Air Quality and Outdoor Activity Guidance for Schools

The table below shows when and how to modify outdoor physical activity based on the Air Quality Index. This guidance can help protect the health of all children, including teenagers, who can be more sensitive than adults to air pollution. Check the air quality daily at www.rapca.org



Air Quality Index	Outdoor Activity Guidance for Schools
green	Great day to be active outside!
yellow	Good day to be active outside! Students who are unusually sensitive to air pollution could have symptoms.*
orange	OK to be active outside, especially for short activities such as recess and physical education classes. For longer activities such as athletic practice, take more breaks and consider reducing the intensity of activities. Watch for symptoms and take action as needed.* Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.
red	For all outdoor activities, take more breaks and do less intense activities. Consider moving longer or more intense activities indoors or rescheduling them to another day or time. Watch for symptoms and take action as needed.* Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.
purple	Consider moving all activities indoors or reschedule them to another day.

^{*}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 could experience these symptoms.

If symptoms occur:

The student might need to take a break, do a less intense activity, stop all activity, go indoors, or use quick-relief medicine as prescribed. If symptoms don't improve, get medical help.

Keep in mind that other pollutants such as pollen can compound poor air quality especially for sensitive groups.

Air Quality and Outdoor Activity Common Questions and Answers

How long can students stay outside when the air quality is unhealthy?

There is no exact amount of time. The worse the air quality, the more important it is to take breaks, do less intense activities, and watch for symptoms. Remember that students with asthma will be more sensitive to unhealthy air.

Why should students take breaks and do less intense activities when air quality is unhealthy?

Students breathe harder when they are active for a longer period of time or when they do more intense activities. More pollution enters the lungs when a person is breathing harder. Reduce the amount of time students are breathing hard (e.g., take breaks; rotate players frequently). Reduce the intensity of activities so students are not breathing so hard (e.g., walk instead of run)

Are there times when air pollution is expected to be worse?

Ozone pollution is often worse on hot sunny days, especially during the afternoon and early evening. Plan outdoor activities in the morning, when air quality is better and it is not as hot.

Particle pollution can be high any time of day, but especially right now with the Canadian wildfires. Since vehicle exhaust contains particle pollution, limit activity near idling cars and buses and near busy roads, especially during rush hours. Also, limit outdoor activity when there is smoke in the air.

How can I find out the daily air quality?

Go to www.airnow.gov. Clark County and our surrounding area has an Air Quality Index (AQI) forecast that tells you what the local air quality will be later today or tomorrow, and a current AQI that tells you what the local air quality is now. Both of these websites can tell you whether the pollutant of concern is ozone or particle pollution.

If students stay inside because of unhealthy outdoor air quality, can they still be active?

It depends on which pollutant is causing the problem:

- 1. **Ozone pollution:** If windows are closed, the amount of ozone should be much lower indoors, so it is OK to keep students moving.
- 2. **Particle pollution:** If the building has a forced air heating or cooling system that filters out particles then the amount of particle pollution should be lower indoors, and it is OK to keep students moving. It is important that the particle filtration system is installed properly and well maintained. Check the air filtration equipment to see if it filters to the fine particulate matter (PM) level we are concerned about on the AQI websites.

What physical activities can students do inside?

Encourage indoor activities that keep all students moving. Plan activities that include aerobic exercise as well as muscle and bone strengthening components (e.g., jumping, skipping, sit-ups, pushups). If a gymnasium or open space is accessible, promote activities that use equipment, such as cones, hula hoops, and sports balls. If restricted to the classroom, encourage students to come up with fun ways to get everyone moving.

What is an asthma action plan?

An asthma action plan is a written plan developed with a student's doctor for daily management of asthma. It includes medication plans, control of triggers, and how to recognize and manage worsening asthma symptoms. See www.cdc.gov/asthma/actionplan.html for a link to sample asthma action plans. When asthma is well managed and well controlled, students should be able to participate fully in all activities.