Canada COVID-19 epidemic models situation report No 48 - 2022-05-20

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Combine and visualize international periodically updated estimates of COVID-19 pandemic at the country level, countries with subnational level estimates

Canada

Based on uptake 20220520 in https://github.com/pourmalek/CovidVisualizedCountry **Study update dates in uptake 20220520**

DELP 20220520, IHME 20220506, No IMPE, **SRIV 20220520**

Days old: DELP 0, IHME 14, IMPE 67, SRIV 0

IMPE update 20220315 was released on 20220505 and is > 60 days old on 20220520. Not included.

DELP: <u>model by Massachusetts Institute of Technology, Cambridge</u>
IHME: <u>model by Institute for Health Metrics and Evaluation, Seattle</u>

IMPE: model by Imperial College, London

SRIV: model by Srivastava, Ajitesh, University of Southern California, Los Angeles

Journal article for this work:

Pourmalek F. CovidVisualized: Visualized compilation of international updated models' estimates of COVID-19 pandemic at global and country levels. *BMC Res Notes*. 2022 Apr 9;15(1):136. doi: 10.1186/s13104-022-06020-4. PMID: 35397567.

Publisher | | PubMed | | PDF

Summary 20220520:

REPORTED DEATHS:

The current level of reported daily deaths at the national level has been around 70 since mid-April, composed of declining daily deaths in Ontario of Quebec, and rising daily deaths in Alberta and British Columbia. This high level of reported daily deaths since mid-April was seen only during the first wave of omicron (January 2022), the second national wave in winter 2021, and the first national wave spring 2000. In short, daily deaths are high. They are increasing in Alberta, British Columbia, and Manitoba.

PREDICTED DEATHS:

The SRIV model predicts rise in daily deaths at the national level starting from July 2022, with levels above 100 in late August.

NEXT-DEMICS:

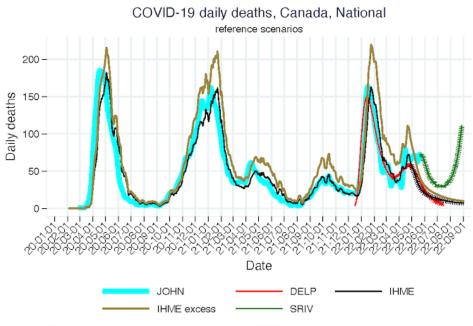
- (1) MONKEY POX: Status uncertain.
- (2) **FOOD SCARCITY** and malnutrition plus additional unaffordability of health services culminate in epidemics of nutritional, infectious, and non-communicable diseases in many countries, probably resulting in a new pandemic.

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Selected graphs - Canada, National

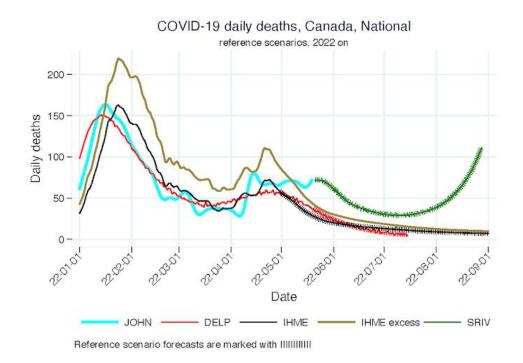
(1) Canada Daily deaths, Reference scenarios, 2020 on



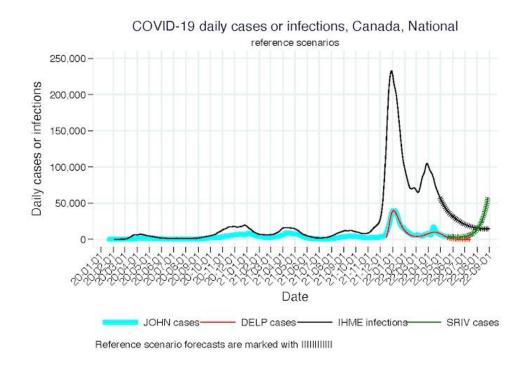
Reference scenario forecasts are marked with IIIIIIIIIII

(2) Canada National Daily deaths, All scenarios, 2021 on

(2b) Canada National Daily deaths, All scenarios, 2022 on

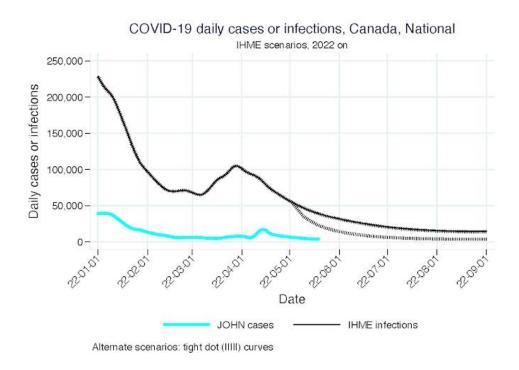


(3) Canada National Daily cases or infections, Reference scenarios, 2020 on



(4) Canada National Daily cases or infections, All scenarios, 2021 on

(4b) Canada National Daily cases or infections, All scenarios, 2022 on



(5) Canada National Daily hospital-related outcomes, Reference scenarios, 2020 on

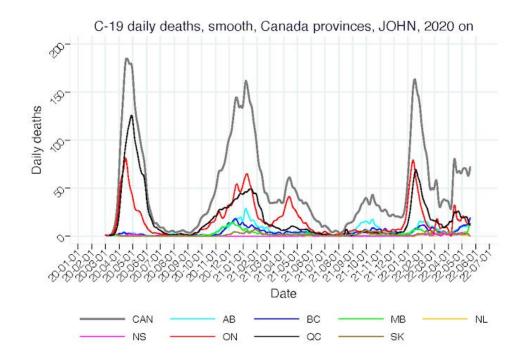
(6) Canada National <u>Daily hospital-related outcomes</u>, <u>without IHME Bed need</u>, <u>Reference scenarios</u>, <u>2021 on</u>

(7) Canada National <u>Daily Infection hospitalization and fatality ratios</u>, <u>Reference scenario</u>, <u>IHME</u>, <u>2021 on</u>

- (8) Canada National Daily percent change in mobility, IHME, 2020 on
- (9) Canada National Daily mask use, IHME, 2020 on
- (10) Canada National Percent cumulative vaccinated, IHME, 2020 on

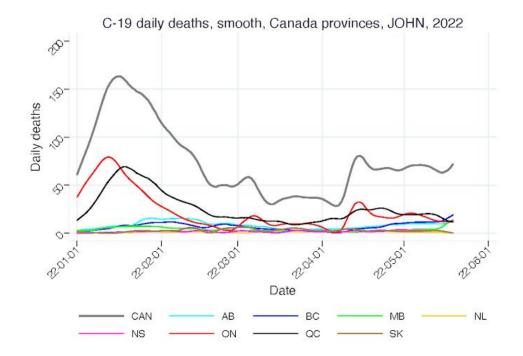
Selected graphs - Canada, Provinces together

- (a) Official reports to WHO, via JOHN || (b) Models: IHME
- (a) Official reports to WHO, via JOHN
- (1) Canada Provinces Daily reported deaths, JOHN, 2020 on

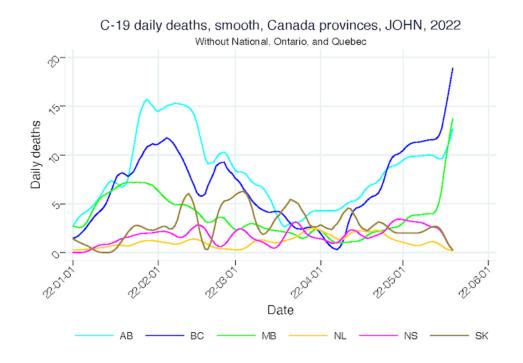


(2) Canada Provinces Daily reported deaths, JOHN, 2021 on

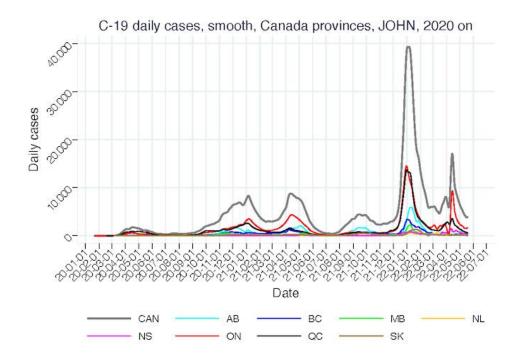
(3) Canada Provinces Daily reported deaths, JOHN, 2022



(4) Canada Provinces <u>Daily reported deaths</u>, <u>without National</u>, <u>Ontario</u>, <u>and Quebec</u>, <u>JOHN</u>, <u>2022</u>

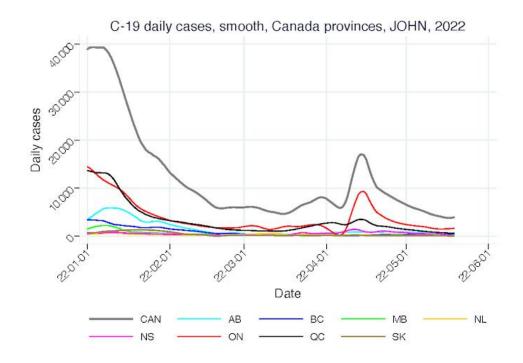


(5) Canada Provinces Daily reported cases, JOHN, 2020 on

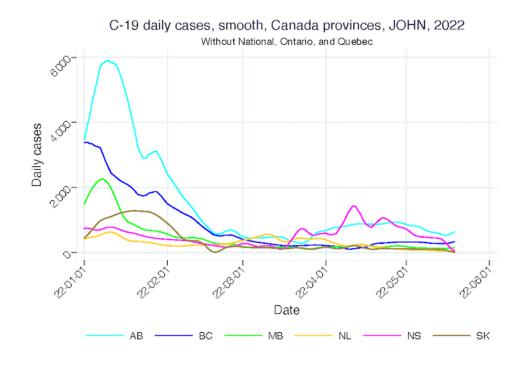


(6) Canada Provinces Daily reported cases, JOHN, 2021 on

(7) Canada Provinces Daily reported cases, JOHN, 2022

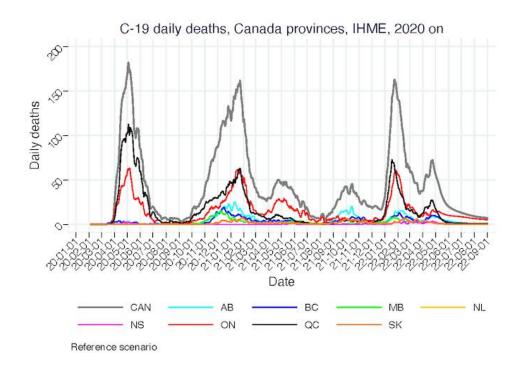


(8) Canada Provinces Daily reported cases, without National, Ontario, and Quebec, JOHN, 2022



(b) Models: IHME

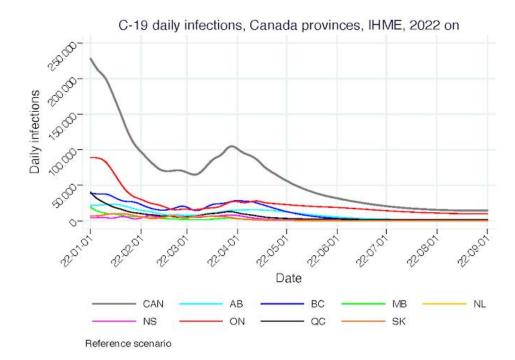
(9) Canada Provinces Daily deaths, Reference scenario, IHME, 2020 on



- (10) Canada Provinces Daily deaths, Reference scenario, IHME, 2021 on
- (11) Canada Provinces Daily deaths, Reference scenario, IHME, 2022
- (12) Canada Provinces Daily infections, Reference scenario, IHME, 2020 on

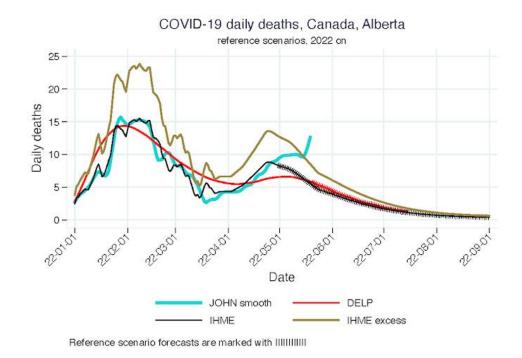
(13) Canada Provinces Daily infections, Reference scenario, IHME, 2021 on

(14) Canada Provinces <u>Daily infections</u>, <u>Reference scenario</u>, <u>IHME</u>, <u>2022</u>



Selected graphs - Alberta

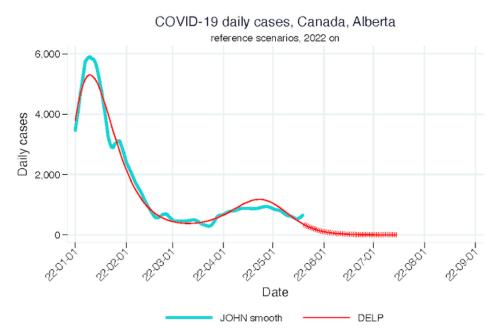
- (1) Alberta Daily deaths, Reference scenario, 2020 on
- (2) Alberta Daily deaths, Reference scenario, 2021 on
- (2b) Alberta Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Alberta Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) Alberta Daily cases or infections, Reference scenario, 2020 on

- (4) Alberta Daily cases or infections, Reference scenario, 2021 on
- (4b) Alberta Daily cases or infections, Reference scenario, 2022 on
- (4c) Alberta Daily cases, Reference scenario, 2022 on, with JOHN raw

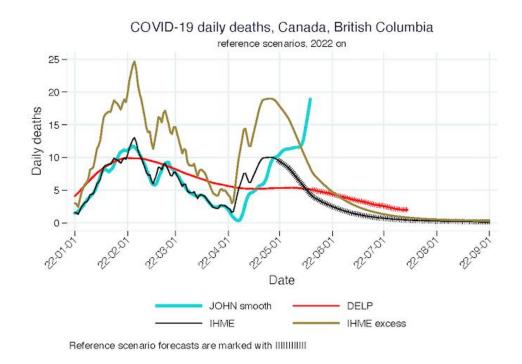
(4e) Alberta Daily cases, Reference scenario, 2022 on, without JOHN raw



Reference scenario forecasts are marked with IIIIIIIIIII

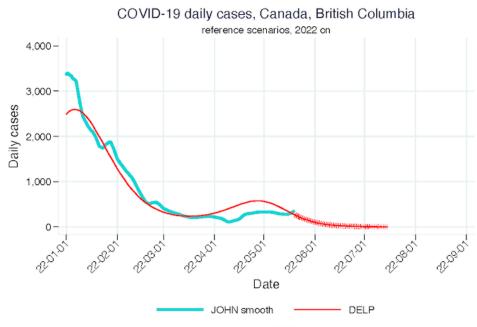
Selected graphs - British Columbia

- (1) British Columbia Daily deaths, Reference scenario, 2020 on
- (2) British Columbia Daily deaths, Reference scenario, 2021 on
- (2b) British Columbia Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) British Columbia Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) British Columbia Daily cases or infections, Reference scenario, 2020 on

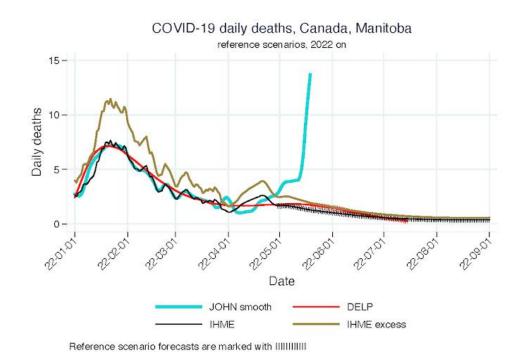
- (4) British Columbia Daily cases or infections, Reference scenario, 2021 on
- (4b) British Columbia Daily cases or infections, Reference scenario, 2022 on
- (4c) British Columbia Daily cases, Reference scenario, 2022 on with JOHN raw
- (4d) British Columbia Daily cases, Reference scenario, 2022 on, without JOHN raw



Reference scenario forecasts are marked with IIIIIIIIIII

Selected graphs - Manitoba

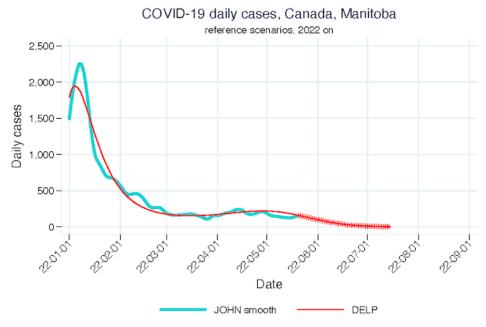
- (1) Manitoba Daily deaths, Reference scenario, 2020 on
- (2) Manitoba Daily deaths, Reference scenario, 2021 on
- (2b) Manitoba Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Manitoba Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) Manitoba Daily cases or infections, Reference scenario, 2020 on

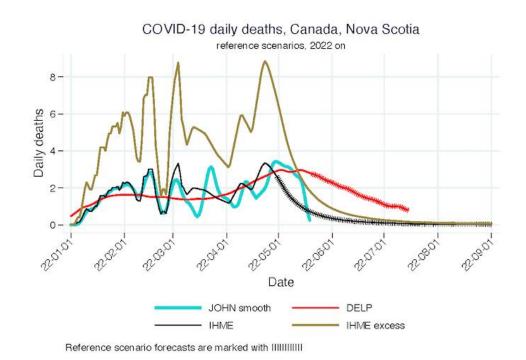
- (4) Manitoba Daily cases or infections, Reference scenario, 2021 on
- (4b) Manitoba Daily cases or infections, Reference scenario, 2022 on
- (4c) Manitoba Daily cases, Reference scenario, 2022 on, with JOHN raw

(4d) Manitoba Daily cases, Reference scenario, 2022 on, without JOHN raw



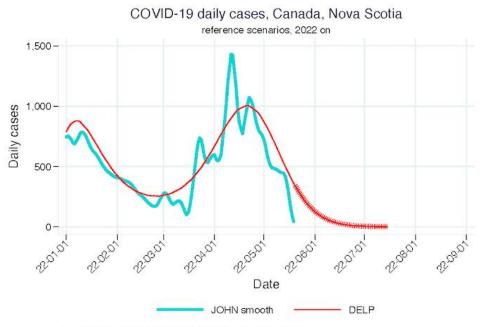
Selected graphs - Nova Scotia

- (1) Nova Scotia Daily deaths, Reference scenario, 2020 on
- (2) Nova Scotia Daily deaths, Reference scenario, 2021 on
- (2b) Nova Scotia Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Nova Scotia Daily deaths, Reference scenario, 2022 on, without JOHN raw



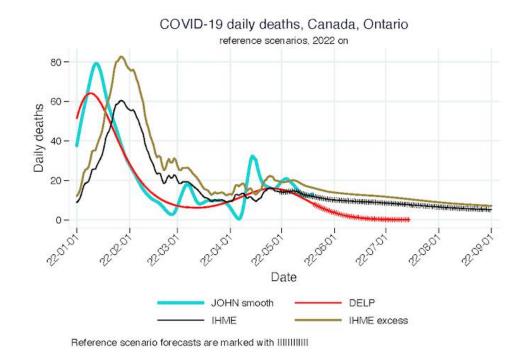
(3) Nova Scotia Daily cases or infections, Reference scenario, 2020 on

- (4) Nova Scotia Daily cases or infections, Reference scenario, 2021 on
- (4b) Nova Scotia Daily cases or infections, Reference scenario, 2022 on
- (4c) Nova Scotia Daily cases, Reference scenario, 2022 on, with JOHN raw
- (4d) Nova Scotia Daily cases, Reference scenario, 2022 on, without JOHN raw



Selected graphs - Ontario

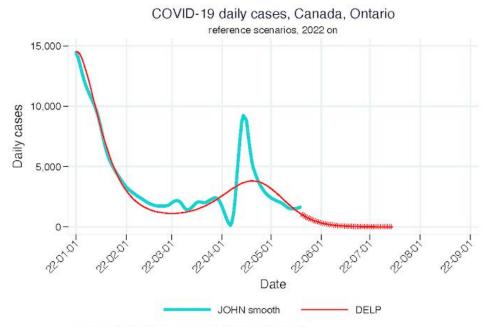
- (1) Ontario Daily deaths, Reference scenario, 2020 on
- (2) Ontario Daily deaths, Reference scenario, 2021 on
- (2b) Ontario Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Ontario Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) Ontario Daily cases or infections, Reference scenario, 2020 on

- (4) Ontario Daily cases or infections, Reference scenario, 2021 on
- (4b) Ontario Daily cases or infections, Reference scenario, 2022 on
- (4c) Ontario Daily cases, Reference scenario, 2022 on, with JOHN raw

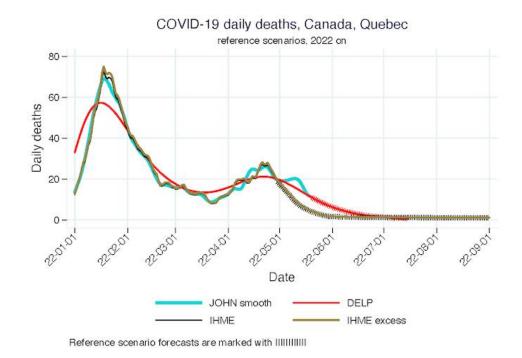
(4d) Ontario Daily cases, Reference scenario, 2022 on, without JOHN raw



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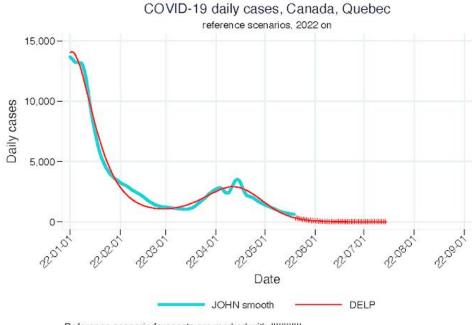
Selected graphs - Quebec

- (1) Quebec Daily deaths, Reference scenario, 2020 on
- (2) Quebec Daily deaths, Reference scenario, 2021 on
- (2b) Quebec Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Quebec Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) Quebec Daily cases or infections, Reference scenario, 2020 on

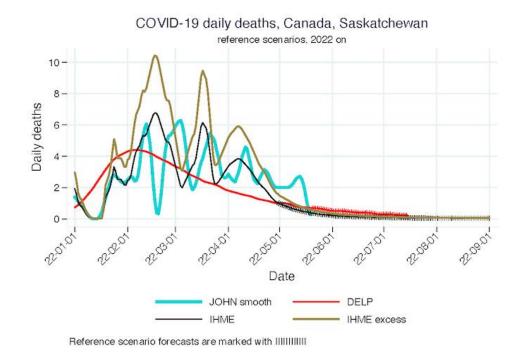
- (4) Quebec Daily cases or infections, Reference scenario, 2021 on
- (4b) Quebec Daily cases or infections, Reference scenario, 2022 on
- (4c) Quebec Daily cases, Reference scenario, 2022 on, with JOHN raw
- (4d) Quebec Daily cases, Reference scenario, 2022 on, without JOHN raw



Reference scenario forecasts are marked with IIIIIIIIIII

Selected graphs - Saskatchewan

- (1) Saskatchewan Daily deaths, Reference scenario, 2020 on
- (2) Saskatchewan Daily deaths, Reference scenario, 2021 on
- (2b) Saskatchewan Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Saskatchewan Daily deaths, Reference scenario, 2022 on, without JOHN raw



(3) Saskatchewan Daily cases or infections, Reference scenario, 2020 on

- (4) Saskatchewan Daily cases or infections, Reference scenario, 2021 on
- (4b) Saskatchewan Daily cases or infections, Reference scenario, 2022 on
- (4c) Saskatchewan Daily cases, Reference scenario, 2022 on, with JOHN raw
- (4d) Saskatchewan Daily cases, Reference scenario, 2022 on, without JOHN raw

