

Box 25 Golden BC V0A 1H0 • 250-439-8491 • e golden@wildsight.ca

For Immediate Release Wildfires wreaking havoc on Canadian air quality

When we think of polluted cities in North America many people would likely think of Los Angeles, Chicago or Toronto. However, in 2023 the top 13 most polluted cities were in Canada, and they were all northern rural communities; Fort McMurray and Peace River in Alberta and Yellowknife in the Northwest Territories made the top 3.

The cause of the poor air quality in Canada compared to previous years is the record-breaking wildfire season in 2023. Smoke from wildfires prompted air quality warnings across the country and in major US cities including New York City. Wildfires are becoming more frequent and more intense due to anthropocentric climate change and warming temperatures.

The findings come from Swiss air quality technology company IQAIR in its sixth annual World Air Quality report. The report measured annual average concentrations of fine particulate matter PM2.5 from more than 30,000 air quality monitoring stations around the world. It then compared those amounts to the World Health Organization's (WHO) air quality guidelines. Of the 134 countries looked at, only 10 fell into the acceptable range defined by the WHO.

PM2.5 refers to particulate matter that's less than 2.5 microns in diameter; to put that in context a human hair is 75 microns. These ultra-small particles can easily travel into one's respiratory system and bloodstream causing an array of health problems including inflamed and irritated lungs, stroke and potentially long-term neurological issues. It is particularly problematic for people with underlying health issues like asthma as well as children and elderly people.

Canada ranked 93 out of 134 countries for worst air quality with an average PM2.5 of 10.3 micrograms per cubic meter of air- 2-3X higher than the WHO recommended level. The US was ranked 102 with an average PM2.5 concentration of 9.1 micrograms per cubic meter. The top countries in the world with the worst air quality were Bangladesh, Pakistan and India with PM2.5 concentrations of 79.9, 73.7 and 54.4.

Canada has previously prided itself on having some of the cleanest air in the continent. The increase in air pollution from wildfires is undoing the progress Canada has made in other areas such as phasing out coal fired power plants and combustion-engine vehicles.

Due to the abnormally dry and warm winter we could potentially experience another record-breaking wildfire season due to abnormally low snowpack levels. As wildfire season approaches, it's important to remember precautions to limit exposure to PM2.5 on particularly bad days including limiting strenuous

outdoor physical activity, installing air filters for ventilation systems inside and wearing medical-grade N95 masks outside.

Submitted by the Air Quality Committee Wildsight Golden

Golden@wildsight.ca