From: Farshad Pourmalek pourmalek_farshad@yahoo.com

Subject: Situation Report of COVID-19 epidemic trajectory in Canada and provinces from international models

Date: August 9, 2021 at 9:51 AM **To:** hlth.health@gov.bc.ca

Cc: Farshad Pourmalek Pourmalek purmalek@u.washington.edu

Dear Dr. Dix.

I am a physician and epidemiologist who has worked in University of British Columbia, University of Washington, WHO, UNDP, and UNICEF.

Attached please find a second situation report of predictions of the COVID-19 epidemic trajectory in Canada at the national and province levels in the next three months, which I have curated from five international and periodically updated epidemic models. It contains graphs, text, and tabular description of daily deaths, infections, and bed needs predicated by different studies. When one or more models predict increase in cases and deaths, this can be used as an early alarm. The ultimate target group are technical advisers to national and subnational health decision makers, and the health researchers.

Model estimations predict start of the fourth wave of the epidemic at the national level in Canada in August, reaching 21,111 daily infections, 5,552 daily bed needs, 1,663 daily ICU bed needs, and 32 daily deaths on November 1st, with a still-would-be-increasing slope.

The report is based on an online tool I developed, a GitHub repository, named "CovidVisualizedCountry" available at https://github.com/pourmalek/CovidVisualizedCountry. The report is a snap-shot and stand-alone version of the latest models' updates for Canada. A pre-print Data Note manuscript that describes the methods used for creation of the GitHub repositories is also attached here.

Thank you,

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