#### Canada COVID-19 epidemic models situation report No 38 - 2022-03-11

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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 20220311 in <a href="https://github.com/pourmalek/CovidVisualizedCountry">https://github.com/pourmalek/CovidVisualizedCountry</a>
Study update dates in uptake 20220311

DELP 20220311, IHME 20220218, IMPE 20220120, SRIV 20220311

#### **Summary 20220311:**

#### Observation:

Reported daily cases are stagnating after their recent decrease at the national level and in all provinces.

Reported daily deaths have stopped decreasing after their recent decrease at the national level and in all provinces. They are stagnating in Ontario and Quebec, and increasing Alberta, British Columbia, and Manitoba. Reporting by Saskatchewan is grossly manipulated and unreliable.

#### **Probability:**



Even though the models are highly divergent about the future trajectory of the epidemic, the above-observed trajectories of the reported daily deaths and cases might signify a new surge.

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

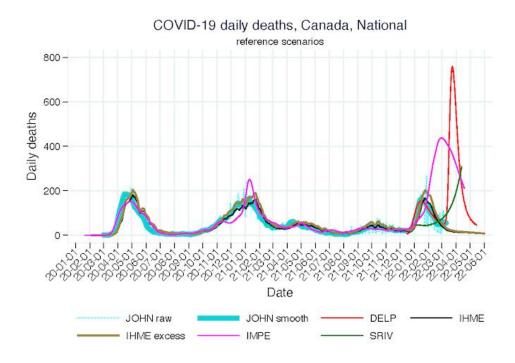
SRIV: model by Srivastava, Ajitesh, University of Southern California, Los Angeles

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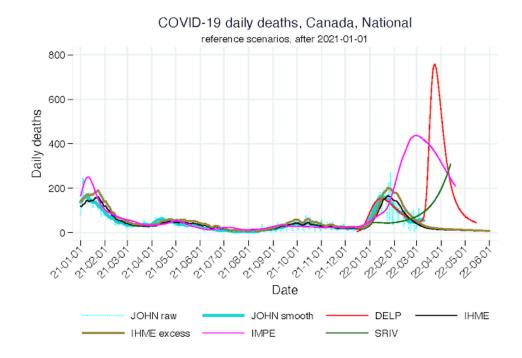
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## Selected graphs - Canada, National

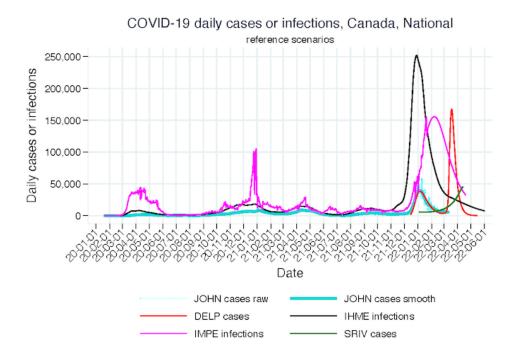
(1) Canada Daily deaths, Reference scenarios, 2020 on



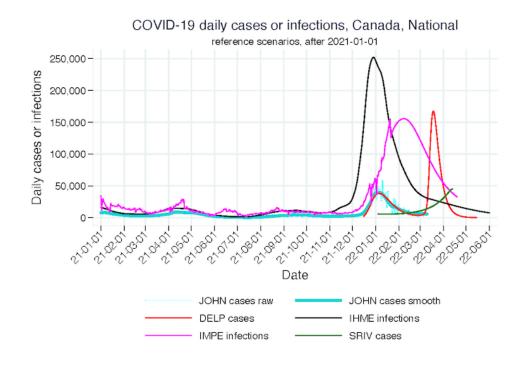
(2) Canada National Daily deaths, All scenarios, 2021 on



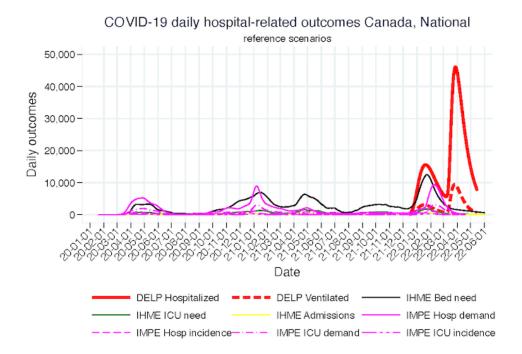
### (3) Canada National Daily cases or infections, Reference scenarios, 2020 on



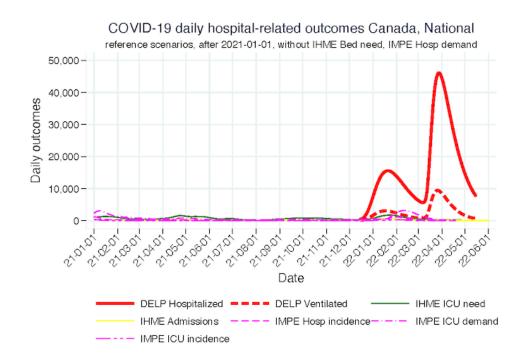
### (4) Canada National Daily cases or infections, All scenarios, 2021 on



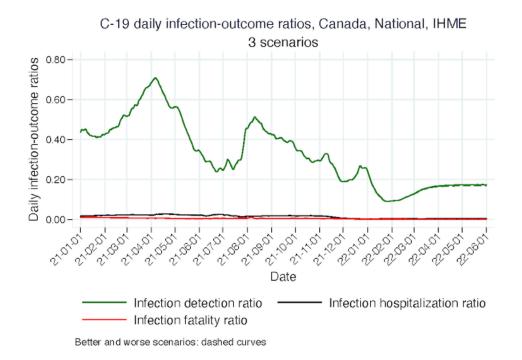
### (5) Canada National Daily hospital-related outcomes, Reference scenarios, 2020 on



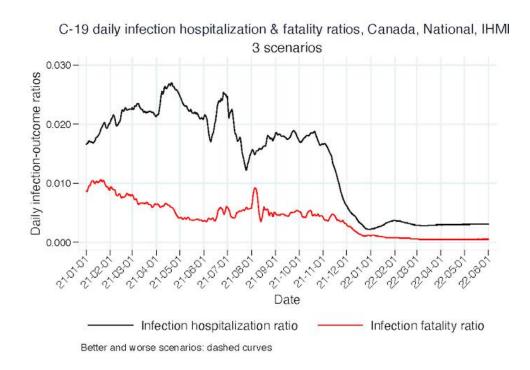
### (6) Canada National Daily Infection outcomes ratios, Reference scenarios, IHME, 2021 on



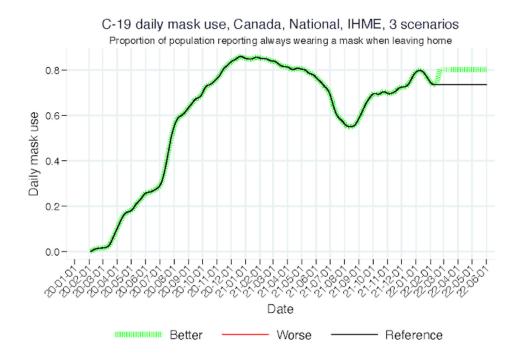
# (7) Canada National <u>Daily Infection hospitalization and fatality ratios</u>, <u>Reference scenario</u>, <u>IHME</u>, 2021 on



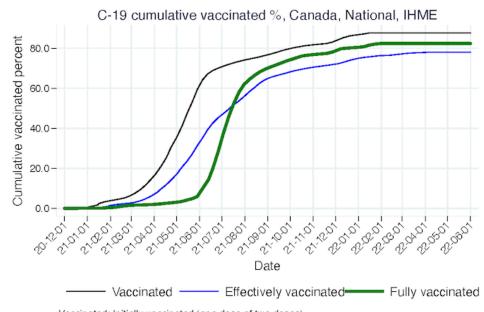
#### (8) Canada National Daily percent change in mobility, Reference scenario, IHME, 2020 on



#### (9) Canada National Daily mask use, IHME, 2020 on



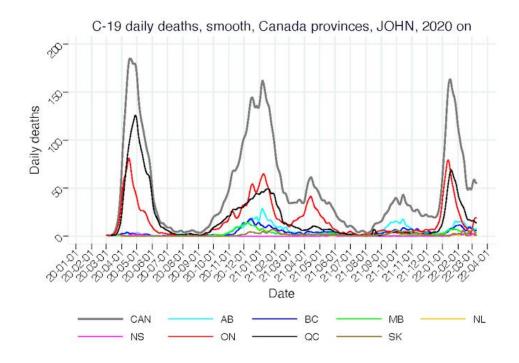
#### (10) Canada National Percent cumulative vaccinated, IHME, 2020 on



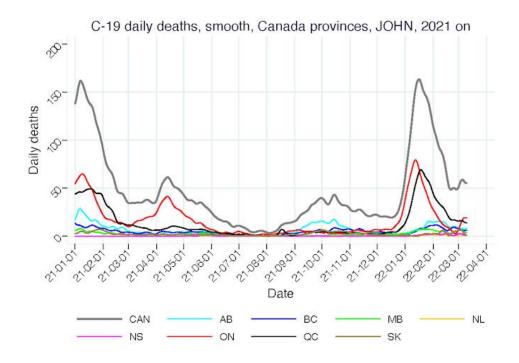
Vaccinated: Initially vaccinated (one dose of two doses) Effectively vaccinated: one and two dose with efficacy Fully vaccinated: one of one and two of two doses

# **Selected graphs - Canada, Provinces together**

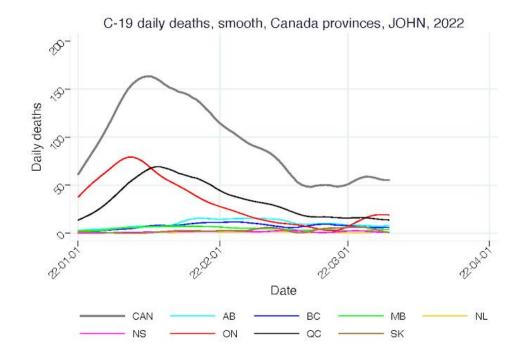
- (a) Official reports to WHO, via JOHN || (b) Models: IHME
- (a) Official reports to WHO, via JOHN
- (1) Canada Provinces Daily reported deaths, JOHN, 2020 on



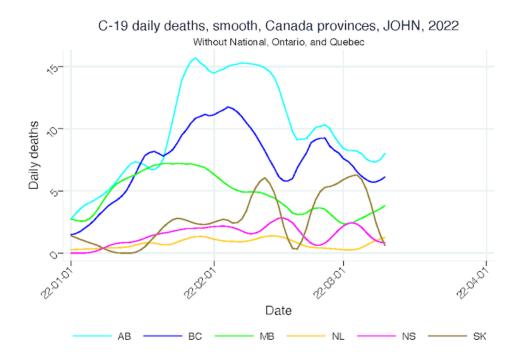
### (2) Canada Provinces Daily reported deaths, JOHN, 2021 on



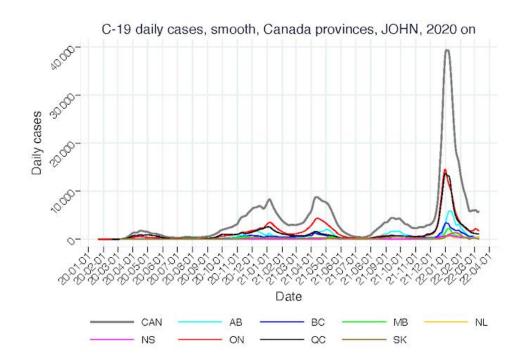
### (3) Canada Provinces Daily reported deaths, JOHN, 2022



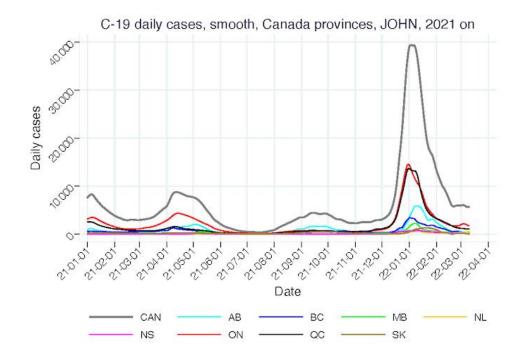
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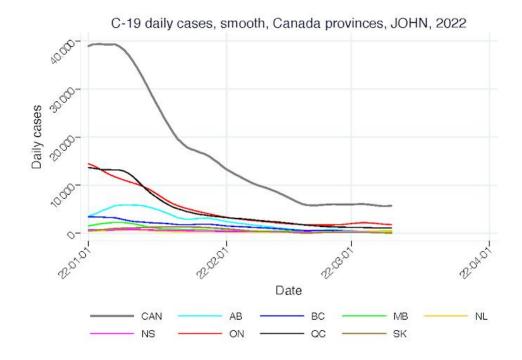
### (5) Canada Provinces Daily reported cases, JOHN, 2020 on



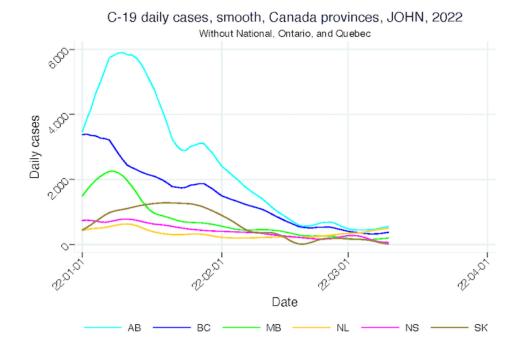
### (6) Canada Provinces Daily reported cases, JOHN, 2021 on



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

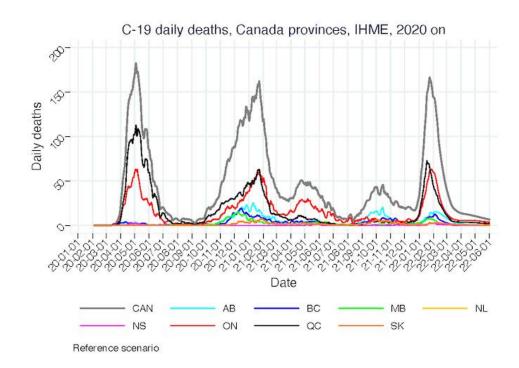


## (8) Canada Provinces <u>Daily reported cases</u>, <u>without National</u>, <u>Ontario</u>, <u>and Quebec</u>, <u>JOHN</u>, <u>2022</u>

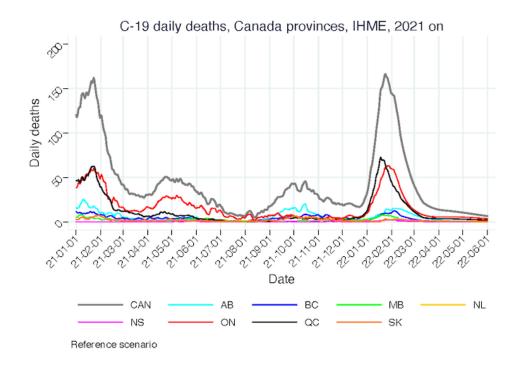


### (b) Models: IHME

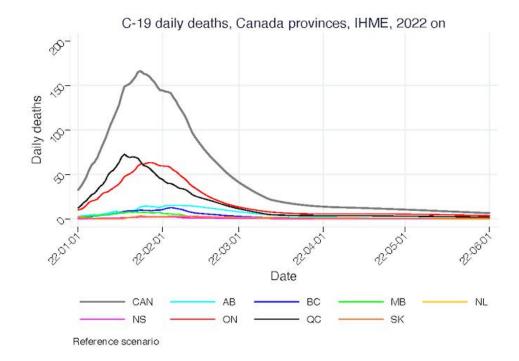
## (9) Canada Provinces Daily deaths, Reference scenario, IHME, 2020 on



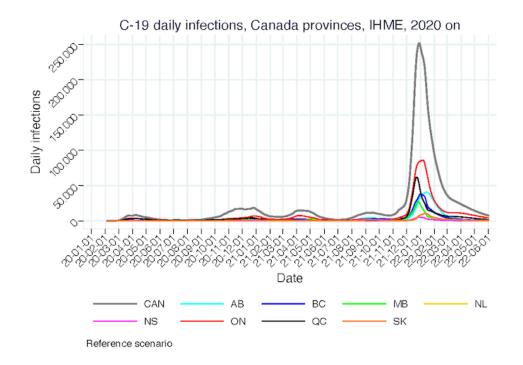
### (10) Canada Provinces Daily deaths, Reference scenario, IHME, 2021 on



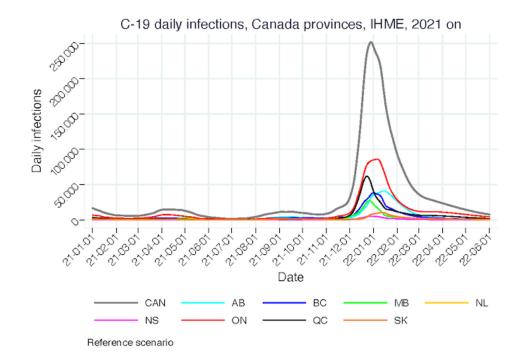
### (11) Canada Provinces Daily deaths, Reference scenario, IHME, 2022



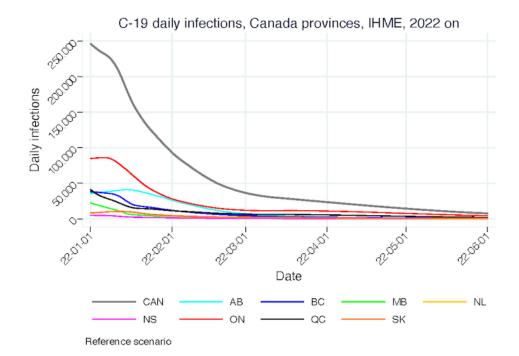
### (12) Canada Provinces Daily infections, Reference scenario, IHME, 2020 on



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

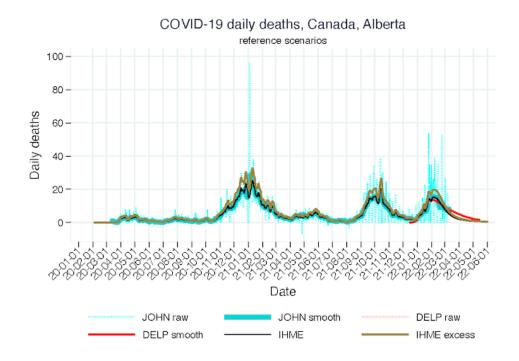


## (14) Canada Provinces <u>Daily infections</u>, <u>Reference scenario</u>, <u>IHME</u>, <u>2022</u>

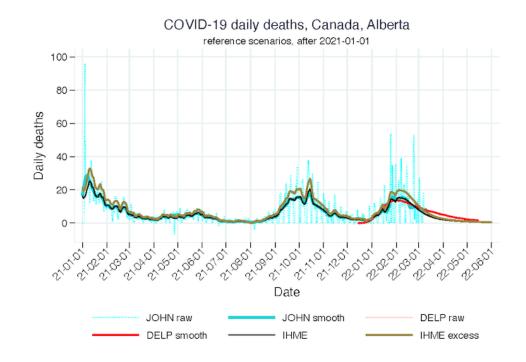


## Selected graphs - Alberta

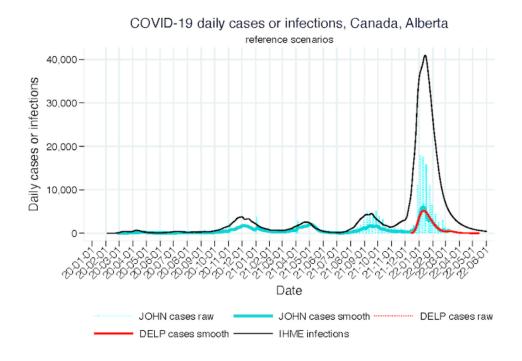
(1) Alberta Daily deaths, Reference scenario, 2020 on



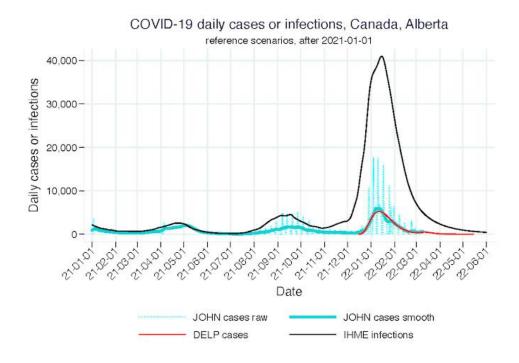
(2) Alberta Daily deaths, Reference scenario, 2021 on



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

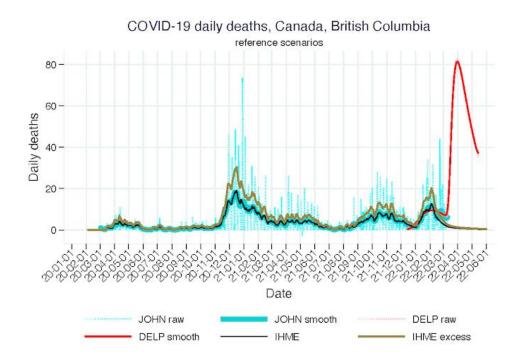


### (4) Alberta Daily cases or infections, Reference scenario, 2021 on

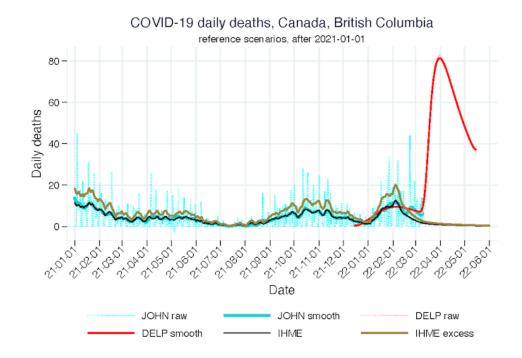


## **Selected graphs - British Columbia**

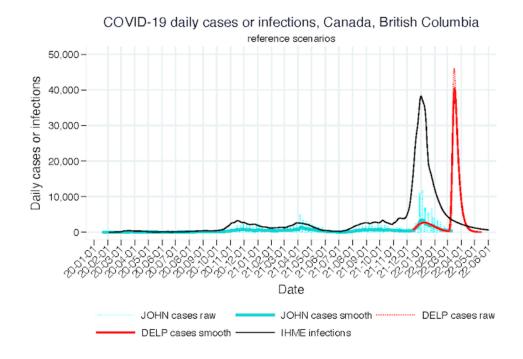
(1) British Columbia Daily deaths, Reference scenario, 2020 on



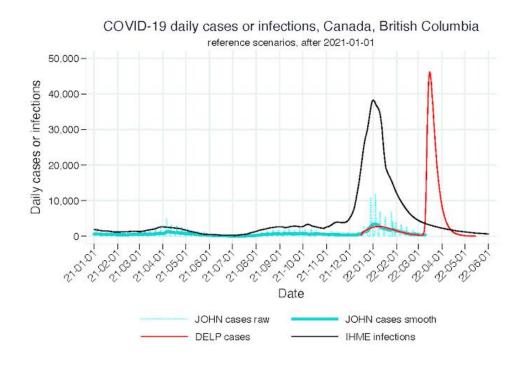
(2) British Columbia Daily deaths, Reference scenario, 2021 on



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

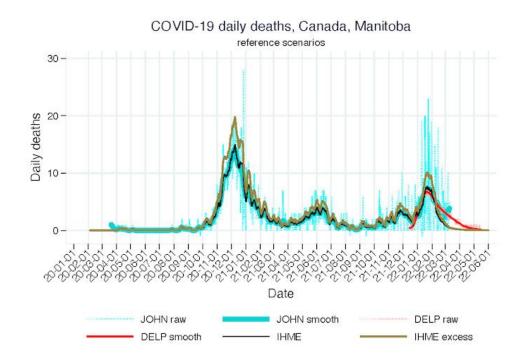


### (4) British Columbia Daily cases or infections, Reference scenario, 2021 on

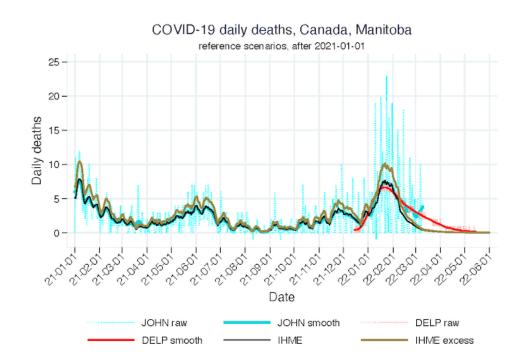


## Selected graphs - Manitoba

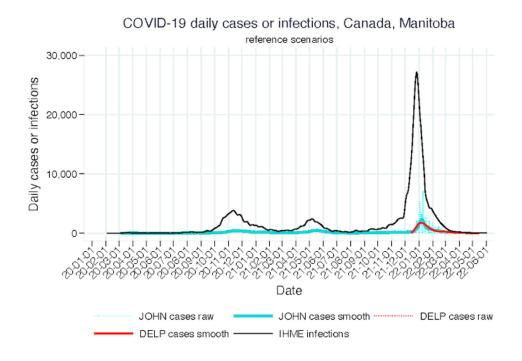
### (1) Manitoba Daily deaths, Reference scenario, 2020 on



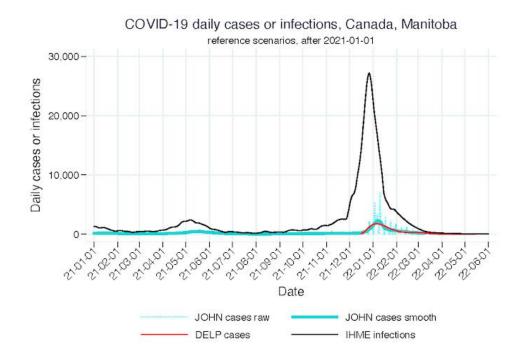
#### (2) Manitoba Daily deaths, Reference scenario, 2021 on



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

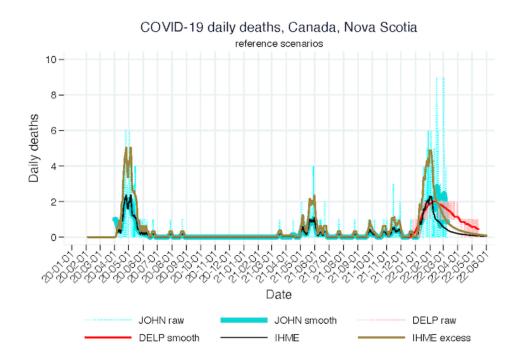


### (4) Manitoba Daily cases or infections, Reference scenario, 2021 on

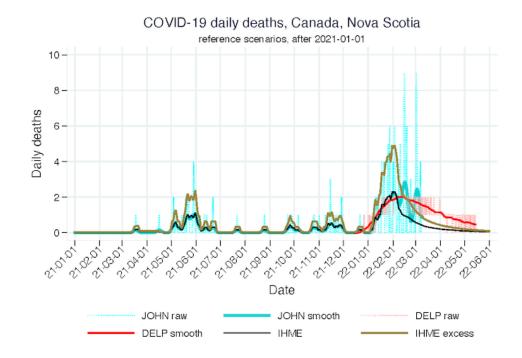


## **Selected graphs - Nova Scotia**

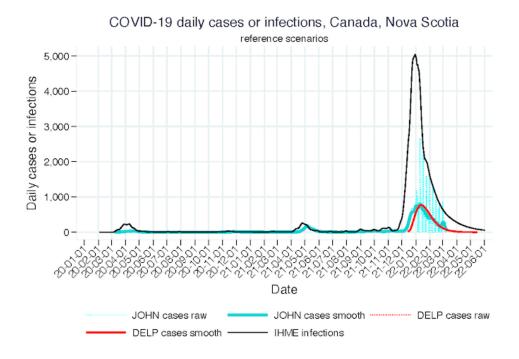
(1) Nova Scotia Daily deaths, Reference scenario, 2020 on



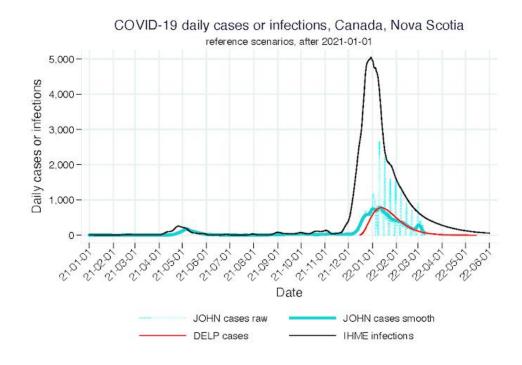
(2) Nova Scotia Daily deaths, Reference scenario, 2021 on



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

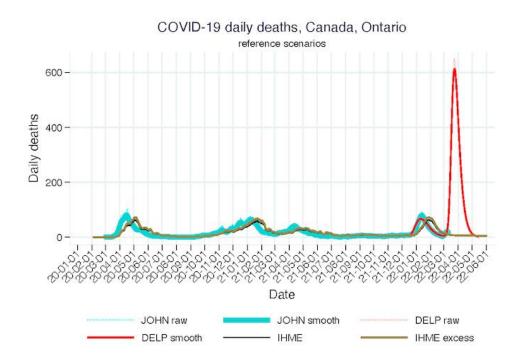


### (4) Nova Scotia Daily cases or infections, Reference scenario, 2021 on

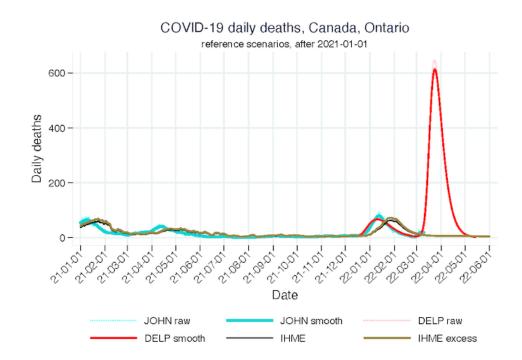


## **Selected graphs - Ontario**

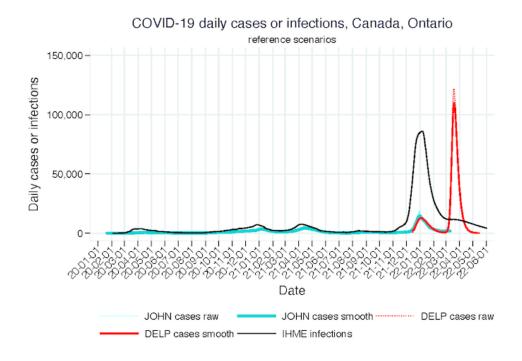
### (1) Ontario Daily deaths, Reference scenario, 2020 on



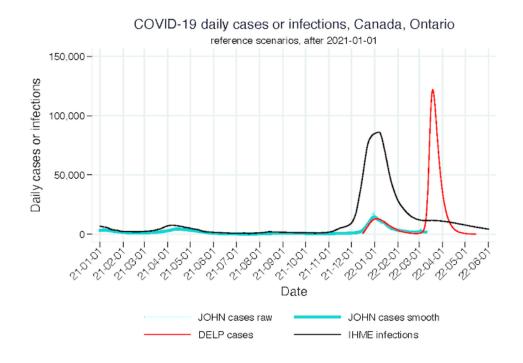
#### (2) Ontario Daily deaths, Reference scenario, 2021 on



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

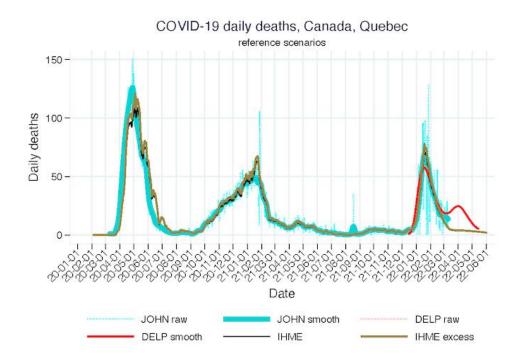


### (4) Ontario Daily cases or infections, Reference scenario, 2021 on

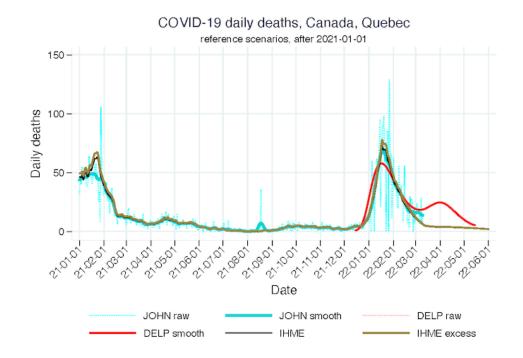


## **Selected graphs - Quebec**

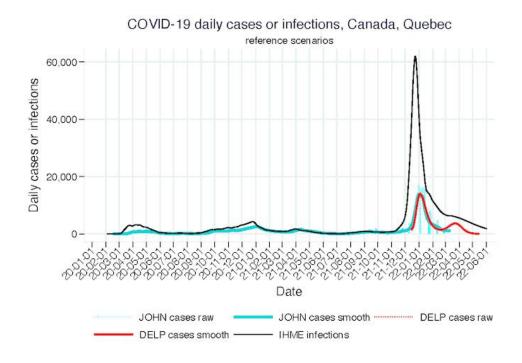
(1) Quebec Daily deaths, Reference scenario, 2020 on



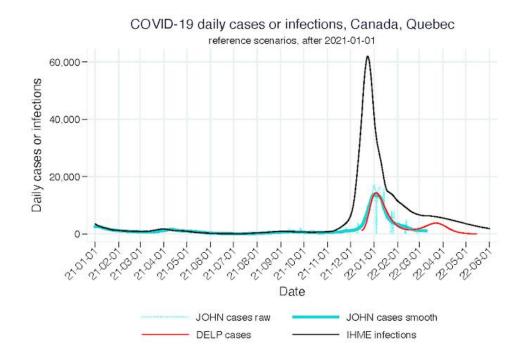
(2) Quebec Daily deaths, Reference scenario, 2021 on



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

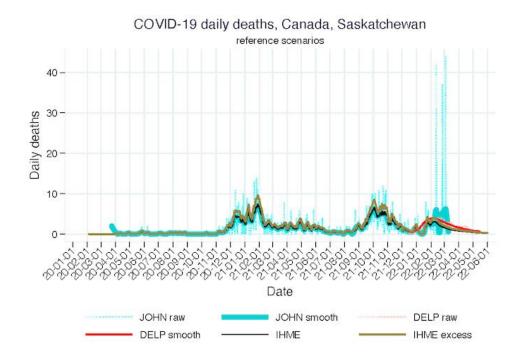


### (4) Quebec Daily cases or infections, Reference scenario, 2021 on

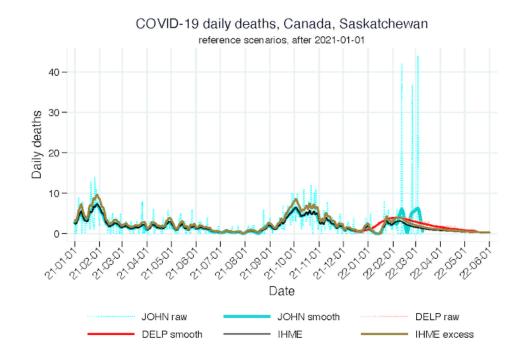


## Selected graphs - Saskatchewan

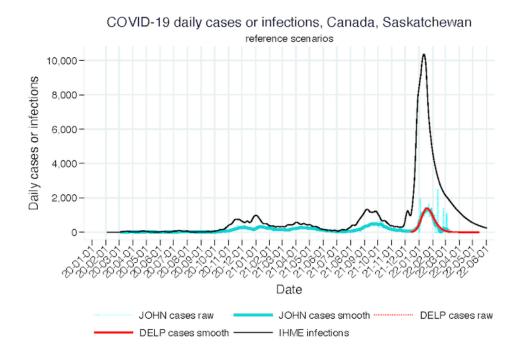
(1) Saskatchewan Daily deaths, Reference scenario, 2020 on



(2) Saskatchewan Daily deaths, Reference scenario, 2021 on



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



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

