

COVID-19 Modeling

March 29, 2022

Presentation available at:
dfr.vermont.gov

Overview

Cases of COVID-19 in Vermont remain stable, with confirmed cases averaging 131 per day over the last week. Reported infections remain flat across age groups.

Hospital admissions and inpatient counts declined this week. The number of Vermonters hospitalized for COVID-19 is down 87% from the Omicron peak, and those requiring ICU care has decreased 94%. Today, Vermont is reporting no individuals in the ICU for COVID-19. Hospitalizations for the virus continue to be most common among unvaccinated and older Vermonters.

COVID-19 fatalities have fallen this month, with 13 confirmed COVID-19 deaths thus far in March, down from 59 last month. March is on track to record the lowest fatality count since July of 2021. A total of 617 Vermonters have been lost to COVID-19.

While the spread of the Omicron BA.2 variant and rise in international infections remain a cause for concern, cases across New England are rising slowly, increasing 11% over the past week, with growth concentrated in Massachusetts and Connecticut. [According to the CDC](#), the BA.2 subvariant is now the predominant form of COVID-19 in the United States. The subvariant is more prevalent in New England, where it makes up more than an estimated 70% of cases.

Table of Contents

Vermont Case Data	Pg. 4
Vermont Hospitalization Data	Pg. 17
Vermont Fatality Data	Pg. 24
Vermont Vaccination Data	Pg. 27
Regional Data	Pg. 30
National Data	Pg. 36
Restart Vermont	Pg. 41

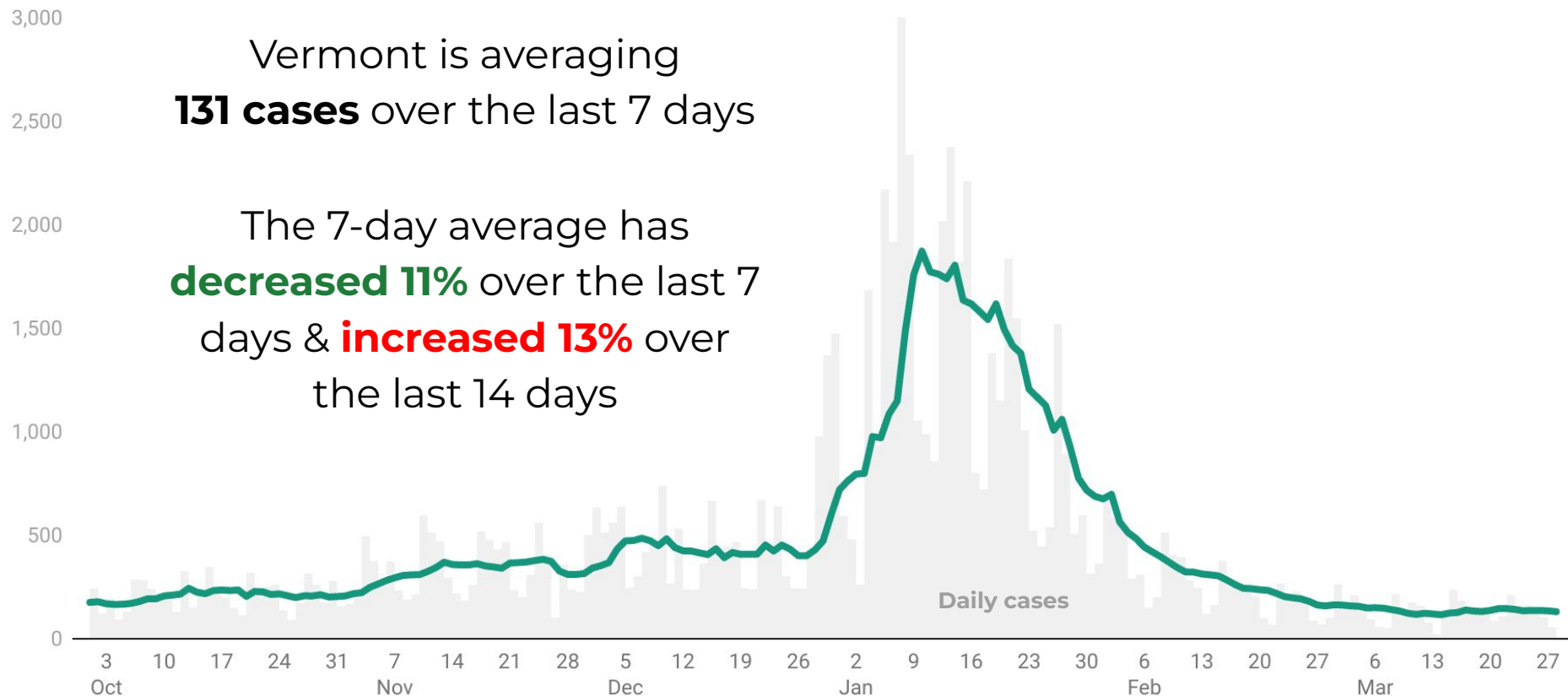
Vermont Case Data

Vermont New COVID-19 Cases

7-Day Average

Vermont is averaging
131 cases over the last 7 days

The 7-day average has
decreased 11% over the last 7
days & **increased 13%** over
the last 14 days



Vermont New Weekly COVID-19

14,000

12,000

10,000

8,000

6,000

4,000

2,000

Apr
2020

Jul

Oct

Jan
2021

Apr

Jul

Oct

Jan
2022

Vermont reported 916 new COVID-19 cases this week,
109 fewer cases compared to last week



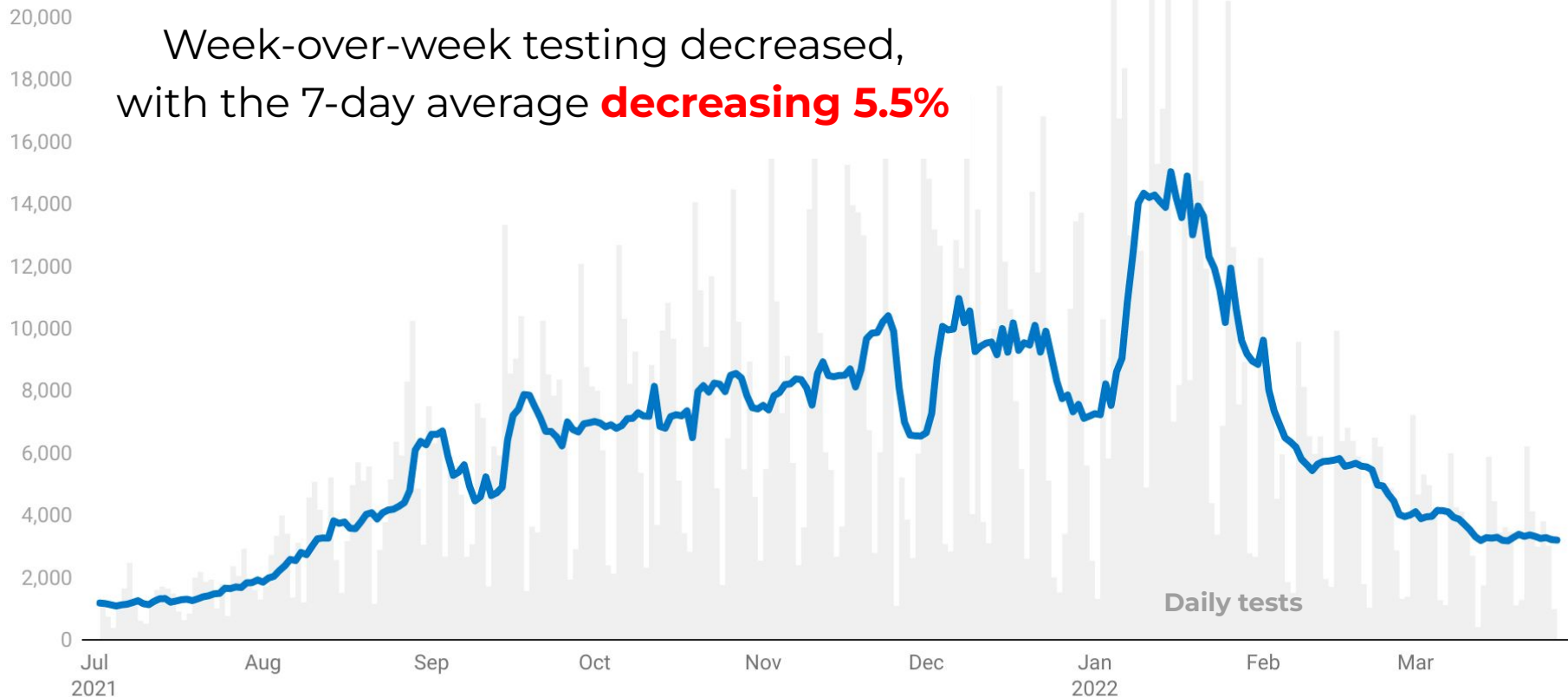
Source: VDH—March 28, 2022; created with Datawrapper

Vermont COVID-19 PCR Testing

7-Day Average

Week-over-week testing decreased,
with the 7-day average **decreasing 5.5%**

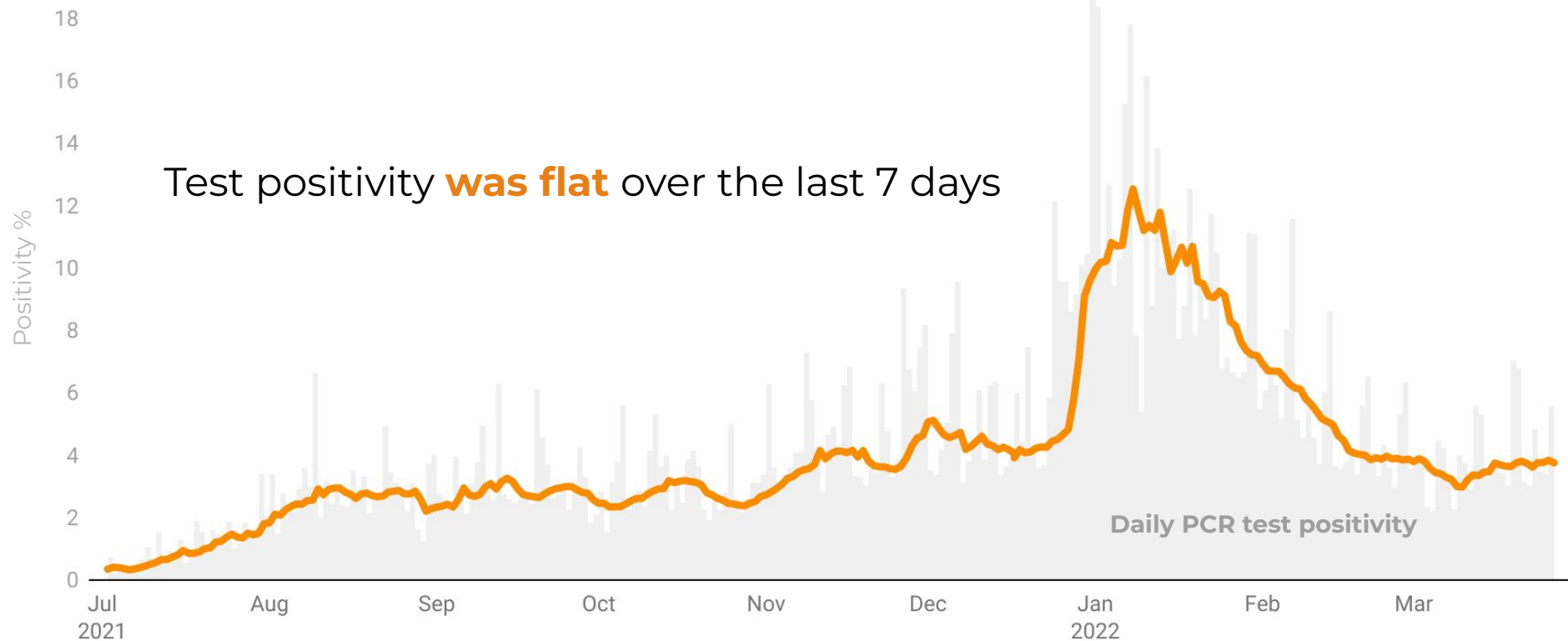
Number of Tests



Daily tests

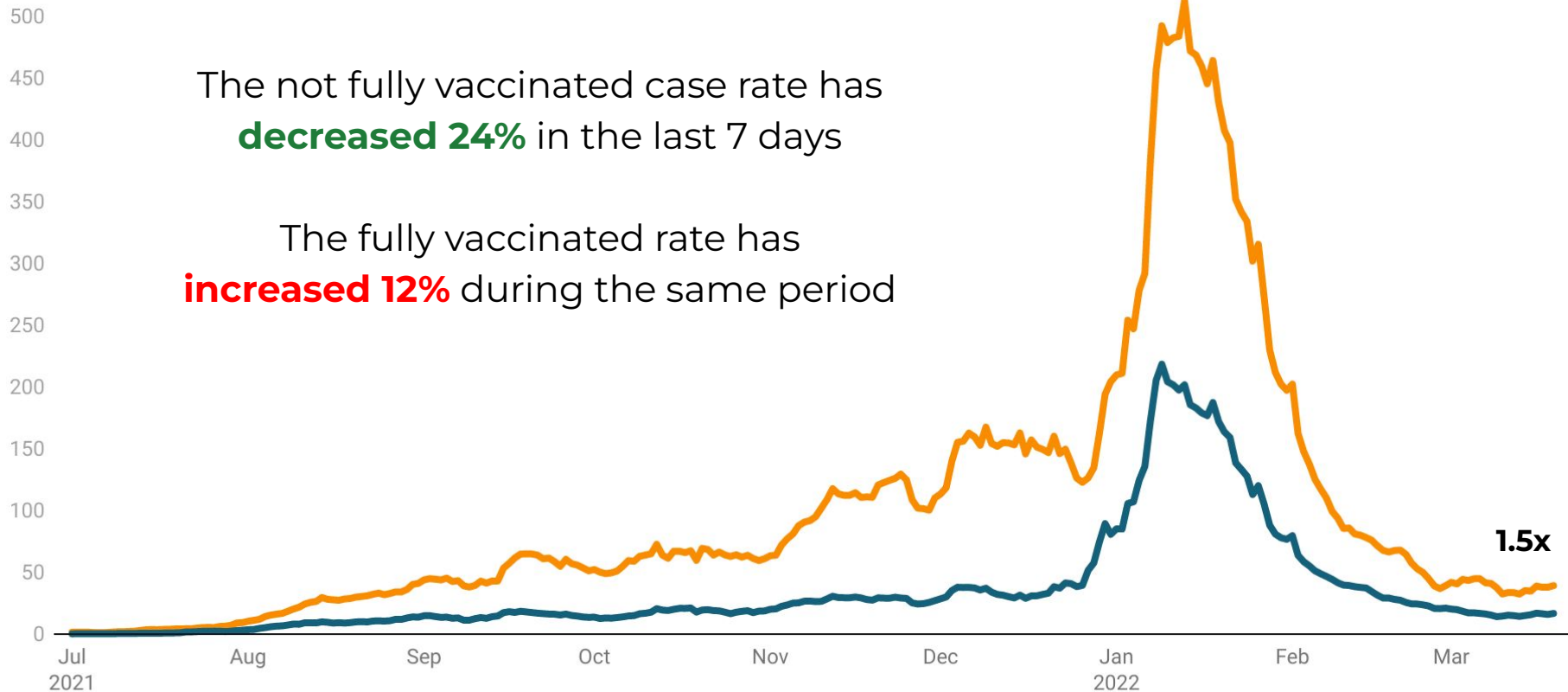
Vermont PCR Test Positivity

7-Day Positivity Rate

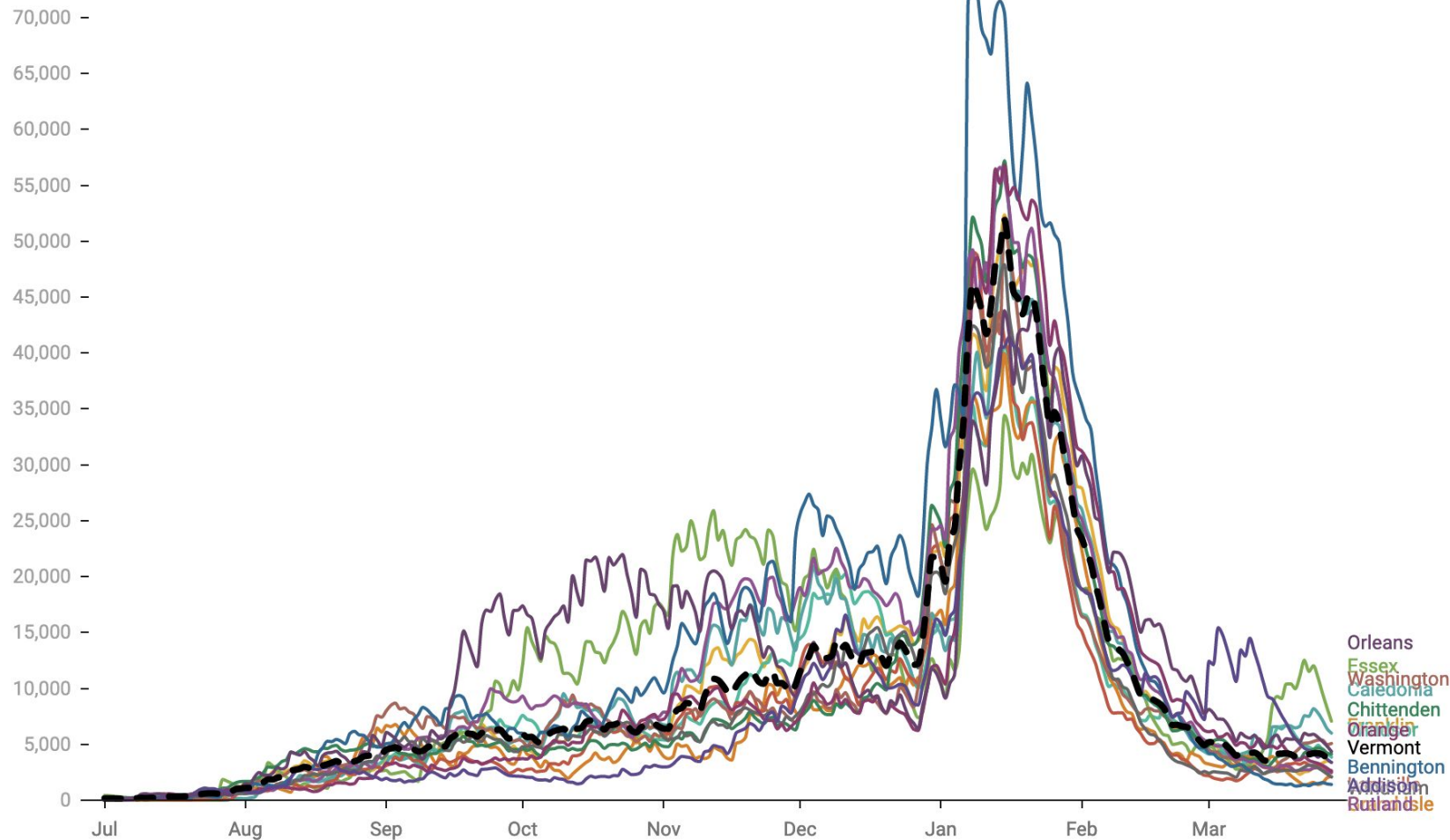


Vermont COVID-19 New Case Rates Per 100K (7-Day Average)

Not Fully Vaccinated Case Rate Fully Vaccinated Case Rate



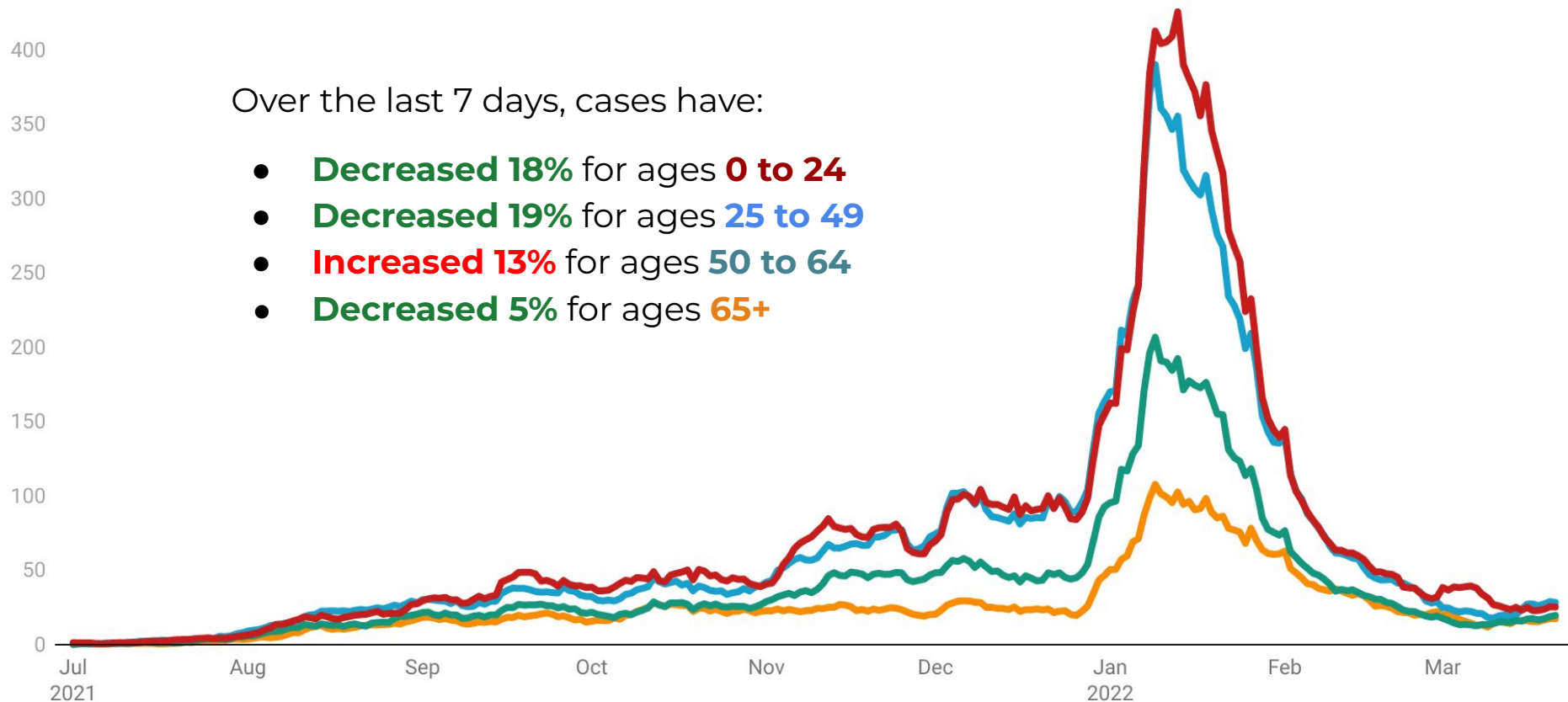
Estimated Active Cases per Million in All Vermont Counties



Source: VDH—March 28, 2022; created with Datawrapper

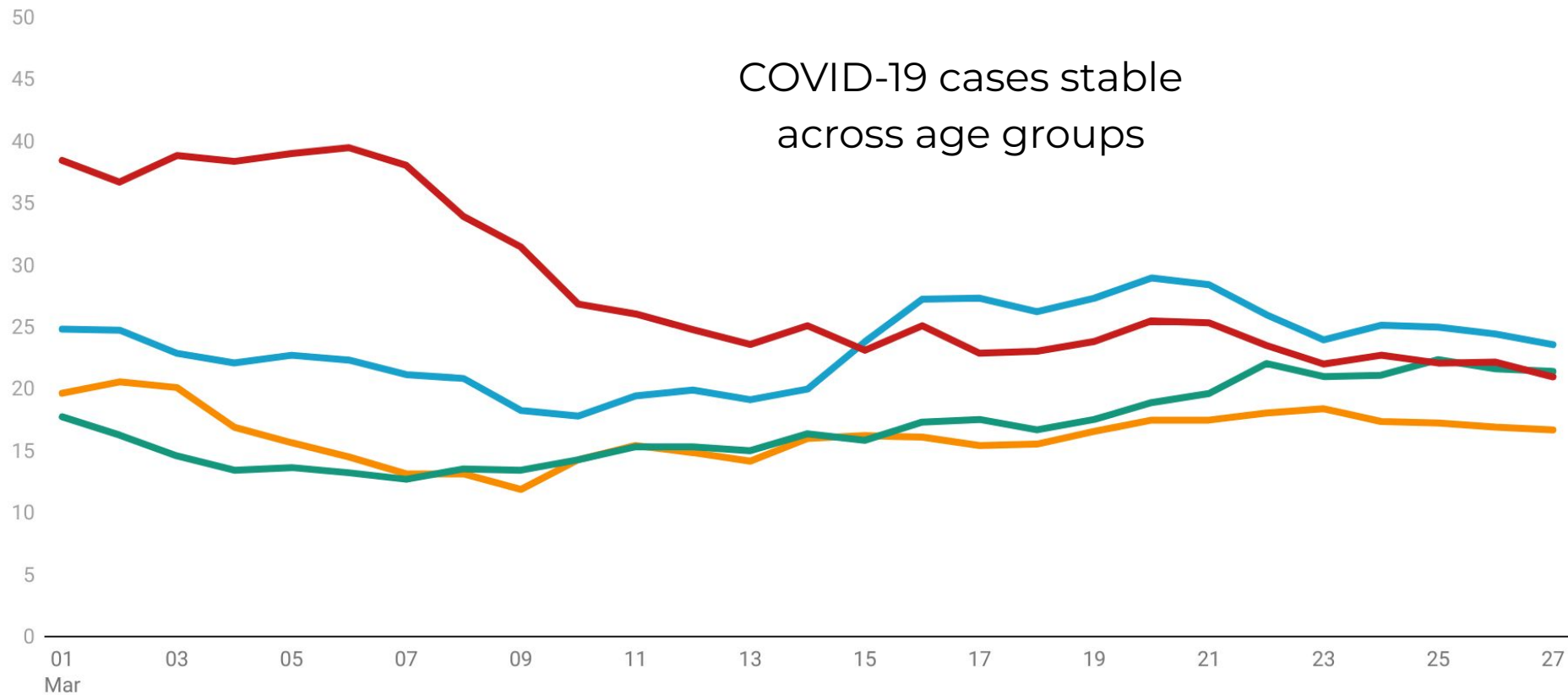
Vermont Case Rates Per 100K By Age (7-Day Average)

— 0 to 24 — 24 to 49 — 50 to 64 — 65+

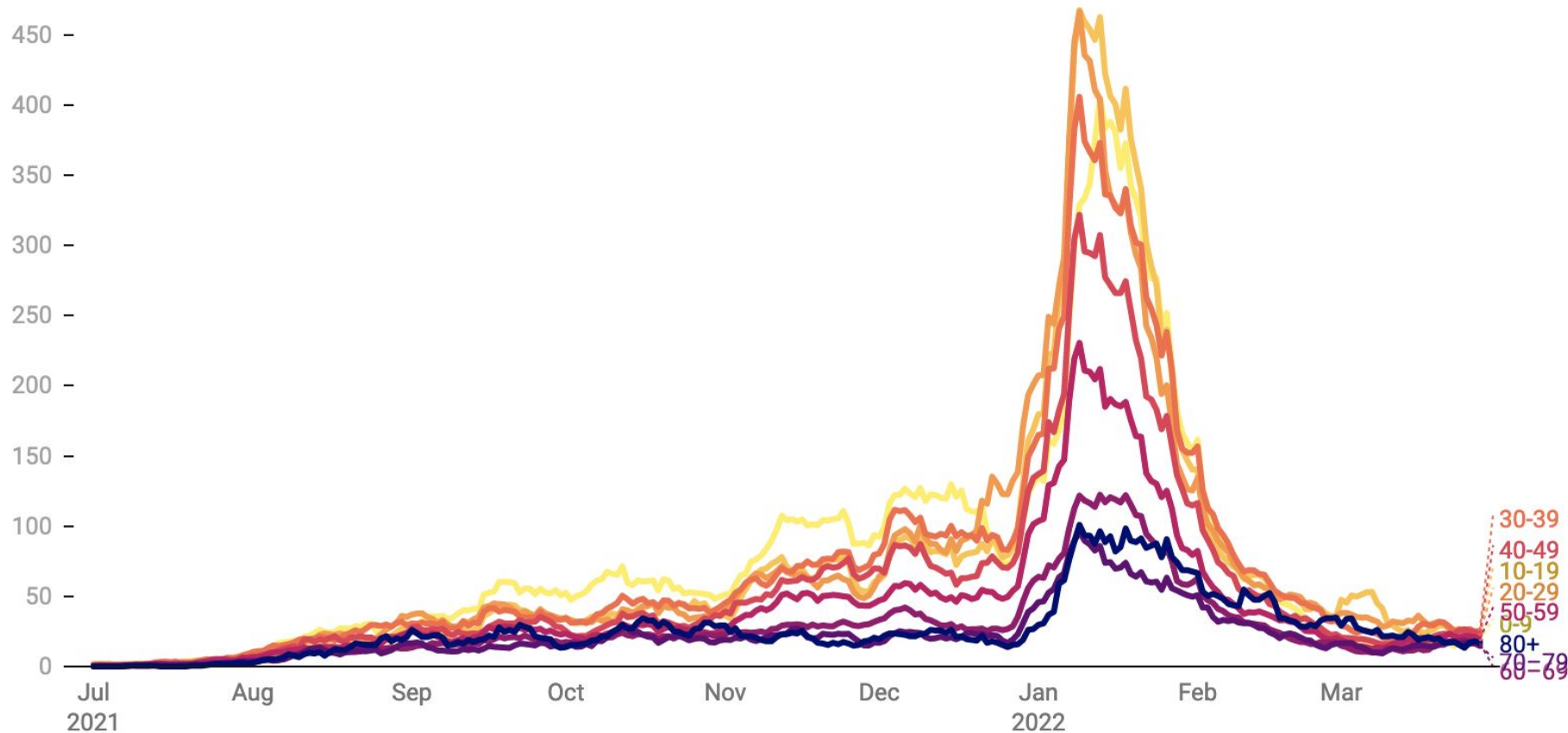


Vermont Case Rates Per 100K By Age (7-Day Average) Since March 1st

0 to 24 24 to 49 50 to 64 65+

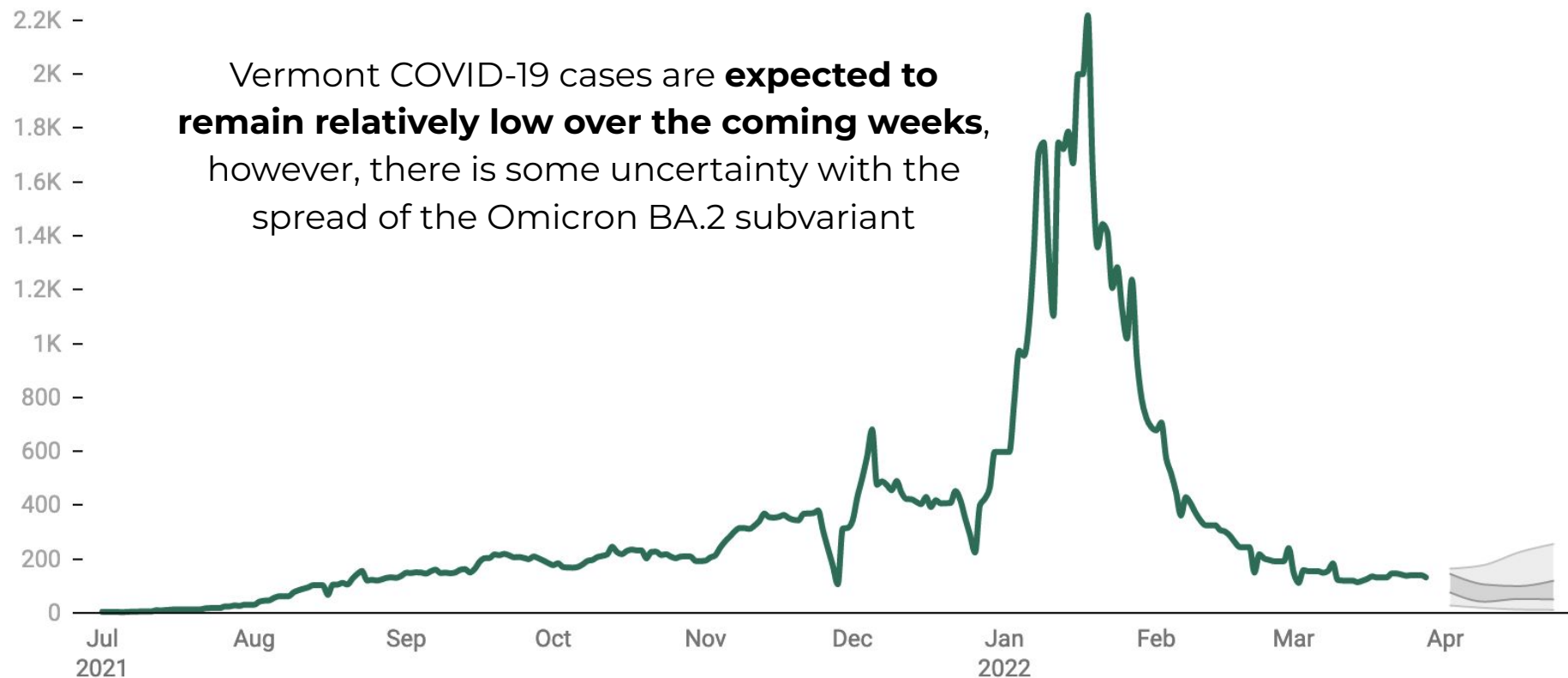


VT COVID-19 Infections per 100K by Age Group



VT COVID-19 Infection Confidence Intervals

Calculated as a 7-day mean. Inner and outer bands represent 50% and 95% confidence intervals, respectively.



VT COVID-19 Death Confidence Intervals

Calculated as a 7-day mean. Inner and outer bands represent 50% and 95% confidence intervals, respectively.



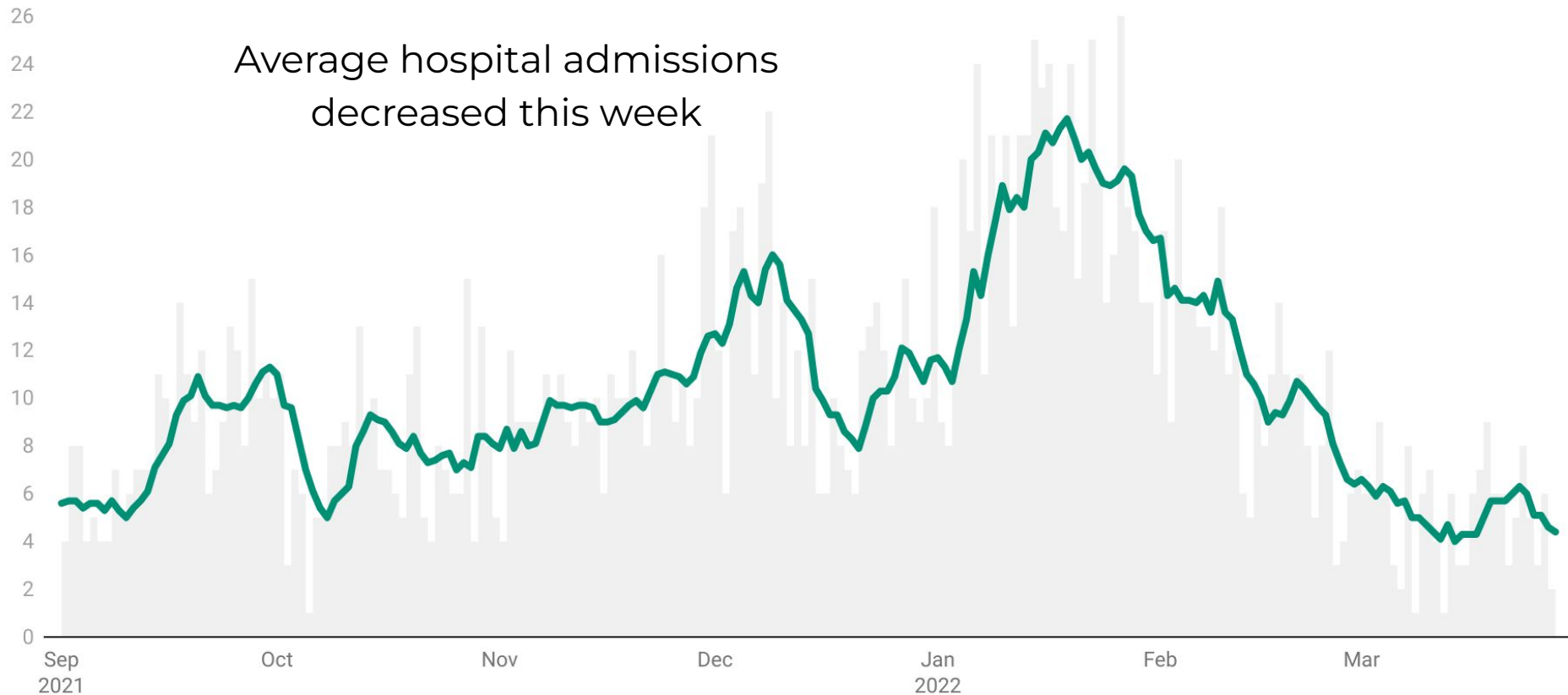
Active Outbreaks in Long Term Care Facilities

Facility Name	Total COVID-19 Cases
Bel-Aire Center	66
Springfield Rivers Nursing & Rehab	62
Greensboro Nursing home	24
LTCF A	24
Loretto Home	13
Thompson House	12
Total	201

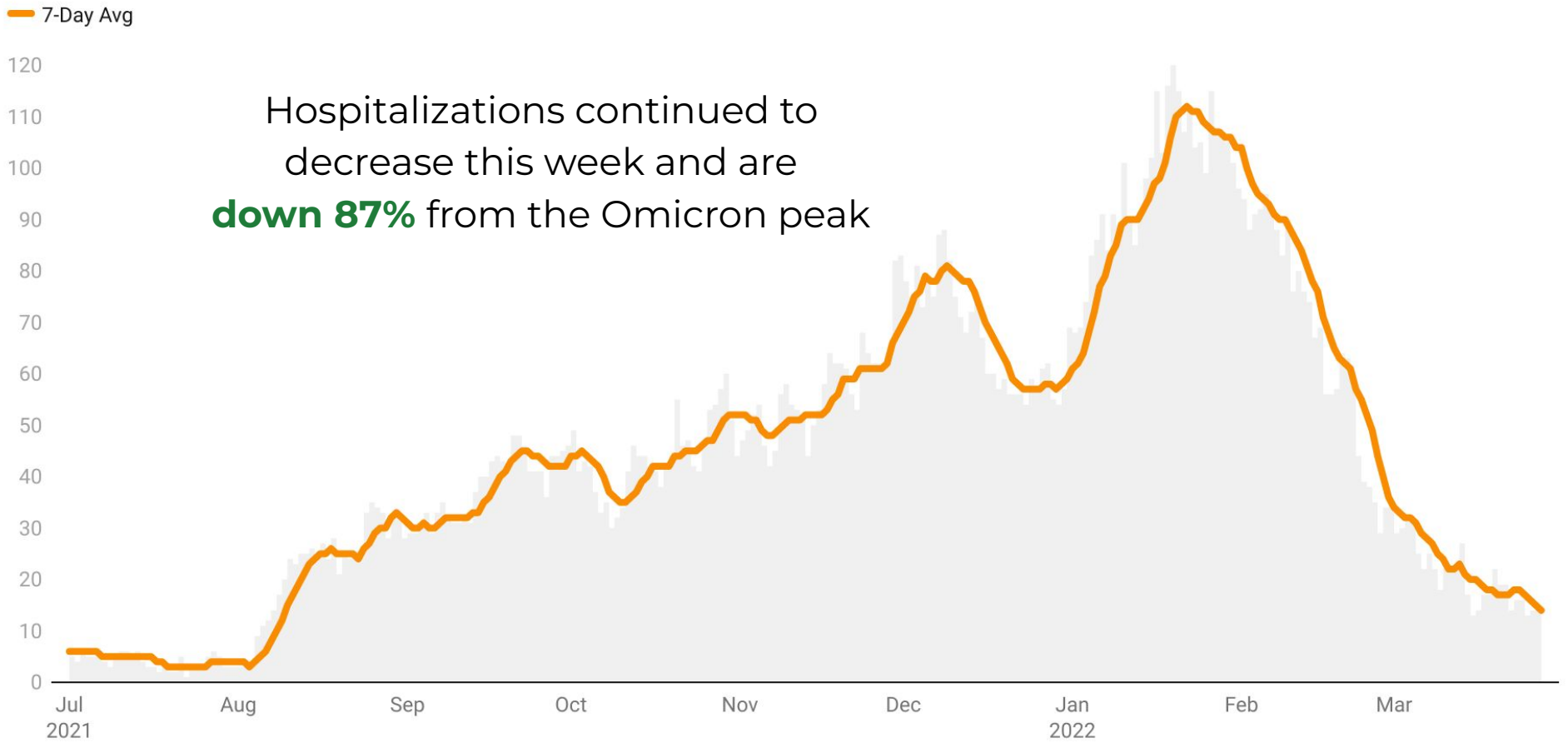
Vermont Hospitalization Data

Vermont New COVID-19 Hospital Admissions

7-Day Average



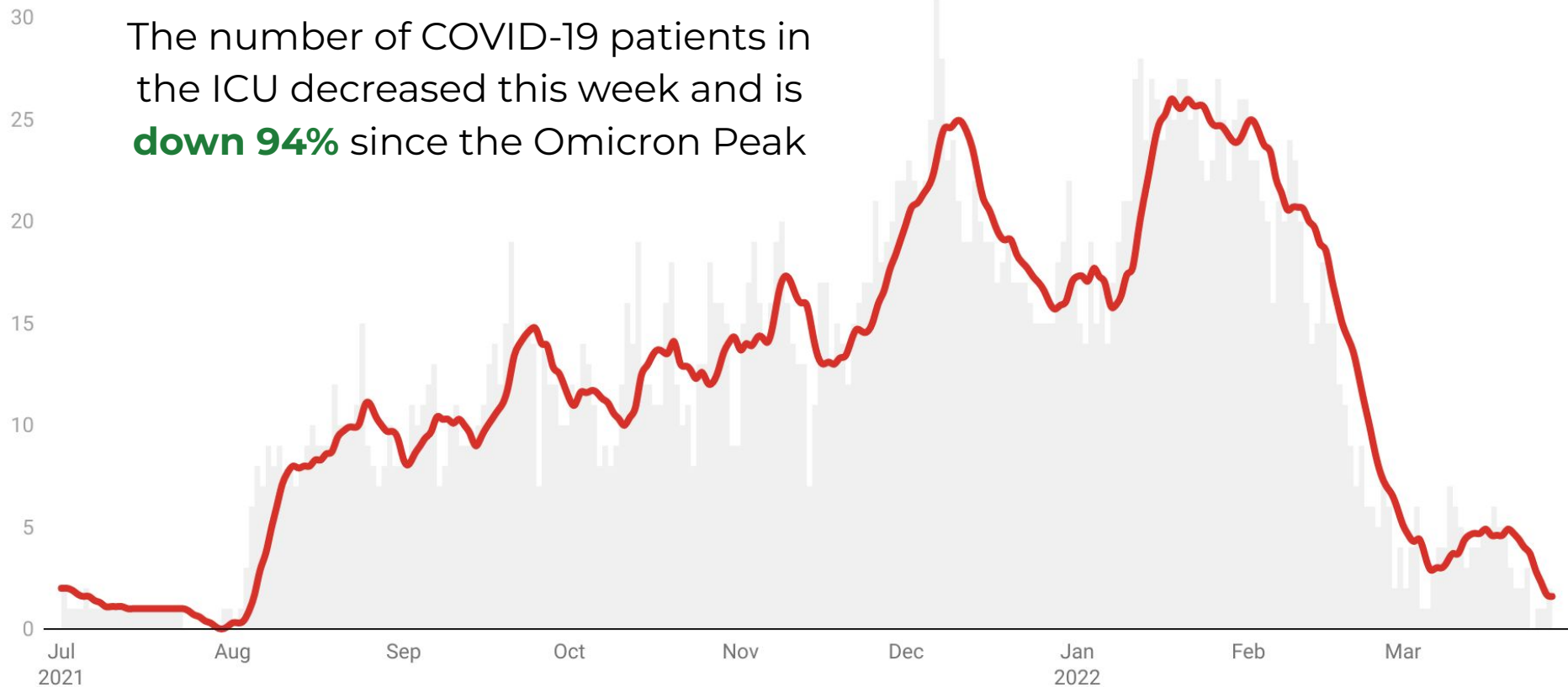
Vermont COVID-19 Patients Currently Hospitalized



Source: VDH—March 28, 2022; created with Datawrapper

Vermont COVID-19 Patients Currently in the ICU

— 7-Day Avg



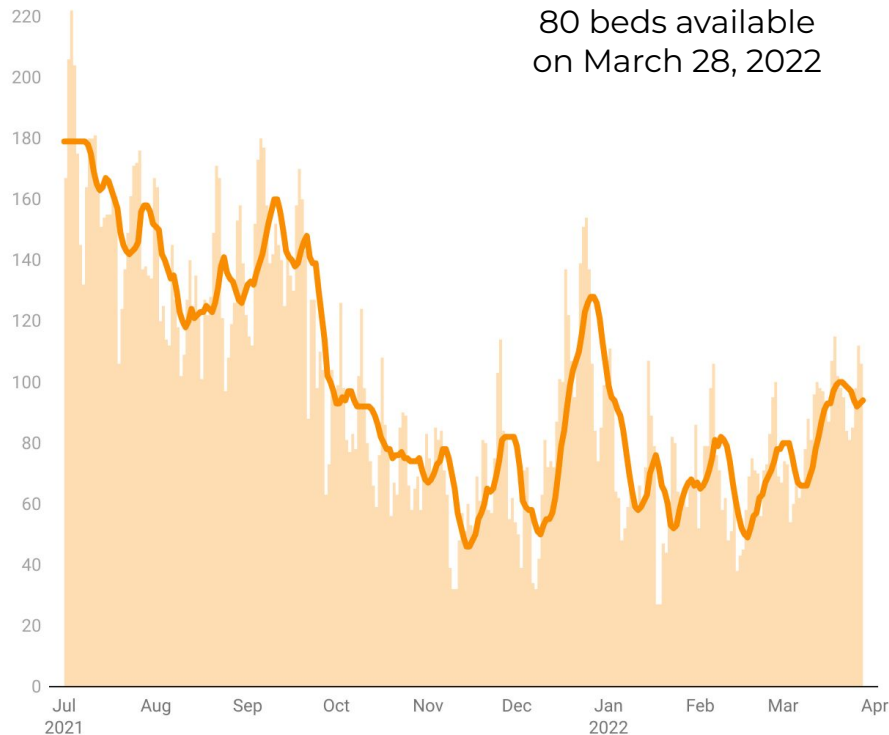
Source: VDH—March 28, 2022; created with Datawrapper

Vermont Hospital Metrics

(7-Day Averages)

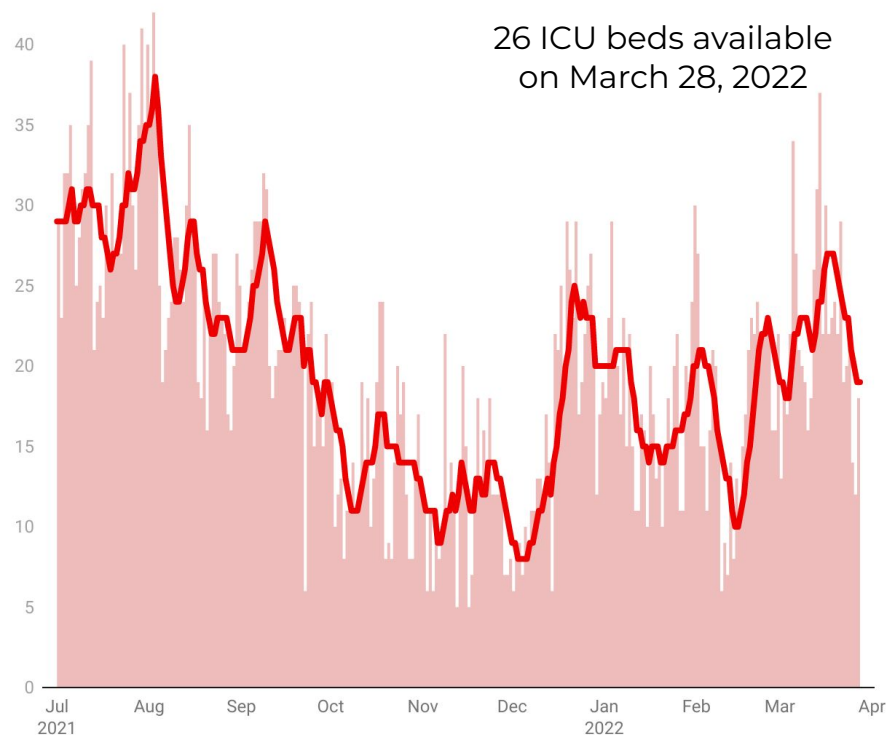
Vermont Hospital Beds Available Since July 1, 2021

Hospital Bed Available 7-Day

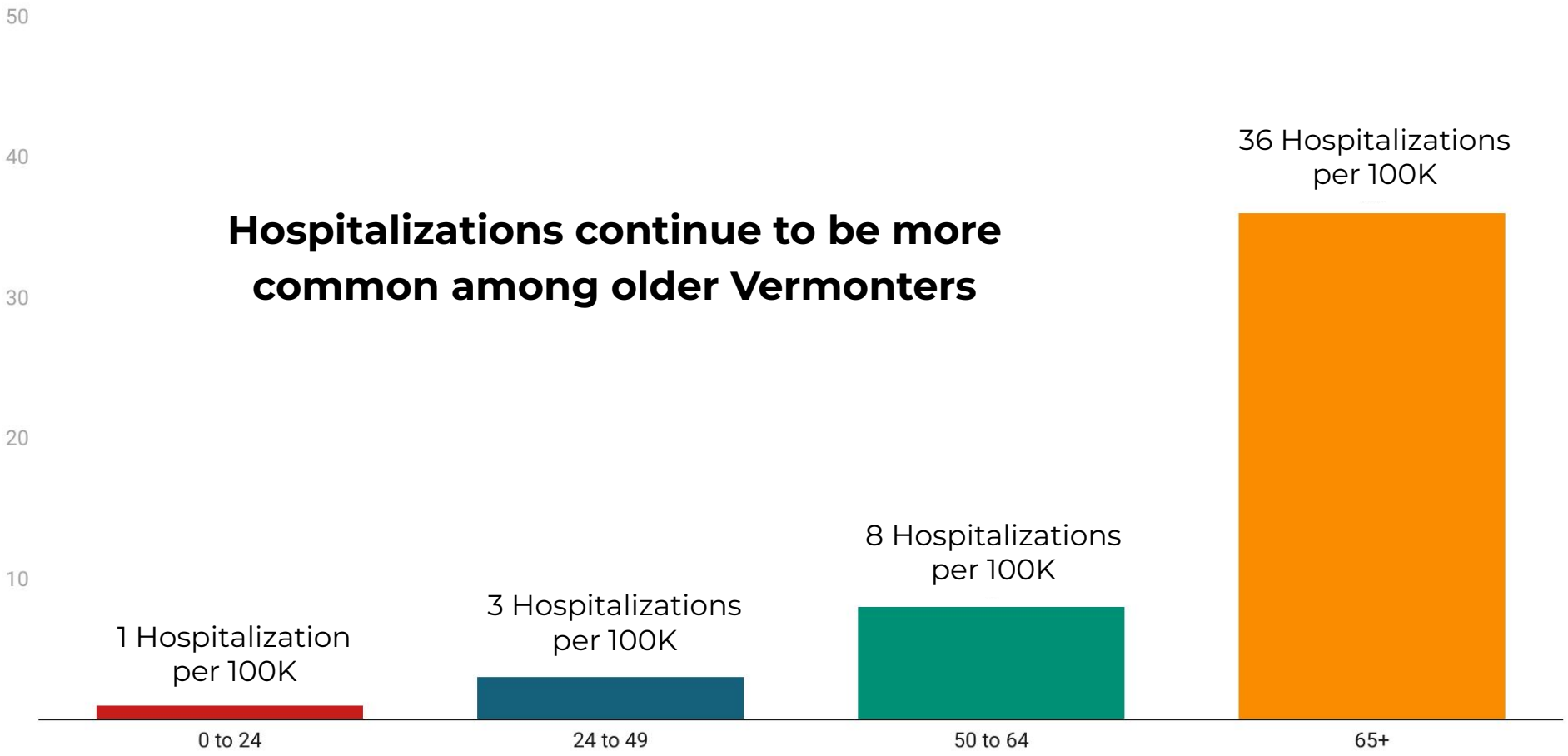


Vermont ICU Beds Available Since July 1, 2021

ICU Available 7-Day



COVID-19 Hospitalization Rate Per 100K By Age Over The Last 6 Weeks



Source: VDH—March 26, 2022; created with Datawrapper

COVID-19 Hospitalizations By Vaccination Status Per 100K

Measured Over the Last 6 Weeks

40

30

20

10

Those 18+ & **not fully vaccinated** were nearly **2.6x more** likely to be hospitalized from COVID-19 over the last 6 weeks compared to those **fully vaccinated & boosted**

27 Hospitalizations
per 100K

10 Hospitalizations
per 100K

10 Hospitalizations
per 100K

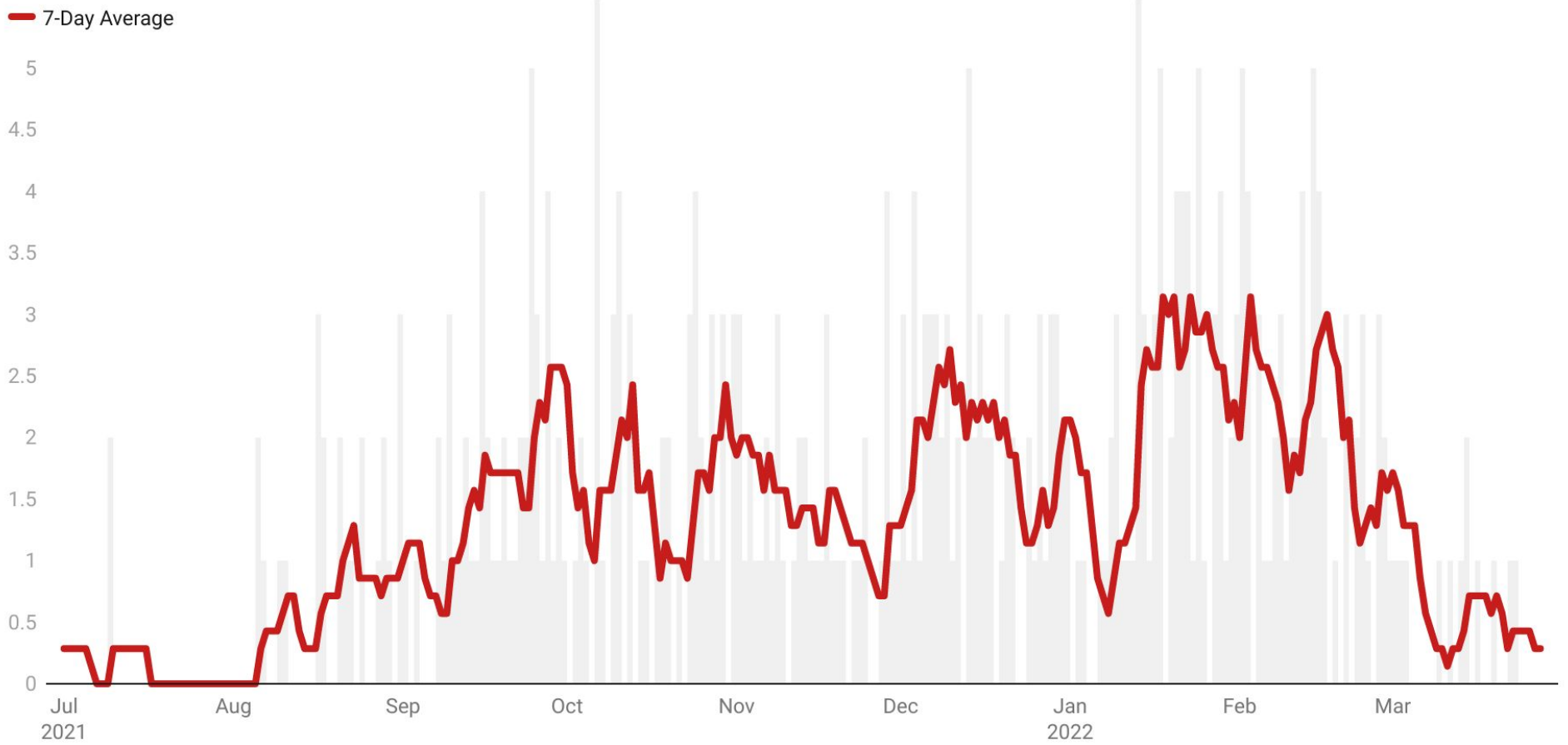
Not Fully Vaccinated

Fully Vaccinated But Not Boosted

Fully Vaccinated & Boosted

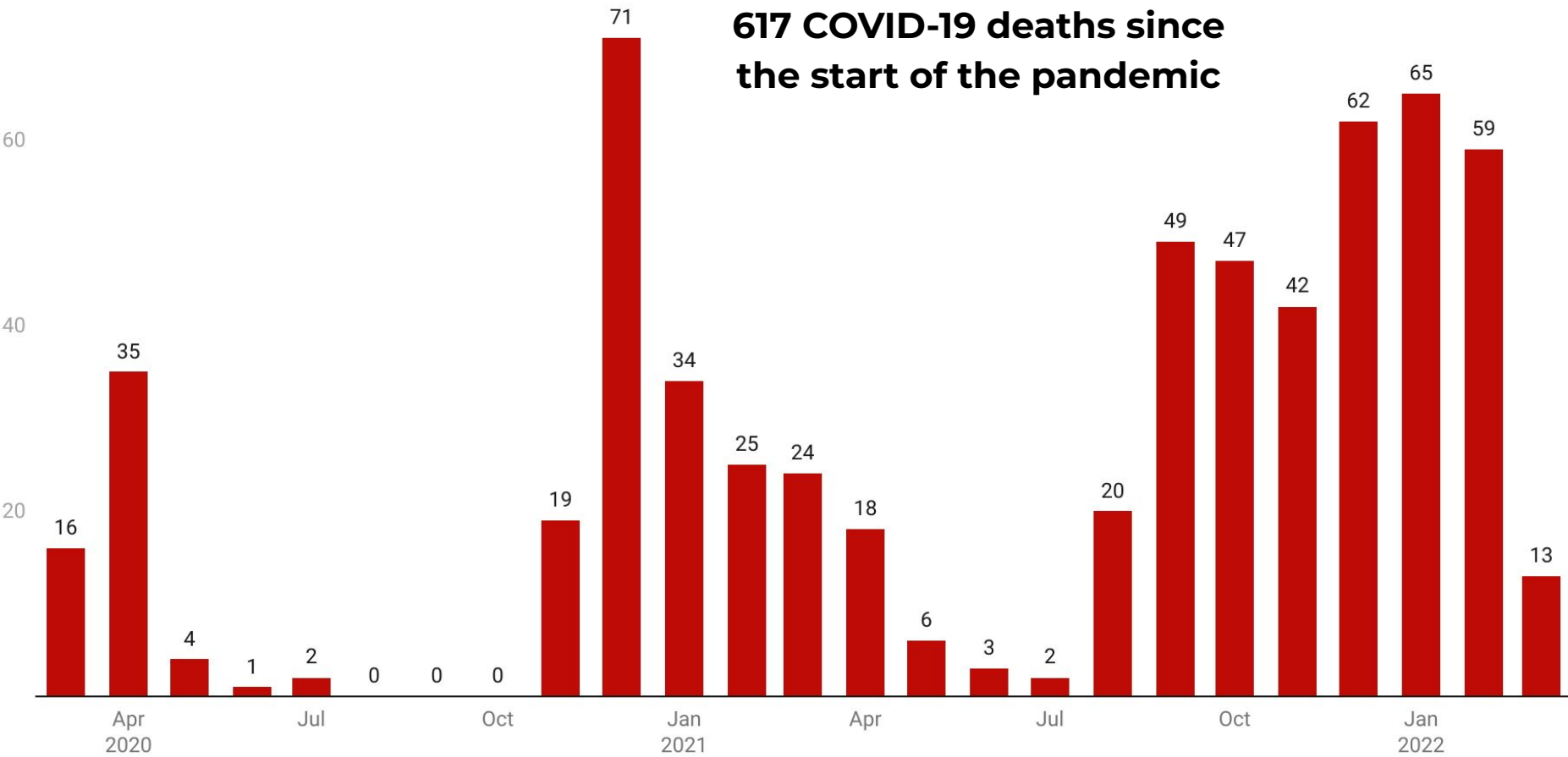
Vermont Fatality Data

Vermont COVID-19 Fatalities



Source: VDH—March 29, 2022; created with Datawrapper

Monthly Covid-19 Deaths In Vermont



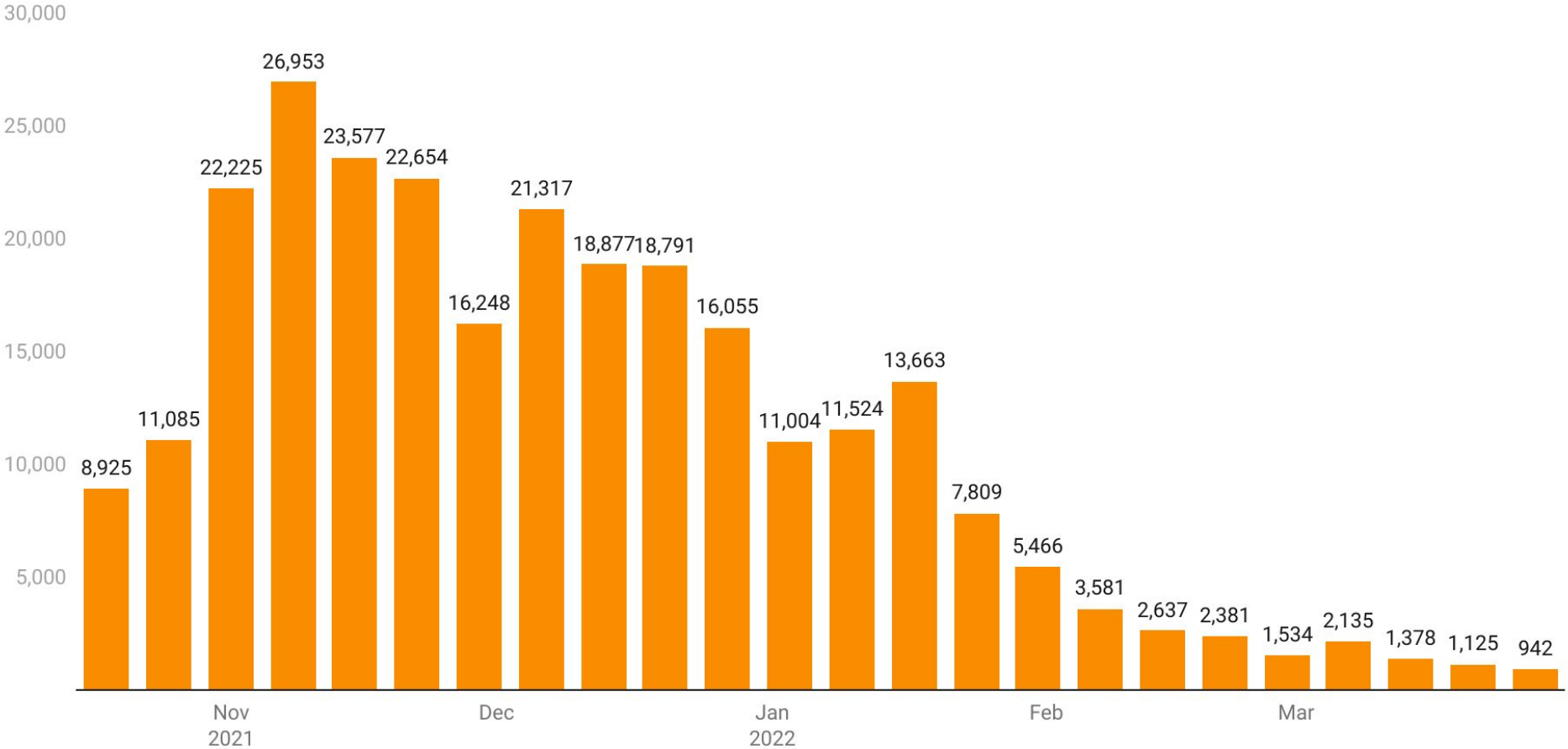
Vermont Vaccination Data

Vermont CDC Vaccine Scorecard

Vaccine Metric	Ranking
Doses Administered per 100K	1
% At Least 1 Dose (5+ Population)	1 (tied)
% Fully Vaccinated (5+ Population)	2
% At Least 1 Dose (Full Population)	3
% Fully Vaccinated (Full Population)	2
% Fully Vaccinated (65 & Over)	1 (tied)

Booster Metric	Ranking
% of Fully Vaccinated w/ booster dose	1
% of Fully vaccinated 12+ w/ booster doses	1
% of Fully vaccinated 18+ w/ booster doses	1
% of Fully vaccinated 65+ w/ booster doses	3

Vermont: Booster Shots Administered By Week

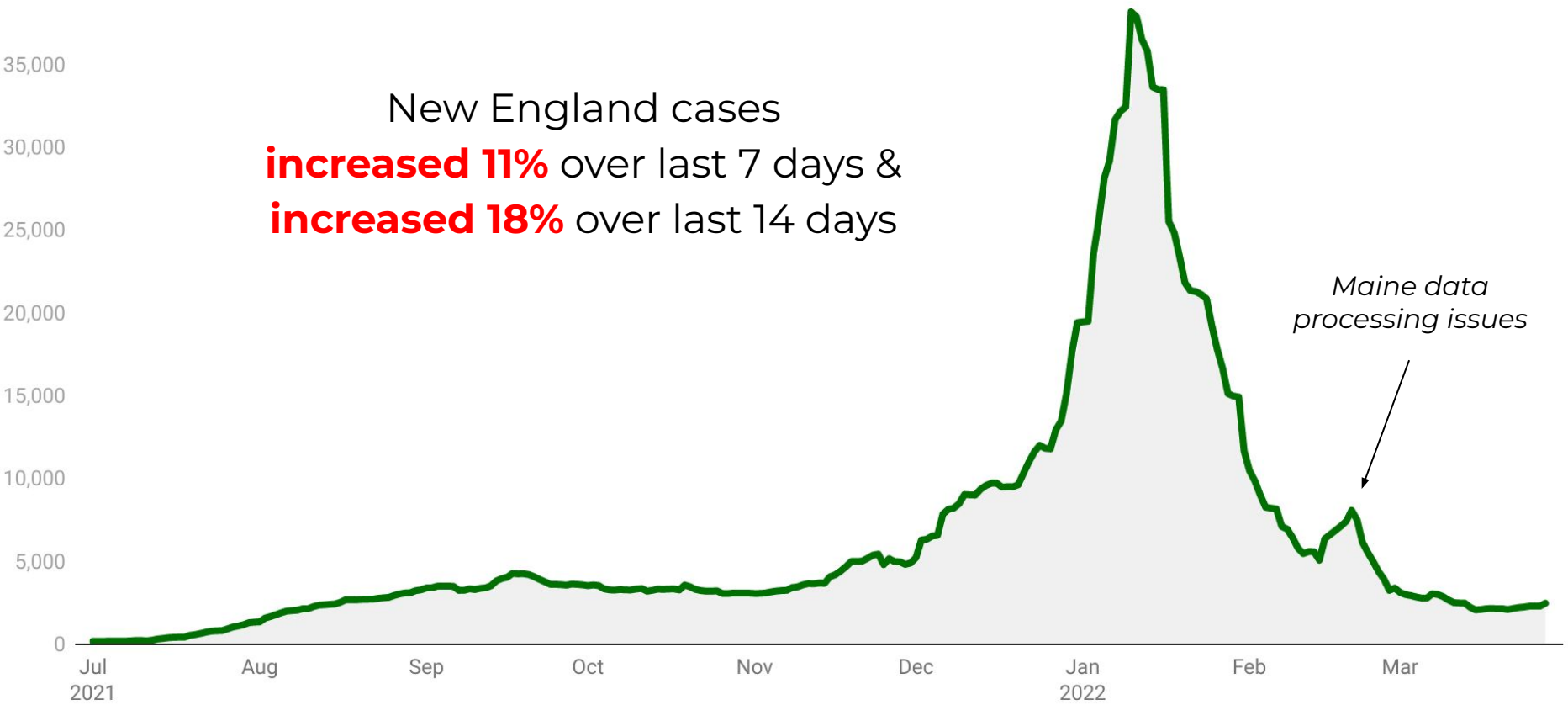


Source: CDC—March 28, 2022; created with Datawrapper

Regional Data

New England COVID-19 Cases

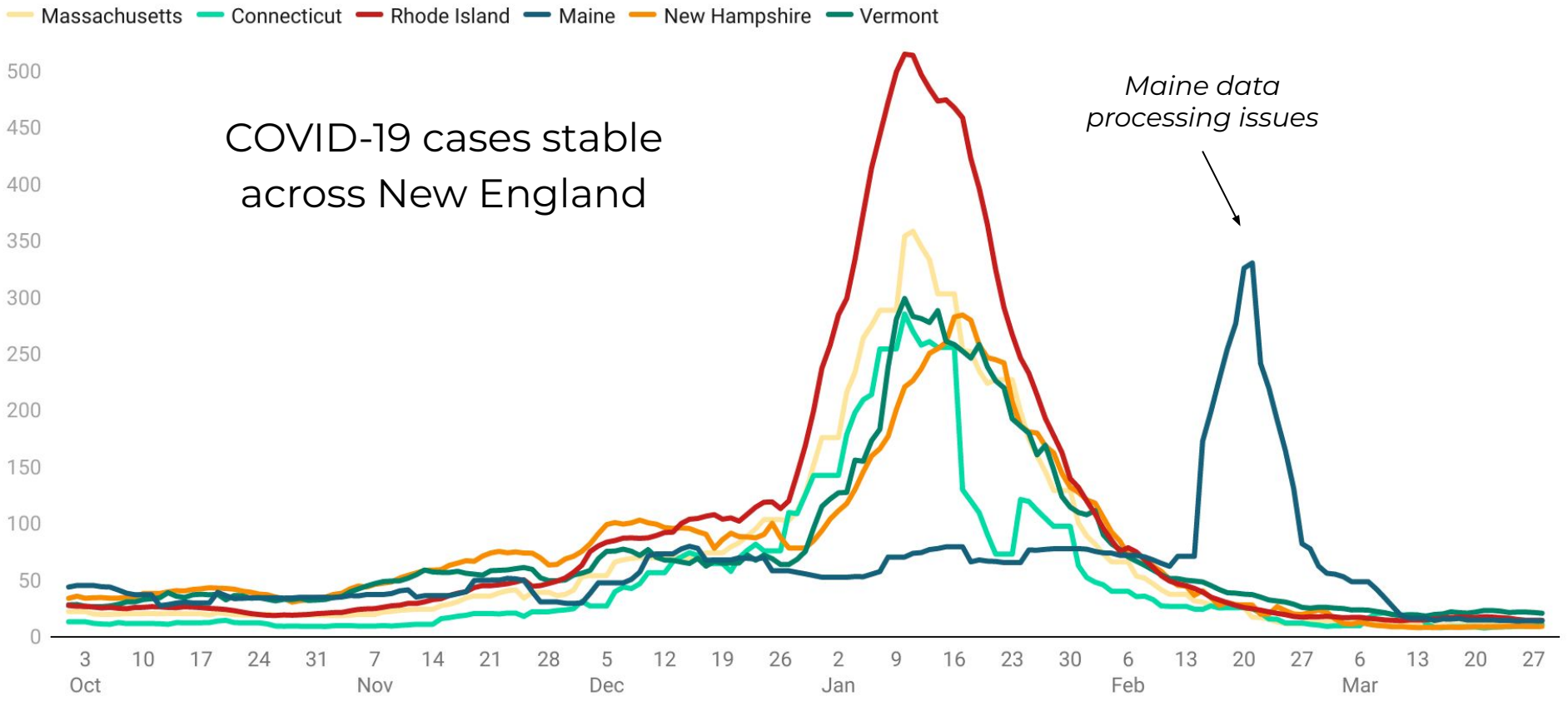
New England 7-Day Case Average



Sources: State Health Depts.—March 28, 2022 (includes: CT, ME, MA, NH, RI & VT)

New England COVID-19 Case Trends

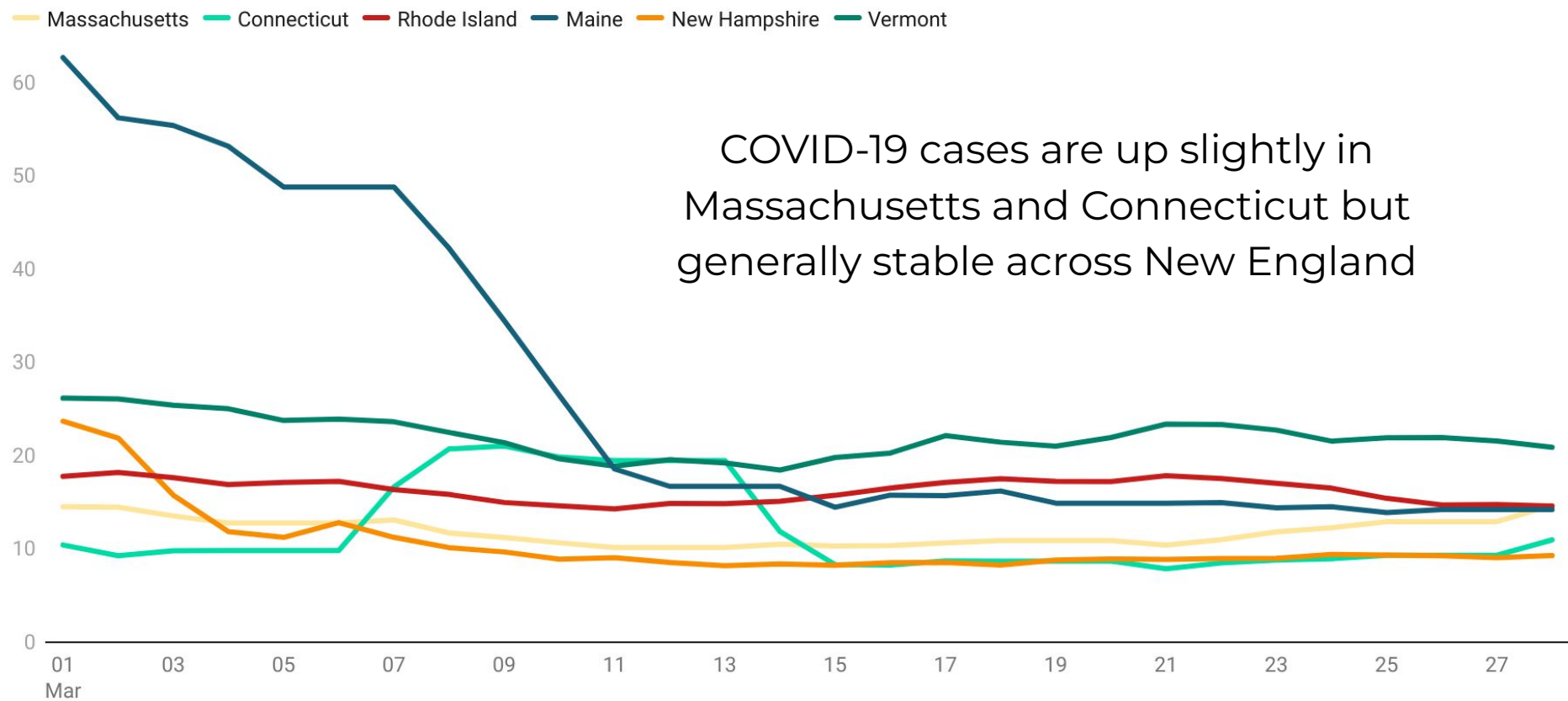
7-Day Average Cases Per 100K



Sources: State Health Depts.—March 28, 2022 (includes: CT, ME, MA, NH, RI & VT)

New England COVID-19 Case Trends Since March 1st

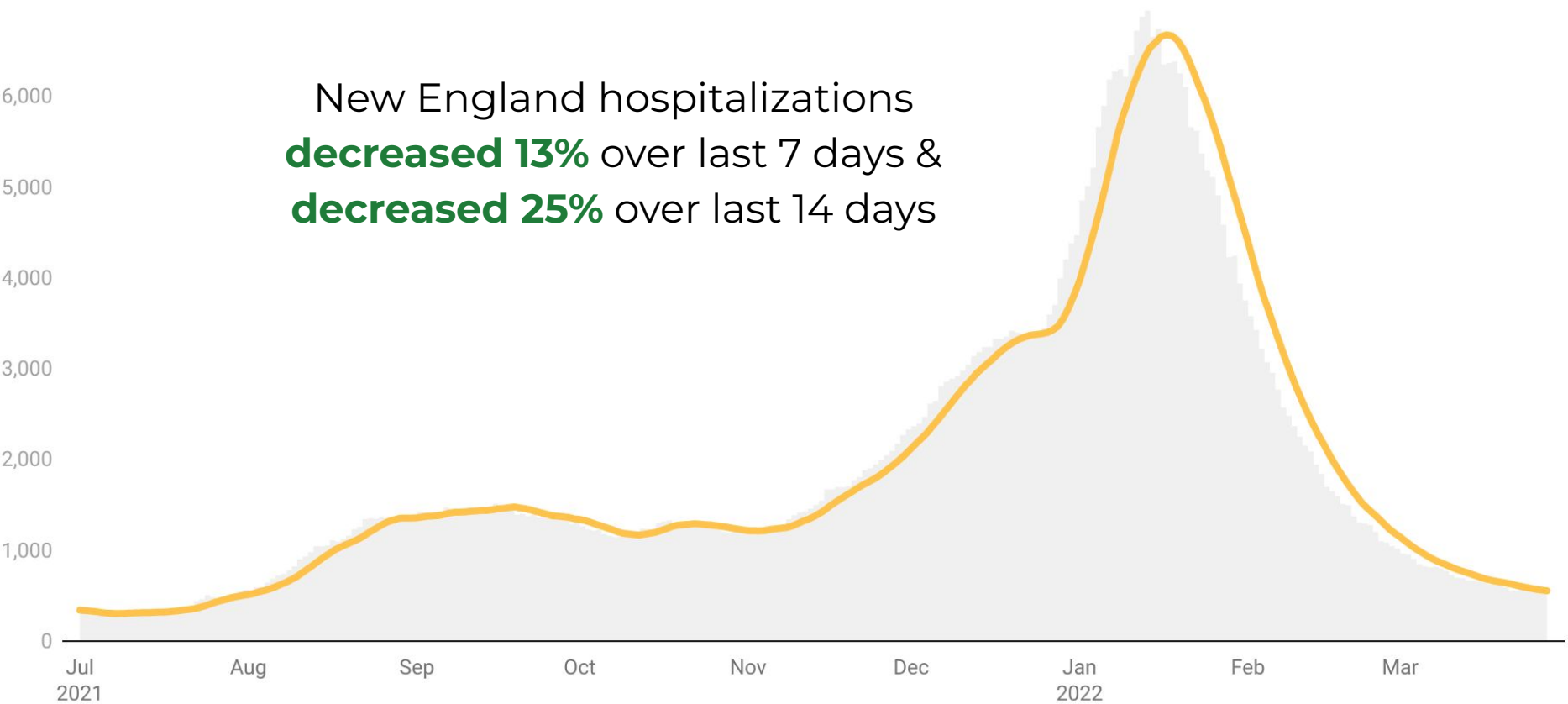
7-Day Average Cases Per 100K



Sources: State Health Depts.—March 28, 2022 (includes: CT, ME, MA, NH, RI & VT)

New England COVID-19 Hospitalizations

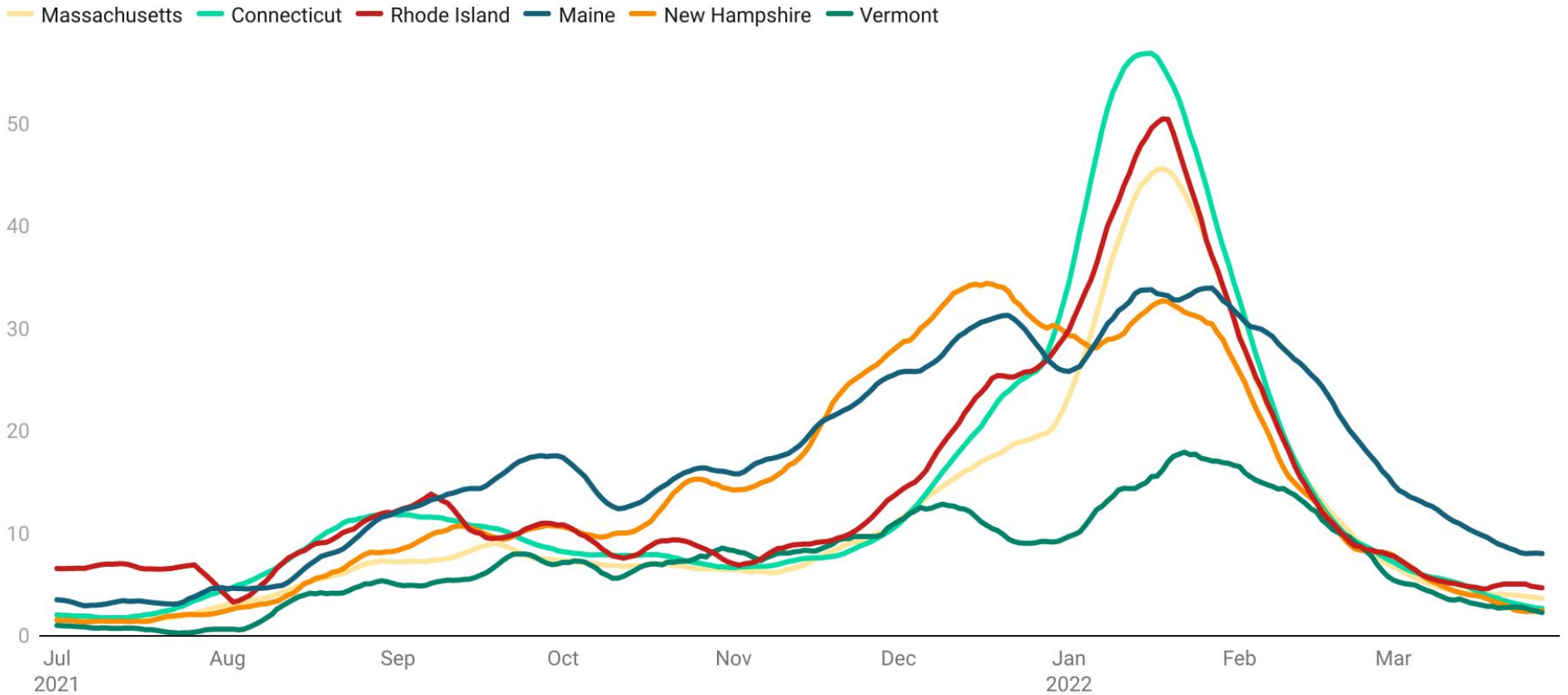
7-Day Average



Sources: HHS—March 28, 2022 (includes: CT, ME, MA, NH, RI & VT)

New England COVID-19 Hospitalizations Trends

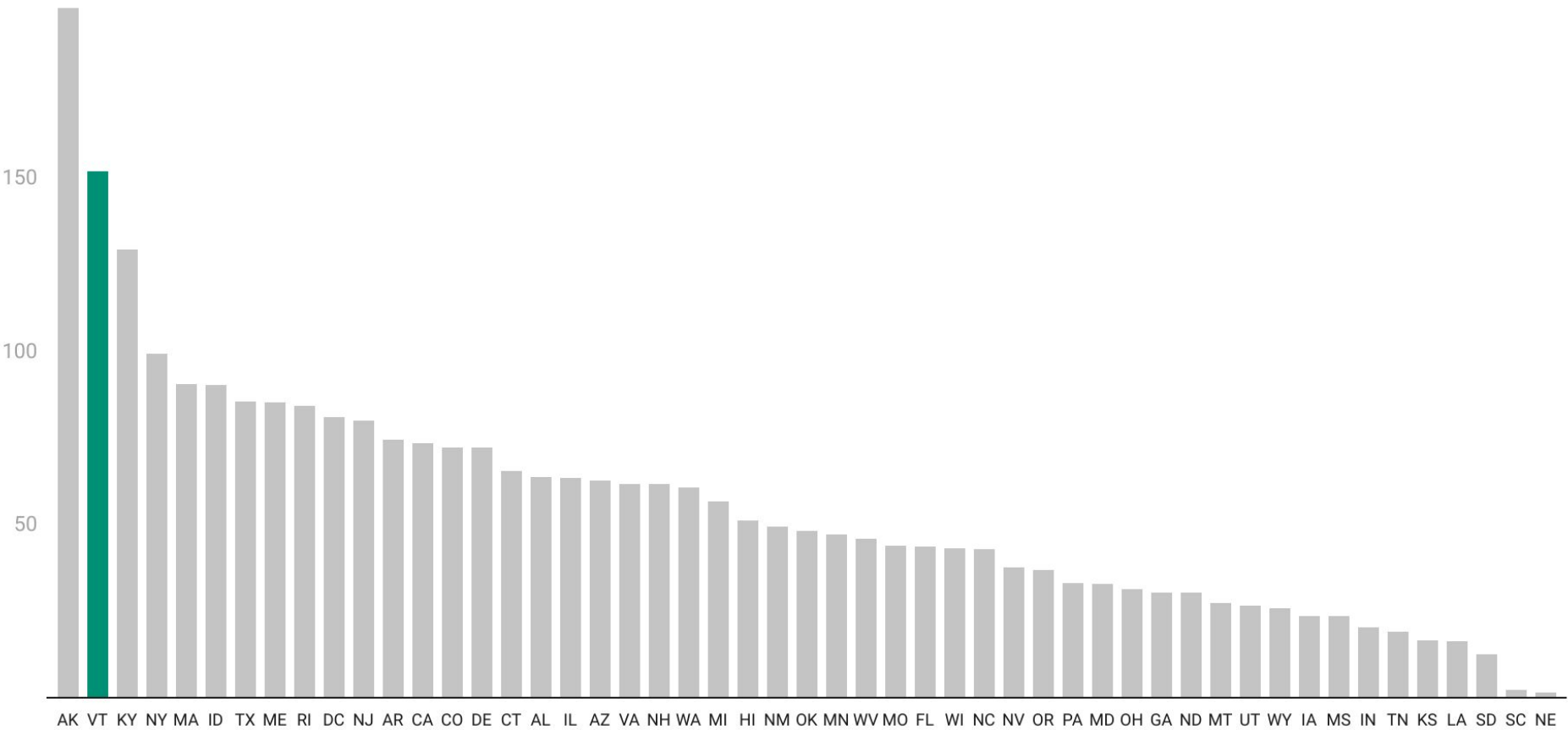
7-Day Average Hospitalizations Per 100K



Sources: HHS—March 28, 2022 (includes: CT, ME, MA, NH, RI & VT)

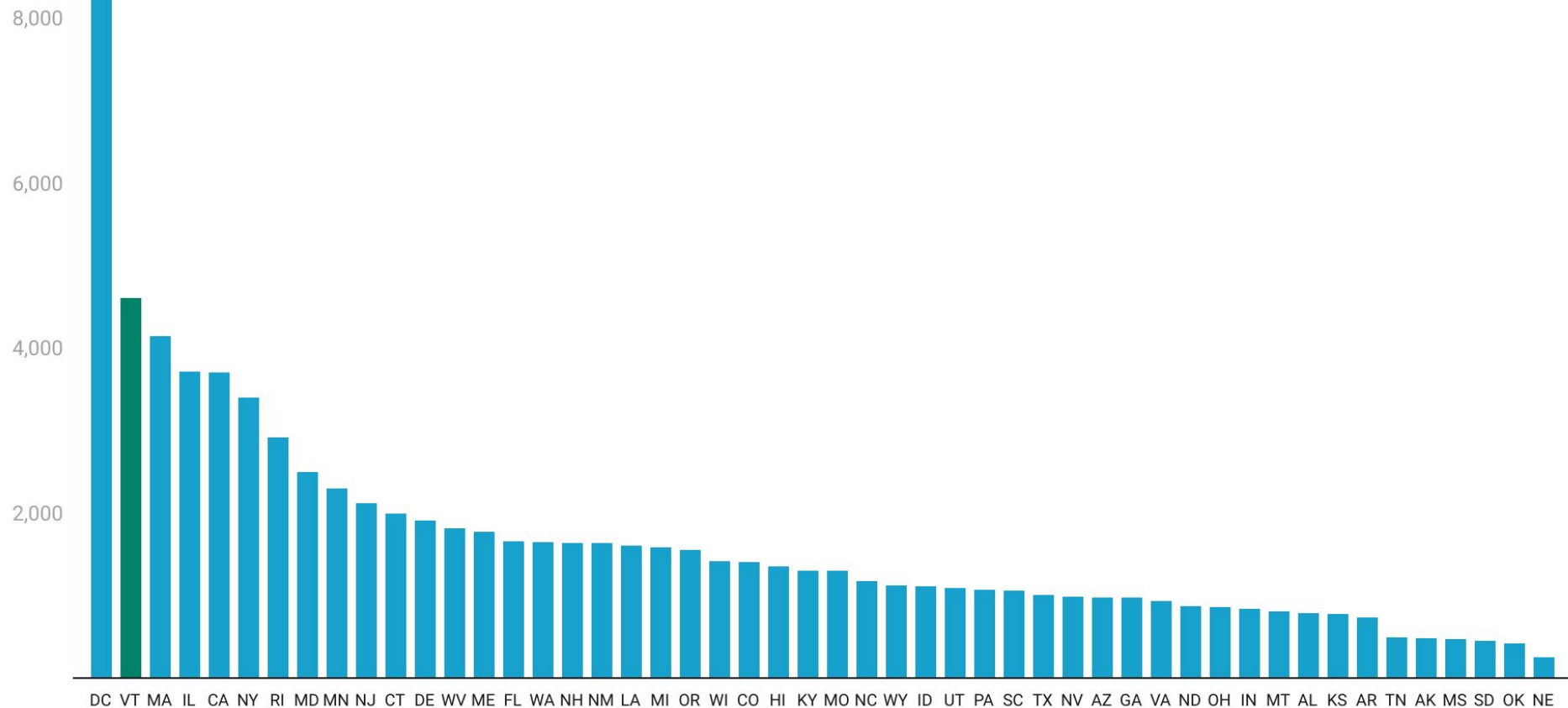
National Data

National COVID-19 Case Rates Per 100K Last 7 Days



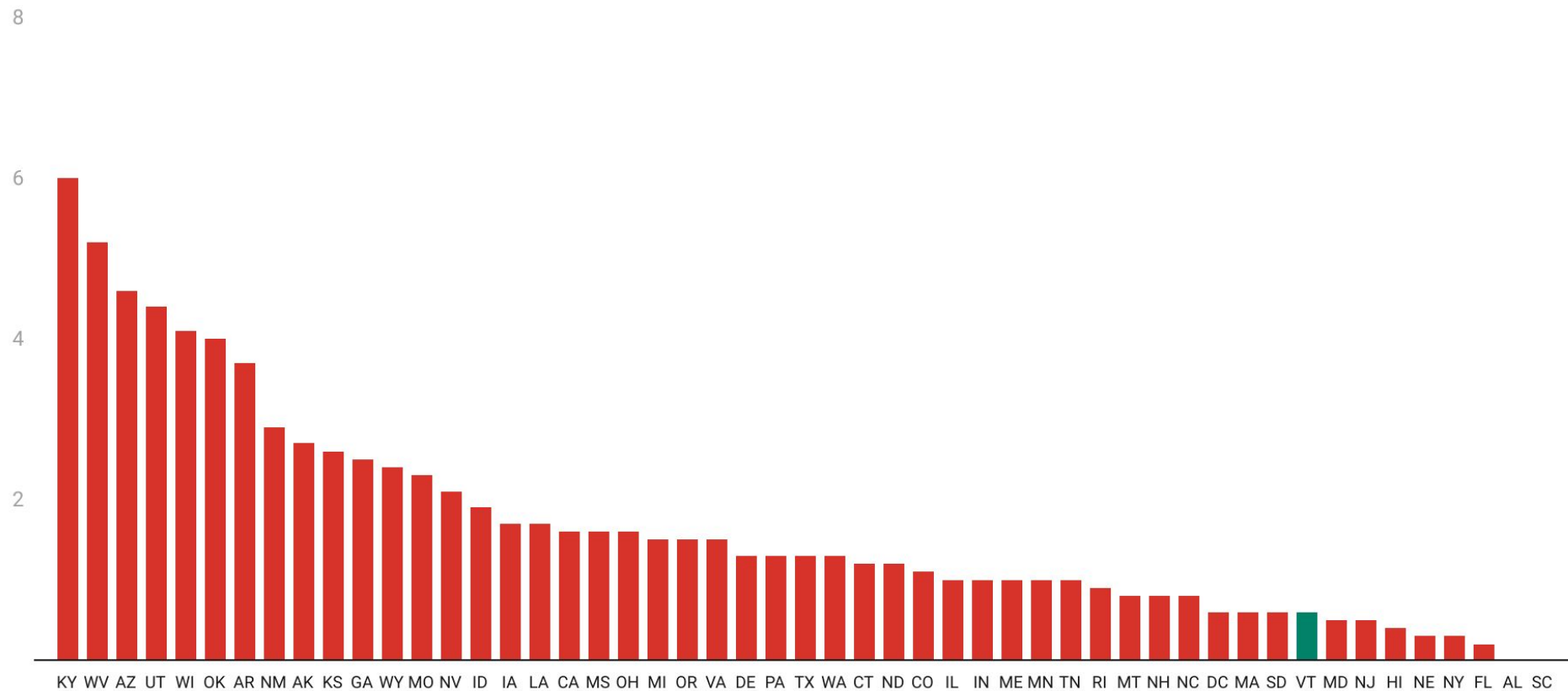
Source: CDC—March 28, 2022; created with Datawrapper

COVID-19 Testing Per 100K Last 7 Days



Source: CDC—March 28, 2022; created with Datawrapper

COVID-19 Deaths Per 100K Last 7 Days

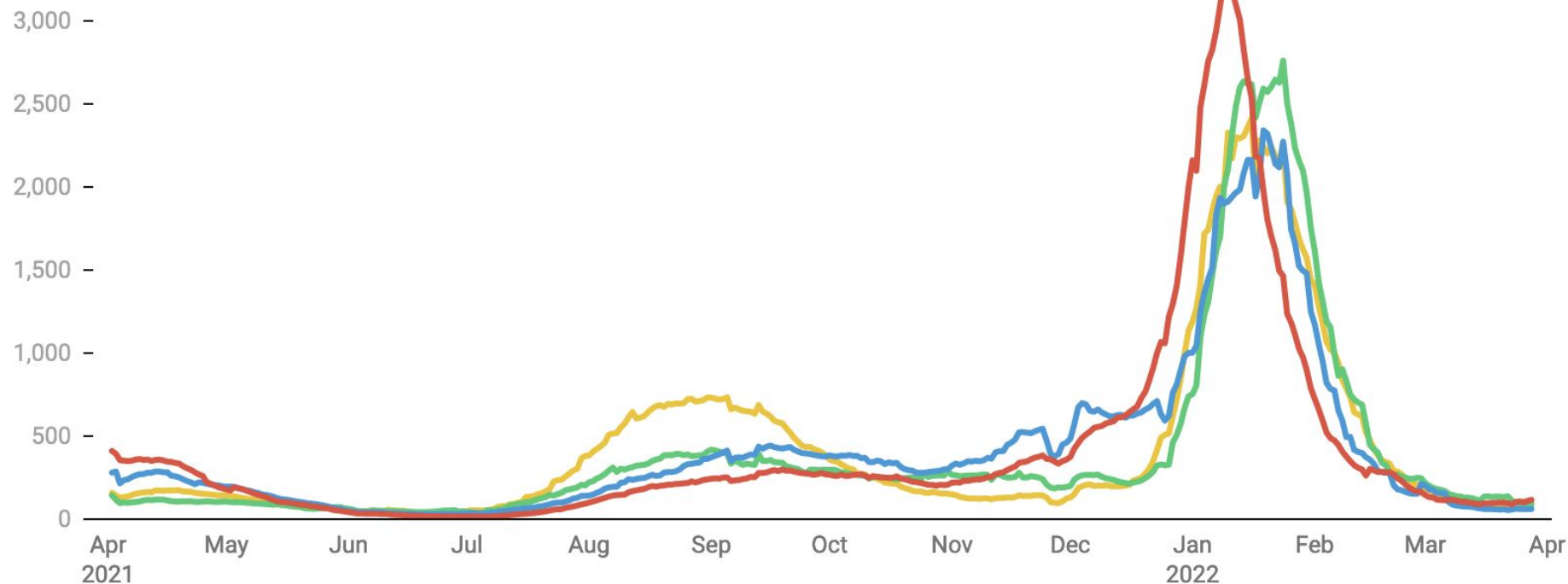


Source: CDC—March 28, 2022; created with Datawrapper

Daily COVID-19 Cases per Million in US Regions

Calculated as a 7-day moving average. Definitions of North, Midwest, South, and West taken from the U.S. Census bureau.

— Northeast — Midwest — South — West

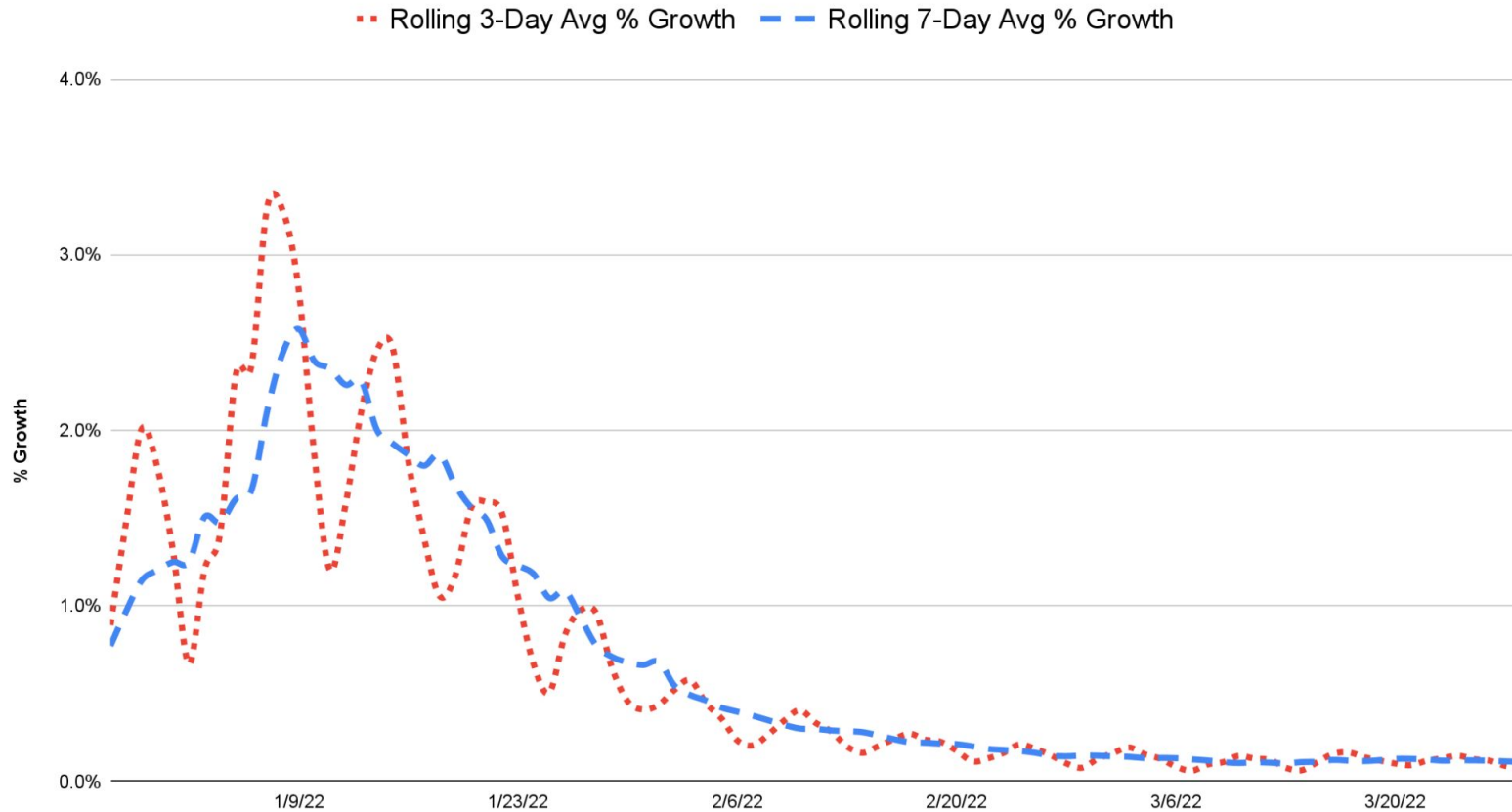


RESTART VERMONT

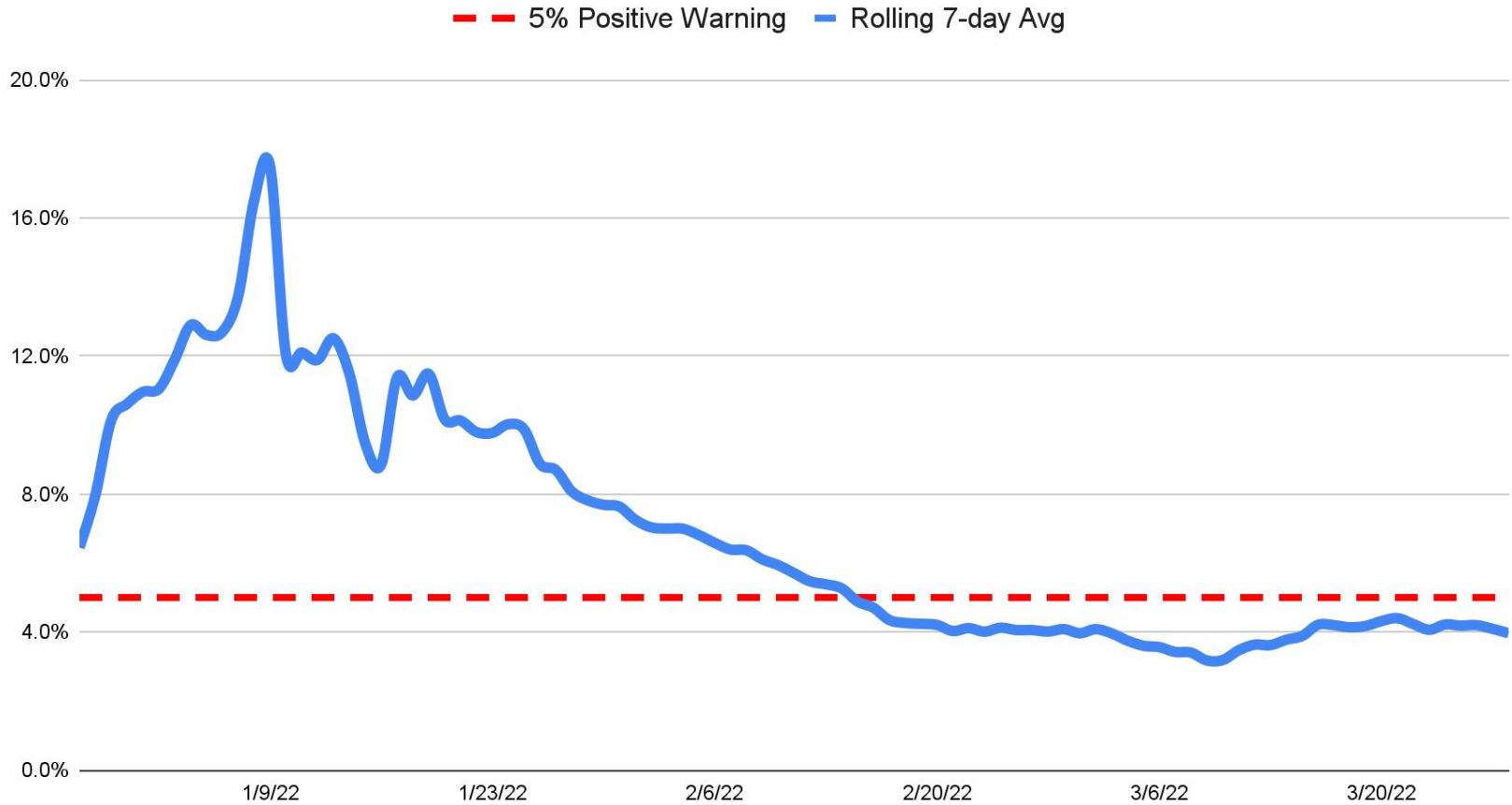
Reopening Metrics

1. Syndromic Surveillance (*retired*)
2. Viral Growth & Reproductive Rates
3. Percentage of New Positive Tests
4. Hospital & Critical Care Bed Capacity
5. Testing Volume

Viral Growth & Reproductive Rates

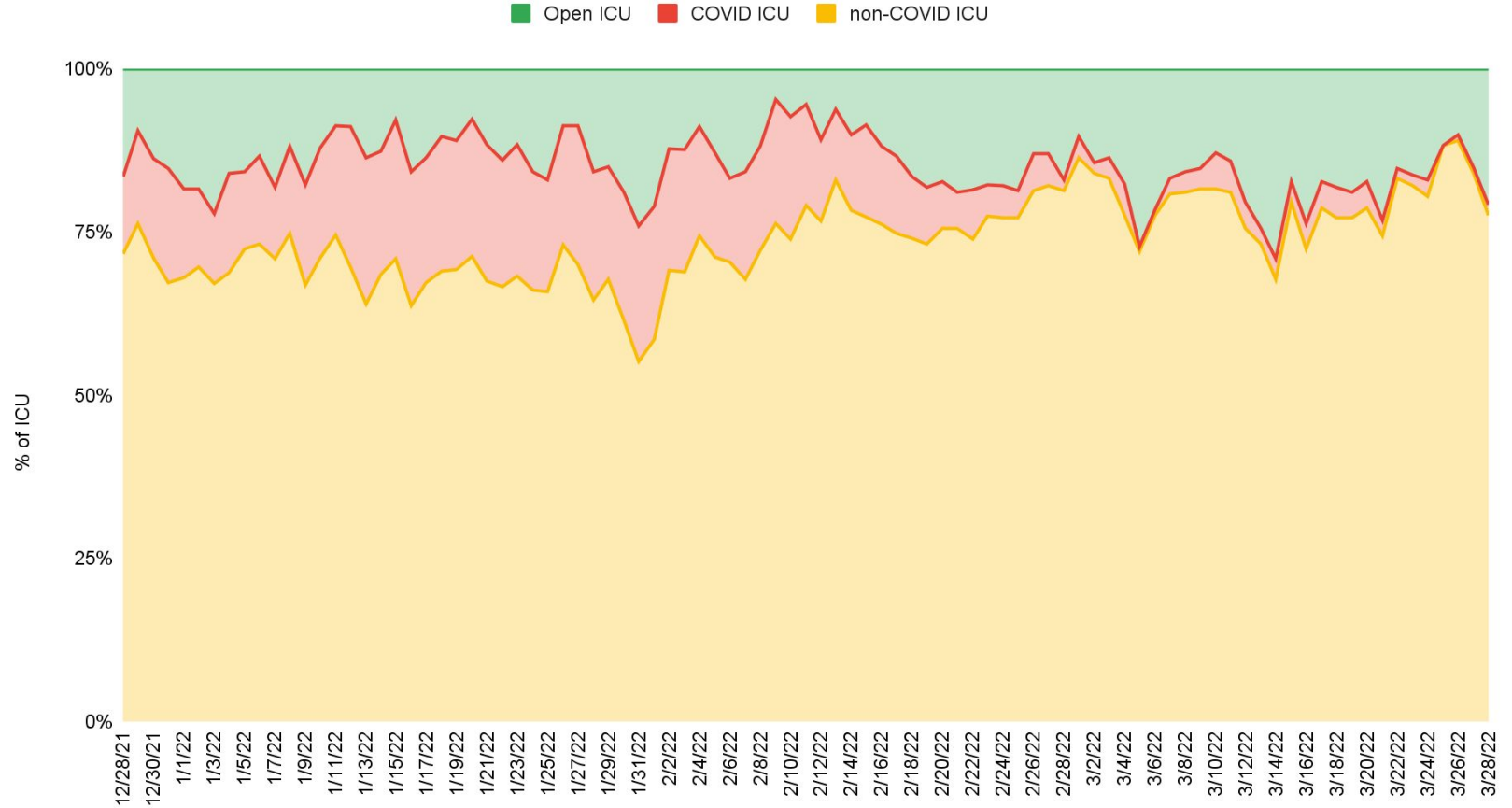


Test Positivity



Source: Vermont Department of Health; 7-day positivity calculated as positive tests last seven days/tests last seven days

Critical Care Beds



Vermont Testing

