


Project:

Impact of Vaccination on Covid-19 in Canada

Tools Used: Python, PowerBI






- > ☐  date
- ☐ Σ hosp_patients_per_million
- ☐ Σ icu_patients_per_million
- ☐ location
- ☐ Σ new_cases
- ☐ Σ new_cases_per_million
- ☐ Σ new_deaths
- ☐ Σ new_deaths_per_million
- ☐ Σ new_tests
- ☐ Σ new_tests_per_thousand
- ☐ Σ new_vaccinations
- ☐ Σ people_fully_vaccinated
- ☐ Σ people_fully_vaccinated_per_hundred
- ☐ Σ people_vaccinated
- ☐ Σ people_vaccinated_per_hundred
- ☐ Σ positive_rate
- ☐ Σ tests_per_case
- ☐ Σ total_boosters
- ☐ Σ total_boosters_per_hundred
- ☐ Σ total_cases
- ☐ Σ total_cases_per_million
- ☐ Σ total_deaths
- ☐ Σ total_deaths_per_million
- ☐ Σ total_tests

Agenda

Coronavirus Pandemic (COVID-19)

Research and data: Edouard Mathieu, Hannah Ritchie, Lucas Rod s-Guirao, Cameron Appel, Daniel Gavrilov, Charlie Giattino, Joe Hasell, Bobbie Macdonald, Saloni Dattani, Diana Beltekian, Esteban Ortiz-Ospina, and Max Roser

 The data on the coronavirus pandemic is updated daily. Last update: 16 hours ago.  [Reuse our work freely](#)  [Cite this research](#)

Coronavirus > **By country** Data explorer Deaths Cases Tests Hospitalizations Vaccinations Mortality risk Excess mortality Policy responses



Explore all metrics – including cases, deaths, testing, and vaccinations – in one place.



Get an overview of the pandemic for any country on a single page.

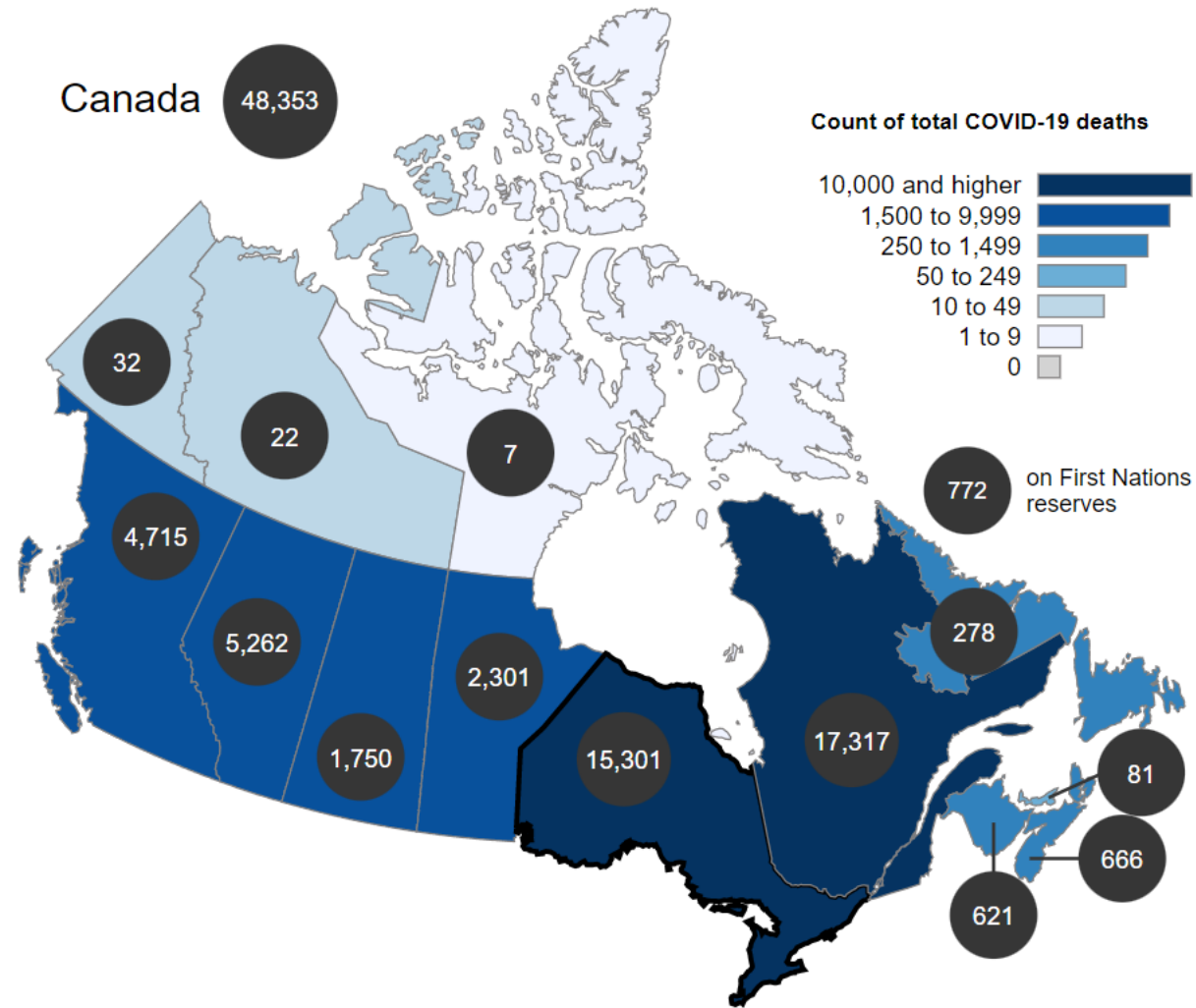


Download our complete dataset of COVID-19 metrics on GitHub. It's open access and free for anyone to use.

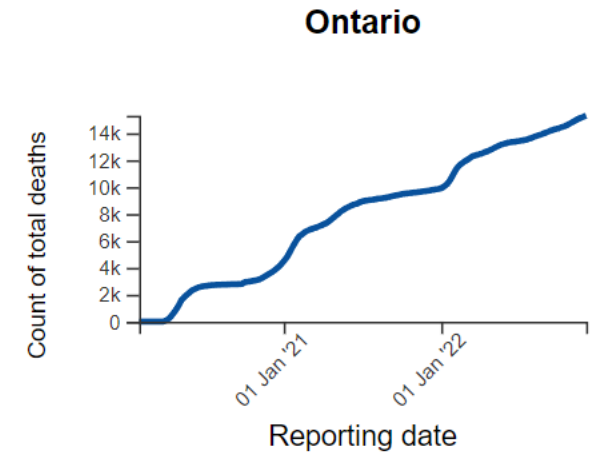


Explore our global dataset on COVID-19 vaccinations.

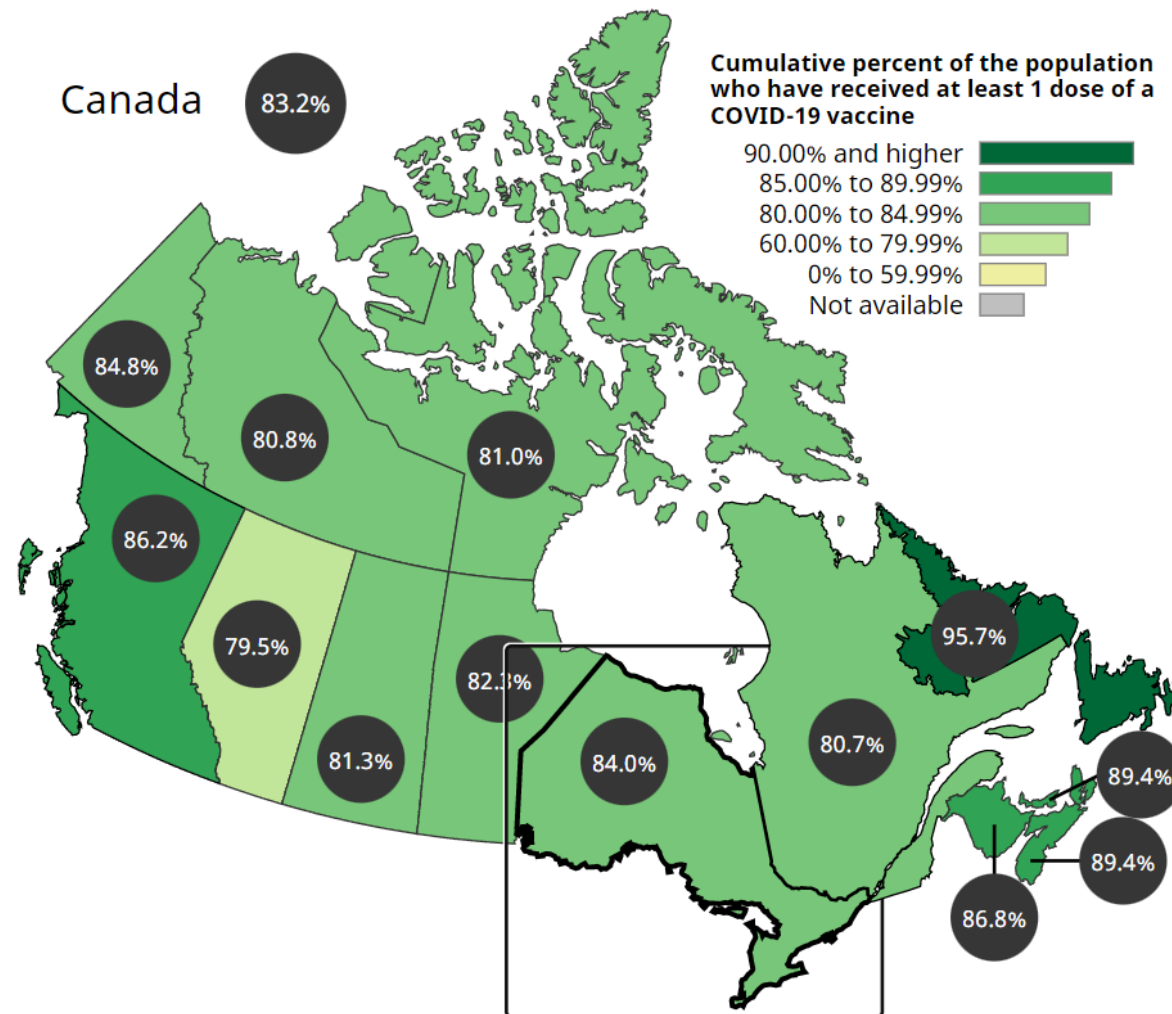
- 1. Impact of vaccination and booster doses on COVID-19 related hospitalization and deaths**
- 2. Relation between testing and positive cases found**



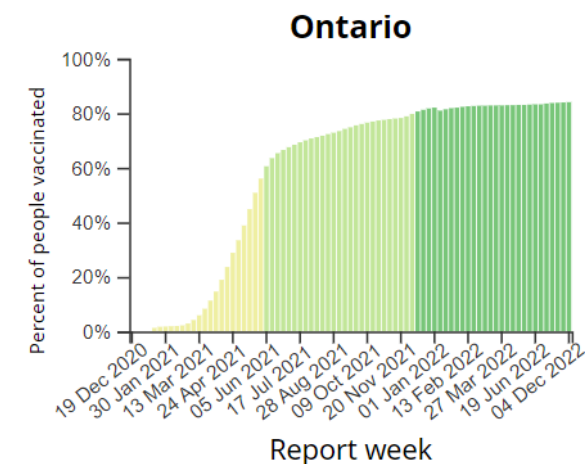
The count of total deaths of COVID-19 of COVID-19 in **Ontario** was **15,301** as of December 3, 2022.



Total Deaths- 48,353



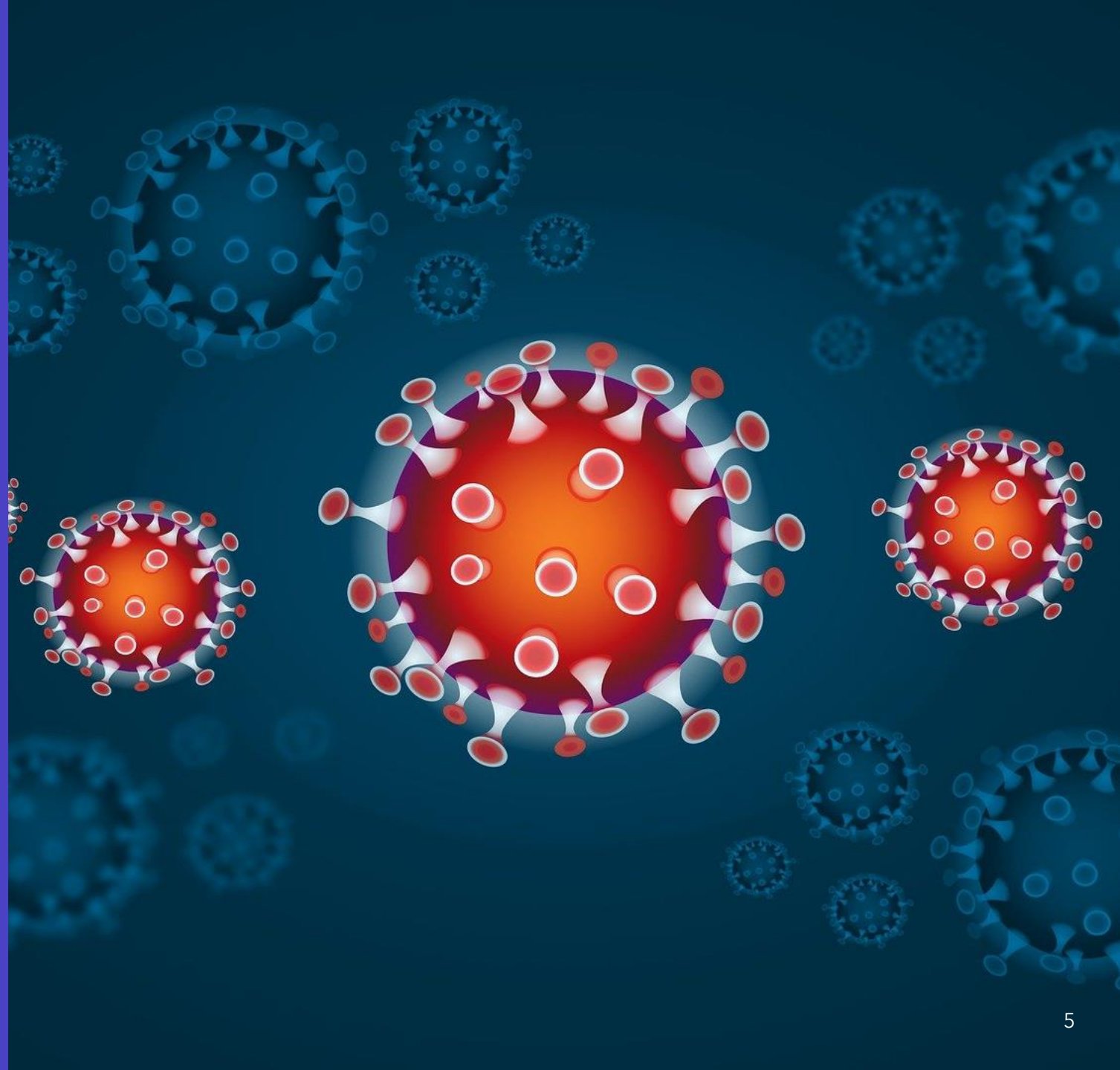
The cumulative percent of people who have received **at least 1 dose** of a COVID-19 vaccine in **Ontario** was **84.0%** as of December 4, 2022.



Percentage of Population vaccinated- 83.2%

Covid-19 cases vs related death vs total testing

Line and Bar Charts across time to
compare impact of testing on
finding new cases and thus to find
any impact on total death.

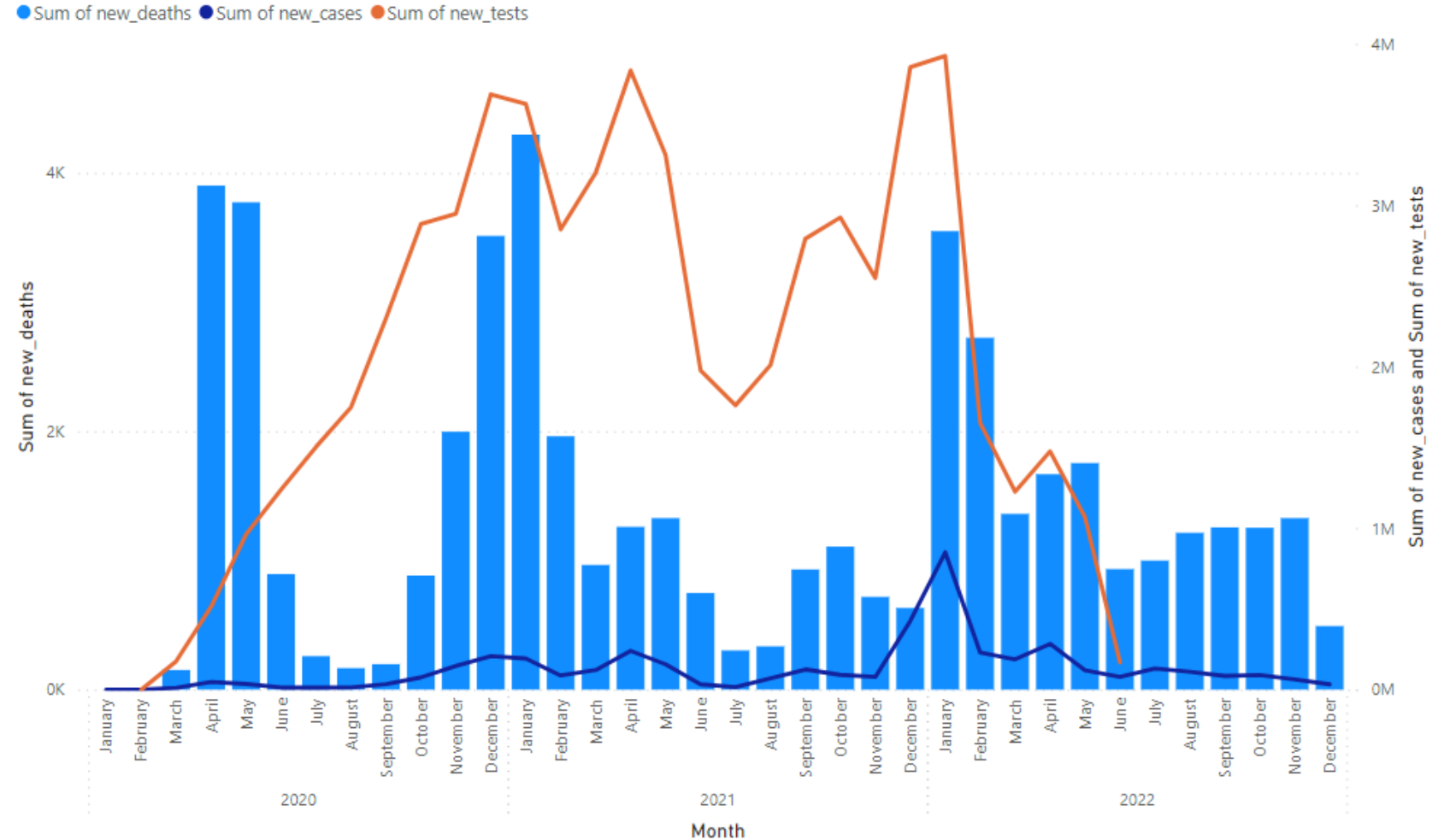


Chart

We can see 3 big waves of high mortality, peaking in January since the virus was first found

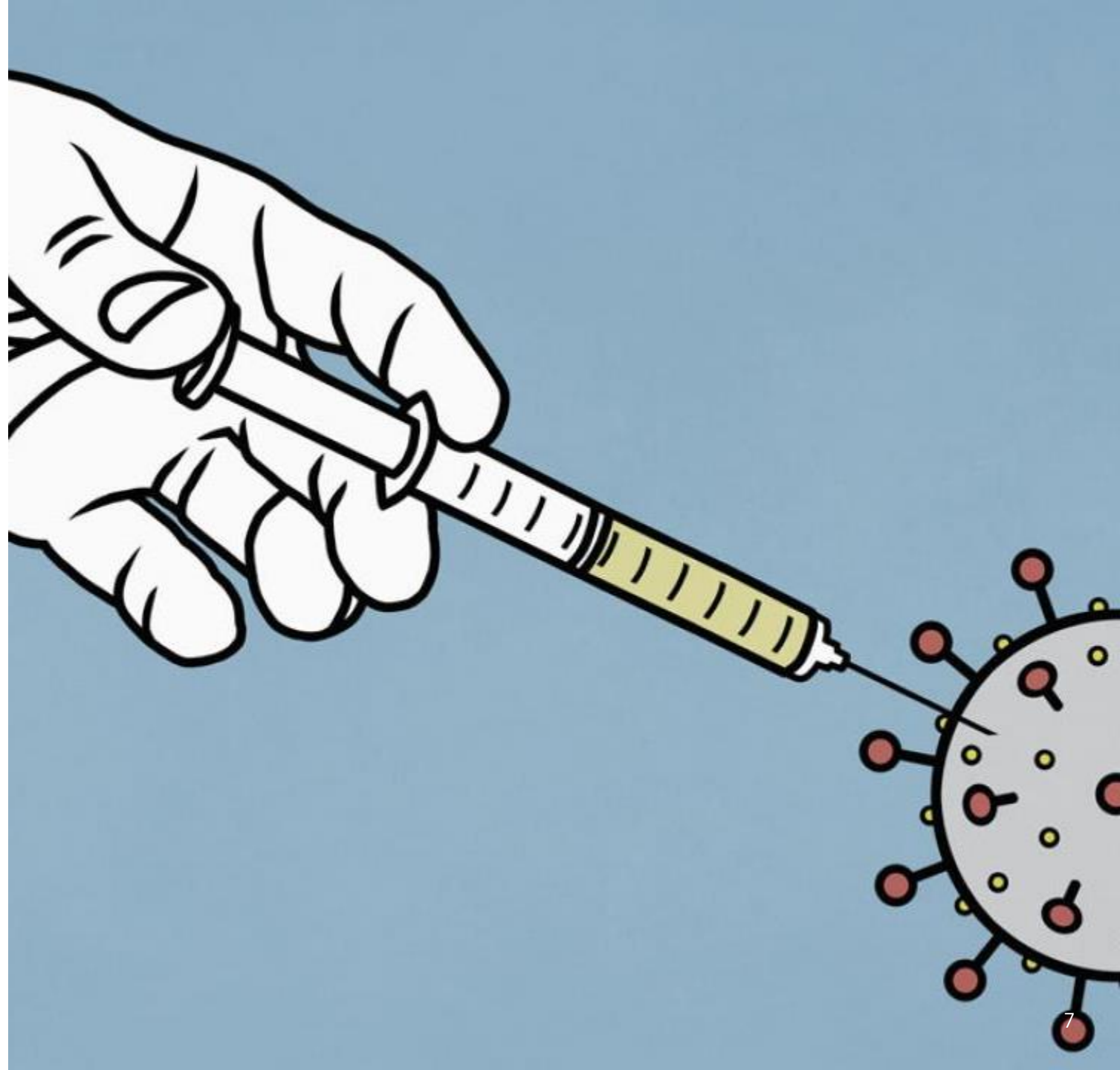
Recently testing has been stopped by the Canadian Government and the new positive cases are going down which is a good news but total deaths are still high

Sum of new_deaths, Sum of new_cases and Sum of new_tests by Year and Month



Effects of Vaccination on Death

Line and Bar Charts across time to compare impact of Vaccination on total death.

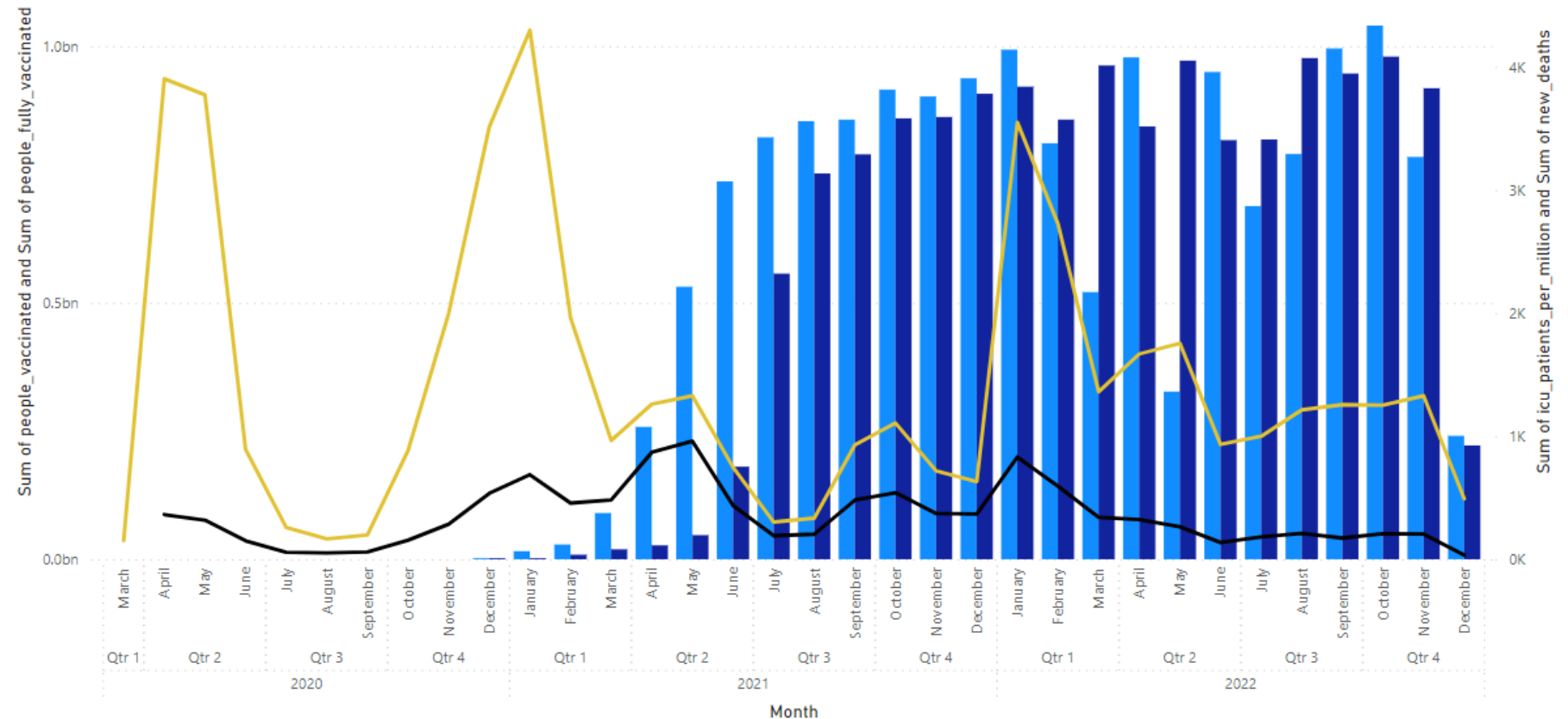


Chart

Vaccination in Canada started in December 2020 and it has reduced deaths and people needing critical assistance

Sum of people_vaccinated, Sum of people_fully_vaccinated, Sum of icu_patients_per_million and Sum of new_deaths by Year, Quarter and Month

● Sum of people_vaccinated ● Sum of people_fully_vaccinated ● Sum of icu_patients_per_million ● Sum of new_deaths



Vaccination vs Hospitalization

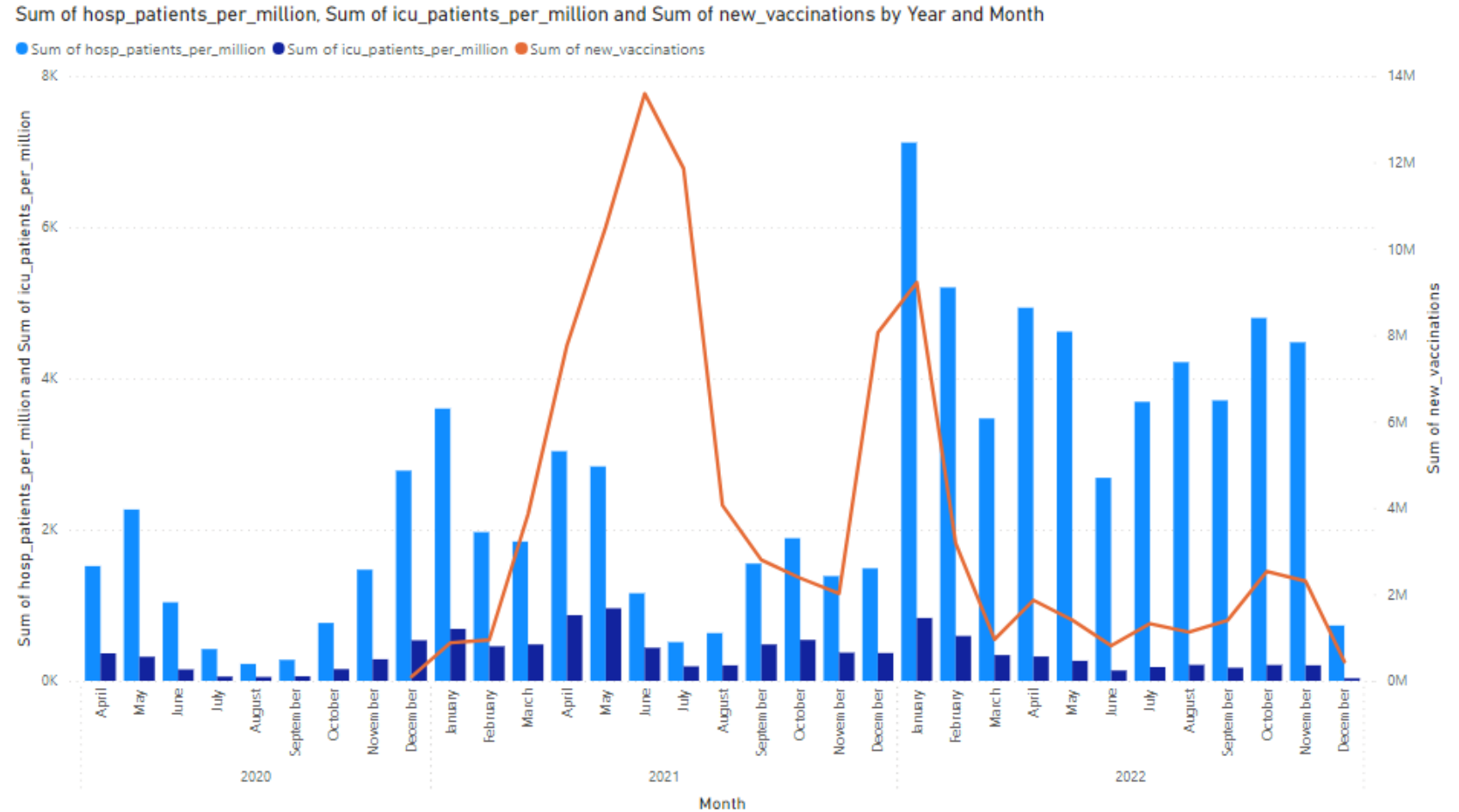
To see the relation between vaccination and thus its effects on hospitalization



Chart

Its been 3 years since Covid-19 was first detected and so around 85% of Canadian have been vaccinated at least once in last 2 years.

Sadly rate of first time vaccinated people is going down and whoever is still unvaccinated has high chances of getting Covid which can be seen in rising hospitalization in last one year. 100% vaccination can lower the hospitalization and deaths



Summary

- We have to **increase the vaccination for the remaining population as the hospitalization is still high** and number of deaths are still not low enough.
- As we see **in past few months the rate of vaccination has fallen** and thus significant number of deaths are still there