

## **Heartland 101: Weather and Forest Fires Impact Local Air Quality**

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Emissions from industry, automobiles, homes, forest fires and other sources all have an impact on air quality. Weather conditions are also an important factor in air quality – wind and rain can break up and disperse regional substances such as ozone and particulate matter. In the spring and summer when the air is hot and the wind is calm, these two substances can accumulate at ground level and affect air quality.

### **Rating Air Quality**

The Air Quality Health Index (AQHI) is a general measure of air quality that people are exposed to, and is rated by four categories – low risk, moderate risk, high risk and very high risk. Fort Air Partnership's (FAP's) AQHI statistics for 2014 show that air quality in and around Alberta's Industrial Heartland was in the low risk category between 94% and 99% of the time, depending on the location of the monitoring station. Data used to calculate the AQHI is collected at four of FAP's eight continuous air monitoring stations. These stations are located in Fort Saskatchewan, Lamont County, Bruderheim and Elk Island National Park.

### **Impacts from Forest Fire Smoke**

In 2014, there were a total of 22 hours (0.07% of total hours monitored) when the AQHI ratings were in the high risk category. These were caused either by forest fire smoke or winter temperature inversions. Recent smoke coming into this region from northern forest fires has contributed to local AQHI ratings fluctuating between low and high. Higher levels of particulate matter in the summer are usually due to smoke from grass or forest fires.

Moderate to high AQHI readings may cause health problems for children, the elderly and those with respiratory problems. Fort Air Partnership immediately alerts the Government of Alberta whenever an air quality standard is exceeded. The government then determines what the environmental and health impacts may be. However, there are [general government established guidelines](#) for the public regarding how to react to various levels of risk.

### **Air Quality Readings Available to Public**

Current and forecast local AQHI levels are available at [www.fortair.org](http://www.fortair.org). The public can also view near real time hourly readings from all eight of FAP's continuous monitoring stations.

For more information: [lifeintheheartland.com](http://lifeintheheartland.com) or follow us on [Facebook](#) and [Twitter](#).

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*Heartland 101 is a monthly print and on-air (Mix 107.9 FM) series brought to you by **Life in the Heartland**, a partnership of five local organizations improving access to information, resources, and contacts for communities in and around Alberta's Industrial Heartland.*