Canada COVID-19 epidemic models situation report No 52 - 2022-06-17

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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

See https://github.com/pourmalek/CovidVisualizedCountry

Study update dates in uptake 20220617

DELP 20220529, IHME 20220610, IMPE 20220530, SRIV 20220617

Days old: DELP 20, IHME 7, IMPE 19, SRIV 0

IMPE update 20220530 was released on 20220617.

The PHAC model released its latest update on 2022-02-18.

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.

<u>Publisher</u> | | <u>PubMed</u> | | <u>PDF</u>

Summary 20220617:

The frequency of official reporting of deaths and cases by provinces and at the national level has become even more hectic than before.

Reported deaths and reported cases are low and going further down at province and national levels.

The SRIV model predicts an **extreme rise in national deaths.** The IHME model predicts an extremely low trajectory of deaths at national and provincial levels.

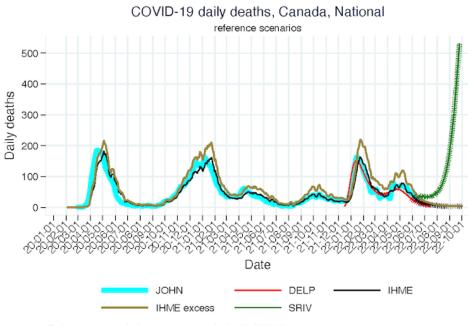
The IHME model predicts **rise in national and provincial infections** starting from August 2022, reaching up to 30,000 national daily infections by the end of October 2022. Such levels of predicted daily infections have not been seen before December 2021, meaning that the Omicron is still causing multitudes of infections and cases.

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Selected graphs - Saskatchewan	

Selected graphs - Canada, National

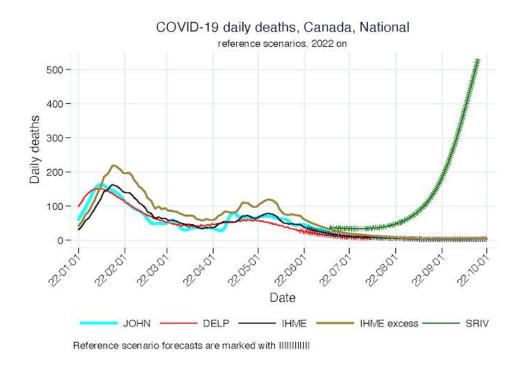
(1) Canada Daily deaths, Reference scenarios, 2020 on



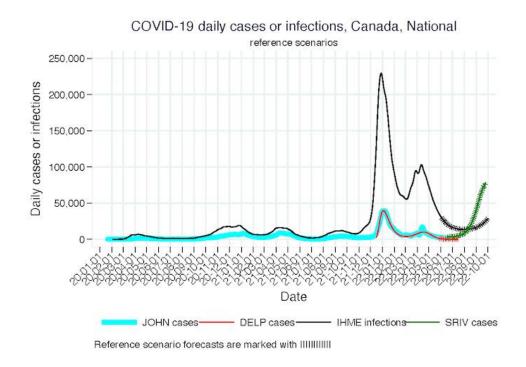
Reference scenario forecasts are marked with IIIIIIIIIII

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

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

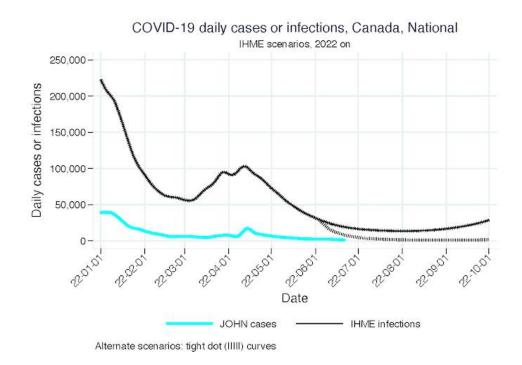


(3) Canada National Daily cases or infections, Reference scenarios, 2020 on



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

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

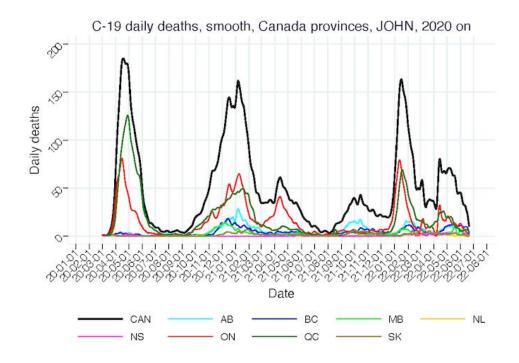


- (5) Canada National Daily hospital-related outcomes, Reference scenarios, 2020 on
- (6) Canada National <u>Daily hospital-related outcomes</u>, <u>without IHME Bed need</u>, <u>Reference scenarios</u>, <u>2021 on</u>
- (7) Canada National <u>Daily Infection hospitalization and fatality ratios</u>, <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

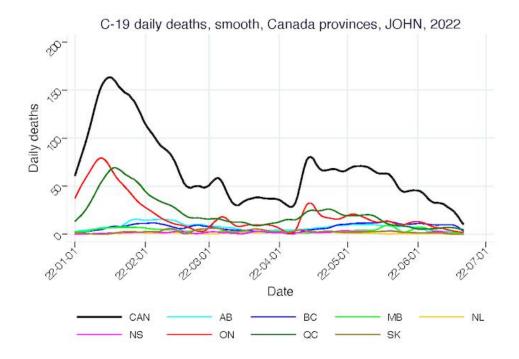
Selected graphs - Canada, Provinces together

- (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

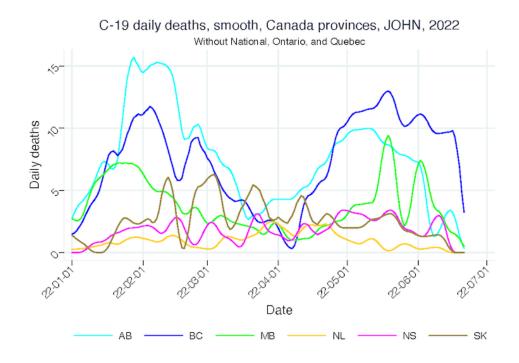


(2) Canada Provinces Daily reported deaths, JOHN, 2021 on

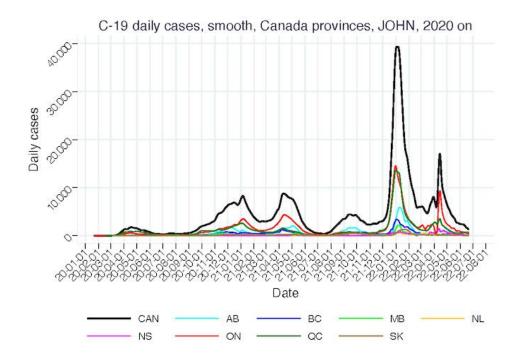
(3) Canada Provinces Daily reported deaths, JOHN, 2022



(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>

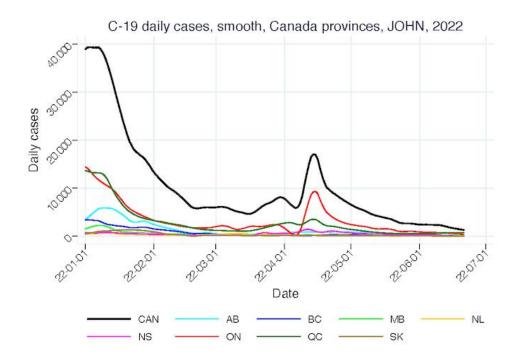


(5) Canada Provinces Daily reported cases, JOHN, 2020 on

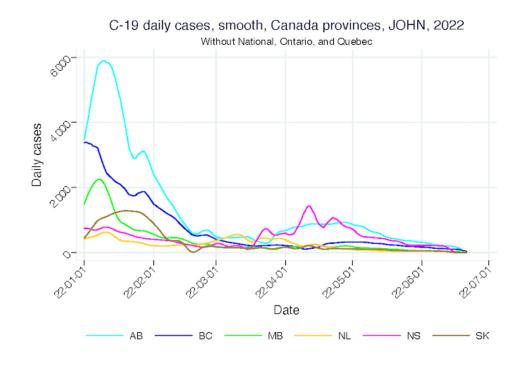


(6) Canada Provinces Daily reported cases, JOHN, 2021 on

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

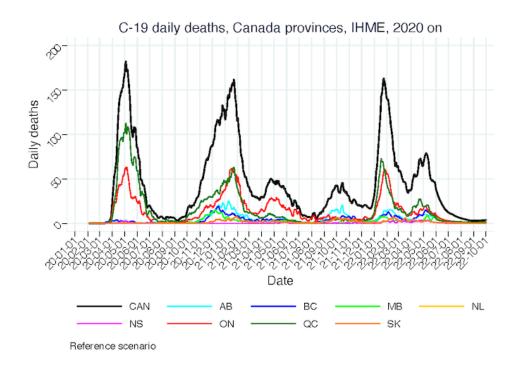


(8) Canada Provinces Daily reported cases, without National, Ontario, and Quebec, JOHN, 2022



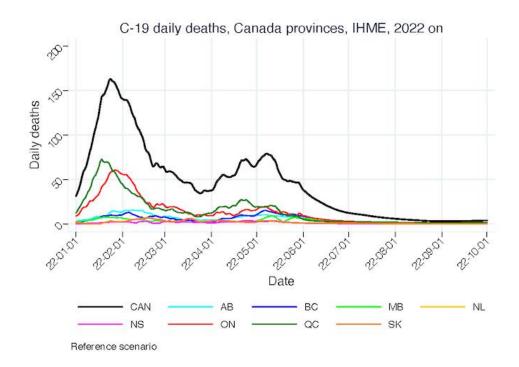
(b) Models: IHME

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

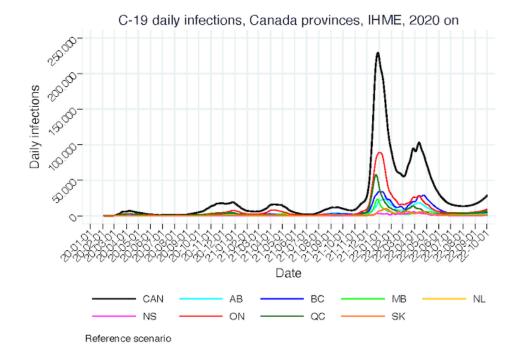


(10) Canada Provinces Daily deaths, Reference scenario, IHME, 2021 on

(11) Canada Provinces Daily deaths, Reference scenario, IHME, 2022

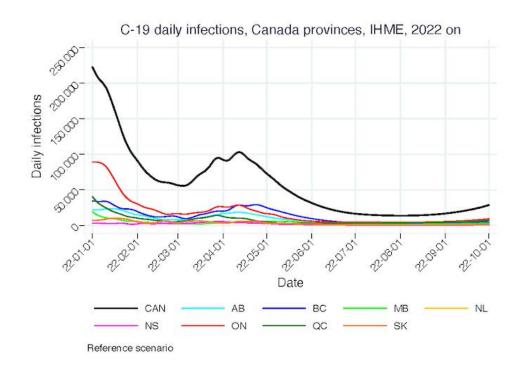


(12) Canada Provinces Daily infections, Reference scenario, IHME, 2020 on



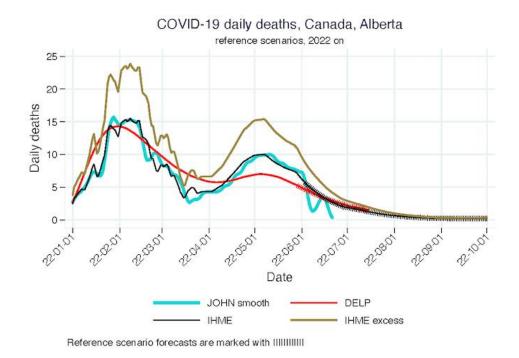
(13) Canada Provinces Daily infections, Reference scenario, IHME, 2021 on

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



Selected graphs - Alberta

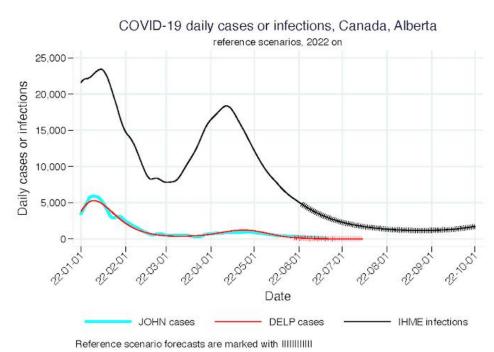
- (1) Alberta Daily deaths, Reference scenario, 2020 on
- (2) Alberta Daily deaths, Reference scenario, 2021 on
- (2b) Alberta Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Alberta Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

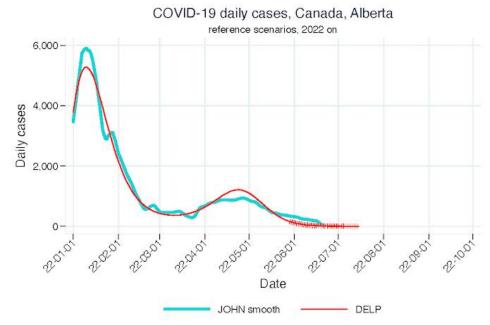
(4) Alberta Daily cases or infections, Reference scenario, 2021 on

(4b) Alberta Daily cases or infections, Reference scenario, 2022 on



(4c) Alberta Daily cases, Reference scenario, 2022 on, with JOHN raw

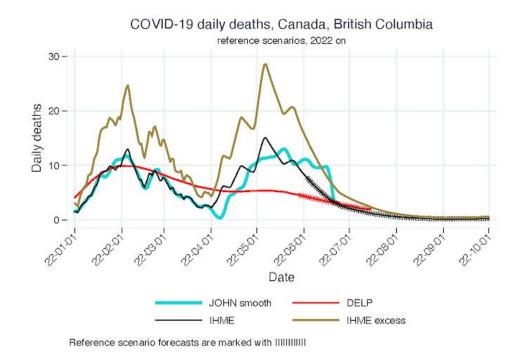
(4d) Alberta Daily cases, Reference scenario, 2022 on, without JOHN raw



Reference scenario forecasts are marked with IIIIIIIIIII

Selected graphs - British Columbia

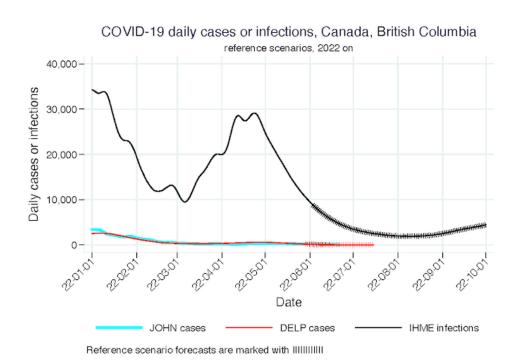
- (1) British Columbia Daily deaths, Reference scenario, 2020 on
- (2) British Columbia Daily deaths, Reference scenario, 2021 on
- (2b) British Columbia Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) British Columbia Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

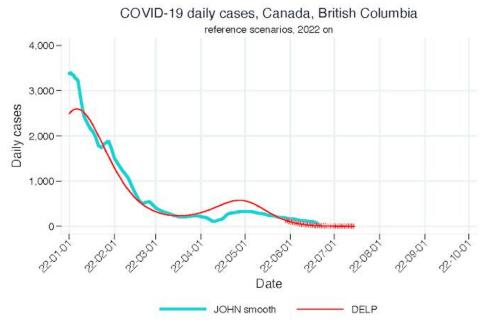
(4) British Columbia Daily cases or infections, Reference scenario, 2021 on

(4b) British Columbia Daily cases or infections, Reference scenario, 2022 on



(4c) British Columbia Daily cases, Reference scenario, 2022 on with JOHN raw

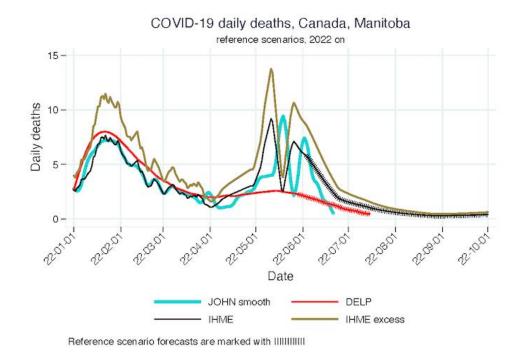
(4d) British Columbia Daily cases, Reference scenario, 2022 on, without JOHN raw



Reference scenario forecasts are marked with IIIIIIIIIII

Selected graphs - Manitoba

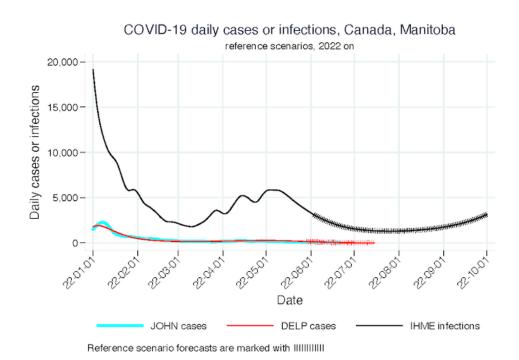
- (1) Manitoba Daily deaths, Reference scenario, 2020 on
- (2) Manitoba Daily deaths, Reference scenario, 2021 on
- (2b) Manitoba Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Manitoba Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

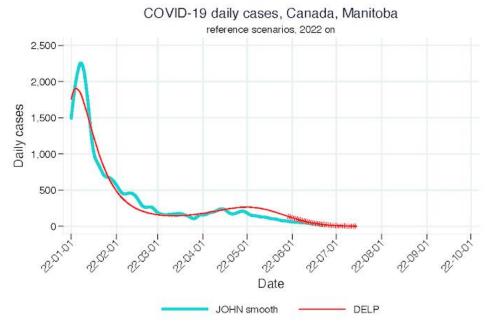
(4) Manitoba Daily cases or infections, Reference scenario, 2021 on

(4b) Manitoba Daily cases or infections, Reference scenario, 2022 on



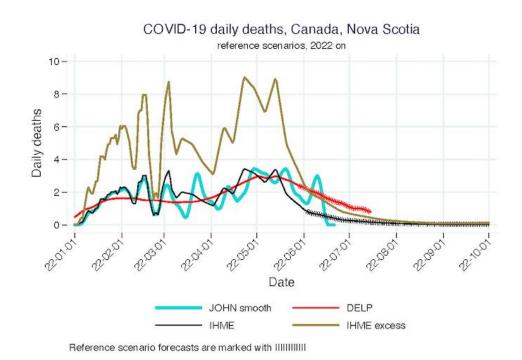
(4c) Manitoba Daily cases, Reference scenario, 2022 on, with JOHN raw

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



Selected graphs - Nova Scotia

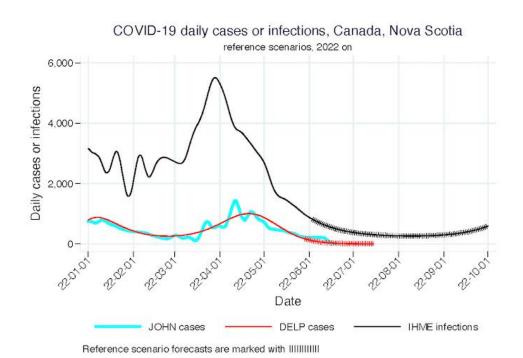
- (1) Nova Scotia Daily deaths, Reference scenario, 2020 on
- (2) Nova Scotia Daily deaths, Reference scenario, 2021 on
- (2b) Nova Scotia Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Nova Scotia Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

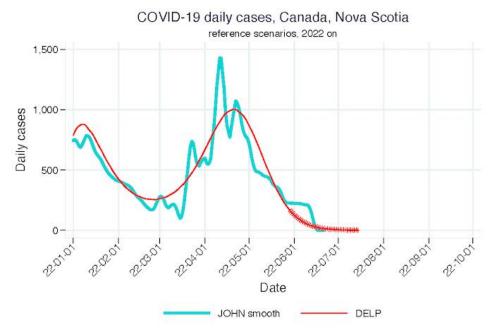
(4) Nova Scotia Daily cases or infections, Reference scenario, 2021 on

(4b) Nova Scotia Daily cases or infections, Reference scenario, 2022 on



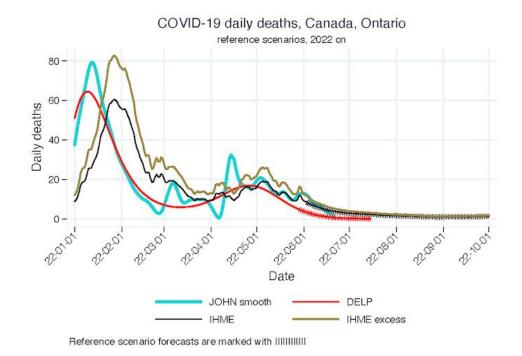
(4c) Nova Scotia Daily cases, Reference scenario, 2022 on, with JOHN raw

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



Selected graphs - Ontario

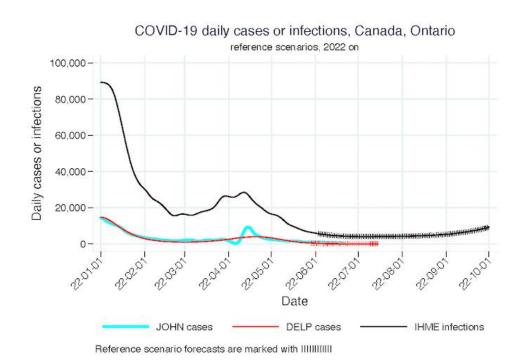
- (1) Ontario Daily deaths, Reference scenario, 2020 on
- (2) Ontario Daily deaths, Reference scenario, 2021 on
- (2b) Ontario Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Ontario Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

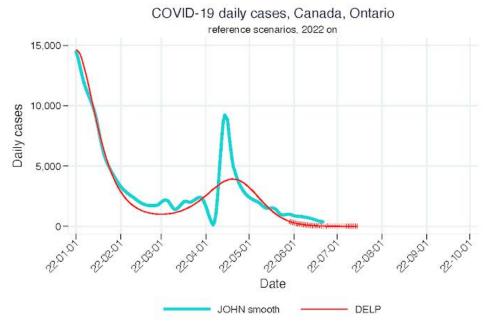
(4) Ontario Daily cases or infections, Reference scenario, 2021 on

(4b) Ontario Daily cases or infections, Reference scenario, 2022 on



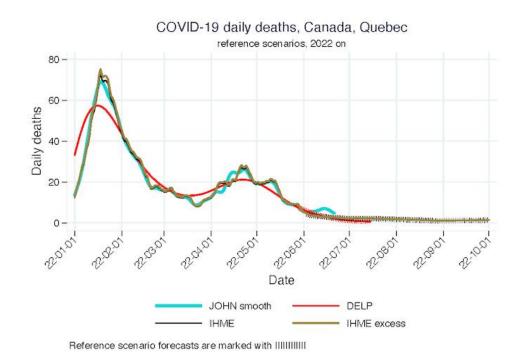
(4c) Ontario Daily cases, Reference scenario, 2022 on, with JOHN raw

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



Selected graphs - Quebec

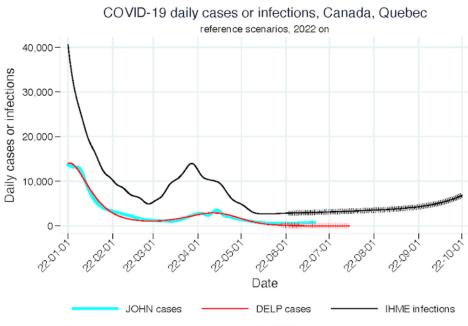
- (1) Quebec Daily deaths, Reference scenario, 2020 on
- (2) Quebec Daily deaths, Reference scenario, 2021 on
- (2b) Quebec Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Quebec Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

(4) Quebec Daily cases or infections, Reference scenario, 2021 on

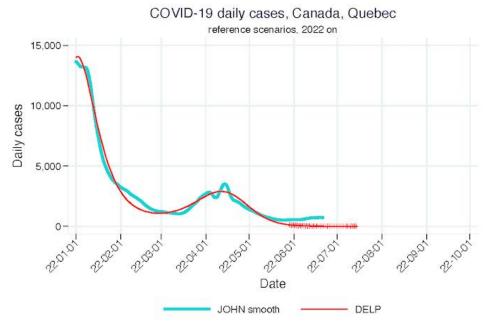
(4b) Quebec Daily cases or infections, Reference scenario, 2022 on



Reference scenario forecasts are marked with IIIIIIIIIII

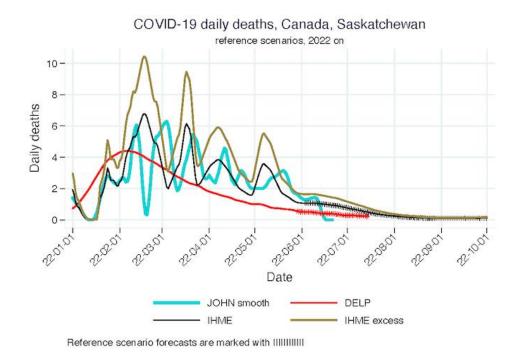
(4c) Quebec Daily cases, Reference scenario, 2022 on, with JOHN raw

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



Selected graphs - Saskatchewan

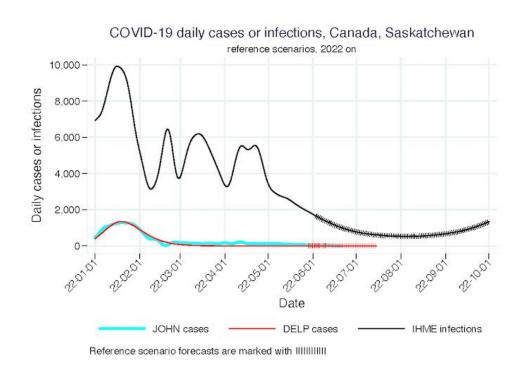
- (1) Saskatchewan Daily deaths, Reference scenario, 2020 on
- (2) Saskatchewan Daily deaths, Reference scenario, 2021 on
- (2b) Saskatchewan Daily deaths, Reference scenario, 2022 on, with JOHN raw
- (2c) Saskatchewan Daily deaths, Reference scenario, 2022 on, without JOHN raw



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

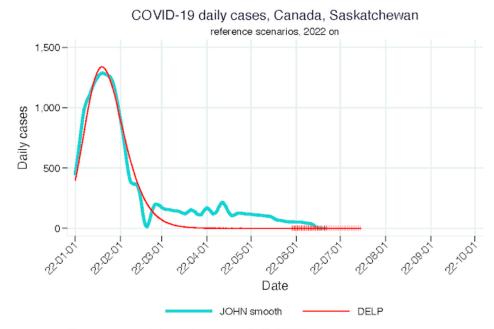
(4) Saskatchewan Daily cases or infections, Reference scenario, 2021 on

(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



Reference scenario forecasts are marked with IIIIIIIIIII