

## Outdoor Air Quality Recommendations for Schools

Student and staff health and safety is a top priority for the Boulder Valley School District. Poor outdoor air quality can create uncomfortable, and even dangerous conditions outside and even inside our schools for staff and students, particularly individuals with respiratory health conditions.

The Colorado Department of Public Health and Environment monitors outdoor air quality around the State, maintains an Air Quality Index (AQI) for local areas, and reports Air Quality Advisories. BVSD will post the current AQI on the Health Services website for administrators and parents.

- [AirNow - Air Quality Index for Boulder, CO](#)

BVSD has established the following recommendations to guide school administrators in decision making related to outdoor air quality:

### **Recommendations**

#### **Moderate AQI -**

When the AQI is in the yellow range (moderate) there should be no restrictions on outdoor activities. Some students who are especially sensitive to air pollution may have symptoms and should be monitored.

#### **Unhealthy for Sensitive Groups AQI -**

When the AQI is in the orange range (unhealthy for sensitive groups) short outside activities are still recommended such as PE and recess. Longer activities such as athletic practices should be less intense and include more breaks.

- Students with asthma should follow their asthma action plans and should be monitored for symptoms.

#### **Unhealthy AQI -**

When the AQI is in the red (unhealthy) range outdoor activities should be less intense and breaks should be offered more frequently. You may consider moving longer or more intense activities indoors or rescheduling them to another day or time.

- Students with asthma should follow their asthma action plans and should be monitored for symptoms.

#### **Very Unhealthy AQI -**

When the AQI is in the purple (very unhealthy) range, consideration should be given to moving all outdoor activities indoors or rescheduling them.

#### **Monitoring Students for Symptoms -**

The school nurse can assist in identifying students with respiratory conditions that should be monitored when the Air Quality Index is in the unhealthy ranges.

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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.

Resources:

Air Quality Index Chart

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects.

Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country.

- Ozone, also known as smog, can irritate the respiratory system, causing coughing, irritation in the throat or a burning sensation in airways. It can aggravate asthma and trigger asthma attacks.
  - People at greater risk from ground-level ozone are people with lung diseases, such as asthma, and children and adults who are active outdoors.
- Particle pollution, also known as particulate matter, is composed of microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Symptoms may include irritation of the eyes, nose, and throat; coughing; phlegm; chest tightness; and shortness of breath.
  - At greatest risk from particle pollution are people with heart or lung disease, older adults, and children.
  - When the particulate pollution is caused by smoke in the air, it is advisable to limit outdoor activity.

AirNow.gov