

# Wildfire Smoke - Outdoor Recreation, Events and Sports

- Wildfire smoke can affect your health. Those more at-risk are the elderly, infants and young children, pregnant persons, people who work outdoors, people who smoke, and those with chronic medical conditions. Consider rescheduling any outdoor/strenuous activities or reducing the hours of operation when air quality is poor.
- The Air Quality Health Index or “AQHI” is a tool to help protect your health. Using a scale from 1 to 10 and the words low, moderate, high, and very high, it measures current levels of outdoor air pollution and related health risk. It can help you decide when it is safe to be active outside, especially if you have a health condition such as lung or heart disease.
- For areas where the AQHI may not be available, you can also access the PurpleAir monitoring site<sup>1</sup> here: [PurpleAir Monitoring Nova Scotia Map](#).
- Coaches and event organizers should check the [Air Quality Health Index \(AQHI\)](#), [Special Air Quality Statements](#), [PurpleAir monitoring site](#) and [weather forecasts](#) before and during events. Conditions can change hour to hour, so being prepared to adapt quickly is key. Air quality forecast maps produced by Environment and Climate Change Canada can be used to check if wildfire smoke might appear in your area and are found here: <https://weather.gc.ca/firework/>.
- Sport organizers, coaches and officials should consider the level and type of activity and the needs of participants and spectators when deciding whether to proceed with their events. High-intensity activities put athletes at greater risk. Seek medical attention if at any time participants experience symptoms such as tightness in their chest, wheezing, or shortness of breath. More information can be found at [Health Canada - Wildfire Smoke and Physical Activity](#)

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<sup>1</sup> PurpleAir is an air quality monitoring system providing real-time, air quality data to the public through an interactive map. Settings on this map must be changed to reflect Canadian measurements. To change the settings, use the drop-down menu in the upper left-hand corner. The “Data layer” drop-down should be changed to “Canadian PM2.5 AQHI+”. The “Apply conversion” drop-down should be changed to “Canada ECCC”. The map displays information for each sensor location. The number in the centre of the circle and the colour of the circle directly show the AQHI scale. A low number and blue colours represent a low AQHI risk. Higher numbers and orange through to red colours represent increasing risk.

- Recreational facilities with outdoor infrastructure for the public (e.g., outdoor pools, splash pads) should balance the above information with the cooling benefits of pools/splash pads and the unintended social impacts of closures.
- Everyone should pay attention to air quality information and monitor their own symptoms, modifying activities as needed.

## Resources

- Health Canada offers guidance regarding wildfire smoke, air quality and health for outdoor events organizers, coaches and sport officials which may be found here: <https://www.canada.ca/en/services/health/healthy-living/environment/air-quality/wildfire-smoke/protecting-your-physical-mental-health.html#a8>
- Environment and Climate Change Canada provides information regarding the Air Quality Health Index (AQHI) scale which shows the health risk associated with the air pollution we breathe. More information is available here: <https://www.canada.ca/en/environment-climate-change/services/air-quality-health-index/understanding-messages.html>
- Environment and Climate Change Canada produces air quality forecast maps twice a day. The maps show the anticipated spread of wildfire smoke, shown as hourly levels of fine particulate matter (PM<sub>2.5</sub>) for the next 72 hours. The information uses weather forecasting and information about the wildfire to show what the impacts are anticipated to be at ground level. This is important as the smoke can be higher up in the atmosphere and not have an impact at the ground level, even if the smoke can be seen. These maps are found here: <https://weather.gc.ca/firework/> .
- More information about protecting workers from smoke exposure may be found through Nova Scotia's Department of Labour, Skills and Immigration here: <https://novascotia.ca/lae/healthandsafety/docs/safety-alert-0000007-en.pdf>