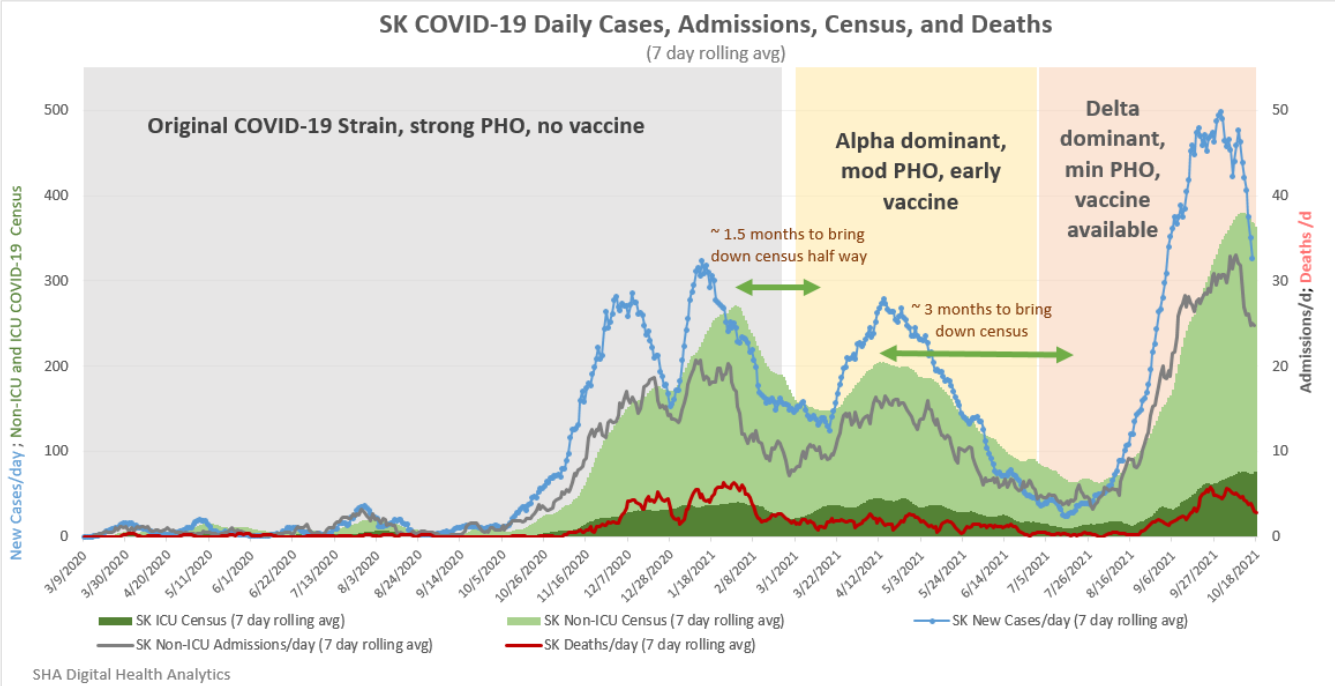


# **SASKATCHEWAN DATA ANALYTICS AND PROJECTIONS**

October 20, 2021

# Progression of COVID-19 in Saskatchewan

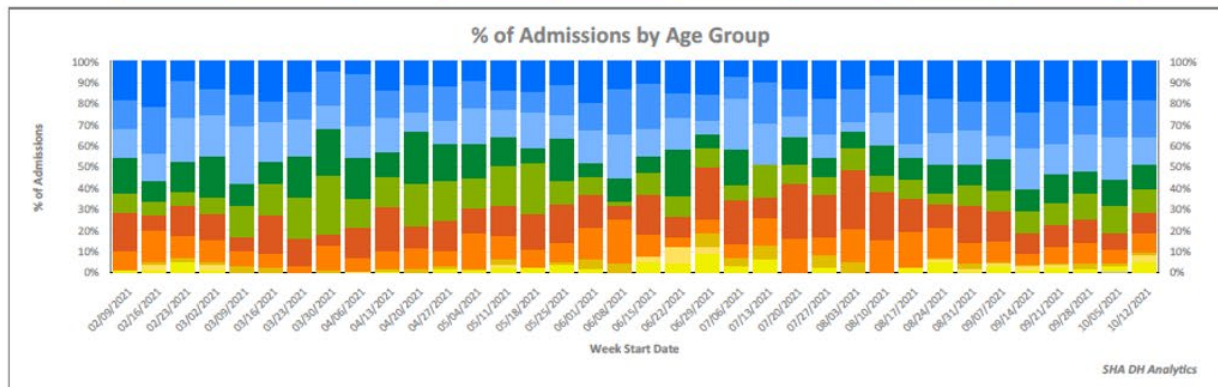
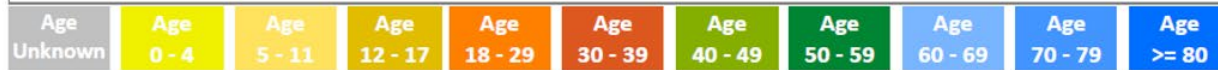
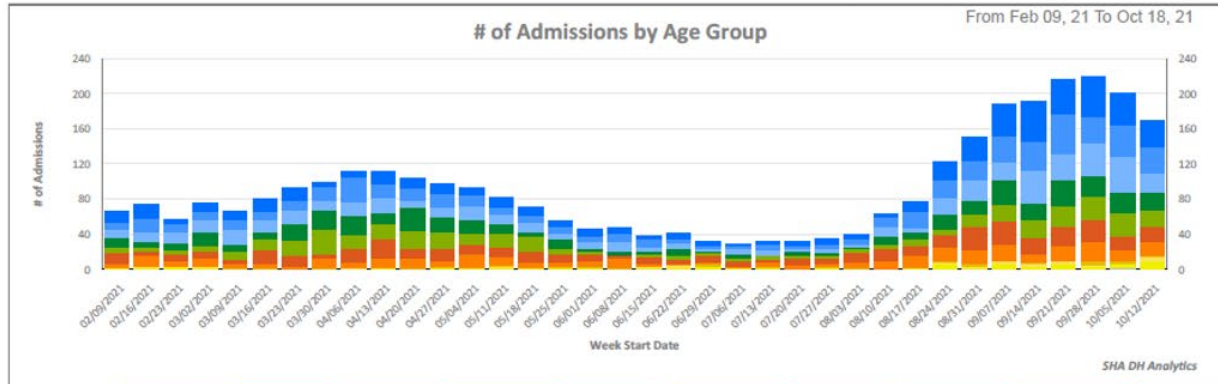


**IF** this is the worst of it,  
**IF** it is decreasing and  
**IF** it only takes 3 months to bring down current census, we will not be back to “normal” until start of 2022

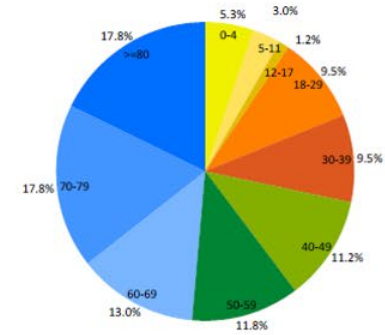
- This translates to:
- ~20,000 surgeries as well as other procedures cancelled
  - Worsening health conditions



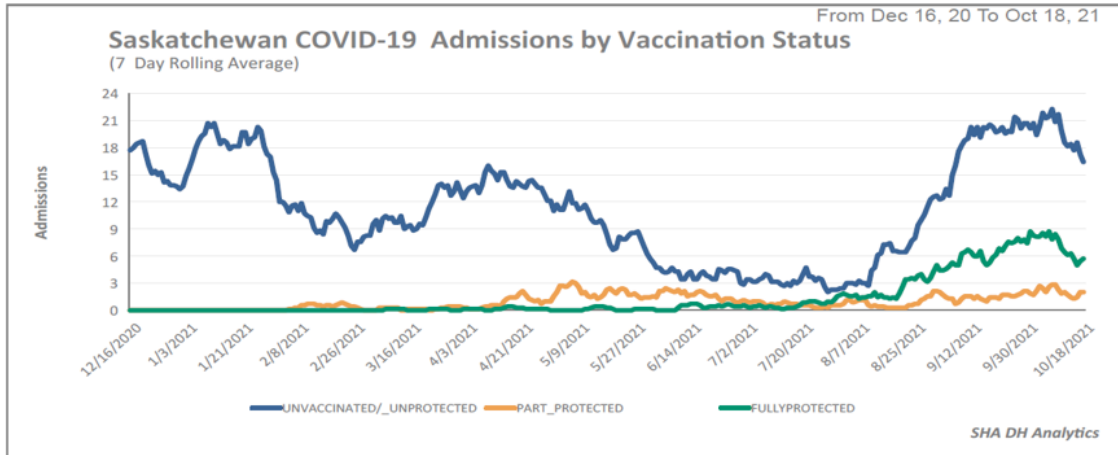
# COVID-19 Admissions by Age group



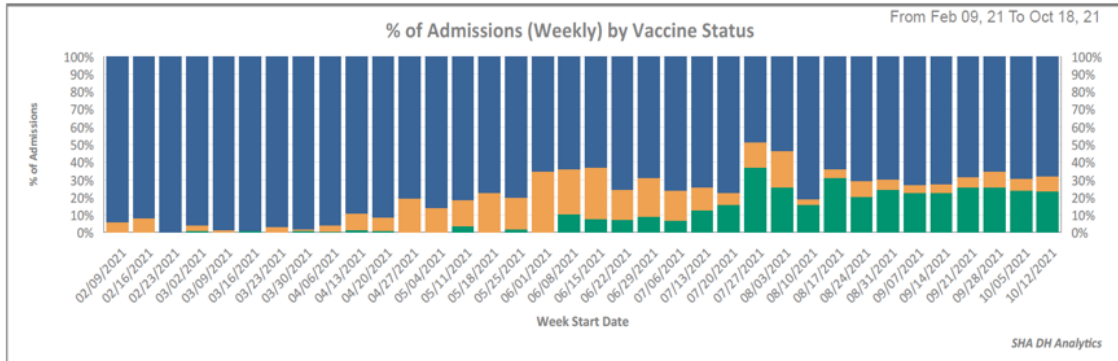
40% admissions < 50 years old



# COVID-19 Admissions by Vaccine Status



|           | Last 7 Days                               |                                     |                                 |
|-----------|---|-------------------------------------|---------------------------------|
|           | Unvaccinated/<br>Unprotected<br>RA 7 Days | Partially<br>Protected RA<br>7 Days | FULLY<br>PROTECTED<br>RA 7 Days |
| 12-Oct-21 | 18.57                                     | 2.00                                | 6.43                            |
| 13-Oct-21 | 18.14                                     | 1.71                                | 6.14                            |
| 14-Oct-21 | 18.43                                     | 1.43                                | 6.29                            |
| 15-Oct-21 | 17.71                                     | 1.29                                | 5.71                            |
| 16-Oct-21 | 18.57                                     | 1.43                                | 5.00                            |
| 17-Oct-21 | 17.29                                     | 2.00                                | 5.43                            |
| 18-Oct-21 | 16.43                                     | 2.00                                | 5.71                            |



| Week Start Date | Last 7 Weeks                 |       |                        |      |                 |       |
|-----------------|------------------------------|-------|------------------------|------|-----------------|-------|
|                 | Unvaccinated/<br>Unprotected |       | Partially<br>Protected |      | Fully Protected |       |
|                 | #                            | %     | #                      | %    | #               | %     |
| 8/31/2021       | 105                          | 69.5% | 9                      | 6.0% | 37              | 24.5% |
| 9/7/2021        | 136                          | 72.7% | 9                      | 4.8% | 42              | 22.5% |
| 9/14/2021       | 138                          | 72.3% | 10                     | 5.2% | 43              | 22.5% |
| 9/21/2021       | 148                          | 68.5% | 12                     | 5.6% | 56              | 25.9% |
| 9/28/2021       | 143                          | 65.3% | 19                     | 8.7% | 57              | 26.0% |
| 10/5/2021       | 139                          | 69.5% | 13                     | 6.5% | 48              | 24.0% |
| 10/12/2021      | 115                          | 68.0% | 14                     | 8.3% | 40              | 23.7% |

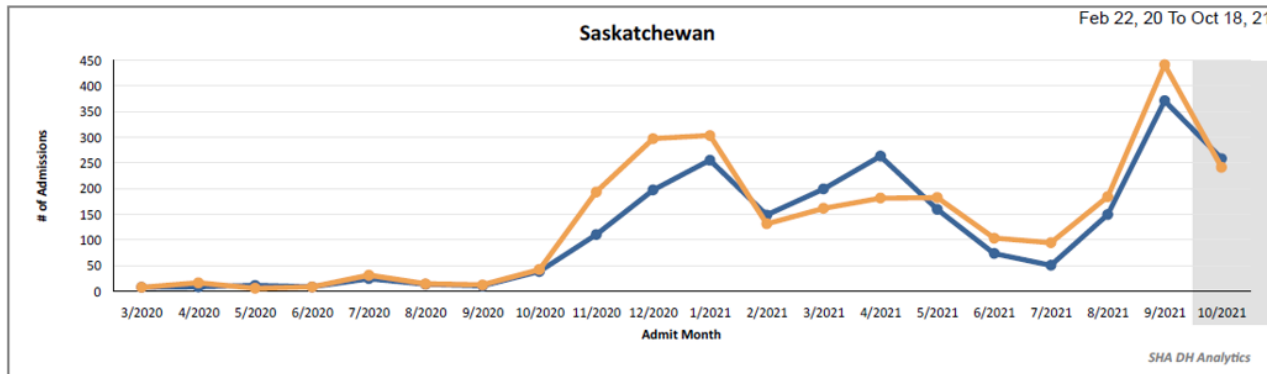
Unvaccinated/ Unprotected

Partially Protected

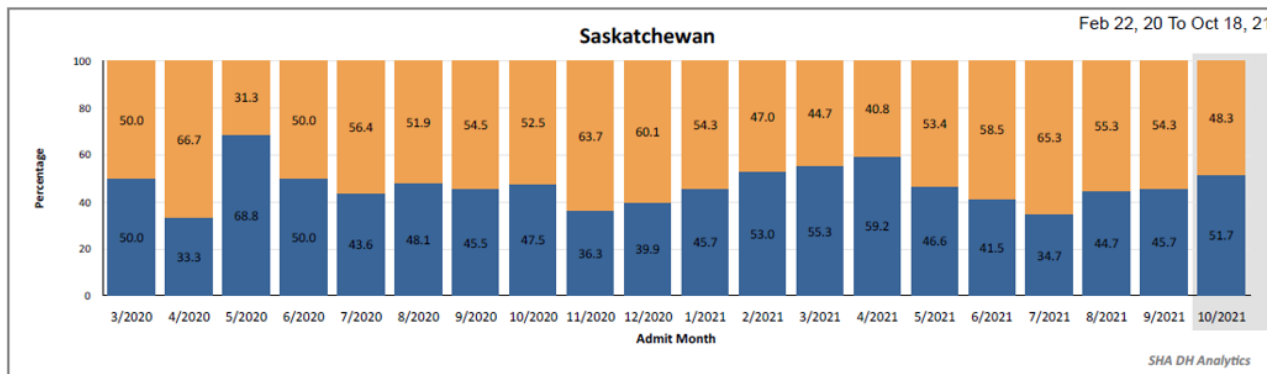
Fully Protected



# First Positive COVID-19 Test on Admission to Hospital – Saskatchewan



48.3% of all COVID-19 admissions during October had their first positive COVID-19 test on or after admission to hospital.



Tested Positive ON or AFTER admission

Tested Positive BEFORE admission

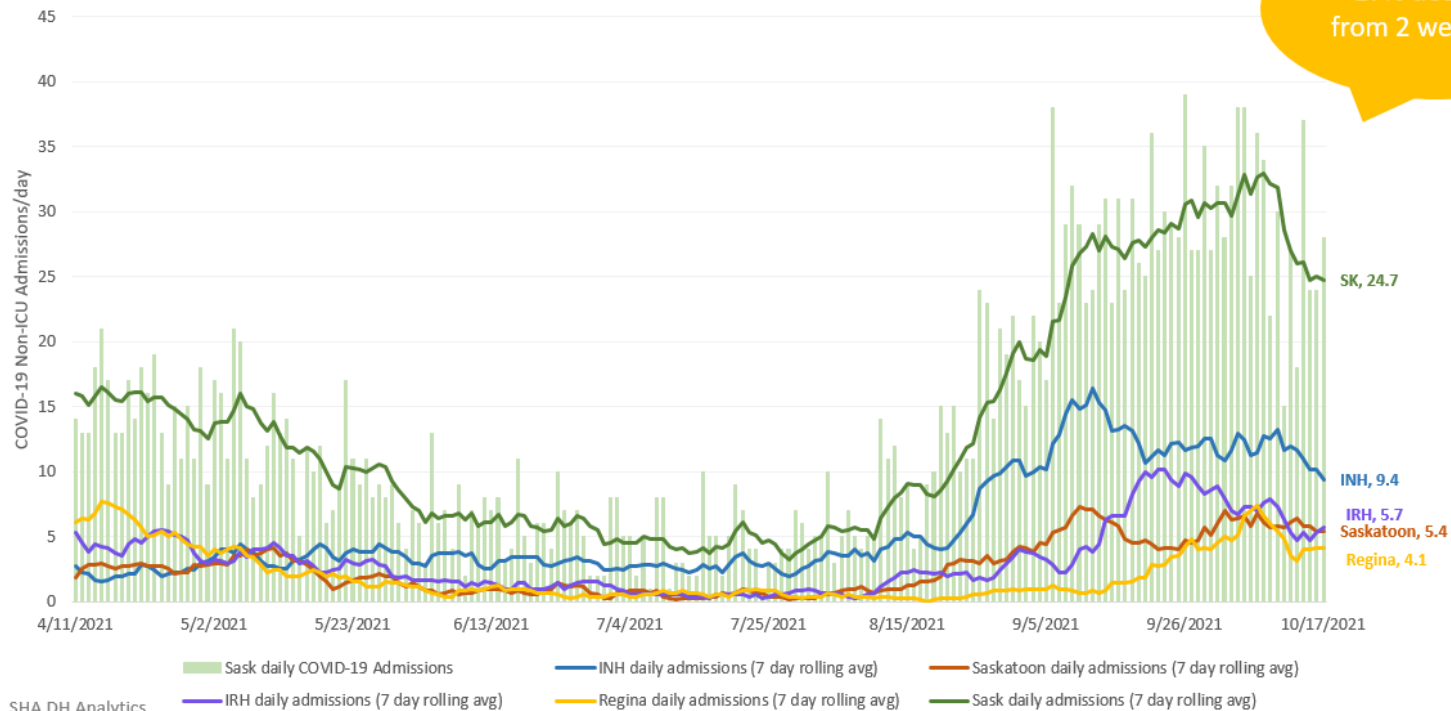
Note: - Shows all EOC (Episode of Care) Admissions before or on/after the 1st date tested positive.

Digital Health Analytics; Data source: RRPL, ADT, Panorama



# Daily COVID-19 Hospital Admissions

COVID-19 Non-ICU Admissions per day  
(7 day rolling average)



SHA DH Analytics

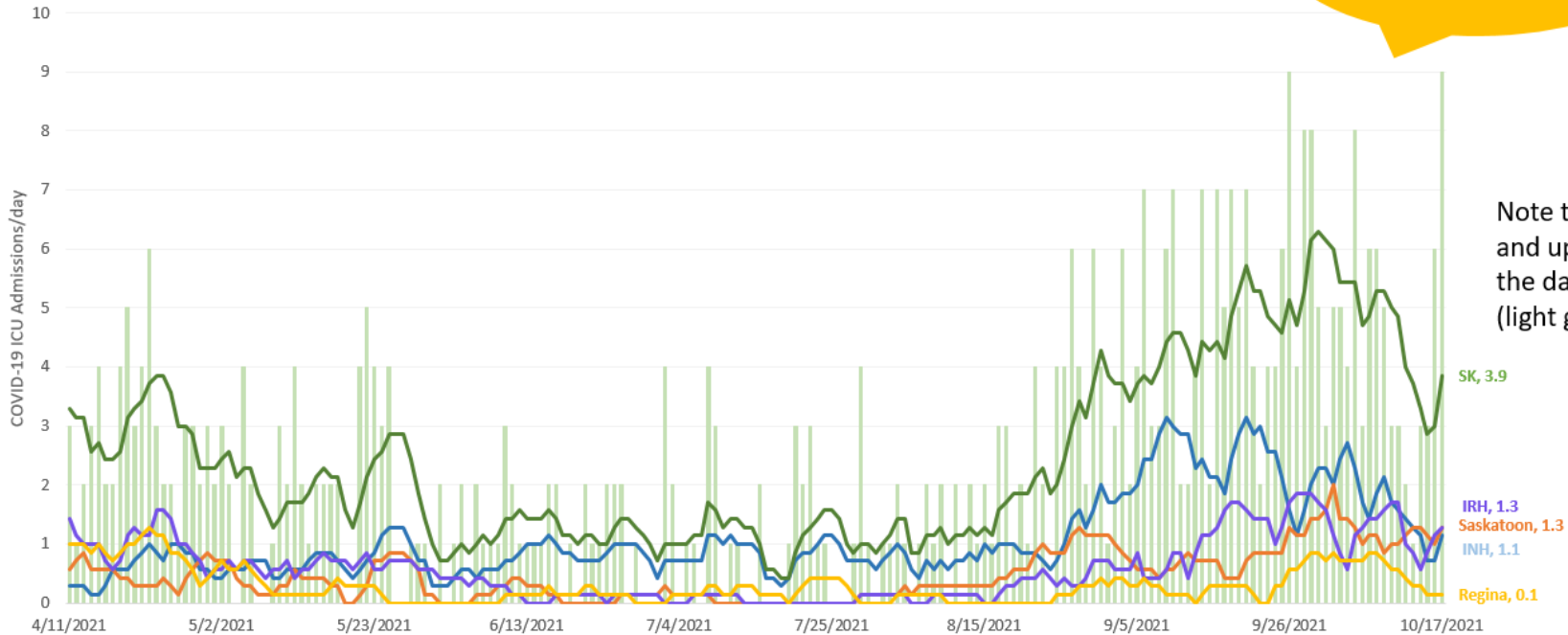
Digital Health Analytics; Data source: RRPL, ADT, Panorama;



# Daily COVID-19 ICU Admissions

COVID-19 ICU Admissions per day  
(7 day rolling average)

28% decrease  
from 2 weeks ago



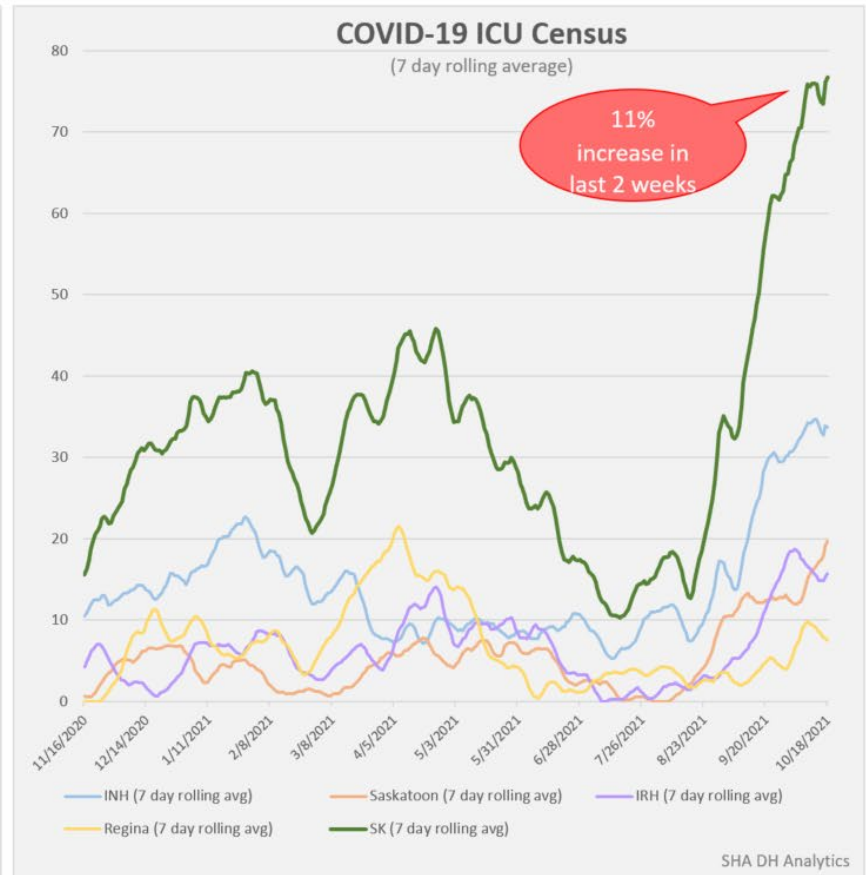
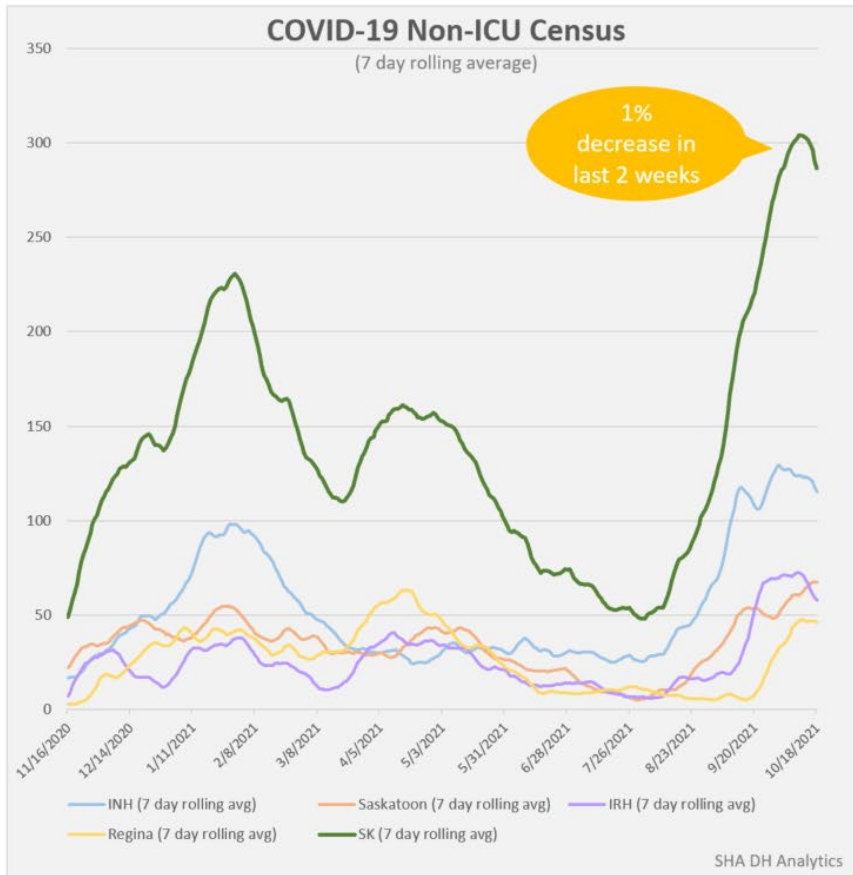
Note the variation and upward trend in the daily numbers (light green bars)

SHA DH Analytics

■ Sask daily COVID-19 Admissions  
— INH daily admissions (7 day rolling avg)  
— Saskatoon daily admissions (7 day rolling avg)  
— IRH daily admissions (7 day rolling avg)  
— Regina daily admissions (7 day rolling avg)  
— Sask daily admissions (7 day rolling avg)



# COVID-19 Non-ICU and ICU Census

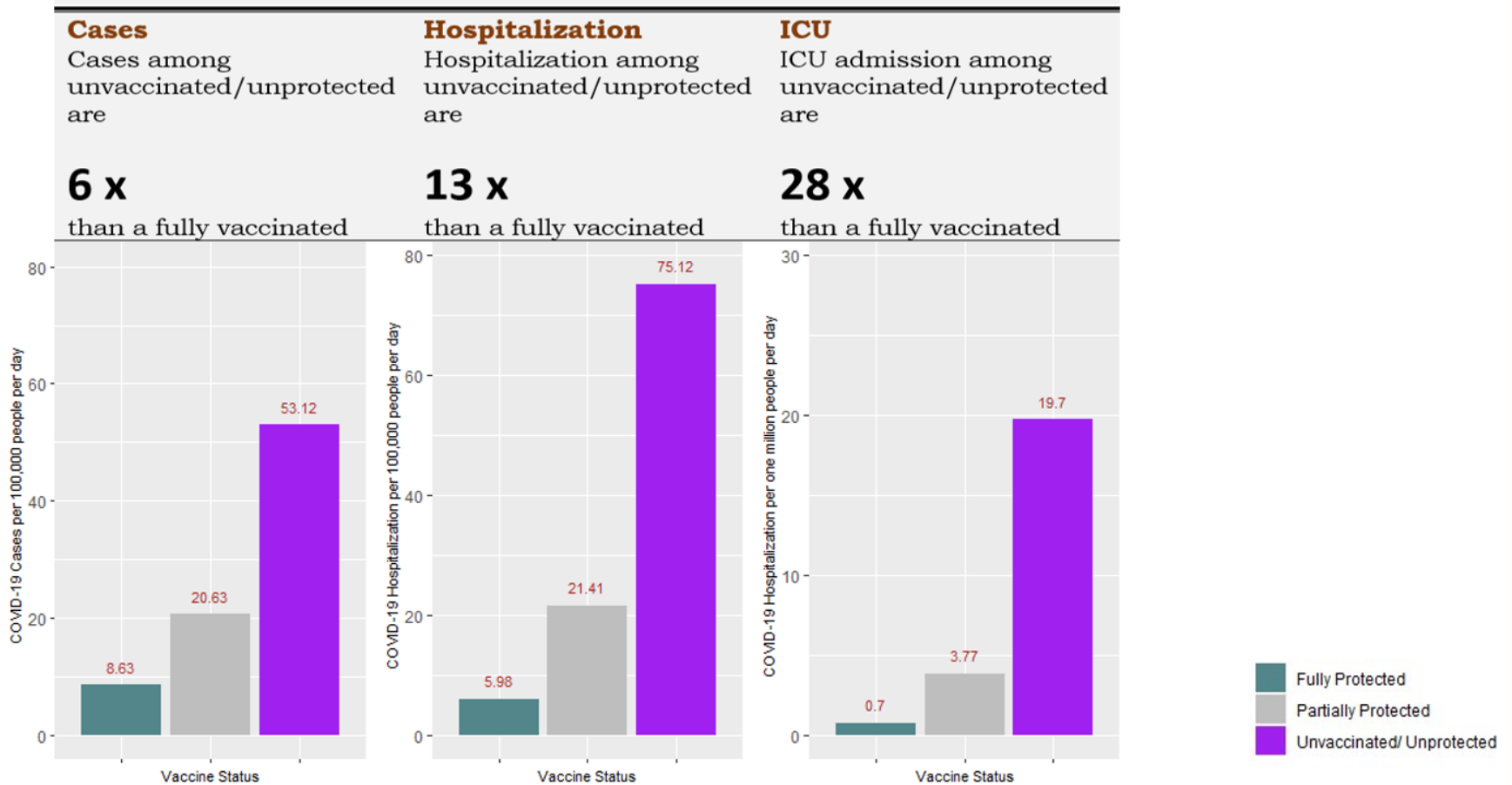


Digital Health Analytics. Data source: ADT, RRPL. Based on where patient resides, not admitted. Census represents all COVID patients on a given day, including admissions and discharges; it is not a point in time census. Out of province patients not included.

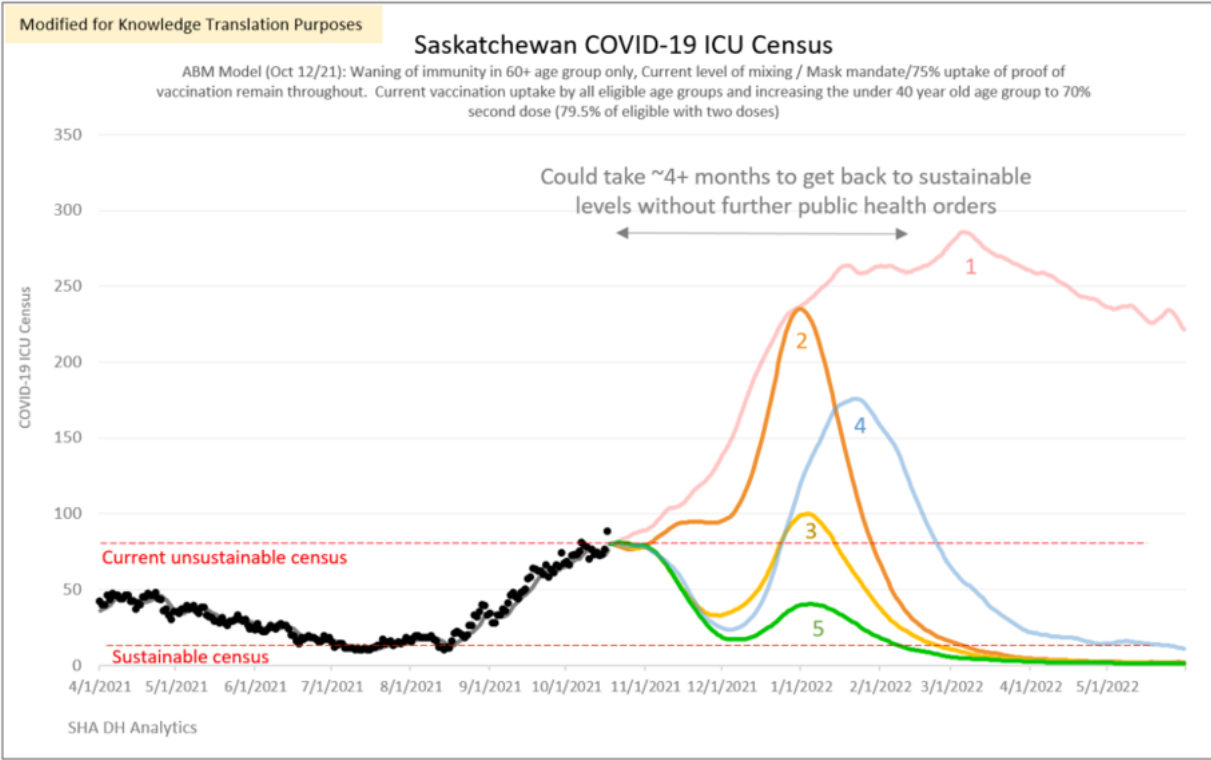




# Relative Risk with Vaccination – Saskatchewan - Aug13/21 to Sep 13/21



# Modelling Scenarios – Saskatchewan



- Scenarios
1. Current behaviour, no boosters (Oct 5 modelling results)
  2. Current behaviour, boosters to 60+ age group (6 months after 2<sup>nd</sup> dose)
  3. 14 day mixing reduction, boosters to 60+ age group (6 months after 2<sup>nd</sup> dose)
  4. 28 day mixing reduction, then “normal” mixing after, boosters to 60+ age group (6 months after 2<sup>nd</sup> dose)
  5. 28 day mixing reduction, boosters to 60+ age group (6 months after 2<sup>nd</sup> dose)
- Actual daily COVID ICU Census with 7 day rolling average line

**Continue current state scenario (#2):**

- Current mixing behaviour; Boosters given to 60+ age group

**Decreased Population Mixing on Oct 15, 2021 (14 days (#3) vs 28 days (#5))**

- Further reduction in how much people are in contact with each other (not a lockdown).
- Could include combination of: private and public gathering limits, capacity limits and work from home.
- Boosters given to 60+ age group

*With this level of waning:*

- *Decreased mixing scenarios, ideally 28 days, brings down census faster (ie: less COVID cases, hospitalizations & deaths) and to sustainable levels earlier (ie: less cancelled surgeries)*
  - *Note: Benefit is lost if population mixing increases more than current levels after 28 day mixing reduction (# 4)*
  - *Need to go back to current mixing levels and keep mask mandate and POV after 28 day mixing reduction (#5)*
- *Rate of waning evidence still evolving with a lot of uncertainty. Modeling scenarios with slower waning has gradual declining, but still requires ~ 4 months to get to sustainable census if no further reduction in mixing.*

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

**Simple measures reduce the risk of infection:**

- **Mask in all public spaces**
- **Reduce close contacts**
- **Outdoors is better than indoors**
- **Wash your hands often**
- **Stay home with even the mildest symptoms and get tested**
- **Get fully vaccinated as soon as you are eligible**

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