

Wildfire Smoke During COVID-19

Information for Homeless Service Providers and Meal Programs

Public Health – Seattle & King County (PHSKC) would like to ensure that homeless shelter providers and meal programs have important information for ventilation and air filtration to continue to reduce the transmission of COVID-19 during wildfire smoke events. Wildfire smoke contributes to already challenging indoor air considerations for COVID-19 transmission. Increasing outdoor air to help reduce the risk of COVID-19 transmission and increasing filtration to remove smoke and reduce some viral particles is important part of a multi-layered approach.

Key considerations for Wildfire Smoke and Covid-19

- If you have an HVAC system, in previous years the recommendation during wildfire smoke was to reduce outdoor air and recirculate indoor air. However, due to COVID-19 this year this may not be the best option for you. Air filtration with a MERV-13 or higher rated filter can be as effective in removing COVID-19 as increasing outdoor air. If you are able to provide good air filtration, you can reduce smoke infiltration by recirculating indoor air. **Be sure to return air to maximize outdoor air intake once the smoke has subsided.** If you are not able to provide high filtration with a MERV-13 filter or higher, keep outdoor air intake as you would for COVID-19 and provide additional filtration utilizing portable air cleaners.
- Air filtration is recommended to help reduce COVID-19 transmission. **Fans alone are not recommended.**
- Filtered air will reduce smoke levels and the amount of virus circulating in the air indoors. However, filtering air indoors alone will not be enough to provide protection from the spread of COVID-19. **Practice all COVID-19 prevention measures, including social distancing, hand washing, requiring face coverings, regular screenings for COVID-19 symptoms, and cleaning and disinfecting protocols, in addition to optimized ventilation and air filtration.**
- Do not assume that a face covering will protect you from smoke, try to stay indoors to reduce exposure from smoke. Cloth and surgical masks generally provide very little protection against wildfire smoke. N95 respirators, when well fitted and worn properly can provide protection against wildfire smoke. Due to COVID-19, N95 and other NIOSH approved respirators are in short supply. We should save these respirators for healthcare and frontline workers fighting COVID-19.
- Wildfire smoke is unhealthy for everyone, but children, pregnant women, stroke survivors, and people who are over 65 years of age or who have a respiratory disease or illness, heart disease or diabetes are especially vulnerable to smoke. Many people most susceptible to COVID-19 are also those most vulnerable to the impacts of wildfire smoke. **Do not assume any symptoms are from wildfire smoke – see a medical provider if you do not feel well to confirm that you do not have COVID-19. For more information about wildfire smoke and COVID-19, visit, <https://publichealthinsider.com/2020/06/16/wildfire-smoke-preparedness-during-the-covid-19-pandemic/>.**

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Tips to increase clean air

Per [CDC guidance](#) shelters designed to provide clean air and cool air spaces during wildfire smoke should utilize the following measures within their facilities to reduce exposures to both COVID-19 and wildfire smoke:

- Work with your building engineer and/or an HVAC specialist to determine how best to optimize ventilation and filtration in your facility.
- If the facility has a central HVAC system, at minimum, facilities should have filtration that is medium or high efficiency (MERV 13 or highest your system can handle), especially at the fresh (outdoor) air intake.
- Facilities should continue to provide air filtration that is adequate for the expected number of occupants in the space.
- At this time, we recommend that you check and change your HVAC and portable air filters.
- Portable air cleaners can be used in spaces that can achieve a smoke clean air delivery rate (CADR) of at least 2/3 of the room volume (this can be achieved through the use of multiple portable units). **Make sure that air exhausted from portable units does not blow directly over one person to others to prevent possible COVID spread.**
- Air should not flow from the space sheltering individuals with COVID-19 to the space sheltering others if separate spaces exist in the same building for both.
- You can reduce smoke indoors by maintaining occupied spaces under slightly positive pressure when it is smoky outside. To do this, provide more clean filtered air into spaces than is exhausted from the space. This prevents infiltration of smoke from outdoors. Once the smoke subsides, return the pressure to normal so that air flows outdoors again.

If you are a homeless service provider and have questions or needs regarding ventilation/air filtration or cleaning and disinfection, we may have resources to help! Please contact Marta Lema, Homeless Coordinator with Environmental Health Services, Public Health – Seattle & King County (Marta.Lema@kingcounty.gov).

Additional Resources and References:

CDC Clean Air Shelters: www.cdc.gov/coronavirus/2019-ncov/php/cleaner-air-shelters.html

CDC Wildfire Smoke and Covid-19: www.cdc.gov/disasters/covid-19/wildfire_smoke_covid-19.html

King County's Wildfire Smoke- Basic Health Messages:

<https://www.kingcounty.gov/depts/health/environmental-health/toxins-air-quality/wildfire-smoke.aspx>

Public Health Insider – How to Keep Indoor Air Clean on Smoky Days:

<https://publichealthinsider.com/2020/09/09/how-to-keep-indoor-air-clean-on-smoky-days/>