



NWT Air Quality Monitoring Program

AIR QUALITY IN THE NWT

Clean air is essential to our well-being. The decisions we make every day in our homes and businesses affect the quality of our air.

The air we breathe contains nitrogen, oxygen, a small amount of carbon dioxide and water vapour. It can also contain dust particles and other gases, some of which occur naturally. Many factors can affect air quality in the NWT, including local and long-distance emissions from wildfires and human-caused pollution, such as smoke or exhaust from heating buildings, driving vehicles and industrial development.



OUR ROLE

The GNWT's Department of Environment and Natural Resources (ENR) monitors air quality across the NWT as part of the Canada-wide National Air Pollution Surveillance Network (NAPS). Tracking daily levels of air pollutants allows us to better assess the impacts of human activities and natural events, such as wildfires, on air quality.

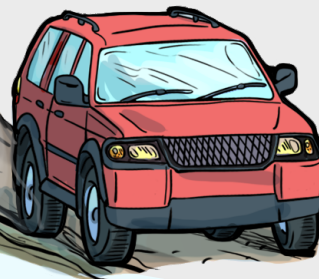
REAL-TIME DATA

The GNWT provides current and historical air quality data at aqm.enr.gov.nt.ca. This includes real-time data from our four community monitoring stations in Inuvik, Norman Wells, Fort Smith and Yellowknife, as well as the ability to generate air quality data in the form of graphs and charts for specific stations and time periods.

ENR compares these levels to the [Guideline for Ambient Air Quality Standards in the Northwest Territories](#) to determine the significance of any changes in air quality.

While summer wildfires are the main cause of air pollution in the NWT, pollutants may be detected in the winter too, particularly on colder days.

Our monitoring stations capture emissions from burning fossil fuels for home heating and running vehicles. While these readings are higher than average, they are still well within established air quality standards.



AIR QUALITY AND YOUR HEALTH

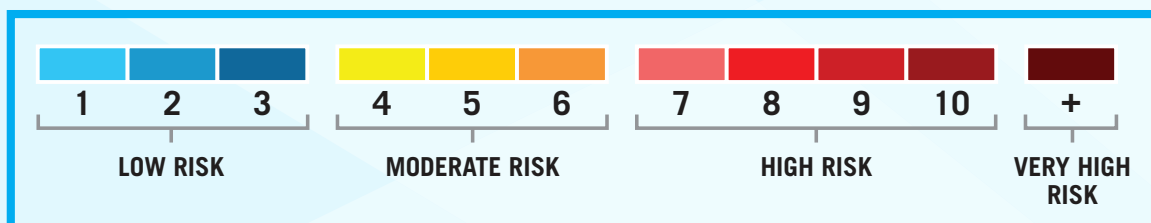
High levels of dust and other pollutants in the air can cause difficulty breathing, headaches, and eye, nose or throat irritation. Infants and young children, the elderly and pregnant women are especially vulnerable to the effects of air pollution, as are people with existing respiratory and cardiovascular conditions.

The national **Air Quality Health Index** (AQHI) is a health risk communication tool that forecasts health risks related to air quality on a scale from 1 to 10 and provides information on how NWT residents can protect themselves when air quality is poor, such as during wildfire season.

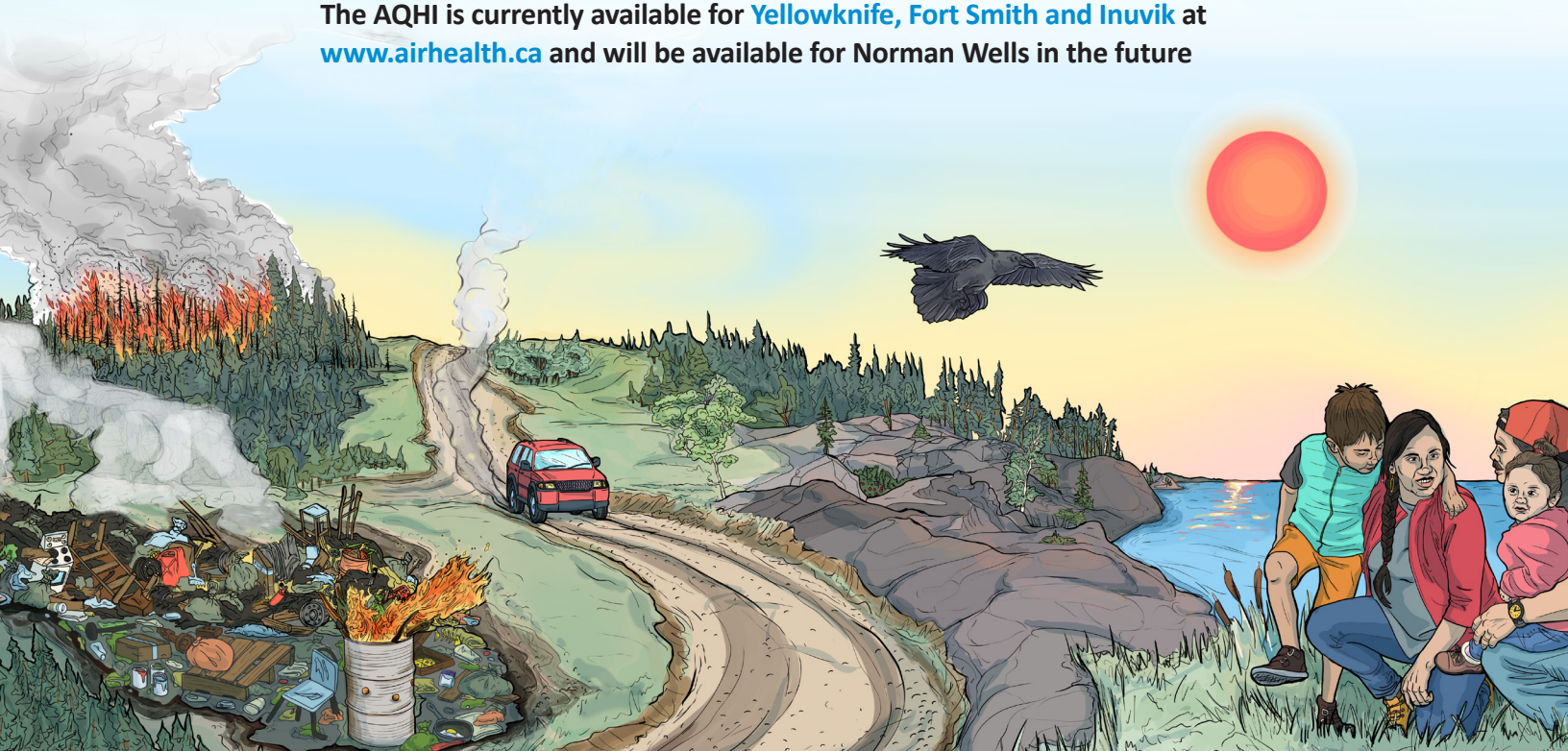
The GNWT's Department of Health and Social Services (www.hss.gov.nt.ca) provides information on health effects related to wildfire smoke and issues public health advisories during periods of poor air quality.

In previous wildfire seasons, the Air Quality Health Index reached high risk (7-10) and very high risk (10+) in several NWT communities.

On these days, Health Canada recommends reducing strenuous activities outdoors, especially for children and the elderly, as well as those experiencing symptoms such as coughing and throat irritation.



The AQHI is currently available for **Yellowknife, Fort Smith and Inuvik** at www.airhealth.ca and will be available for Norman Wells in the future



HOW WE MONITOR AIR QUALITY

ENR monitors air quality at monitoring stations located in four NWT communities. These stations have highly specialized instruments to collect and measure pollutants, including gases and particles (such as dust), that are in the air.

OUR NETWORK

ENR has air quality monitoring stations in:

- Yellowknife
- Inuvik
- Norman Wells
- Fort Smith

At each station, we record levels of:

- Fine particles ($PM_{2.5}$)
- Coarse particles (PM_{10})
- Sulphur dioxide
- Nitrogen oxides
- Ground level ozone
- Carbon monoxide

For details on these pollutants and their sources, visit aqm.enr.gov.nt.ca.

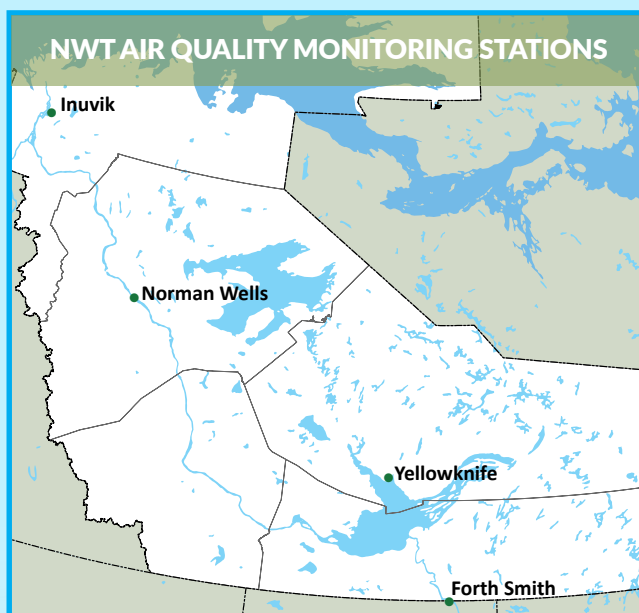
ENR works in collaboration with a Canada-wide air quality network, the **National Air Pollution Surveillance Network**. This network provides accurate and long-term air quality data for cities across Canada.

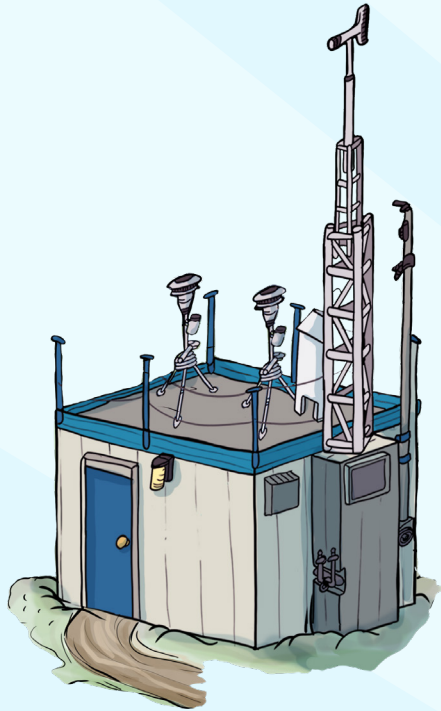
Particles and dust

Fine particles come from industrial activities, fuel burned to heat buildings, vehicle emissions and smoke from wildfires. These particles can trigger coughing and make it harder to breathe. They can also affect heart and lung function, especially in young children and older adults.

Coarse particles come mainly from road dust and wind-blown soil. These particles are not as often linked to heart and lung disease, but they can still irritate the eyes, nose and throat.

- World Health Organization





CONTACT US

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**ANNUAL NWT AIR QUALITY REPORTS
CAN BE FOUND ON OUR WEBSITE:**

www.enr.gov.nt.ca/en/services/air-quality