



Nova Scotia's Air Quality Health Index (AQHI) Frequently Asked Questions

Q: What is the Air Quality Health Index?

A: The Air Quality Health Index or "AQHI" is a scale which provides information on outdoor air pollution and the related short term health risks. It is presented on a scale from 1 to 10+: the lower the number, the lower the health risk.

The AQHI helps Nova Scotians protect their health and the environment by encouraging them to be informed, adjust their activity level during days of increased air pollution, and take action to reduce their personal contributions to air pollution.

The AQHI is currently measured for Halifax, Sydney, Greenwood, Kentville, Pictou, and Port Hawkesbury.

Q: How does the AQHI affect me?

A: The AQHI provides information on current and forecasted levels of outdoor air pollution and what it means for people's health.

Knowing the level of air pollution is especially useful for those considered to be at higher risk, including seniors, young children, those with chronic heart or lung conditions, and people physically active outdoors. These individuals may wish to reduce or reschedule outdoor exercise when levels of outdoor air pollution are elevated.

Q: Isn't the air quality in Nova Scotia good?

A: Yes. We have low pollution levels here in Nova Scotia and we are continuing to take steps to improve it through provincial legislation such as the Environmental Goals and Sustainable Prosperity Act and through the Climate Change Action Plan. We are also working with neighbouring provinces and states to help further reduce air pollution in Nova Scotia.

Q: Who is most at risk to outdoor air pollution?

A:

- People with chronic conditions (such as heart and lung problems like asthma, emphysema and chronic bronchitis)
- Small children
- Seniors
- People who are physically active outdoors

Q: Why is the AQHI not measured for all communities?

A: Our air monitoring stations that collect data for the AQHI are located in both urban and rural locations in Nova Scotia. The areas chosen cover a wide geographic scope, providing a general picture of the health risk associated with outdoor air quality for the province.

These locations also have characteristics that make provision of the AQHI ideal. These include population size, geographical features, and industrial activities.

Q: How does one access the AQHI in Nova Scotia?

A:

- The federal AQHI website (www.airhealth.ca)
- Environment Canada's Weatheroffice website (www.weatheroffice.gc.ca)
- Information on the AQHI project specific to Nova Scotia can be accessed at Nova Scotia Environment's website (www.gov.ns.ca/nse/aqhi).

Q: What are the most significant sources of air pollution in Nova Scotia?

A: Significant sources of air pollutants in Nova Scotia come from industrial activities such as coal-fired power plants and power driven forms of transportation. Heating our buildings and homes also contributes to air pollution. We can also receive pollution from away or "transboundary" air pollution.

Q: What is the provincial government doing to reduce emissions?

A: The *Climate Change Action Plan* identifies goals related to cleaner energy, energy efficiency, renewable energy, transportation, and air quality. For more information on the Plan, visit www.gov.ns.ca/nse/climate.change.

In 2007 the *Environmental Goals and Sustainable Prosperity Act* was introduced. This provincial legislation contains several goals related to reducing outdoor air pollution including:

- Setting tighter emission caps for industry

- Meeting the Canada-wide standard for particulate matter and ground-level ozone by 2010
- Adopting emissions standards for new vehicles for air emissions and greenhouse gases

Visit www.gov.ns.ca/nse/egspa/ for more information.

Since 2008, wood stoves sold in this province must be EPA-certified for efficiency and emissions under the *Energy-efficient Appliances Act*.

Q: Which air pollutants are measured in determining the AQHI level?

A: The AQHI measures three air pollutants:

- ground-level ozone (O₃), nitrogen dioxide (NO₂), and particulate matter (PM_{2.5}).
- These three pollutants best represent the mixture of common air pollutants (such as those found in smog) that harm human health.
- Sources of such pollutants include transportation, industrial activities, home heating, forest fires, and transboundary air pollution.

Q: Is it true that Nova Scotia is considered the “tailpipe of North America?”

A: Air pollution knows no boundaries between provinces and countries. Nova Scotia receives some air pollution from outside of the province, particularly from the eastern United States and central and eastern Canada. Transboundary air pollution is not unique to Nova Scotia. The “tailpipe of North America” term is often interpreted by people to mean that our air is worse here in Atlantic Canada than in other regions of North America. This is not the case—AQHI levels in Nova Scotia and the rest of Atlantic

Canada tend to reside at the low health risk level (1 to 3) most of the time.

Q: What other provinces are involved with the AQHI?

A: The AQHI is currently available across Canada. Here in Atlantic Canada, New Brunswick, Prince Edward Island, and Newfoundland and Labrador all provide the AQHI for various locations.

Q: What is the AQHI usually like in Nova Scotia?

A: The most frequent AQHI level in Nova Scotia is 2. This falls within the low health risk category of 1-3.

Q: How do the AQHI levels reached in Nova Scotia compare to levels in other locations in Canada?

A: One has to be careful when comparing AQHI levels among provinces, as each province (and locations within each province) has unique outdoor air quality issues and sources of air pollution. AQHI levels in Atlantic Canada do tend to be low, likely as a result of the smaller population and levels of industry as compared with other areas in the country.

Larger cities such as Toronto can experience elevated AQHI levels. For example, a very smoggy day in a large city could register as high as a 6 to 8 on the AQHI scale. It is important to note, however, that for cities across Canada to date the AQHI tends to reside in the low-risk end of the scale 70% of the time.

Q: Where can I find more information about the AQHI? Is there someone I can contact?

A: To learn more about Nova Scotia's AQHI, visit www.gov.ns.ca/nse/aqhi or www.airhealth.ca, or contact Nova Scotia Environment's Air Quality Branch at air@gov.ns.ca.