

Shasta County School Air Quality Activity Recommendations

AIR QUALITY CONDITIONS

The terrain in Shasta County is complex making air quality monitoring a challenge based on weather and topography. Check current air quality first at the [Fire and Smoke Map](#).

This document has been prepared in collaboration with Shasta County Air Quality Management District, Shasta County Health and Human Services Agency – Public Health Branch, and Shasta County Public Schools.



The following school activity recommendations are based on consultation with health researchers and several important principles drawn from recent studies. Consideration should be given to **AQI**, **wind patterns**, and **ability to keep students indoors within air-conditioned environments**.

Air Quality Level - [Fire and Smoke Map](#)

Activity	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
	0-50	51-100	101-150	151-200	201+
	Keep classroom doors and windows closed. Use air conditioning system.				
Recess (15 min)	No restrictions	Ensure that sensitive individuals are medically managing their condition.*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.*	Exercise indoors or avoid vigorous outdoor activities. Sensitive individuals should remain indoors.*	No outdoor activity. All activities should be moved indoors.
P.E. (1 hr)	No restrictions	Ensure that sensitive individuals are medically managing their condition.*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.*	Exercise indoors or limit vigorous outdoor activities to a maximum of 15 minutes. Sensitive individuals should remain indoors.*	No outdoor activity. All activities should be moved indoors.
Athletic Practice & Training (2-4 hrs)	No restrictions	Ensure that sensitive individuals are medically managing their condition.*	Reduce vigorous exercise to 30 minutes per hour of practice time with increased rest breaks and substitutions. Ensure that sensitive individuals are medically managing their condition.*	Exercise indoors or reduce vigorous exercise to 30 minutes of practice time with increased rest breaks and substitutions. Sensitive individuals should remain indoors.*	No outdoor activity. All activities should be moved indoors.
Scheduled Sporting Events	No restrictions	Ensure that sensitive individuals are medically managing their condition.*	Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure that sensitive individuals are medically managing their condition.*	Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure that sensitive individuals are medically managing their condition.*	Event must be rescheduled or relocated.

* Sensitive Individuals include all those with asthma or other heart/lung conditions

** California Interscholastic Federation

Guidelines:

- Using the [Fire and Smoke Map](#) is easy. Simply visit the fire.airnow.gov website, enter a zip code to set the display to your area. Then locate circles, triangles or squares near your location to determine what the current air quality is. A tutorial can be found by clicking the ? in the upper right hand corner. Note: the fire and smoke map only works on modern web browsers.
- School districts and charter schools should make decisions about school activities and closures based on air quality measurements and local conditions, such as the availability and quality of school building air filtration and direct observation of onsite indoor/outdoor air quality.
- School districts may wish to consult with their local air district regarding outdoor air and their local public health official regarding indoor air before making a final determination.
- School districts should report any school closures to the Shasta County Office of Education, notify the media, and announce closures to families using normal school closure procedures.

Preventing Health Effects of Wildfire Smoke About Masks:

- There are steps you can take to reduce the risk of health effects from wildfire smoke, which is especially important for sensitive groups. The ideal strategy is to avoid high concentrations of smoke; reduce or eliminate exertion in smoky environments; and reduce or eliminate the **time** spent in smoky environments.
- When the air is unhealthy, the best option is to:
 - Stay indoors. Close the windows and doors and use the air conditioner with updated air filters (MERV 13 or higher). Consider using an air cleaner where you spend the most time.
 - Avoid moderate or strenuous outdoor activity. reduce physical activity and stay indoors with windows/doors closed. If the indoor temperature is high, get to a location with clean filtered air such as a public library, shopping mall or other building with heating, ventilation, and air conditioning (HVAC) system filtration.
- If necessary and safe to do so, use respiratory protection, such as N-95 masks, which are available at most hardware stores. If you have underlying medical conditions, check with your doctor first.
- N-95 respirator masks are not intended for children. No N-95 masks have been approved for children by U.S. regulatory agencies and therefore, masks are not recommended for children by air quality districts/public health agencies.
- N-95 respirator masks are designed for professional use by trained adults and require a perfect seal to be effective. If these masks are not fitted correctly, they will provide little if any protection.
- Masks have limitations:
 - Masks can exacerbate breathing difficulty for sensitive breathers or potentially cause deeper breathing, which draws particulates deeper into the lungs if they are not fitted correctly.
 - Masks must be kept clean and replaced frequently to be effective. If a mask is used, please refer to the mask manufacturer's recommendations on cleaning and replacement intervals.

Additional Information & Resources

Recommendations for Ensuring Cleaner Air at School:

- Install and maintain HVAC air conditioning system with medium or high-efficiency filtration. Install high-efficiency particulate air (HEPA) filters if possible. See below for U.S. EPA recommendations for air filtration. https://www3.epa.gov/airnow/smoke_fires/indoor-air-filtration-factsheet-508.pdf
- Install portable HEPA filters in classrooms where possible. Approved filters: <https://www.arb.ca.gov/research/indoor/aircleaners/certified.htm>
- Be sure that portable filters are sized correctly for the room.
- Ensure doors and windows are sealed tightly. Minimize air movement in and out of the room.
- Clean Room Link: <https://www.epa.gov/indoor-air-quality-iaq/create-clean-room-protect-indoor-air-quality-during-wildfire>
- Smoke Ready Toolbox: <https://www.epa.gov/smoke-ready-toolbox-wildfires>

The [Fire and Smoke Map](#) considers the following in determining the Air Quality Index (AQI)*:

- Data from permanent official monitoring sites (Circles),
- Data from temporary official monitoring sites (Triangles),
- Data from low cost sensors i.e. Purple Air (Squares),
- EPA approved correction factors for the low-cost sensors that provide more accurate data,
- Ease of use by the public who no longer have to “switch” the data into the AQ&U or LRAPA correction factor,
- Visual layers showing fire and smoke plume locations.

*Due to quality control processing, some low cost sensors do not display on the AirNow Fire and Smoke Map. These sensors can be accessed at the Purple Air website. In the Map Data Layer dialog box, switch the correction factor from “None” to “LRAPA”. This will display corrected values.