

# COVID-19 Data Analytics and Modelling Update

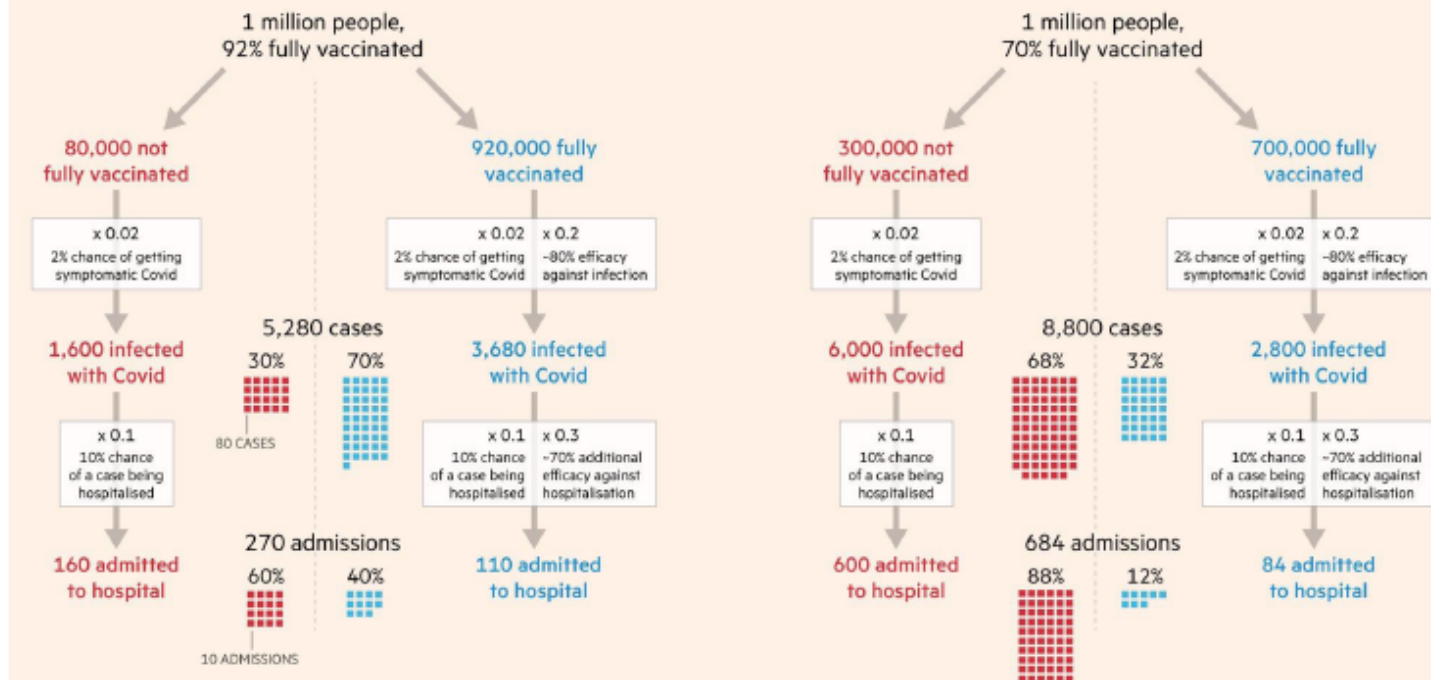
COVID-19 Analytics and Modelling as  
of December 16, 2021

# Fully Vaccinated Hospitalizations Does not mean Vaccines Are Failing

Why a high proportion of double-jabbed people among hospitalisations does not mean the vaccines are failing

When a **very high share of people** are fully vaccinated, a large share of cases and hospitalisations will be double-jabbed people despite the vaccines working very well

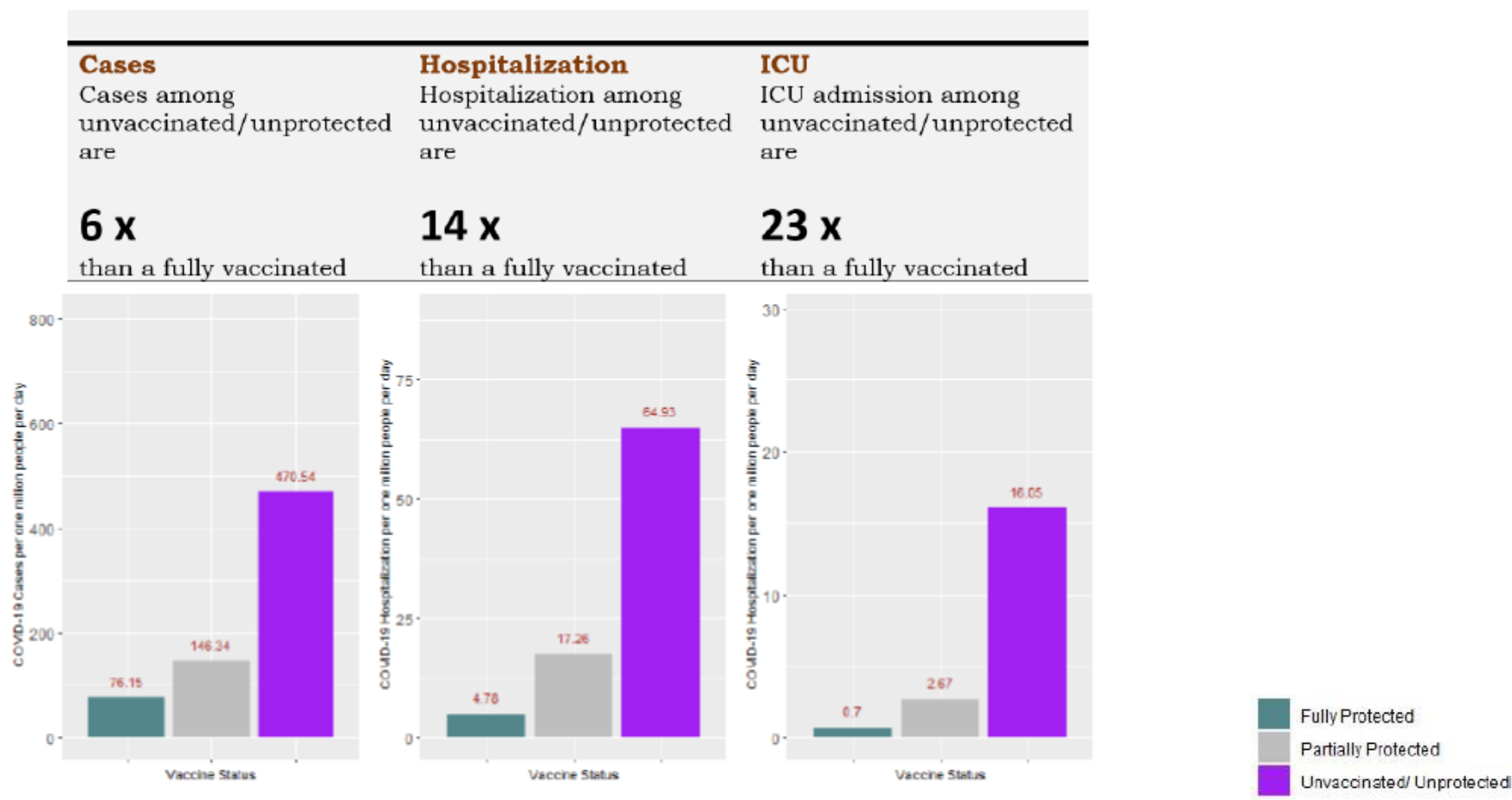
When a **lower share** are fully vaccinated, the double-jabbed are a smaller share of cases and hospitalisations, but far more people end up in hospital overall



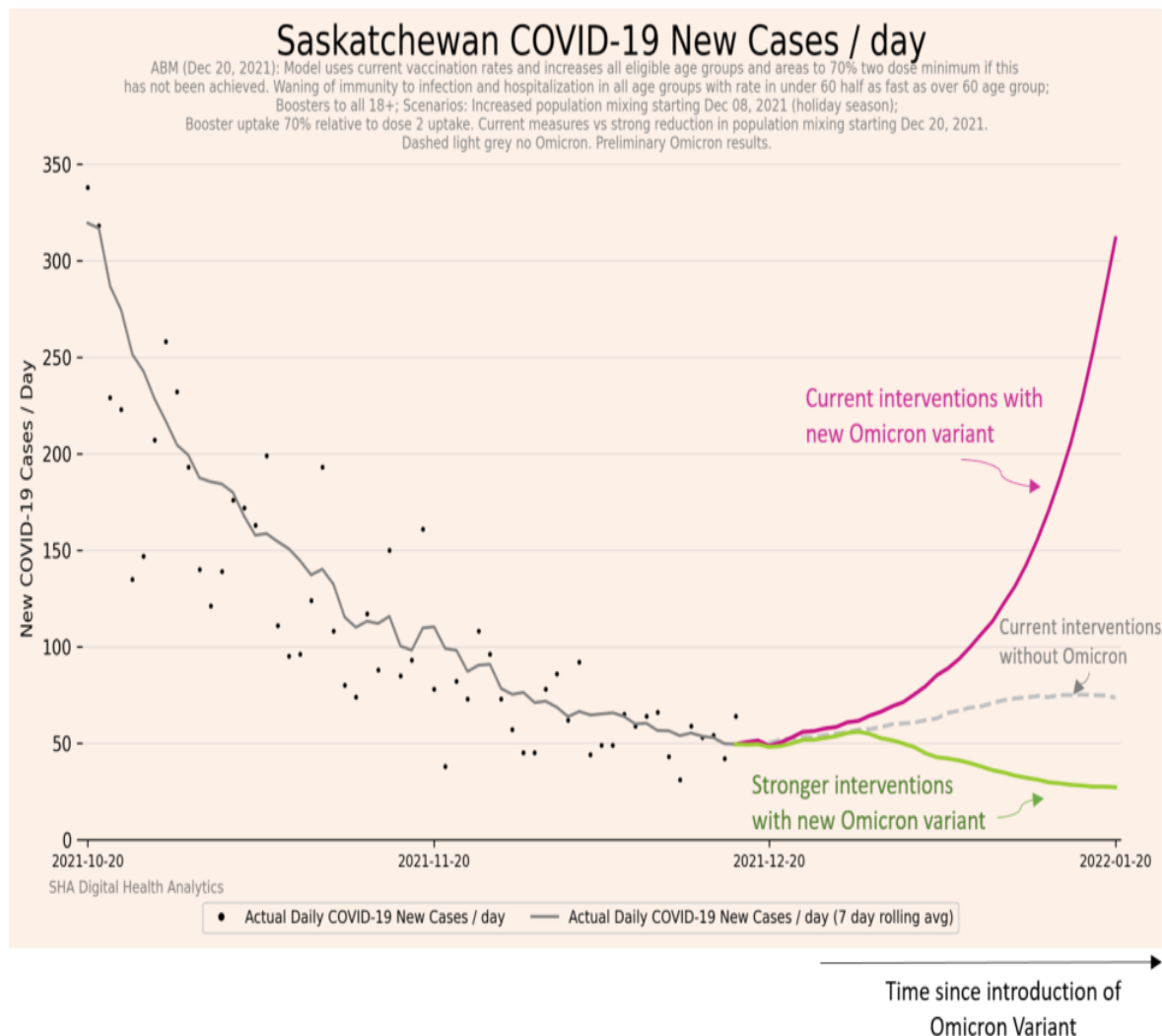
Sources: Left-hand scenario based on vaccination rates for people aged 50+ in England, vaccine efficacy from PHE. Right-hand scenario is hypothetical  
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<https://www.ft.com/content/0f11b219-0f1b-420e-8188-6651d1e749ff>

# Relative Risk with Vaccination – Saskatchewan - Sep 28/21 to Nov 28/21



# Omicron driven cases will increase rapidly without stronger interventions

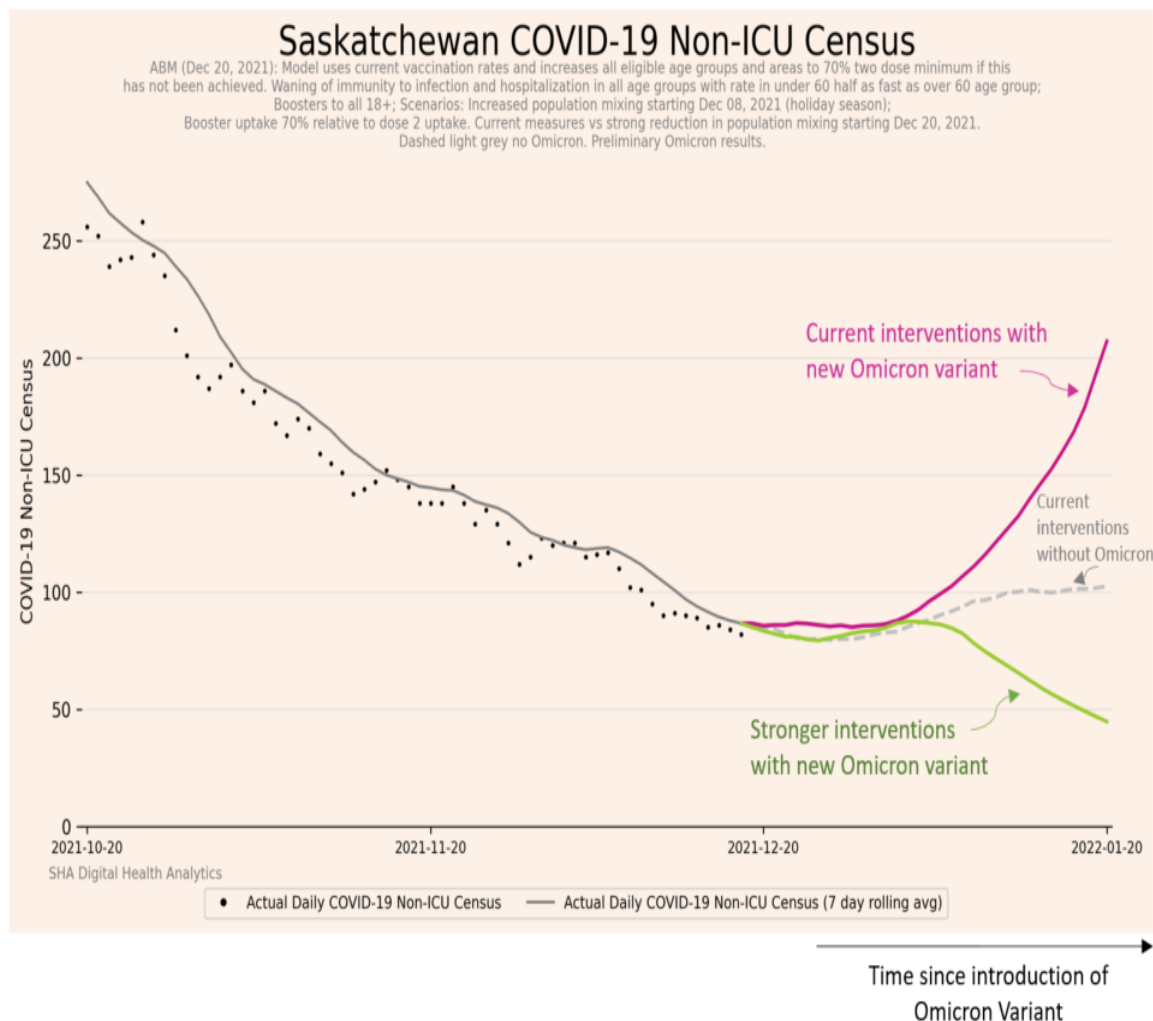


Scenarios include the assumption that the Omicron variant is much more transmissible than Delta, with higher immune escape to prior vaccination or infection. Doubling time ~ 5.2 days:

1. Current public health interventions with Omicron. No changes to population mixing, mask use and proof of vaccination.
2. Stronger public health interventions starting Dec 20, 2021, including reduced population mixing.
3. IF No Omicron – Delta only with current public health interventions.

**Caution:** Very preliminary model scenarios with a lot of uncertainty due to limited evidence, particularly re: severity and hospitalization risk with Omicron.

# Hospitalizations will increase without stronger interventions

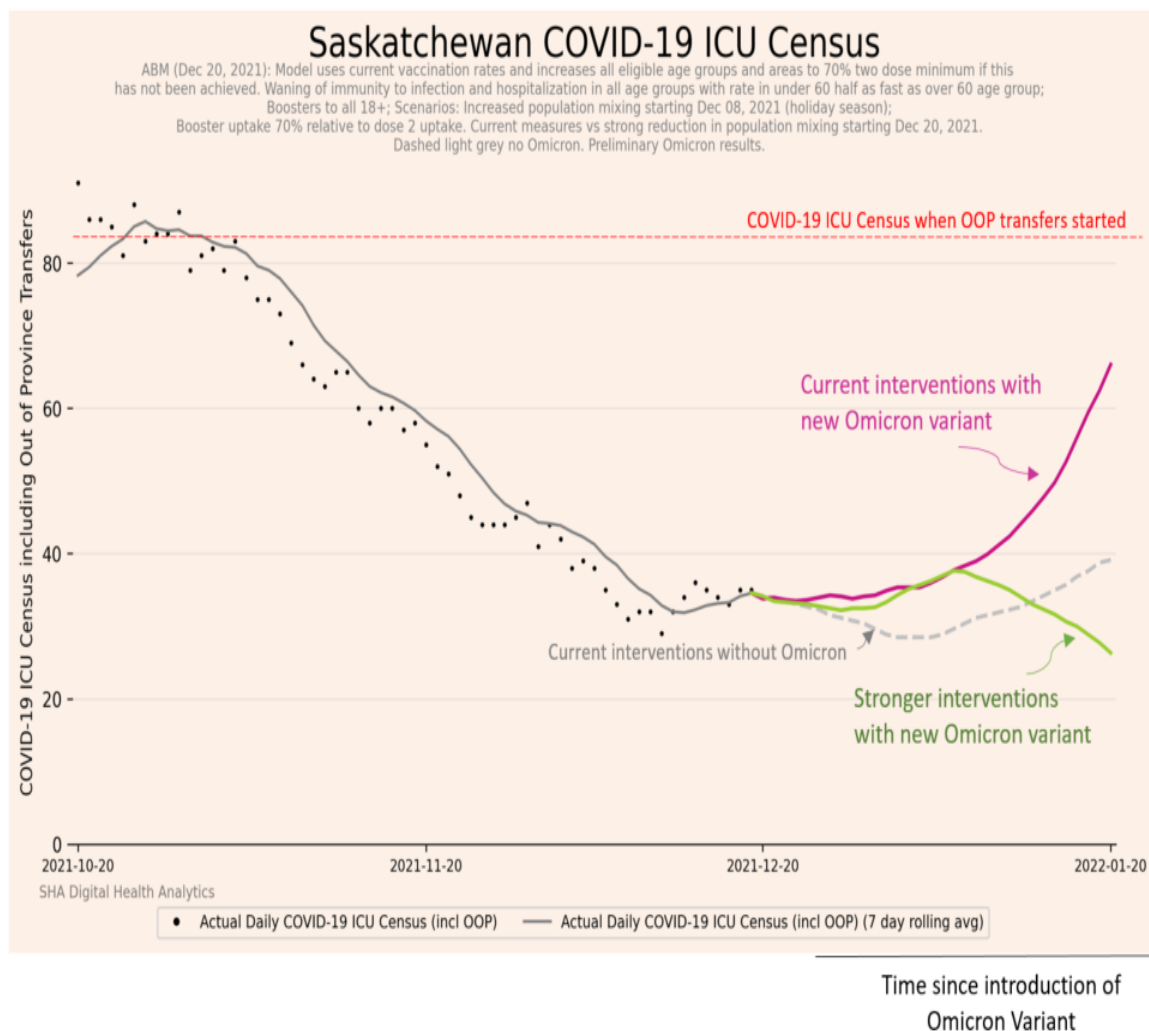


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# May hit max ICU capacity quickly without stronger interventions.



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# **The actions taken by the people of Saskatchewan collectively will determine the outcome.**

Simple measures reduce the risk of infection:

- Get the vaccine and booster as soon as you are eligible to receive it
- Use your best mask whenever you are away from your home
- Physically distance
- Take a rapid test before attending an event
- Stay home with even the mildest symptoms and get tested
- Reduce close contacts and non-essential travel
- Outdoors is better than indoors
- Improve ventilation if receiving visitors at home
- Wash hands/sanitize often

**COVID-19 information is available at [saskatchewan.ca/COVID19](https://saskatchewan.ca/COVID19)**