

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.**

Activity	Air Quality Level				
	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

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.
- **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 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.