Alberta Air Quality Notification Protocol What you need to know

Air monitoring and your health

Poor air quality has the potential to impact your health. The Alberta Air Quality Notification Protocol provides timely notification of changes in air quality, so you can take steps to reduce your exposure.

Air quality events

An air quality event is any situation which can result in poor air quality. There are two classes of events:

Routine

Air quality events captured by the provincial air monitoring system are called Routine events. For example, wildfire smoke travelling into Alberta from B.C. and impacting the air quality in Edmonton.

Non-Routine

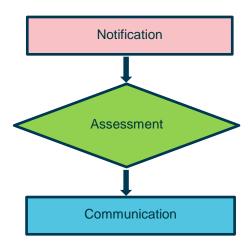
A Non-Routine event is an air quality event not captured by the provincial air monitoring system. For example, smoke from an industrial fire or fire in a remote forest that could impact the air quality of local communities.

The Alberta Air Quality Notification Protocol provides updates on both Routine and Non-Routine events.

Notification Protocol

The Alberta Government works with Environment and Climate Change Canada to assess and communicate an air quality event.

This process in Alberta is called the Air Quality Notification Protocol. The Protocol has three stages:



Notification

Notification for an air quality event prompts an assessment of available information to determine the cause of poor air quality.

Assessment

The Alberta Government works together with Environment and Climate Change Canada to decide whether a Special Air Quality Statement should be issued based on the information available about air quality events. This may include data from air quality monitors, satellite images, forecasts of smoke movement, local reports and road cameras.

Examples of when Special Air Quality Statements are issued include:

- The Air Quality Health Index will be 7 or higher for 2 or more hours (learn more about the Index on the next page)
- Forest fires when smoke is impacting an Alberta community
- Reduced visibility



A Special Air Quality Statement includes:

- Type of air quality event
- Event's location
- Cause (if known)
- Health information and recommended precautions
- Link to Alberta Health Services (AHS) website

Communication

Environment and Climate Change Canada issues a Special Air Quality Statement on different platforms.

Albertans can view a Special Air Quality Statement by:

- Visiting <u>Public Weather Alerts for Canada</u> and then selecting Alberta
- Signing up for <u>EC Alert Me</u>, an online tool that will send air quality and weather email alerts throughout Canada
- Downloading the <u>WeatherCAN App</u> to get weather alert notifications in your area, as well as in your saved locations

Additional notifications

In addition to Special Air Quality Statements, air quality advisories may also be issued by Alberta Health Services and Indigenous Services Canada. Information in these advisories is consistent with notifications found in EC Alert Me.

Planning Your Day with the Air Quality Health Index

Both Alberta and the Government of Canada use the Air Quality Health Index (AQHI), a public health tool reported on a scale from 1 to 10. The higher the number, the greater the health risk associated with the air quality. The Index has corresponding health risk categories and provides advice to the general population and at-risk audience.

Air monitoring stations located throughout the province measure the levels of these pollutants to calculate the Air Quality Health Index:

- Fine Particulate Matter (PM_{2.5})
- Nitrogen Dioxide (NO₂)
- Ozone (O₃)

In Alberta, the Index also considers pollutant concentrations that may, from time to time, go above their provincial thresholds. In these cases, the Index value could be replaced with a "High" or "Very High" risk value. These pollutants are: ozone, fine particulate matter, nitrogen dioxide, sulphur dioxide, and carbon monoxide.

In addition, Alberta Government provides special messaging for odour and visibility events. Special messaging is provided in communities when concentrations of certain pollutants are higher than the odour or visibility thresholds and the Air Quality Health Index is rated as Low or Moderate risk. Sulphur dioxide, hydrogen sulphide or total reduced sulphur have odour thresholds and fine particulate matter has a visibility threshold.

If you are part of the at-risk population, use the Air Quality Health Index to monitor your health. Even if you are relatively healthy, fit, and active, you can still use the Index to plan your day.

The <u>AQHI Canada App</u> is updated hourly to help users stay informed on outdoor air quality conditions, plan their outdoor activities, and manage exposure to outdoor air pollution.

Additional resources

- Learn more about air monitoring in Alberta
- Air quality and health
- Learn about the Air Quality Health Index
- Information on Wildfire Smoke and Air Quality
- Wildfire Smoke Prediction Models
 - FireWork Canada
 - FireSmoke Canada

Contact information

Any questions regarding this Air Quality Notification Protocol can be addressed to Health.AQ@gov.ab.ca.

