The Air Quality Health Index (AQHI) is designed to help people understand how air quality can affect their health, and how they can protect themselves when air quality is poor. It uses a scale of 1–10+ to indicate potential health risk and to recommend actions for reducing risk.

Wildfire Smoke and the Air Quality Health Index (AQHI)

Of all the pollutants in wildfire smoke, PM$_{2.5}$ poses the greatest risk to human health. In British Columbia, the AQHI has been changed to reflect this risk.

- The AQHI was originally developed to communicate about the health risks associated with changes in urban air pollution. Wildfire smoke causes much larger and faster changes in PM$_{2.5}$.
- Every hour the AQHI in British Columbia is calculated two different ways, and the higher of the two values is reported:
  1. Using levels of PM$_{2.5}$, NO$_2$, and O$_3$ together
     https://u.nu/s08q
  2. Using the level of PM$_{2.5}$ alone (Table 1)
- This change to the AQHI was based on the respiratory health effects observed across British Columbia under smoky conditions.
- The current AQHI values https://u.nu/p-3 and 1-hour PM$_{2.5}$ concentrations https://u.nu/lamf are reported in real time on the BC Air Quality website.
The AQHI has a maximum value of 10+ based on the current health evidence.

- There is limited evidence on the health effects of air pollution at AQHI values over 10.
- For example, an AQHI of 7 is known to be much unhealthier than an AQHI of 3. However, it is not known whether an AQHI of 17 is much unhealthier than an AQHI of 13 because such high values are rare.
- Wildfire smoke is the main cause of 10+ AQHI values in British Columbia and elsewhere in Canada.
- Whenever the AQHI is 10+, the air quality is extremely poor. Everyone should take action to protect their health.

The evidence-based AQHI was developed in Canada by federal and provincial partners.

- The best sources of information for British Columbia are the BC Air Quality website [https://u.nu/91n0](https://u.nu/91n0) and the national WeatherCAN smartphone app [https://u.nu/an9l](https://u.nu/an9l).
- Do not rely on any values reported by other websites and smartphone applications. These values may not be based on scientific evidence, and may not reflect the PM$_{2.5}$ concentrations measured in British Columbia.