chain to meet demand. Language requesting the public reserve PPE for health care personnel may be added or dropped based on state and national PPE supply and current conditions.

Resources:

Statement from OR OSHA an OHA on Particulate Respirators and Masks https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le3304.pdf

 $Oregon\ OSHA\ Summary\ of\ Heat\ and\ Wildfire\ Rules: \ \underline{https://osha.oregon.gov/OSHARules/adopted/2022/heat-wildfire-smoke-rule-summary-2022.pdf}$

 $Identification \ of \ Clean \ Air \ Spaces: \\ \underline{https://www.oregon.gov/oha/PH/PREPAREDNESS/PREPARE/Documents/IdentificationOfCleanAirShelters.pdf}$

Appendix E – Resources and Links

Wildfire Smoke: A Guide for Public Officials. The smoke exposure levels listed in *Table 4* are adapted from the guidance document Wildfire Smoke: A Guide for Public Health Officials (2019). This document is currently used in many states as a reference guide for how public agencies can best protect public health during wildfires.

In addition to providing background information on the composition of smoke, potential health effects, and recommended actions, it contains specific strategies on how to reduce smoke exposure, such as indoor air filters and cleaners, use of masks and respirators, setting up cleaner air spaces, and examples of public service announcements for wildfire. This document is referenced here as general guidance to provide additional information, and like this protocol, is not intended to replace, interfere with, or limit any action taken by a public agency while performing its official duties, nor does it represent a legally binding document.

Fire Information. In addition to information on the <u>Oregon Smoke Blog</u> and the <u>Fire and Smoke map</u>, these sites provide current information on wildfires and smoke.

- National Interagency Fire Center The nation's support center for wildland firefighting.
- Northwest Coordination Center Information on fires in the NW and seasonal fire weather outlooks.
- <u>InciWeb</u> Provides updates on large fires across the country, with current information, maps and more.
- Oregon Department of Forestry Information and statistics, restrictions and closures, fire prevention and more. Visit ODF's wildfire blog for the latest fire info.
- <u>State of Oregon Fires and Hotspots Dashboard</u> Active fires and satellite detected hotspots around the state.
- RAPTOR (Real-Time Assessment and Planning Tool) Information on a variety of hazards, closures, and resources for Oregon.
- <u>Central Oregon Fire Info</u> Current fire and smoke information for Central Oregon.
- Oregon Department of Forestry Southwest Oregon District Fire Blog Jackson and Josephine counties.
- <u>Blue Mountains Interagency Fire Dispatch Center</u>– Umatilla and Wallowa Whitman National Forests
- <u>Watch Duty</u> Nonprofit providing fire data online and in an app with information pulled from numerous sources.

Air Quality. In addition to information on the <u>Oregon Smoke Blog</u> and the <u>Fire and Smoke map</u>, these sites provide current air quality information.

- Oregon DEQ AQI Map with Oregon DEQs air quality monitoring data.
- AirNow Access air quality data and forecasts for your zip code or city.
- <u>AirFire Monitoring</u> Air quality monitoring data with the ability to easily compare sites and view trends.
- <u>PurpleAir</u> Map of publicly-owned monitors. Data does not go through a quality assurance process. The LRAPA conversion factor should be applied.
- <u>E::Space Labs</u> Monitoring network focused on the Central Oregon area. Data does not go through a quality assurance process.

Smoke Forecasting. These sites provide smoke forecasting information.

- <u>National Weather Service</u> Forecast for near surface smoke with the ability to also view PM2.5, ozone, and dust forecasts.
- BlueSky Daily Runs Uses meteorological data to forecast smoke.
- <u>HRRR Smoke Model</u> High Resolution Rapid Refresh Smoke model
- AirPact Air quality forecasting for the Pacific Northwest.
- <u>Canadian Wildfire Smoke Prediction System</u> Provides daily smoke forecast maps from early April to late October.
- FireSmoke Canadian Model Canadian smoke forecasting model using BlueSky Canada.

• Western Region Climate Center

Satellite Imagery. These sites provide satellite imagery that can be helpful in visualizing smoke transport.

- MODIS Today
- GOES West Visible Imagery
- Zoom Earth
- NASA Worldview

Webcams

- Oregon Department of Transportation's Trip Check
- Crater Lake
- Joseph Oregon
- Columbia River Gorge Area
- Black Butte Ranch in Sisters
- Downtown Bend
- <u>Timberline Lodge</u>
- Oregon AlertWest Wildfire Camera Network

Appendix F – Oregon Air Resource Advisor – State Welcome Packet

Air Resource Advisor Guide to Oregon Wildfire Smoke Advisory Calls

This document is intended to help guide you in your deployment as an ARA while in Oregon. Wildfires burn an average of 716,000 acres in Oregon each year and the number of days with air quality that is unhealthy for sensitive groups or worse continues to increase. We greatly appreciate ARA input during advisory calls and find the smoke outlooks useful both throughout wildfire season and when it is necessary to complete an exceptional event demonstration for the Environmental Protection Agency.

If you are being provided this Guide as a standalone document, the full Oregon Wildfire Response Protocol for Severe Smoke Episodes can be found at: https://www.oregon.gov/deq/FilterDocs/WFresponse.pdf. The Protocol includes information for participating agencies, their area of expertise and their involvement in wildfire and smoke response, action taken during advisory calls and the call agenda, contact lists, and an air quality advisory template. Air quality advisories are posted on the Oregon Smoke Blog (www.oregonsmoke.org), with messaging amplified by partner agencies.

When air quality is impacted by wildfire smoke, advisory calls are hosted on an as-needed basis by the Oregon Department of Environmental Quality and the Oregon Health Authority, along with partner agencies including the Oregon Department of Forestry, the National Weather Service, the US Forest Service, the Lane Regional Air Protection Agency, and local public health authorities. Calls are scheduled on an as-needed basis from 8:30 – 9:30 AM PDT and email invitations are sent the day before when possible. One of the key objectives of calls is to make decisions about the location and duration of air quality advisories. During these calls, about five to ten minutes is dedicated to ARA updates on fire activity and smoke production forecasts. We appreciate if you could provide the following information during that time:

- Name
- Incident to which you are assigned
- If you have recently taken over for someone, their name
- Where you are physically located
- Which communities are included in your forecast area
- Current fire information including size, growth in the past 24 hours, percent contained
- Expected changes in the rate of fire growth, fire operations activities, or fuels which could result in a significant change in smoke emissions
- Location and duration of the placement of any temporary monitors
- Which, if any, smoke forecasting models you rely on, if you agree with their predictions and why/why not
- Your smoke predictions
- Any smoke concerns being expressed by fire management or the community
- Upcoming community meetings or events to provide wildfire updates and their location and time

Meetings are held using Microsoft Teams and screen sharing is utilized for each agencies report. The agenda includes:

- Introduction Host (DEQ or OHA)
- Statewide weather briefing National Weather Service
- Current fire situation ARA(s)
- Smoke and air quality forecast DEQ
- Epidemiological report OHA
- Any community needs or emergency issues to be considered can be provided by state or local attendees
- Air quality advisory development and supplementary public health and safety messaging group can comment but led by DEQ PIO
- Date for next call Host (DEQ or OHA)

Coordination with DEQs Meteorologist outside of air quality advisory calls is recommended, when possible, as a useful tool in preparing forecasts and comparing information and resources.

A list of main contacts is included below, with a more inclusive list included in the Protocol. The Protocol also contains online resources including websites related to wildfire information, air quality information, OHA resources for public health and risk communications, and Oregon webcams.

Agency	Contact Information
Oregon DEQ Smoke Team	smoke@deq.oregon.gov – Team members listed below
DEQ	Jennifer Horton, Air Quality Planner cell: 503-333-5812 jennifer.horton@deq.oregon.gov
DEQ	Russell Graham, Community Air Quality Coordinator, Eastern Region cell: 503-933-7515 russell.graham@deq.oregon.gov
DEQ	Neda Khosravi, Meteorologist, DEQ Lab Cell: 503-933-8336 Neda.khosravi@deq.oregon.gov
ОНА	Jamie Bash, Risk Communications Analyst 971-673-1394, cell: 503-754-3190 jamie.p.bash@dhsoha.state.or.us
ODF	Stacey McCarter, Mitigation Manager (503) 701-0236 Stacey.Mccarter@odf.oregon.gov
USFS	Trevor Miller, Regional Fuels Program Manager (541) 604-5625 Simon.miller1@usda.gov
Lane Regional Air Protection Agency	Travis Knudsen, Executive Director 541-736-1056 ext. 217, cell: 303-523-2661 tknudsen@lrapa-or.gov
	Matt Sorensen, Public Affairs 541-736-1056 ext. 209 msorensen@lrapa-or.gov

If you have additional questions related to the Protocol or advisory calls in Oregon or need to be added to the email list for advisory call invitations, please reach out to one of the DEQ or OHA staff listed above.

Appendix G – Facebook and X/Twitter Air Quality Advisory Templates – Wildfire Smoke Response

Updated: May 26, 2025

OVERALL NOTES:

- Bold font indicates possible/varied inclusion.
- See the end of this appendix for common tags and hashtags.
- Additional templates are available on OHAs <u>Wildfire preparedness</u>, <u>response and recovery communication</u> tools and templates webpage.

For a newly issued air quality advisory:

Facebook:

NOTES:

- DEQ includes English and Spanish in one post on Facebook. The English section is identified by beginning with "ENG" and the Spanish section identified by beginning with "ESP".
- We typically put all tags and hashtags at the end of the post.

ENG: Today, @OregonDEQ [and @SWCleanAirAgency, @LaneRegionalAir, if needed] issued an #AirQuality advisory for [location] due to smoke from the [fire name] near @[nearest city or county]. The advisory is expected to last until [day of week][morning/afternoon/evening]. Go to www.oregonsmoke.org for more details.

ESP*: Hoy, @OregonDEQ [y @SWCleanAirAgency, @LaneRegionalAir, if needed] emitieron un aviso de #CalidadDelAire para [location] debido al humo del [fire name] cerca de @[nearest city or county]. Se espera que el aviso dure hasta el [day of week – note that days of the week are not capitalized in Spanish] [en la mañana OR en la tarde OR en la noche].

Visite www.oregonhumo.org para obtener más detalles.

*If the Spanish translation is not available by the time you post in English, you may want to use the following: La traducción al español aún está por llegar. (Translation: "Spanish translation still to come.")

X/Twitter:

ENG: Today, @OregonDEQ [& @LaneRegionalAir, if needed] issued an #airquality advisory for [location] due to smoke from the [fire name] near @[nearest city or county]. The advisory is expected to last until [day of week][morning/afternoon/evening].

More: oregonsmoke.org

Possible tags (aka "@") and hashtags if space allows: @[Relevant cities and/or counties if not used above], #[FireName], #Wildfire #AirQuality

ESP*: Hoy, @OregonDEQ [y @LaneRegionalAir [if needed] emitieron un aviso de #calidaddelaire para [location] debido al humo del [fire name] cerca de @[nearest city or county]. Se espera que el aviso dure hasta el [day of the week] en [en la mañana/en la tarde/por la noche].

Más: oregonhumo.org

Possible tags (aka "@") and hashtags if space allows: @[Relevant cities and/or counties if not used above], #[FireName], #IncendioForestal #CalidadDelAire

If you would like to include language about protecting yourself from smoke, you may include the following message in English and Spanish:

ENG: Advice to protect yourself and your family from smoke include:

- Stay inside if possible.
- Avoid strenuous outdoor activity.
- Be aware of smoke in your area and avoid places with the highest levels.

Find more information at www.oregonsmoke.org.

ESP*: Los consejos para protegerse a usted y a su familia del humo incluyen:

- Quédese adentro si es posible.
- Evite actividades extenuantes al aire libre.
- Esté atento al humo en su zona y evite los lugares con niveles más altos.

Encuentre más información en www.oregonhumo.org.

Possible Facebook and X/Twitter Hashtags (i.e., #) and Handles (i.e., @):

Hashtags:

- #AirQuality
- #CalidadDelAire
- #Wildfire
- # IncendioForestal

Handles for Relevant State, County, City Governments and Departments (@):

- Amity Fire District (Polk County): @AmityFireDistrict
- Ashland: FB: @CityofAshlandOregon X: @cityofashland
- Baker: FB: @BakerCounty X: @bakercountygov
- Baker County Health Department: FB: @BCHDfan
- Beaverton: FB: @CityofBeaverton X: @CityofBeaverton
- Bend: FB: @CityofBendOregon X: @CityofBend
- Benton County: FB & X: @BentonCoGov
- Clackamas County: FB: @ClackamasCounty X: @clackamascounty
- Curry County: X: @curry county
- Curry County Emerg. Man.: FB: @curry.co.emergency.management
- Deschutes County: FB: @Deschutes.County X: @DeschutesCounty
- Douglas County: FB: @Douglas CountyeGovernment (NOTE: Be careful **not** to tag Douglas County, CO)
- EPA Reg. 10: FB: @eparegion10 X: @EPAnorthwest
- Eugene: FB: @CityofEugene X: @cityofeugene
- Gilliam County: None
- Gold Beach: FB: @CityofGoldBeach
- Grand Ronde Confederated Tribes: FB & X: @CTGRgov
- Grants Pass: FB: @grantspassoregon X: @CityGrantsPass
- Hermiston: FB: @cityofhermiston X: @CityofHermiston
- Hood River (City): FB: @cityofhoodriver
- Hood River County: FB: @HoodRiverCo
- Hood River County Health Dept.: FB: @HRCHealthDepartment
- Hood River West Side Fire District: FB: @WestSideFireDistrict
- Jackson County: FB & X: @JacksonCountyOR
- Jefferson County: FB: @JeffersonCounty1914
- Jefferson County Public Health: FB: @JeffersonCountyOrPublicHealth

- Josephine County: FB: @JosephineCountyOR X: @CountyJosephine
- Josephine County Office of Emergency Management: FB: @josephinecountyEM
- Josephine County Public Health: X: @JoCoPH
- Klamath County: FB: @KlamathCountyGov X: @CountyKlamath
- Klamath Tribes: FB: @KlamathTribes
- Lake County: FB: @LakeCoPubHealth
- Lane County: FB: @LaneCountyGovernment X: @LaneCountyGov
- LRAPA: FB & X: @LaneRegionalAir
- Marion County: FB: @MarionCountyOR X: @MarionCo OR
- Medford: X: @CityofMedford
- Morrow County: FB: @MorrowCountyOregon
- Multnomah County: FB: @MultCo X: @multco
- Multnomah County Health Dept.: FB & X: MultCoHealth
- Central Oregon Fire Info: X: @CentralORFire
- Oregon Department of Forestry: FB: @oregondepartmentofforestry X: @ORDeptForestry
- Oregon Department of Forestry Central Oregon District: FB: @ODFCentralOregon
- Oregon Office of Emergency Management: FB & TW: @OregonOEM
- Oregon Health Authority: FB: @OregonHealthAuthority X: @OHAOregon (NOTE: @OregonOHA is not the correct account.)
- Oregon Health Authority Spanish-Language: FB Only: @OHAespanol
- Portland BEM: FB & X: @PortlandBEM
- Portland (City): FB: @PortlandORGov X: @PortlandGov
- Umatilla Confederated Tribes: FB: @CTUIR X: @1855CTUIR
- Umatilla County Pub. Hlth: FB: @umatillacountyhealth
- Union County Center for Human Development: FB: @chdinc.org X: CHDInc
- U.S. Forest Service: FB: @USForestService X: @forestservice
- U.S. Forest Service Deschutes National Forest: FB: @deschutesnationalforest X: @DesNatlForest