## **193 AIR QUALITY**

## **Background**

The Division believes in optimum health and safety for all stakeholders. Monitoring air quality is an important element in contributing to the well-being of all. As part of the Division's duty to ensure the health and safety of students, staff, volunteers and visitors, this procedure outlines what staff will consider in assessing air quality during physical/strenuous activities/events. This procedure also provides awareness of potential health impacts and outlines actions to be taken following an alert or advisory issued in our Division.

#### **Procedures**

Following a poor Air Quality Health Index (AQHI) alert or when local conditions suggest high levels of particulate matter less than 2.5 µg/m³ per square metre matter are present in the local area (AQI readings), principals will:

- 1. Air quality may vary from community to community within Canadian Rockies Public Schools. Principals will make decisions based on local conditions.
- 2. Principals will make decisions for field trips that involve outdoor activities based on air quality information available for the field trip location.
- Principals will make decisions related to outside activities including recess, physical
  education classes, outdoor learning and field trips based on the information available
  from the Alberta Government Air Quality Health Index map, any air quality advisories
  issued by Alberta Health Services, or particulate matter readings from our local weather
  station data.
- 4. Principals will use the Air Quality Guidelines for Outdoor Activities in the REFERENCE section below to make decisions related to outdoor activities, events and field trips.

#### References

### Air Quality Guidelines for Outdoor Activities

<u>Air Quality Health Index</u> (AQHI) is defined and measured by Environment Canada. Below are the recommended restrictions for outdoor activities related to air quality:

| AQHI         | Air Quality<br>Index (mg/m³)                |                       | Canadian Rockies Public Schools'<br>Response   |  |
|--------------|---|-----------------------|--|--|
| 1 - 3        | Green (0-50)                                | Low Health Risk       | Continue as normal   |  |
| 4 - 6        | Yellow<br>(51-100) &<br>Orange<br>(101-150) | Moderate Health Risk  | Consider restricting levels of activities. Reduce the intensity and duration of any strenuous activities. Provide resting periods. Consider indoor recess for students with health issues that may be impacted by air quality. Consider modifying outdoor activities, events or field trips for students with health issues that may be impacted by air quality. |  |
| 7 - 9        | Red (151-200)                               | High Health Risk      | Reduce or reschedule strenuous activities outdoors. Consider indoor recess and lunch supervision for all students. Consider modifying or cancelling outdoor activities, events or field trips. Administrator discretion based on the nature of the activity and duration.  |  |
| 10 and Above | Purple<br>(201-300)                         | Very High Health Risk | Avoid strenuous activities outdoors. Indoor recess and lunch supervision for all students. Cancellation of all outdoor activities, events, outdoor recess or field trips.  |  |

The Activity Guidelines for Wildfire Smoke Events guidelines provide recommendations for Schools during Wildfire Smoke Events according to activity types and AQI score ranges. These guidelines can provide school administrators with responses to local conditions when AQI scores (the PM2.5 standard particulate matter less than 2.5 µg in size per m³ per square metre) are available. Local Bow Valley weather and air quality conditions are available from the Environment Canada website, the Alpenglow/CCHS weather station via the Ambient Weather app, and the Air Visual app.

# **Activity Guidelines for Wildfire Smoke Events**

Recommendations for Schools and Others Responsible for Children during a Wildfire Smoke Event

| Activity   | 0 – 50 AQI<br>(10+ miles visibility)<br>GOOD | 51 – 100 AQI<br>(6 – 10 miles visibility)<br>MODERATE  | 101 - 150 AQI<br>(3 - 6 miles visibility)<br>UNHEALTHY FOR<br>Sensitive Groups *  | 151 – 200 AQI<br>(1.5 – 3 miles visibility)<br>UNHEALTHY   | 201 – 300 AQI (<1.5<br>miles visibility) VERY<br>UNHEALTHY/<br>HAZARDOUS |
|--|--|--|---|--|--|
| Recess<br>(15 minutes)   | No restrictions                              | No restrictions  | Keep children with asthma or<br>other respiratory problems<br>indoors. Make indoor space<br>available for all children.   | Keep all children indoors.   | Keep all children indoors.   |
| P.E. (1 hour)  | No restrictions                              | Monitor kids with asthma<br>or other respiratory<br>problems and limit their<br>vigorous activities. | Keep children with asthma or<br>other respiratory problems<br>indoors. Make indoor space<br>available for all children. If<br>outdoors, limit vigorous activities.<br>Individuals with asthma or other<br>respiratory illness should be<br>medically managing their<br>condition. | Conduct P.E. indoors, If outdoors,<br>only allow light activities for all<br>participants. Individuals with<br>asthma or other respiratory illness<br>should be medically managing their<br>condition.   | Keep all children<br>indoors.  |
| Scheduled Sporting<br>Events   | No restrictions                              | Monitor kids with asthma<br>or other respiratory<br>problems and limit their<br>vigorous activities. | Individuals with asthma or other<br>respiratory illness should be<br>medically managing their<br>condition. Increase rest periods<br>and substitutions for all<br>participants to lower breathing<br>rates.   | Consider rescheduling or relocating event.   | Reschedule or relocate event.  |
| Athletic Practice,<br>Training & Games<br>(2-4 hours)  | No restrictions                              | Monitor kids with asthma<br>or other respiratory<br>problems and limit their<br>vigorous activities. | Individuals with asthma or other respiratory illness should be medically managing their condition. Increase rest periods and substitutions for all participants to lower breathing rates.   | Conduct practice and games indoors. If outdoors, allow only light activities for all participants. Add rest breaks or substitutions to lower breathing rates. Individuals with astima or other respiratory illness should be medically managing their condition. | Conduct practice<br>and games<br>indoors only.                           |
| Examples of light activities:  Walking slowly on level ground Carrying school books Hanging out with friends |  | Examples of moderate activities:  Skateboarding Slow pitch softball Shooting basketballs             |   | Examples of vigorous activities:  Running, jogging Playing football, soccer, and basketball  |  |

<sup>\*</sup>If your child has lung or heart problems he or she may be more sensitive to air pollution and it is recommended that you talk with a doctor about his or her condition.

How to estimate air quality based on visibility for areas without an air quality monitor or airport visibility estimate:

1. Face away from the sun.

2. Determine the limit of your visible range by looking for targets at known distances (miles).

3. Visible range is when an object you can easily see in the distance disappears.

4. Use the visibility values above to determine the local wildfire smoke category.





## **History**

Developed: June 2025