

# Air pollution gets worse during winter at airports

June 9 2022

---



Credit: CC0 Public Domain

Air pollution kills approximately 7 million people every year worldwide. According to researchers from McGill University, airports are hotspots

for airborne pollutants that are detrimental to human health and the Earth's climate. Studying air pollution at three major Canadian airports the researchers found that airports situated in colder climates accumulated more pollutants like PM<sub>2.5</sub> in the fall and winter, compared to airports in milder climates. The smallest and the coldest airport with the least number of flights and passengers had the highest PM<sub>2.5</sub> concentration.

"Meteorological factors such as the cold temperature and snowfall concentrate pollutants and alter their distribution. Targeted reduction of PM<sub>2.5</sub> emissions is recommended, especially for cold climate regions where we observe higher concentrations of pollutants," says Professor Parisa Ariya of the Departments of Chemistry and Atmospheric and Oceanic Sciences.

During the COVID-19 lockdown, the researchers found that concentrations of PM<sub>2.5</sub> and other particles in residential areas close to one airport decreased to such an extent that it conformed to the recommended workplace health threshold. Before the lockdown it exceeded this threshold. "The drop in the concentration of pollutants due to COVID-19 reveals how much pollution is generated at airports during normal activities. It also shows how much pollution workers and residents of the area are exposed to, especially during cold seasons," says Professor Ariya.

The research was published in *Environmental Science and Pollution Research*.

**More information:** Rodrigo Rangel-Alvarado et al, PM<sub>2.5</sub> decadal data in cold vs. mild climate airports: COVID-19 era and a call for sustainable air quality policy, *Environmental Science and Pollution Research* (2022). [DOI: 10.1007/s11356-022-19708-8](https://doi.org/10.1007/s11356-022-19708-8)

Provided by McGill University

Citation: Air pollution gets worse during winter at airports (2022, June 9) retrieved 26 April 2024 from <https://phys.org/news/2022-06-air-pollution-worse-winter-airports.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.