

AIR QUALITY AND OUTDOOR SPORT SAFETY: A POLICY GUIDE FOR CANADIAN SPORT ORGANIZATIONS



Health
Canada

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BACKGROUND

Air pollution can affect the health and performance of participants engaged in outdoor sport and physical activity. To help sport organizations protect participants from exposure to air pollution, Health Canada and the Sport Information Resource Centre (SIRC) partnered to create this Air Quality Policy Guide. The Policy Guide outlines the components that should be included in an organization's Air Quality Policy.

These components include:

- ▶ Awareness
- ▶ Monitoring
- ▶ Management

To learn about the research that supports this Policy Guide, explore the accompanying [Guiding Document](#).

POLICY COMPONENTS

1. Policy Statement

- ▶ **Description:** The policy statement should provide a brief background outlining why it is important to consider air quality when planning and participating in outdoor sports. Additionally, the policy statement should outline the organization's position on air quality and its commitment to fostering safe outdoor sports environments for all participants.
- ▶ **Sample Text:** Poor air quality can impact the health and performance of outdoor sport participants, including athletes, coaches and sport officials. [Organization Name] recognizes the potential short- and long-term health effects of engaging in physical activity outdoors when the air quality is poor. [Organization Name] is fully committed to reducing the risk posed to outdoor sport participants from poor air quality to help contribute to safer outdoor activities and events.

2. Purpose and Scope

- ▶ **Description:** The purpose and scope section should highlight the organization's goal with the Policy. Additionally, it should identify who will be affected by the Policy and what components will be addressed in the Policy.

- ▶ **Sample Text:** This Policy aims to increase the safety of all outdoor sport participants with respect to air quality. To do this, [Organization Name] will increase education about the dangers of engaging in physical activity outdoors when the air quality is poor. In addition, [Organization Name] will provide its members with evidence-informed strategies to prevent or limit participants' exposure to air pollution. The information in this Policy applies to all individuals and at all times during [Organization Name] sanctioned events and activities. This includes any [Organization Name] events in Canada and abroad.

3. Air Quality Awareness

- ▶ **Description:** The Awareness section should describe the steps your organization is taking to improve its members' awareness of air quality and sport safety. Your organization may list mandatory training for coaches and sport officials. It may also list resources that will be made available to its members to help them make informed decisions about when it is safe to engage in outdoor sport and physical activity. This section should also specify who will be responsible for implementing awareness initiatives in your organization and when awareness initiatives will be promoted.
- ▶ **Sample Text:** [Organization Name] will make this Policy readily accessible to members on our website [include your organization's website hyperlink here] and will ask that all sport participants, parents, coaches, and officials review it at the beginning of each season. All [Organization Name] coaches are encouraged to discuss poor air quality and its effects on health during a pre-season meeting with athletes and parents. Additionally, [Organization Name] requires coaches and sport administrators to complete the [Air Quality and Outdoor Sport Safety eLearning Module](#) on the Coaching Association of Canada's e-learning platform, The Locker, as part of their pre-season education program.

4. Monitoring Air Quality

- ▶ **Description:** This section should outline when and how your organization's members should monitor air quality. It is important for an outdoor sports organization to continuously monitor the outdoor air quality during the outdoor sports activity season. For example, wildfire smoke can impact communities hundreds of kilometres away from the wildfire, and a slight shift in wind can lead to rapid changes in air quality.
- ▶ **Sample Text:** Just as outdoor training or competition may be cancelled or rescheduled due to lightning or other weather conditions, it is essential to take similar actions to protect outdoor sport participants when the air quality is poor. [Organization Name] requires coaches, team managers and sport officials to check the Air Quality Health Index (AQHI) before an outdoor event and when an activity is scheduled to begin. You can find your local AQHI by visiting [AirHealth.ca](#) or by downloading the WeatherCAN app. The WeatherCAN app can also be used to receive notifications when the AQHI exceeds a pre-set level (for example, AQHI 4). Coaches, team managers and sport officials can also monitor media platforms (including television, radio, and social media) for regional and local air quality alerts.

5. Managing Participants' Health with Respect to Air Quality

- ▶ **Description:** This section should describe how your organization will manage the safety of outdoor sport participants with respect to air quality. For example, this section can identify how AQHI values can be used to plan outdoor activities. It could also include recommendations for when and where outdoor activities should take place to limit exposure to air pollution.
- ▶ **Sample Text:** The forecasted and observed AQHI values should be used to prevent or limit participants' exposure to air pollution. Specific guidance on forecasted and observed AQHI values is provided below.

I. TO PLAN SAFE OUTDOOR ACTIVITIES: Check the **forecast maximums**. These values estimate the maximum value that the AQHI will reach in your region during each of the forecast periods.

- ▶ If the AQHI value is between 1 to 3 (low risk), plan outdoor activities
- ▶ If the AQHI value is between 4 to 6 (moderate risk), plan a modified version of the outdoor activity*
- ▶ If the AQHI value is over 7 (high risk), plan to hold your session indoors or reschedule the activity for when the forecasted value is low

II. DURING THE ACTIVITY: Check the **observed conditions**. This value indicates the current AQHI value for a specific region.

- ▶ If the AQHI value is between 1 to 3 (low risk), continue with planned outdoor activities
- ▶ If the AQHI value is between 4 to 6 (moderate risk), modify the outdoor activity*
- ▶ If the AQHI value is over 7 (high risk), move the session indoors or reschedule it to another time

*Note: When the AQHI value is between 4 to 6 (moderate risk) [Organization Name] recommends that the following modifications be made:

- ▶ Reduce the intensity of the outdoor activity
- ▶ Incorporate more breaks into the outdoor activity
- ▶ Shorten the duration of the outdoor activity
- ▶ Monitor all participants, particularly those with pre-existing medical conditions, for symptoms
- ▶ Inform sport participants of risks, especially those with pre-existing medical conditions

To prevent or limit outdoor sport participants' exposure to air pollution, [Organization Name] encourages sport administrators, coaches, and team managers to consider the location and timing of events and activities. When possible, outdoor events should be scheduled for early morning (before rush hour) or later in the evening (after rush hour) to avoid times when air pollution levels are highest. Additionally, outdoor activities should be held away from busy roadways and industrial plants to minimize exposure to air pollutants. An indoor location may be considered if no such outdoor location is available.

6. Policy Review

- ▶ **Description:** This section should indicate when the Policy was last reviewed and when it will be updated.
- ▶ **Sample Text:** This Policy was last updated by [Organization Name] on [date of last update]. The Policy will be reviewed annually to ensure that it continues to align with the best practice recommendations of health experts.

For more information or support with creating your organization's Air Policy please contact the SIRC team at info@sirc.ca.

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