



Memo: Get Smart about Wildfire Smoke - Clear Guidelines for Schools and Wildfire Smoke

Over the last decade, devastating wildfires have ravaged communities and school districts in every corner of this state.

These massive disasters impacted tens of thousands of Californians in the communities they call home and blanketed entire regions of California with thick, unhealthy smoke.

When a wildfire occurs nearby, the decision to close or evacuate a school is straightforward. However, as we have seen over the past several years, wildfire smoke can settle in communities hundreds of miles from the location of the fire and impact the health of students and school district operations.

Without clear state guidelines, districts have been forced to make difficult, last minute decisions on whether to cancel classes, remain open, or modify school events.

This is why leaders from the education, air quality, and public health communities established a working group to develop state guidance regarding air quality for California's 1,026 school districts during wildfire smoke days.

The guidelines attached to this message are intended to advance local conversations between school districts, public health officers, air districts, and the community, and provide educational leaders with the data they need to make informed decisions when their communities are inundated with wildfire smoke.

The guidelines are not meant to supersede any protocols or guidelines school districts may have already adopted.

We encourage districts that haven't already addressed this issue to begin the conversation now, prior to the start of the 2019-20 school year. California's next big wildfire is not a matter of if, but when.

For questions on how to track air quality in your community, please contact your local air district. To find which air district serves your community, visit <https://www.arb.ca.gov/app/dislookup/dislookup.php>.

Thank you for your partnership on this critical issue.

School Air Quality Activity Recommendations

PROTECT STUDENT HEALTH DURING POOR AIR QUALITY

Air quality is an important consideration for schools in terms of student activities. Local air districts are available to assist schools with understanding local air quality concerns and actions they can take to protect student health. To find out more, contact your local air district. Visit this page to learn which District serves your area:

www.arb.ca.gov/app/dislookup/dislookup.php



The following school activity recommendations are based on consultation with health researchers and several important principles drawn from recent studies.

Modify these levels to correspond with the AQI, emissions concentration, or other air district recommended method for your region.

Air Quality Level

Activity	Level 1	Level 2	Level 3	Level 4	Level 5 <i>School districts may consider school closures based on site-by-site concerns. ***</i>
Recess (15min)	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. (1hr)	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 (2-4hrs)	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

*** To meet the conditions for approval of a waiver due to emergency conditions (Form J-13A) from the State Superintendent of Public Instruction poor air quality must be shown to be caused by an emergency event such as a wildfire.

Air Quality Guidance Template for Schools

About the Guidelines:

- These guidelines are based on the United States Environmental Protection Agency (U.S. EPA) and Centers for Disease Control's [Air Quality and Outdoor Activity Guidance for Schools](#) and [Wildfire Smoke: A Guide for Public Health Officials](#). The guidelines are designed to assist in your decision-making process.
- Modify the template and chart as needed after consultation with your local county office of education, local school districts, local air district, and local public health experts to determine which air quality monitoring methodology, such as Air Quality Index, total emissions concentration, or other air district-recommended method best applies in your school district.
- This template and chart are not intended to supersede existing guidelines and policies developed by local authorities, including the school districts or air districts.
- These guidelines are intended to assist school districts in making decisions when air quality is poor. *School closure and event cancellation is ultimately a school district-by-school district decision based on local conditions.*
- The impact of smoke depends on the sensitivity of the person and the length of exposure, as outlined in the sample chart below. Children with respiratory or heart conditions are vulnerable to poor air quality and may require extra precautions. School districts should advise parents to consult with their family health care provider.

Using the Guidelines:

- School districts will need to monitor local air quality conditions using air quality tracking tools recommended by their local air district. One example of such a tool is U.S. EPA's air quality index (AQI) available at AirNow.gov. However, because other air quality tracking methodologies may be used in your jurisdiction, it is highly recommended to contact your local air district for advice on the most appropriate tools to use for your region.
- School districts 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 their County Office of Education for media notification as well as announce closures to families using normal school closure procedures.

Additional Air Quality Information & Resources

About AirNow.gov:

- A network of monitors maintained and operated by trained government agencies.
- It is recommended by many air districts, the California Air Resources Board, and U.S. EPA.
- AirNow monitors form a network to track regional air quality. Pollutants like smoke tend to be well-mixed in the atmosphere and may be adequately represented by these monitors, even if a monitor is not in the same neighborhood as a school.
- Uses highly accurate tools that are regularly monitored for quality control by U.S. EPA. Tools remain accurate at all levels as opposed to personal sensors like Purple Air, which overestimate (especially at AQI of 150 or higher)
- Although AirNow is relied on by many jurisdictions, please consult with your local air district about resources school districts can use that will best represent local air quality.

About Masks:

- When air is unhealthy, the best option is to reduce physical activity and stay indoors with windows/doors closed. If 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.
- Masks have limitations. Surgical gauze masks provide no protection from smoke. N95 respirator masks are designed for professional use by trained adults and are not intended for children. Therefore, masks are not recommended for children by air quality districts/public health agencies.
- N95 masks require a perfect seal to be effective. If these masks are not fitted correctly, they will provide little if any protection.
- 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.

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 room.

Considerations for School Districts from CDE: Before You Make a Decision to Close a School

Outdoor air quality is one factor local educational agencies (LEAs) need to consider when making a school closure decision. LEAs should consider the factors below, in addition to any other relevant local conditions or concerns, when deciding to close school.

Health and Safety:

- **Indoor air quality.** Ventilation and filtration systems at schools may offer a higher level of protection than residential systems.
- **Supervision.** The school environment provides appropriate student supervision by trained and caring adults who can ensure students remain indoors.
- **Student support services.** School may be the primary place where students receive needed health and counseling services.
- **Nutrition services.** Schools serve healthy meals to a significant proportion of students. If school is closed, it is a substantial challenge at best for LEAs to feed students.

Using an Equity Lens:

- Socioeconomically disadvantaged families may not have options for alternate child care.
- Working parents and guardians are disproportionately affected by school closure and could suffer significant professional or economic consequences as a result.
- Students receiving free or reduced-price meals may not have a reliable alternate source of healthy food.
- Students with Individualized Education Programs (IEPs) may not have access to needed services during school closure.
- Schools provide safe and supportive environments for their students; our most vulnerable students rely on them most.

Instructional Time:

- Instructional time is foundational to students' academic achievement. LEAs should consider adding instructional days or minutes to the school calendar when time is lost due to school closure.

- LEAs that have a foreseeable loss of instructional time due to a history of school closures should consider adding “built-in emergency” days to the annual school calendar.
- Information on requesting credit for lost attendance and instructional time during an emergency is available on the California Department of Education’s website at <https://www.cde.ca.gov/fg/aa/pa/j13a.asp>.

National School Lunch Program Meal Reimbursement:

- *Education Code* Section 49505 allows for LEAs to submit an application for meal reimbursement during a disaster.
- The disaster would require a state or federal declaration for the county affected by the disaster.
- The application is available on the California Department of Education’s website at <https://www.cde.ca.gov/ls/nu/sn/documents/disastermealapp.doc>.

Guidance for Families When Schools are Closed:

- Stay indoors.
- Keep doors and windows closed.
- Consult a Physician if you have concerns about your child’s health.