

# Canada needs a better detection system for respiratory pathogens

September 19 2022

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Canada needs a better infectious disease surveillance system to detect emerging respiratory pathogens that includes waste-water testing, population-based testing and genomics, according to an analysis

published in *Canadian Medical Association Journal (CMJA)*.

Clinical and outbreak management (COM) platforms were critical tools in Canada's response to the COVID-19 pandemic, but we need expanded surveillance systems to anticipate emerging viruses and support an effective public health response.

"Strengthening surveillance in Canada remains critical," writes Dr. Beate Sander, Toronto General Hospital Research Institute and a Canada Research Chair in Economics of Infectious Diseases at University Health Network, Toronto, Ontario. "Although COM platforms are essential for [clinical care](#) and contact tracing, robust population-based surveillance systems can better provide actionable data on community transmission of SARS-CoV-2 and other emerging and re-emerging [respiratory pathogens](#) to inform proactive and equitable public health policy."

The authors suggest that a system based on waste-water testing, population-based testing and genomic sequencing of samples will provide accurate, timely data for an integrated, adaptive approach. The system must make surveillance data available in real time to the public and public health community.

"The funding and resources necessary to develop, initiate and sustain expanded [surveillance systems](#) will be substantial, but critical public health gains will include reduced morbidity and mortality, economic impact and societal disruption through public health action, policy decisions and programming," says lead author Dr. Isha Berry, Dalla Lana School of Public Health, University of Toronto.

**More information:** Isha Berry et al, A better normal in Canada will need a better detection system for emerging and re-emerging respiratory pathogens, *Canadian Medical Association Journal* (2022). [DOI:](#)

[10.1503/cmaj.220577](https://doi.org/10.1503/cmaj.220577)

Provided by Canadian Medical Association Journal

Citation: Canada needs a better detection system for respiratory pathogens (2022, September 19)  
retrieved 12 May 2024 from <https://medicalxpress.com/news/2022-09-canada-respiratory-pathogens.html>

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