



DOH 334-430 August 2019

SUMMARY GUIDANCE: Wildfire Smoke

Cancelling Outdoor Public Events and Activities

This is a summary of the Washington State Departments of Health and Ecology guidance for cancelling or moving outdoor events or activities when smoke may be a health threat. For more information: [Guidance on cancelling events or activities, and closing schools - July 2019 \(PDF\)](#).

Health effects from smoke

Symptoms of smoke exposure range from minor irritation such as burning eyes, runny nose and coughing, to life threatening.

Sensitive populations include people with heart and lung diseases (like asthma and COPD), people with respiratory infections, people with diabetes, stroke survivors, infants, children, pregnant women, and people over 65.

Factors to consider: cancelling outdoor activities and events

- What is the forecast for how long wildfire smoke levels will remain high?
- Are smoke conditions getting worse, getting better, or staying about the same?
- Is there an option to relocate to an area with cleaner air?
- If children or others requiring care are involved, will adults be available as caretakers?
- Will there be impacts on economic or job security by cancelling the activity or event?

- Are there other weather factors to consider, like excessive heat or humidity, that would further increase risk of outdoor exposure?
- Is the visibility safe for driving?

Measuring wildfire smoke levels

The concentration of PM_{2.5} – particles less than 2.5 micrometers in diameter – is the most useful measurement of smoke levels to protect health.

Ecology and local clean air agencies routinely monitor these levels outdoors. PM_{2.5} concentrations are grouped in health hazard levels. Health and Ecology recommend making health decisions based on the Washington Air Quality Advisory (WAQA).



When outdoor forecasted 24-hour or NowCast PM_{2.5} concentrations:

- Equal or exceed 80.5 µg/m³ (WAQA value 201/AQI value 164) consider recommending cancelling outdoor public events and activities.
 - With the WAQA, this concentration is the lower level of the “very unhealthy” category.
 - With the AQI, this concentration is within the “unhealthy” category.
- Equal or exceed 150.5 µg/m³ (WAQA value 301/AQI value 201) recommend cancelling outdoor public events and activities.
 - With the WAQA, this concentration is the lower level of the “hazardous” category.
 - With the AQI, this concentration is the lower level of the “very unhealthy” category.

For more information about steps to reduce exposures:
[DOH Smoke From Fires](#)

Washington Air Quality Advisory (WAQA) Guidance for Public Health Actions



Health Advisory Category Forecasted 24-Hour Average or NowCast PM _{2.5} Concentration (µg/m ³)	Recommended Public Health Actions For use with Washington Air Quality Advisory PM _{2.5} NowCast values and forecasted 24 hour PM _{2.5} concentrations.
Good PM _{2.5} 0 - 12.0	<ul style="list-style-type: none"> If smoke incident is forecasted in your area, review the Washington Wildfire Response document for Severe Smoke Episodes and the Wildfire Smoke Guide for Public Health Officials. More health tips on the Department of Health Smoke From Fires website. More information about wildfire and air quality at WA Smoke.
Moderate PM _{2.5} 12.1 – 20.4	<ul style="list-style-type: none"> Distribute information to public health partners and the public. Focus on identifying and getting information to vulnerable populations. Refer people to the WA Smoke Blog for more information about status of wildfires. Provide information about steps to take with health advisory categories: DOH Washington Air Quality Advisory Graphic (English).
Unhealthy for Sensitive Groups PM _{2.5} 20.5 – 35.4	<p>Above recommendations, plus:</p> <ul style="list-style-type: none"> Issue press release, identify sensitive groups and encourage them to reduce exposure. For extended duration of smoke recommend spending time in a cleaner air setting in the community (air-conditioned library) or leaving the area until air quality improves. For extended duration of smoke, open a cleaner air shelter for sensitive groups. If school is in session, refer to the DOH Air Pollution and School Activities Guide.
Unhealthy PM _{2.5} 35.5 – 80.4	<p>Above recommendations, plus:</p> <ul style="list-style-type: none"> Recommend cancelling children's outdoor athletic events and practices, or moving them indoors or to an outdoor space with good air quality. Recommend the public limit strenuous outdoor activities. Recommend that sensitive groups shelter-in-place, spend time in a cleaner air setting in the community (air-conditioned library) or leave the area until air quality improves. For extended duration of smoke, open and publicize cleaner air shelters for sensitive groups.
Very Unhealthy PM _{2.5} 80.5 – 150.4	<p>Above recommendations, plus:</p> <ul style="list-style-type: none"> Consider cancelling outdoor public events and activities. Recommend shelter-in-place for the general population. Share information about periods of improved air quality to guide essential outdoor activity and ventilation of dwellings.
Hazardous PM _{2.5} : >150.4	<p>Above recommendations, plus:</p> <ul style="list-style-type: none"> Cancel outdoor public events and activities. If school is in session, discuss school closure with administrators if indoor air cannot be kept cleaner. Recommend voluntary evacuation for sensitive groups.