

Air Quality Policy and Guidelines for Baseball Activities for Baseball Alberta

Objective:

This policy aims to ensure the safety and well-being of participants involved in baseball activities (games and practices) in Alberta by providing guidelines on when it is safe to play or practice outdoors based on air quality conditions, with a focus on the Air Quality Health Index (AQHI).

1. Important Information and Background:

- a. Regularly monitor local air quality indices (AQI), including the Air Quality Health Index (AQHI), provided by the Alberta Government the Air Quality Index can be found here: <http://environment.alberta.ca/apps/aqhi/aqhi.aspx>. Or use the AQHI Canada app for more specific stations. Air quality can be variable within a localized region like the greater Edmonton area even though stations such as Edmonton and St. Albert are in proximity to each other. Use the index value that is within one hour of the scheduled start time for the game or activity. In addition to the AQHI, be aware of weather and other conditions. Conditions such as forest fires located some distance away, local burning of agricultural stubble, and sudden changes in wind direction and strength can all affect local air quality. The AQHI is calculated differently for Alberta in two significant ways. First, in the rest of Canada, the AQHI only measures ground-level ozone, fine particulate matter (PM2.5) and nitrogen dioxide. In addition to these three pollutants, Alberta is more comprehensive by also including sulphur dioxide, hydrogen sulphide, total reduced sulphur and carbon monoxide in its AQHI reporting. Second, for the rest of Canada the AQHI is calculated on a 3-hour rolling average and so is less responsive to dramatic changes in air quality. It is for these reasons that the Alberta AQHI website is the best source of AQHI index values.
- b. Hand-held monitoring devices are permitted for use by host associations. This policy recognizes the importance of empowering host associations and communities which are not serviced well by the Alberta Environment website. The handheld device must contribute to global measurement mapping, the use of handheld air quality monitoring devices, such as those compatible with platforms like <https://map.purpleair.com/> is permitted. Communication with the visiting association and officials regarding this is paramount. These maps must be able to display the Canadian AQHI index.

- c. Air quality impacts individuals differently. This document will use the term 'at-risk athletes' to describe individuals most likely to experience health impacts related to poor air quality. An individual with a history of respiratory or cardiovascular conditions, young children, and the elderly may be considered at-risk.

To determine if an individual is in the at-risk population, see Environment Canada's website at <https://www.canada.ca/en/environment-climatechange/services/air-quality-health-index/health-risks.html>.

It is strongly recommended that the parents/guardians of at-risk athletes communicate this information to their child's coaches to ensure their health is closely monitored in times of poor air quality. The parents/guardians of at-risk athletes should make decisions related to their child's participation in baseball activities, based on their child's own personal health circumstances. Please ensure the AQHI index is at 6 and above precautions are taken and individuals are monitored.

- D. the intensity of physical activity and related exertion levels are factors when determining what actions to take in response to poor air quality. Baseball is generally considered a low-intensity sport and may make different adaptations in times of poor air quality, when compared to higher-intensity sports, such as soccer and lacrosse. However, participation should be limited regarding certain positions on the baseball field, such as pitcher and catcher during high-risk exposure. Athletes should be continually monitored.

2. Air Quality Health Index (AQHI) Categories:

- a. Low Risk (1-3): Air quality is considered good, and outdoor activities can proceed as scheduled.
- b. Moderate Risk (4-6): Moderate air quality; activities can continue, but individuals with respiratory conditions should take precautions.
- c. High Risk (7-9): **Play is permissible with caution and modified activities.** Unhealthy for sensitive individuals and groups; consider rescheduling or modifying outdoor activities. Baseball activities should be carefully evaluated,



and organizers should consider shortening warm-up and practice times, modifying activities, or moving indoors, especially for individuals with respiratory or cardiovascular conditions. At-risk individuals, including those with respiratory or cardiovascular conditions, should not participate in outdoor baseball activities during High-Risk conditions.

- e. Very High Risk (10+): **Play is not permissible for a Baseball Alberta Event.** Very unhealthy; outdoor activities are to be rescheduled if possible, and individuals with health concerns should avoid prolonged exertion.

3. Decision-Making Process:

- a. Air quality can vary throughout the province, and the responsibility for enacting the recommended adaptations described in section 2 is the responsibility of the **local association, host team, or tournament committee**.
- b. The host team must communicate with the umpire to understand if they are comfortable during periods of high risk. The umpire must communicate with the local association, host team, or tournament committee if they are at risk of not being able to attend with the High-Risk category (7-9).
- c. The local association needs to abide by the field user agreements of the municipal policy if it exists.
- d. At provincial championships, the onsite tournament committee will have the primary responsibility for making decisions and recommendations related to air quality.

4. Communication:

- a. The local association and host team must establish clear communication involving officials, participants, coaches, parents, and families about AQHI-related decisions.
- b. Encourage parents and families, especially those with athletes with medical considerations, to be vigilant and make decisions for themselves if they believe additional precautions or modifications are necessary.



5. Review and Update:

- a. Regularly review and update the air quality policy based on feedback, changing environmental conditions, and evolving guidelines from health authorities.

