



## Sonoma County Schools Air Quality Guidance

### About the Guidelines

- These guidelines were modified from Environmental Protection Agency'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](#), as well as the California Department of Public Health's (CDPH) [Wildfire Smoke: Considerations for California's Public Health Officials](#), and are in accordance with [the Bay Area Air Quality Management District's guidelines for schools](#).
- They were developed through a collaboration of the Sonoma County Department of Health Services, Bay Area Air Quality Management District, the Northern Sonoma County Air Pollution Control District (NSCAPCD), and the Sonoma County Office of Education (SCOE).
- They are meant to assist school districts in making decisions when air quality is poor because of wildfire smoke or other airborne pollution. *School closure is ultimately a district-by-district decision based on local conditions.*
- Families always have the right to keep their children home from school if they are concerned for their child's health and are encouraged to talk with their child's pediatrician and school administrator or teacher if they wish to do so.

### About Children's Vulnerability to Wildfire Smoke

- Children are considered more vulnerable to smoke because their developing lungs make them more sensitive to the impacts of smoke, they inhale more air per pound of body weight, and spend more time outside and engage in more vigorous activities than adults.
- Wildfire smoke can exacerbate issues such as asthma, COPD, bronchitis, or pneumonia, or result in more severe symptoms for individuals with COVID-19 or other respiratory diseases.

### Choosing to Use the Guidelines

- School districts will monitor the air quality index (AQI) using EPA's AQI monitoring tools at [Fire.AirNow.gov](https://www.fire.airnow.gov), which aggregates data from Purpleair.com and Airnow.gov.
- School activities and closures decisions will be made based on fire.airnow.gov measurements and local conditions, such as the availability and quality of air filtration and direct observation of indoor/outdoor air quality.
- School districts will report any school closures to SCOE for media notification.
- School districts will announce any closures to families using normal school closure procedures (ParentSquare, email, social media, etc.).
- 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 child's health care provider to develop a plan of action before smoke creates a hazardous air situation.

### About Masks

- When air is unhealthy, the best protection is to reduce physical activity and stay indoors with windows and doors closed, in a location with well-filtered air. If indoor temperature is high, get to a location with cleaner, filtered air such as a public library, shopping mall or other building with HVAC system filtration.
- Masks have limitations. Surgical gauze masks provide limited protection from smoke. N95 respirators are designed for professional use by trained adults and are not



intended for children, although KN95 or KF94 masks can provide similar protection against the fine particulate matter that is the main component of wildfire smoke. No N95 respirators are currently certified for use by children. There is insufficient data to support the benefit to children of prolonged use of N95 respirators in wildfire smoke events.






- While face coverings are still recommended for protection against COVID-19, cloth or medical procedure (surgical) masks will still provide the best protection against the virus for children and may afford SOME protection against smoke.
- Masks must be kept clean and replaced frequently to be effective.

## Recommendations for Ensuring Cleaner Air at School

- Install and maintain HVAC air conditioning system with high-quality HEPA air filters that have medium or high efficiency. [EPA recommendations for air filtration are given here.](#)
- [Consider installing indoor air quality monitors to assess indoor air quality throughout the day.](#)
- Install portable, non-ozone-forming HEPA air purifiers in classrooms where possible. [See approved filters here.](#)
- Check manufacturer instructions to ensure that portable filters are sized correctly for the room.
- Because high-efficiency filters and portable air cleaners may be difficult to find during periods of intense wildfire smoke, it is highly recommended that such products be obtained in advance.
- Ensure doors and windows are sealed tightly. Minimize air movement in and out of the room.
- Some brief outdoor exposure during smoke events may be necessary to transport children to and from school or in-between classes in outdoor passageways. Keep these exposures as brief as possible and consider encouraging the use of masks during these times, if appropriate.

## Considerations for Altering the School Day or Communicating with School Families

- When messaging school families about air quality or related alterations to the school day, ensure that messaging is multilingual and accessible to people of different abilities or circumstances, people who are vision impaired or have low literacy levels, or may lack internet access, either because of socioeconomic issues or outages caused by natural disaster.
- The Bay Area Regional Quality Messaging Steering Committee has developed [an air quality messaging toolkit](#) that includes guidance for communicating with vulnerable populations.
- If you are considering closing school because of poor air quality, please remember that closing schools may leave some students without a safe place to go, and that closing schools may cause low-income students to lose access to lunch, depriving them of an important source of nutrition. Additionally, it may create a hardship for working parents who may not be able to arrange supervision for children who are not in school.

Air Quality Index (fire.airnow.gov)	Recommended School Activities	School Actions	District Actions
 (0-50) GOOD	Great day to be active outside  No restrictions on outdoor activities	None	None
 (51-100) MODERATE	Good day to be active outside  Students who are unusually sensitive to air pollution could have symptoms. <sup>1</sup>	Monitor readings, keep staff aware of sensitive students	Monitor the situation if index worsens
 (101-150) UNHEALTHY FOR SENSITIVE GROUPS	Avoid vigorous outdoor activities and consider holding recess indoors  For <b>longer activities</b> such as athletic practice, take more breaks and do less intense activities. Consider moving indoors or rescheduling.  Watch for symptoms, take action as needed  Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy	Inform staff that restrictions are in place based on recommendations  Ensure that staff are following the guidelines  Encourage families to carpool to reduce emissions	Remind site administrators of restrictions at this level  Monitor the situation if index worsens
 (151-200) UNHEALTHY	Move all activities indoors or reschedule them.  Watch for symptoms and take action as needed.* Students with asthma should follow their asthma action plans and keep their quick-relief medication on hand	Inform staff restrictions based on recommendations  Cancel all outdoor athletic activity  Ensure that staff are following the guidelines  Encourage families to carpool to reduce emissions	Remind site administrators of restrictions at this level  Monitor the situation if index worsens  Determine if there are site by site concerns.  Respond to school if there are site by site concerns to support and determine severity
 (201 and higher) VERY UNHEALTHY Or (301 and higher) HAZARDOUS	Move <b>all activities</b> indoors or reschedule them to another day  When AQI is 301 or higher, sensitive groups should keep indoor activity levels low.	Inform community that restrictions are in place  Cancel all outdoor athletic activity  Ensure staff are following guidelines  Stay in communication with district office for changes  Monitor for poor air filtration or leaky windows  Encourage families to carpool to reduce emissions	Respond to school's concerns to support and determine severity  Remind site administrators of restrictions at this level  Consider closing schools relative to site context  Allow excused absences for reported health concerns  Consult local health experts as needed regarding safety & viability of operations

<sup>1</sup> **Asthma Symptoms:** Air pollution can make asthma symptoms worse and trigger attacks. Symptoms of asthma include coughing, wheezing, difficulty breathing, and chest tightness. Even students who do not have asthma can experience these symptoms. If symptoms occur, the student may need to take a break, do less intense activity, stop all activity, go indoors, or use quick-relief medicine as prescribed. If symptoms don't improve, seek medical help.