

Public Health – Seattle & King County
Wildfire Smoke Response Plan



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INTRODUCTION

Purpose

The *Wildfire Smoke Response Plan* (Plan) for Public Health – Seattle & King County (Public Health) describes the anticipated actions the department may take before and during a wildfire smoke event to protect community health and limit health disparities.

Scope

This Plan can be referenced by Public Health leadership and staff to facilitate effective incident management and response for a wildfire smoke event. This Plan may also guide the development of Incident Action Plans (IAPs) that establish the objectives, resource requirements, and tactics for a given operational period during a wildfire smoke event.

This plan does not replace Washington Labor and Industries (L&I)'s [proposed Wildfire Smoke Rule](#) (based on the expired 2022 [Emergency Wildfire Smoke Rule](#)), which outlines requirements of employers to provide for the safety of their employees during levels of air quality degradation due to wildfire smoke pollutants. Alerting employees is not covered in this response plan, nor does the plan cover worker protections as defined in the *Wildfire Smoke Rule*. Elements of health and safety guidance is included in this plan but intended solely for those employees undertaking response activities, as defined in the [Operations Section](#) below. For consultation or training on the *Wildfire Smoke Rule*, contact Public Health Employee Health or the Department of Human Resources Central Safety team.

Planning constraints

This Plan was developed under nonemergency conditions and includes Public Health's general procedures for responding to future wildfire smoke events. Although this Plan attempts to reduce the unknowns for an anticipated wildfire smoke event, it is impossible to plan for every contingency and every aspect of an incident response. Public Health plans are not intended to be prescriptive, but guide decision making and resource allocation, and ensure equity considerations are embedded in our response actions. This Plan should thus be considered a starting point for incident management and response, and Public Health leadership and staff who adapt or implement this Plan should maintain flexibility for action and innovation to best meet community needs during a wildfire smoke event.

INCIDENT OVERVIEW

Hazard definition

[Wildfires](#) are a natural hazard in the western United States which typically occur during the warmer, drier summer months. Climate change has increased the frequency and severity of these events. While the impacts of a wildfire may be limited to the areas burnt, they generate significant amount of wildfire smoke, called plumes, which can impact air quality for hundreds of miles and affect the health of populations far removed from the locations where the wildfires may be burning. They can create air quality conditions that are considered unhealthy or even hazardous. As climate change worsens, we expect more wildfires across the western United States and potentially more wildfire smoke making its way to the Puget Sound region.

Wildfire smoke is a complex mixture of carbon dioxide (CO₂), carbon monoxide (CO), water vapor, particulate matter, hydrocarbons, nitrogen oxides, trace minerals, and other organic chemicals. There is

growing evidence that environmental pollutants and toxins from human activities now make up a portion of wildfire smoke components as wildfires increasingly occur in the wildland-urban-interface. To date, the primary pollutant of concern for public health is [particulate matter](#).

[Recent history](#)

2015 was the [largest wildfire season in Washington state history](#), with more than 1 million acres burned between June and September. The same year resulted in sustained periods of poor air quality across much of King County and throughout western Washington.

Since 2015, wildfires burning in Washington, Oregon, California, British Columbia, Alberta, and as far away as Siberia have impacted local air quality in King County. With 2018 resulting in a total of 24 days of poor air quality due to wildfire smoke, including nine days that were considered either unhealthy for sensitive groups or unhealthy for everyone. Wildfires in September 2020 resulted in the worst recorded air quality in King County since air quality monitoring efforts began in the 1980s at [AQI 238](#), reaching hazardous levels in some areas.

The COVID-19 pandemic has also influenced the risk profile of wildfire smoke: those with COVID-19 and those who have recovered may be more susceptible to adverse health outcomes associated with wildfire smoke exposure. A [2021 Harvard study](#) found that PM2.5 (particulate matter 2.5 micrometers and smaller) pollution from wildfire smoke during 2020 led to a statistically significant increase in excess COVID-19 cases and deaths across the western U.S. Local researchers [estimates that as many as 92 excessive deaths](#) which occurred during the 2020 wildfire smoke event across Washington can be attributed to PM2.5 exposure.

However, the pandemic has also resulted in an increased awareness and adoption of indoor air filtration technologies that are also effective at mitigating public health risks during a wildfire smoke event.

In 2022, the Bolt Creek Fire along the Snohomish-King County border created a prolonged period of rapidly fluctuating wildfire smoke impacts in the region, making forecasting and effective preparation more difficult as the AQI levels shifted daily and even hourly. In late October, Seattle [ranked](#) as the worst city in the world for air quality pollution. Since 2017, King County has seen a [consistent increase in bad air days](#) affecting the community.

[Health and medical impacts](#)

Wildfire smoke is made up of a [complex mixture](#) of gases and fine particles produced when vegetation and other organic and synthetic materials burn, with particulate matter being the primary pollutant of concern. These microscopic particles can irritate mucus membranes of the body, penetrate deep into the lungs, and be absorbed into the cardiovascular system of the body, causing a range of health problems, from burning eyes and a runny nose to aggravating chronic heart conditions, respiratory illness, and diseases. Exposure to particle matter associated with wildfire smoke has even been linked to an increased risk of [premature mortality](#). With the greatest impact to health being observed the day after exposure.

[Sensitive and higher risk populations](#) include:

- **People with heart or lung disease:** Underlying circulatory and/or respiratory diseases resulting in compromised health status can result in the triggering of severe respiratory responses by environmental irritants, such as wildfire smoke.

- **Older adults, 65 years and over:** This population has a higher prevalence of pre-existing lung and heart disease and decline of physiologic process, such as defense mechanisms.
- **Children and teenagers, 18 years of age and younger:** Children’s lungs are still developing and there is a greater likelihood of increased exposure to wildfire smoke resulting from more time spent outdoors, engagement in more vigorous activity, and inhalation of more air per pound of body weight compared to adults.
- **Pregnant people:** This population can experience pregnancy-related physiologic changes (e.g., increased breathing rates) which may increase vulnerability to environmental exposures, such as wildfire smoke. In addition, during critical development periods, the fetus may experience increased vulnerability to these exposures.
- **Outdoor workers:** This population faces extended periods of time exposed to high concentrations of wildfire smoke, which can lead to increased risks of experiencing the range of health effects.

[Preventative action](#) taken to reduce exposure to wildfire smoke is the most effective way to mitigate impacts to public health. Preliminary studies show a lag between poor air quality and a healthcare visit (4-6 days on average), which makes tracking health impacts on the community difficult and suggests messaging during an event should focus on not only identifying ongoing symptoms, but the need to limit exposure to wildfire smoke, even if symptoms are not present at the time of the event.

INITIAL RESPONSE

[Notification and warning](#)

Atmospheric currents can carry plumes of smoke from large wildfires hundreds of miles from where they are generated, resulting in impacts to air quality here in King County. Notification of potential air quality impacts from wildfires can come from multiple sources:

- **Puget Sound Clean Air Agency (PSCAA):** PSCAA is the lead [air quality monitoring](#) agency for King County, providing alerts when air quality is impacted or forecasted to be impacted (up to 24 hours). The *Instant* view on the Sensor Map provides the current particle pollution levels.
- **National Weather Service (NWS):** If wildfire complexes create smoke that accumulates in the atmosphere, NWS may include advisory alerts of [potential plume impacts](#) into their forecasts and briefings with local jurisdictions and partners.
- **Washington Smoke Impacts Advisory Group (WSIAG):** WA Department of Health facilitates the comprised of local, state, and federal department and agencies to coordinate wildfire smoke preparedness efforts. During wildfire smoke events a regional coordination call may be held with representatives from WA Department of Natural Resources, WA Department of Ecology, WA Labor & Industries, U.S. Forest Service, and the National Weather Service.

Following notification of potential air quality impacts to King County due to wildfire smoke, Public Health begins monitoring air quality forecasts. Several wildfire smoke monitoring systems exist to track air quality. Two resources monitor wildfire smoke specifically:

- [Washington Smoke Blog](#): This tool is a partnership between federal, state, and local agencies, with coordinated information for communities impacted by wildfire smoke. It includes latest air

quality information across the state as well as a 5-day smoke forecast. It also marks existing wildfire complexes across Washington.

- [Smoke Forecast \(wa.gov\)](#): This tool is a WA Department of Ecology smoke forecasting site. It provides a 4-day smoke forecast across Washington.

Two additional resources are available for monitoring air quality:

- [Puget Sound Clean Air Agency Network and Sensor Maps](#): These tools provide the most updated local monitoring information. AQI levels [above 100](#) trigger Air Quality Alert to subscribers. [Network Map](#) offers current air quality and general forecast information using official monitoring station data. The [Sensor Map](#) provides health-based and instantaneous particle pollution. This site is best used for real time air quality tracking.
- [AirNow](#): the Environmental Protection Agency (EPA)'s air quality monitoring system. It produces high confidence data called "NowCast" to estimate current conditions using algorithms to relate hourly readings from air quality monitors to the AQI values (which are based on 24-hour continuous exposure).

When Air Quality Index (AQI) levels above 100 are forecasted, Public Health's Preparedness Section (Preparedness) will [notify Public Health divisions and programs](#) that have identified roles in response operations:

- Assessment, Policy Development & Evaluation Unit (APDE)
- Communications
- Environmental Health (EH)
- Emergency Medical Services (EMS)
- Healthcare for the Homeless Network (HCHN)
- Office of Equity and Community Partnerships (OECPP)
- Preparedness Section

Preparedness also receives hazard alerts and related updates and briefings from King County Office of Emergency Management (King County OEM). Additional briefings, forecasts, and other information may also be disseminated by the Puget Sound Clean Air Agency and National Weather Service prior to or during an air quality event, relating to the forecast, wind direction, and forecasted duration of smoke in the region. Preparedness will share these products with other Public Health divisions and programs to help inform response operations.

[Assessment](#)

Public Health divisions and programs with identified roles in response operations will be asked to attend a meeting facilitated by Preparedness to review essential elements of information (EEl) and make a timely and informed decision on the need to initiate incident action planning. EEl related to wildfire smoke impacts to air quality include:

- Forecasted [AQI Levels and level of concern for health effects](#)
 - [Washington Smoke Blog](#) forecasted air quality
 - [Puget Sound Clean Air Agency Network Map](#) forecasted air quality
 - [Puget Sound Clean Air Agency Sensor Map](#) current air quality
- NWS [forecasts for King County](#)

- Wind speeds and direction
- Daytime high temperature ranges

Prior to meeting, Preparedness will seek to gather information from King County OEM, City of Seattle Office of Emergency Management (Seattle OEM), and the Northwest Healthcare Response Network (NWHRN) around any actions underway or being planned by local emergency management, other city and county departments, and healthcare systems. These actions may further inform the need to initiate incident action planning. For example, Public Health may be asked to support partners responsible for establishing cleaner air sites. Preparedness will attend pre-incident briefings and meetings organized by King County OEM, Seattle OEM, and NWHRN and invite Public Health divisions and programs to participate as appropriate.

The forecasted AQI levels may not necessitate a meeting of divisions and programs with identified roles in response operations. After initially reviewing EEs and any other critical information requirements, Preparedness may send an email to initiate situational awareness across the divisions and programs without recommending a response meeting. This information exchange via email may continue throughout the wildfire smoke event if divisions and programs feel confident in their ability to manage response activities without additional coordination. This is considered a partial activation, as described below.

After reviewing EEs and any other critical information requirements, meeting participants should:

- **Make a recommendation on an appropriate incident management structure.** Depending on the incident complexity, Public Health may partially or fully activate Public Health's Health and Medical Area Command (HMAC) to support divisions and programs in preparing for a wildfire smoke event and managing any subsequent emergency response operations.

During a **partial activation**, response to the wildfire smoke event may require ongoing information sharing and coordination across Public Health divisions and with external response partners, such as King County OEM and Seattle OEM. Preparedness will attend response partner meetings and share any updates to the forecast, partner activities, and requests for information with identified Public Health response staff via email. In this partial activation state, staff identified from APDE, EMS, MEO, HCHN, EH, and Communications should share updates on any planned and conducted response activities with Preparedness throughout the event. If the complexity of the wildfire smoke event increases, Preparedness will convene a meeting with identified Public Health staff to determine additional support needs and recommend an appropriate incident command structure, as necessary, which may lead to a full activation.

When **fully activated**, HMAC serves as Public Health's single coordination point for incident response and follows a formal incident action planning process consistent with the [National Incident Management System \(NIMS\)](#). The role of HMAC is further defined in the Emergency Support Function (ESF) 8 Annex to [King County's Comprehensive Emergency Management Plan](#).

- **Make a recommendation on incident objectives and resource requirements for the first operational period.** Public Health should manage wildfire smoke events by developing objectives that define what must be accomplished to protect community health and limit health disparities. The availability of personnel, equipment, supplies, or facilities should be considered

when developing objectives. It is recommended that the first operational period for a wildfire smoke event be at least 24 hours or longer depending on air quality forecasts.

Participants should share meeting outcomes with other Public Health staff who may be responsible for responding to wildfire smoke event. The following information should be shared as available and as authorized to responders:

- Issued air quality alerts, from PSCAA and others
- Air Quality Index Levels and forecast
- EEIs and other critical information requirements
- Projected workforce needs and potential assignments
- Any pre-incident steps staff need to take to prepare to respond, including Washington Labor & Industries required fit-testing for respirators and other required personal protective equipment

Public Health's Workforce Mobilization Annex includes additional considerations for communicating with potential responders.

[Agency Administrator Briefing](#)

Preparedness will schedule an Agency Administrator Briefing with the Public Health Director, Public Health Deputy Director, and Local Health Officer (LHO) and present the following:

- Issued air quality alerts, from PSCAA, NWS, and others
- Air Quality Index levels and forecast
- EEIs and other critical information requirements
- Recommended incident management structure
- Recommended incident objectives and resource requirements for the first operational period

Other Public Health Office of the Director staff may also attend the Agency Administrator briefing at the request of the Public Health Director, Public Health Deputy Director, or LHO. Preparedness may also ask other Public Health divisions and programs that have identified roles in response operations to attend.

Briefing participants should agree to a final incident management structure as well as incident objectives and resource requirements for the first operational period.

[Incident Management Team and responder mobilization](#)

If HMAc is activated, Preparedness will mobilize staff from its HMAc Incident Management Team (IMT) roster to fill Command and General Staff positions within the Incident Command System (ICS). The following ICS positions are typically staffed by the HMAc IMT:

- Agency Administrator
- Incident/Area Commander
- Safety Officer
- Liaison Officer
- Equity Officer
- Public Information Officer
- Operations Section Chief
- Planning Section Chief

- Logistics Section Chief
- Finance and Administration Section Chief

The Incident/Area Commander (IC/AC) may choose to staff fewer Command and General Staff positions in consideration of the incident objectives and resource requirements for the specific forecasted AQI levels and duration, EEIs, and other critical information requirements. They may also choose to staff more positions depending on what is needed to facilitate effective incident management.

Public Health divisions and programs that have identified roles in response operations are responsible for assigning Public Health staff as responders to the Operations Section. The following services may be reflected in the roles and responsibilities of staff serving in the Operations Section:

- Health and Safety Guidance
- Surveillance and Data
- Outreach Services
 - Direct Outreach
 - Resource Distribution
- Healthcare Systems Support

Public Health's Workforce Mobilization Annex includes additional considerations for identifying and assigning responders.

HMAC activation is assumed in the proceeding sections of this Plan, but if HMAC is not activated, Public Health divisions and programs are still encouraged to use NIMS-compliant concepts to effectively manage the impacts of a wildfire smoke event as they carry out response operations. Even if not initially activated, HMAC can also be partially or fully activated in support of divisions and programs as a wildfire smoke event unfolds.

[Incident Briefing](#)

The IC/AC should deliver an Incident Briefing to the HMAC IMT and other responders. An ICS 201 Incident Briefing may be used to help prepare for and facilitate the briefing.

Following the briefing, an HMAC Activation Notice should be sent to Public Health leadership and staff and external partners, the HMAC IMT, and any other responders.

OPERATIONS

The Incident Briefing leads into the initial operational period and marks the start of proactive incident management for a wildfire smoke event. Facilitated by the HMAC Planning Section, an Incident Action Plan (IAP) should be developed for the first operational period and then executed. The following objectives and strategies should be considered for inclusion in an IAP for a wildfire smoke event.

Different objectives and strategies are recommended for each of the forecasted AQI levels. These are recommendations only; air quality levels for the region during an extended duration wildfire smoke event can rapidly change and fluctuate over time. **All objectives can be used at any point during a wildfire smoke response**, as required by the scope of the response and at the discretion of the Area Commander.

Below is a list of all objectives, organized by response areas: Information Management, Public Information and Guidance, and Technical Assistance.

Information management

MONITOR

- **Objective:** Monitor wildfire smoke forecasts, alerts, and warnings.
 - *Strategy:* Monitor [Puget Sound Clean Air Agency AQI network map](#), [Washington Smoke Blog](#), and EPA's [AirNow Fire and Smoke Map](#) for current conditions relating to fires and smoke plumes.
 - Lead: HMAC Planning Section
 - **Attachment:** *Response Resources for Wildfire Smoke Operations*
 - *Strategy:* Liaise with King County Office of Emergency Management (KCOEM) for key briefings and updates.
 - Lead: HMAC Planning Section
 - *Strategy:* Monitor WebEOC for updates.
 - Lead: HMAC Planning Section
 - *Strategy:* Participate in and monitor messaging from Washington Smoke Impacts Advisory Group (WSIAG).
 - Lead: Environmental Health
- **Objective:** Collect data on respiratory illnesses and other wildfire smoke-related impacts to populations.
 - *Strategy:* Track respiratory and smoke-related visits to emergency departments.
 - Lead: APDE
 - *Strategy:* Track increase in emergency calls and incidents.
 - Lead: EMS
 - **Attachment:** *Wildfire Smoke Issues Tracking*
- **Objective:** Track open cleaner air sites.
 - *Strategy:* Receive reports from KCOEM on cleaner air site updates.
 - Lead: HMAC Planning Section
 - *Strategy:* Monitor WebEOC updates and KCOEM emergency response website.
 - Lead: HMAC Planning Section
 - **Attachment:** *Response Resources for Wildfire Smoke Operations*
 - **Support Document:** HMAC Playbook
- **Objective:** Monitor impacts to healthcare facilities, including hospital capacity.
 - *Strategy:* Receive WATrac Bed Status and Boarder Report from NWHRN.
 - Lead: HMAC Liaison Officer
 - *Strategy:* Receive reports from NWHRN on impacts to healthcare facilities and any activation of DMCC.
 - Lead: HMAC Liaison Officer
- **Objective:** Identify service delivery gaps (direct outreach, education and outreach, language support, n95 masks, etc.) in disproportionately impacted communities across King County.
 - *Strategy:* Receive input and updates from Office of Equity and Community Partnerships.
 - Lead: HMAC Equity Officer
- **Objective:** Monitor impacts to Public Health services and sites.

- *Strategy:* Ask COOP Liaisons to report on impacts to Priority 1 functions and facility status.
 - Lead: Preparedness

DOCUMENT

- **Objective:** Document information on respiratory illnesses and other wildfire smoke-related impacts to populations.
 - *Strategy:* Document wildfire smoke-related illnesses and health impacts data.
 - Lead: HMAC Planning Section
 - **Attachment:** *Wildfire Smoke Issues Tracking*
 - **Attachment:** *Wildfire Smoke Surveillance Response Guidance*

DISSEMINATE

- **Objective:** Disseminate information to response partners on tracked respiratory illness data and other wildfire smoke-related impacts to populations.
 - *Strategy:* Produce HMAC snapshots and IAPs as needed and disseminate.
 - Lead: HMAC Planning Section
 - **Supporting Document:** HMAC Playbook
 - **Supporting Document:** WebEOC SOP
 - **Supporting Document:** HMAC Distribution List
- **Objective:** Disseminate information on cleaner air sites.
 - *Strategy:* Disseminate to ESF-8 partners through Situation Reports/Snapshots via email.
 - Lead: HMAC Planning Section
 - **Supporting Document:** HMAC Playbook
 - **Supporting Document:** HMAC Distribution List
- **Objective:** Disseminate information on wildfire smoke impacts on the continuity of Public Health services and sites.
 - *Strategy:* Utilize COOP Liaisons to track impacts to Priority 1 functions and facility status.
 - Lead: HMAC Planning Section
 - **Supporting Document:** HMAC Distribution List
- **Objective:** Respond to public health-related information requests from partners and others.
 - *Strategy:* Monitor regular communication channels, WebEOC, and community channels for requests.
 - Lead: HMAC Planning Section
 - *Strategy:* Participate in planning meetings and briefings held by Seattle OEM and King County OEM as requested.
 - Lead: HMAC Liaison Officer

[Public information and guidance](#)

WILDFIRE SMOKE HEALTH & SAFETY GUIDANCE

- **Objective:** Provide health and safety guidance relating to ongoing wildfire smoke event.

- *Strategy:* Adapt existing wildfire smoke guidance and resources to any event-specific information (ongoing health impacts relating to air quality; ongoing public events; beach/lake closures due to bacteria; etc.).
 - Lead: Environmental Health
 - **Attachment:** *PHSKC Recommended Wildfire Smoke Measures*
 - **Attachment:** *Response Resources for Wildfire Smoke Operations*
- **Objective:** Develop wildfire smoke air quality-related health and safety recommendations for King County services and operations.
 - *Strategy:* Recommend the opening of cleaner air sites based on population health impacts.
 - Lead: Environmental Health
 - Approval: Local Health Officer
 - *Strategy:* Recommend reduction of services across King County departments due to wildfire smoke exposure impacts (ie, COOP activation for services in outdoor settings; staff wildfire smoke safety resources).
 - Lead: Human Resources
 - Approval: Local Health Officer
 - Technical Support: Environmental Health
 - **Attachment:** *PHSKC Employee Field Operations Guide_ Wildfire Smoke Events*
- **Objective:** Develop wildfire smoke health and safety recommendations for reduction of public outdoor activities and events.
 - *Strategy:* Use AQI thresholds to determine recommendations for outdoor activities (youth camps, youth athletic games and practices, leisure) and events (concerts, festivals, fairs, major sporting events).
 - Lead: Environmental Health
 - Approval: Local Health Officer

PUBLIC INFORMATION

- **Objective:** Develop relevant, specific, and actionable public information to assist the public in staying safe during wildfire smoke events.
 - *Strategy:* Promote wildfire smoke and air quality safety messages via Public Health’s blog, social media, Community Communication Network, and other outlets.
 - Lead: Communications
 - **Attachment:** *Wildfire Smoke Communications Resources*
 - *Strategy:* Print wildfire smoke-related health education materials in multiple languages.
 - Lead: Communications

AT-RISK POPULATIONS and KEY SETTINGS GUIDANCE

- **Objective:** Develop relevant, specific, and actionable messaging for key at-risk populations to stay safe during periods of poor air quality due to wildfire smoke: elderly, those with heart or lung disease, children (18 years and younger), pregnant people, outdoor workers, and those with increased exposure to wildfire smoke (such as those experiencing homelessness).

- *Strategy:* Promote air quality safety messages on platforms in addition to Public Health’s regular channels, considering alternative outlets to target the specific at-risk populations (radio spots; community blogs and newspapers; schools; libraries; etc.)
 - Lead: Communications
- *Strategy:* Provide cleaner air messaging and recommended actions in multiple languages.
 - Lead: Communications
 - **Attachment:** *Wildfire Smoke Communications Resources*
 - **Attachment:** *Wildfire Smoke Messaging in Translation*
- **Objective:** Develop relevant, specific, and actionable messaging for cleaner air site operators.
 - Lead: Communications

[Technical support](#)

AT-RISK POPULATION OUTREACH

- **Objective:** Distribute relevant, specific, and actionable wildfire smoke/air quality safety messaging to at risk populations and key partners that serve at risk population.
 - *Strategy:* Disseminate messaging to KC Libraries, KC Parks, and other Public Health partners.
 - Lead: HMAC Planning
 - *Strategy:* Distribute messaging developed by Communications to those experiencing homelessness.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - *Strategy:* Distribute relevant, specific, and actionable messaging to cleaner air site shelter operators.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - Key Partner: DCHS, KC Regional Homelessness Authority
 - *Strategy:* Disseminate messaging to partners serving outdoor workers.
 - Lead: Equity Officer
 - *Strategy:* Disseminate messaging to partners serving agencies serving seniors and the elderly, such as Long-Term Care Facilities and pharmacies.
 - Lead: Communications
 - Informed by: NWHRN
 - **Attachment:** *Wildfire Smoke Communications Resources*
 - **Attachment:** *Response Resources for Wildfire Smoke Operations*
 - *Strategy:* Disseminate messaging to partners serving childcare facilities.
 - Lead: Communications
 - **Attachment:** *Wildfire Smoke Communications Resources*
 - *Strategy:* Disseminate messaging to King County school districts and independent school association.
 - Lead: Environmental Health
 - Support Document: *Wildfire Smoke and Schools*
 - *Strategy:* Disseminate Public Health employee resources upon request and direct questions on employee guidance or mandates to Human Resources.
 - Lead: Environmental Health

- Authority: Human Resources: Safety & Claims
 - **Attachment:** *PHSKC Employee Field Operations Guide_Wildfire Smoke Events*
- **Objective:** Conduct outreach to individuals experiencing homelessness and at high risk of wildfire smoke exposure.
 - *Strategy:* Liaise with the Regional Homelessness Authority to coordinate outreach.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - *Strategy:* Connect individuals with available cleaner air site locations and shelter information.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - *Strategy:* Distribute air quality protection resources (N95 masks) to individuals living homeless.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - *Strategy:* Provide limited first aid care services to key at-risk individuals.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - *Strategy:* Provide volunteer management support for outreach activities, if necessary.
 - Lead: HMAC Logistics Section
 - **Supporting Document:** *PHRC Severe Weather Shelter Guidance*

CLEANER AIR SITES

- **Objective:** Share cleaner air site recommendations and relevant health and safety guidance with partners operating cleaner air sites.
 - *Strategy:* Participate on coordination calls with partners operating cleaner air sites; share Public Health recommendations on cleaner air sites and applicable health and safety guidance.
 - Lead: HMAC Liaison Officer
- **Objective:** Support partner needs at prioritized cleaner air sites serving those most at risk during the wildfire smoke event.
 - *Strategy:* Support cleaner air site opening and operations.
 - Lead: HMAC Logistics Section
 - **Supporting Document:** *Shelter Resource List: Durable Medical Supplies*
 - *Strategy:* Provide ventilation and filtration guidance, replacement HEPA filter units, and DIY MERV box fan kits to key congregate shelter locations, as resources are available.
 - Lead: Healthcare for the Homeless Network (HCHN)
 - Support: Environmental Health
 - **Attachment:** *Ventilation Resource Distribution Process*
 - **Supporting Document:** *Wildfires and Indoor Air Quality in Schools and commercial Buildings*
 - *Strategy:* Support volunteer need for first aid and triage at cleaner air sites.
 - Lead: HMAC Logistics Section
 - **Supporting Document:** *PHRC Severe Weather Shelter Guidance*

HEALTHCARE SYSTEM SUPPORT

- **Objective:** Address healthcare system requests for materiel support to mitigate wildfire smoke impacts.
 - *Strategy:* Coordinate with the Northwest Healthcare Response Network to fulfill non-medical resource requests from healthcare facilities (such as nursing home requests for filters and fans).
 - Lead: HMAC Logistics Section
 - **Supporting Document:** Logistics Section Guide
 - **Reference:** [NWHRN Resource request process](#)
 - *Strategy:* Manage health-related resource requests from response partners (such as durable medical equipment for cleaner air sites).
 - Lead: HMAC Logistics Section
 - **Reference:** [NWHRN Resource request process](#)
 - **Supporting Document:** Logistics Section Guide
 - **Supporting Document:** Shelter Resource List: Durable Medical Supplies
 - *Strategy:* Address requests for indoor air quality guidance and requests from healthcare settings, such as Long-Term Care facilities and adult family homes.
 - Lead: HMAC Liaison Officer
 - Support: Environmental Health
 - **Attachment:** *Response Resources for Wildfire Smoke Operations*
- **Objective:** Provide support to communities and key healthcare settings ordered to evacuate due to prolonged wildfire smoke impacts.
 - *Strategy:* Provide support to the emergency transportation needs of medically fragile patients relocated from impacted healthcare settings and long-term care facilities in the event of mandatory evacuation orders.
 - Lead: HMAC Liaison Officer
 - **Attachment:** *Medically Fragile Patient Transportation: LTCF Evacuation*
- **Objective:** Investigate reports of communicable diseases or outbreaks within response operations (within cleaner air sites, congregate settings, among responders).
 - Lead: CD-Epi

DEMobilIZATION

Planning for demobilization begins at the start of the response. Demobilization actions can commence once:

- The current Air Quality Index (AQI) falls below 101 **and** the forecast indicates AQI levels will continue to remain at moderate/good levels.
- The forecast indicates AQI levels are or will be consistently dropping to moderate/good levels across the county (below AQI 101) in the next 24 hour period. A wildfire smoke forecast with high confidence of further improved air quality trends can also trigger demobilization actions.
- The majority of objectives have been met following the wildfire smoke event (as indicated by the air quality forecast).

Health impacts, including respiratory and smoke-related illnesses, and their symptoms may appear following prolonged exposure to wildfire smoke, even after communities' air quality improves and AQI

levels fall below 101. If the remaining response activities required to address these needs can be managed by programs and divisions without HMAC support, demobilization activities can continue.

Following activation of this plan, Preparedness will conduct an evaluation to collect lessons learned and recommendations for improvement. Public Health staff involved in the response are expected to participate in any evaluation or debrief session as part of the demobilization process.

PLAN MAINTENANCE

Review and revision

The Wildfire Smoke Response Plan will be reviewed prior to every summer season to ensure Public Health's response capacity and recommendations remain accurate. The revision process will include outreach to relevant Public Health divisions and programs represented in the plan, to ensure their response activities and services are documented accurately.

Following any activation of the plan, Public Health will seek feedback on the response from HMAC responders, Public Health divisions and programs involved in the response, impacted communities, and key partners across the county. Findings from the evaluation process will be shared with those involved in and impacted by the wildfire smoke event. Based on this feedback, the plan will be updated to include lessons learned and address recommended improvements.

Socialization

Relevant portions of the updated plan will be shared with the following groups prior to each summer:

- Public Health divisions and programs
- King County Office of Emergency Management
- City of Seattle Office of Emergency Management
- Emergency management representatives from local jurisdictions
- Relevant county departments and agencies
- Northwest Healthcare Response Network
- Puget Sound Clean Air Agency

Socialization is intended to inform partners of any changes following an annual update and revision of the document. Public Health divisions and programs and key partners directly involved in wildfire smoke response will have participated in the revision process, ensuring thorough engagement prior to any socialization.

Training and exercises

Preparedness maintains an Integrated Preparedness Plan (IPP), which details the training and exercise priorities for Public Health response actions. Portions of the *Wildfire Smoke Response Plan* may be integrated into the IPP to ensure key capabilities are exercised and relevant training developed.