

## Recommendations for Schools and Others on Poor Air Quality Days\* Air Quality Index (AQI) Chart for Ozone (8-hr standard)

ACTIVITY	0 to 50 GOOD	51 to 100 MODERATE	101 to 150 UNHEALTHY FOR SENSITIVE GROUPS	151 to 200 UNHEALTHY	201 to 300 VERY UNHEALTHY
Recess (15 min)	No Restrictions	No Restrictions	Make indoor space available for children with asthma or other respiratory problems.	Any child who complains of difficulty breathing, or who has asthma or other respiratory problems, should be allowed to play indoors.	Restrict outdoor activities to light to moderate exercise.
P.E. (1 hr)	No Restrictions	No Restrictions	Make indoor space available for children with asthma or other respiratory problems.	Any child who complains of difficulty breathing, or who has asthma or other respiratory problems, should be allowed to play indoors.	Restrict outdoor activities to light to moderate exercise not to exceed one hour.
Scheduled Sporting Events	No Restrictions	Exceptionally sensitive individuals should limit intense activities.	Individuals with asthma or other respiratory/ cardiovascular illness should be medically managing their condition. Increase rest periods and substitutions to lower breathing rates.	Consideration should be given to rescheduling or relocating event.	Event should be rescheduled or relocated.
Athletic Practice and Training (2 to 4 hrs)	No Restrictions	Exceptionally sensitive children should limit intense activities.	Individuals with asthma or other respiratory/ cardiovascular illness should be medically managing their condition. Increase rest periods and substitutions to lower breathing rates.	Activities over 2 hours should decrease intensity and duration. Add rest breaks or substitutions to lower breathing rates.	Sustained rigorous exercise for more than one hour must be rescheduled, moved indoors or discontinued.

**Note: All guidelines are cumulative (left to right and top to bottom) as duration and intensity of activities increase.**



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## HOW TO USE THIS CHART

This chart is for restrictions to outdoor activities affected by ground-level ozone pollution only. It should be used to modify plans for outdoor activities of less than four hours duration, including recess, lunch, and physical education class. Use it in conjunction with air quality forecasts and current ozone conditions. *Other air pollution episodes such as wildfire smoke increase respiratory health risks. In this situation, contact your local Air Quality Management District for air quality conditions.*

Daily forecasts are updated by noon and Ozone Maps are updated hourly. Both can be viewed at [www.SpareTheAir.com](http://www.SpareTheAir.com). Canceling or rescheduling vigorous outdoor activities to the morning should be considered to decrease the risk of exposure to higher levels of ozone.

Here's an example of how this chart might be used to determine changes to be made for a Friday afternoon Physical Education program:

**Step 1:** On Thursday afternoon, check the forecast for Friday at [www.SpareTheAir.org](http://www.SpareTheAir.org). While you're there, sign up for Air Alert, to be notified by e-mail about the latest changes in air quality and Spare The Air Days. The Air Quality Index (AQI) forecast is also available by calling the air quality information line at 1-800-HELP-AIR.

**Step 2:** If the forecast for Friday is Orange, or Unhealthy for Sensitive Groups, make arrangements to have indoor space available for children with asthma and other respiratory or cardiovascular problems.

**Step 3:** On Friday prior to class, check the current AQI. Since ozone can vary from one area to another, click on the map for a representation of ozone levels in your area. If the AQI in your area has moved to Moderate, no action is needed. However, if the AQI has moved to Unhealthy, note that even children without respiratory problems may complain of breathing difficulties and they should play indoors as well.

The health benefits of regular exercise are well documented. The intent of this chart is to help children continue to exercise while protecting their health when air quality is poor. Even when air quality is poor, exercise can be continued indoors. Indoor air can have 20 – 80% less ozone than outdoor air.

Ground-level ozone (O<sub>3</sub>) is an invisible pollutant and a strong irritant that can cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. It can also cause other health problems such as aggravated respiratory disease, damage to the deep portions of the lungs, wheezing, dry throat, headache, nausea, increased fatigue, weakened athletic performance and more.

Long-term exposure to polluted air can have permanent health effects including decreased lung function, possible development of diseases such as asthma and bronchitis, or a shortened life span. Ground-level ozone reaches its highest level during the afternoon and early evening hours. Ozone may reach short-term peaks not reported in U.S. EPA's 8-hr average standard.

When 1-hour ozone levels reach, or are predicted to reach, the equivalent of an 8-hr AQI of 211, the local air district will issue a Health Advisory Notice to affected school districts in accordance with the State's Air Pollution Emergency Plan. Follow the detailed advice in the Health Advisory.

**Please note:** Before canceling a scheduled outdoor athletic event, call your local air district for up-to-date information for your specific location. This chart is for use in the Bay Area and areas with similar or better air quality related to ozone.

### ADDITIONAL RESOURCES

#### Breathe California of the Bay Area

(408) 998-5865      [www.lungsrus.org](http://www.lungsrus.org)

#### Daily Air Quality Forecast

1-800-HELP-AIR      [www.SpareTheAir.org](http://www.SpareTheAir.org)

#### Bay Area Air Quality Management District

(415) 749-4900      [www.baaqmd.gov](http://www.baaqmd.gov)

#### Sacramento Metropolitan Air Quality Management District

(916) 874-4800      [www.AirQuality.org](http://www.AirQuality.org)

#### National Air Quality

[www.airnow.gov](http://www.airnow.gov)

For questions or comments on how you can better utilize this chart, please contact Breathe California at (408) 998-5865 or [info@lungsrus.org](mailto:info@lungsrus.org).

*This chart was created by Breathe California of Sacramento-Emigrant Trails.*

\* These recommendations assume that most of a child's outdoor exposure occurs while at school or going to and from school. Some children engage in after-school activities (work and/or play) that can increase their daily exposures beyond four hours and should follow the guidance and advice offered by U.S. EPA in their cautionary health statements for ozone exposures. These recommendations apply only to ozone exposures and may require modification when exposed to significant levels of multiple pollutants that affect the respiratory system, including particles from wildfires should they occur.