COVID-19 Modeling
July 10, 2020

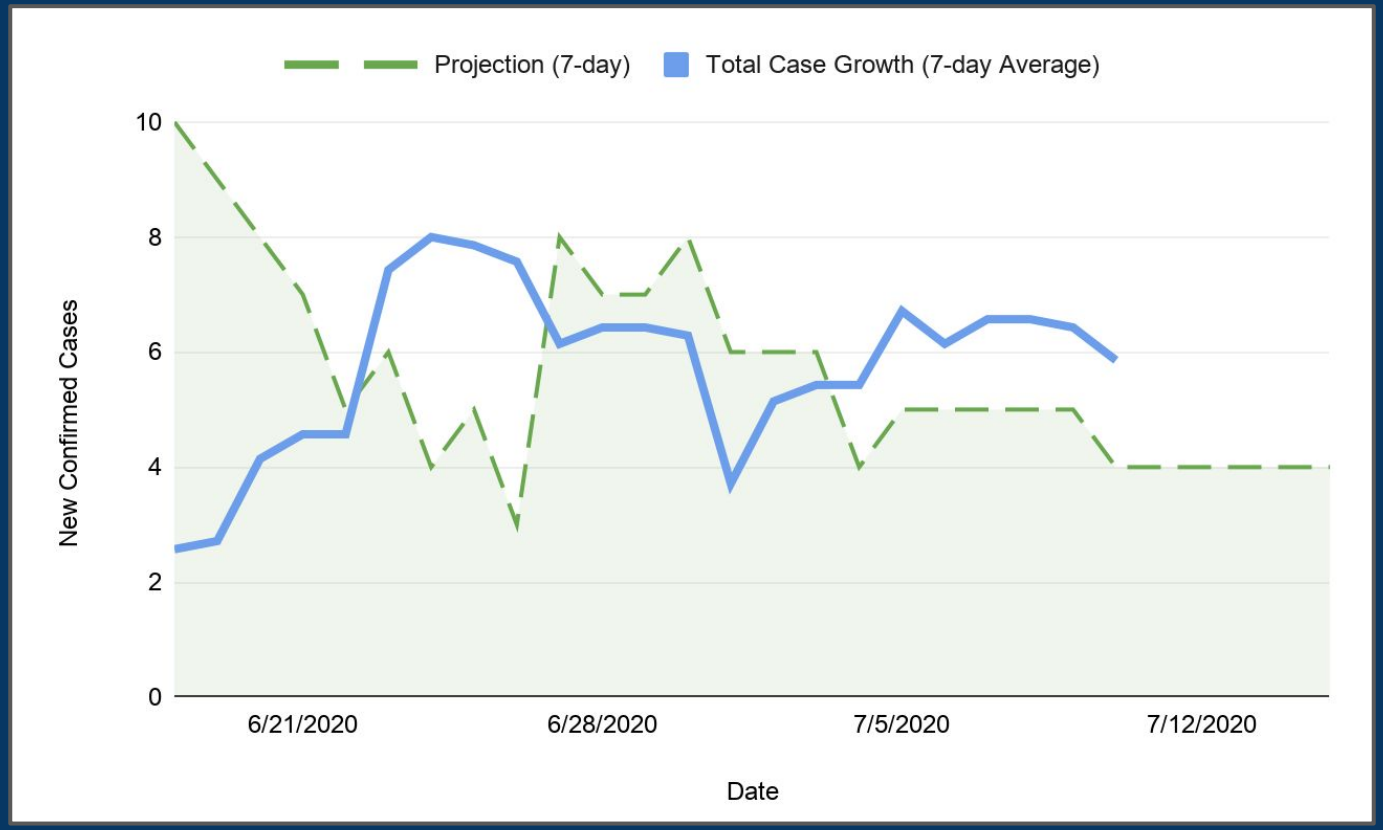
Presentation available at:
dfr.vermont.gov

Weekly Data & Forecast

July 3, 2020 to July 10, 2020

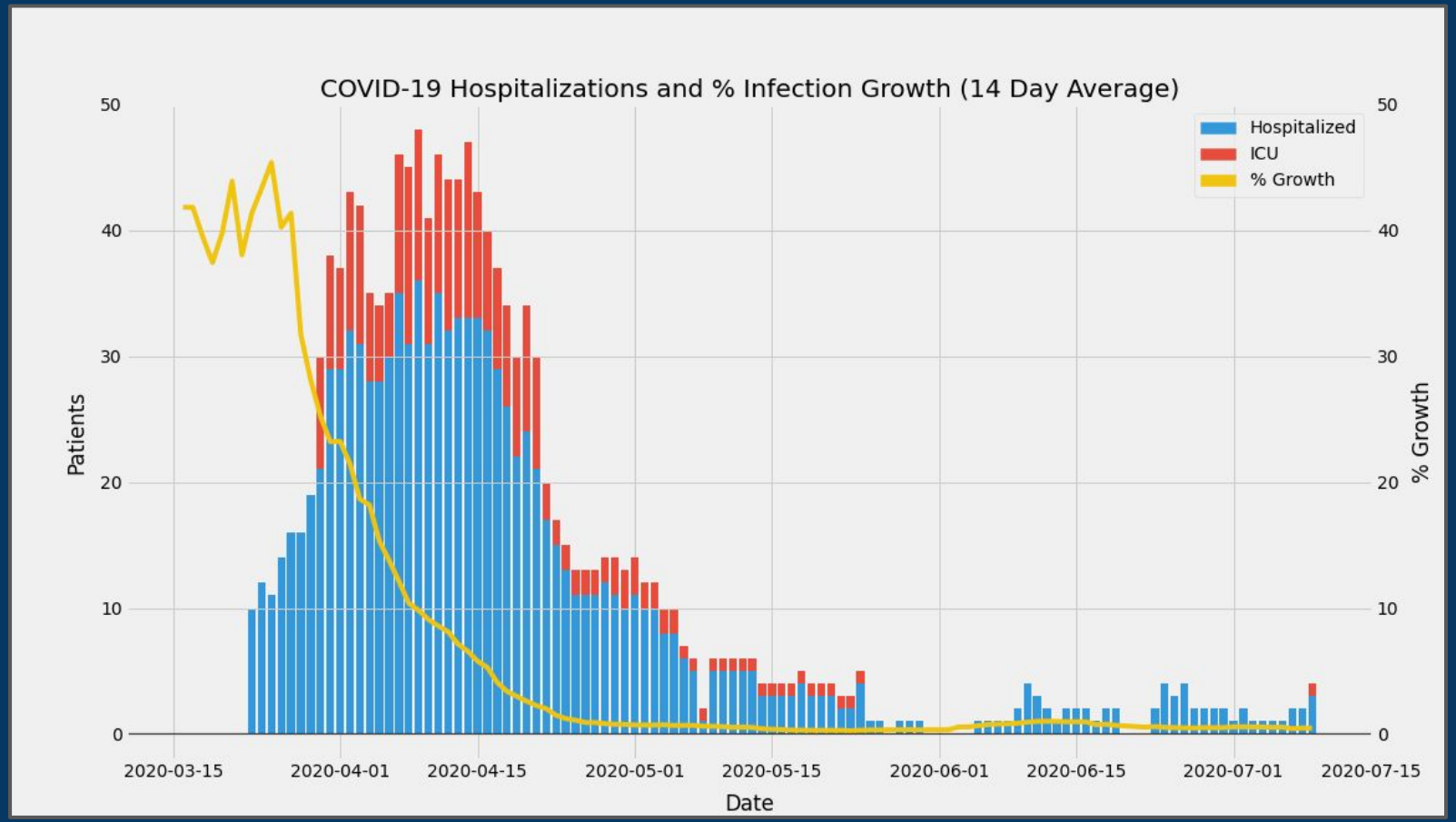
Forecast vs Actual June 18th to July 15th

7-Day Rolling Average



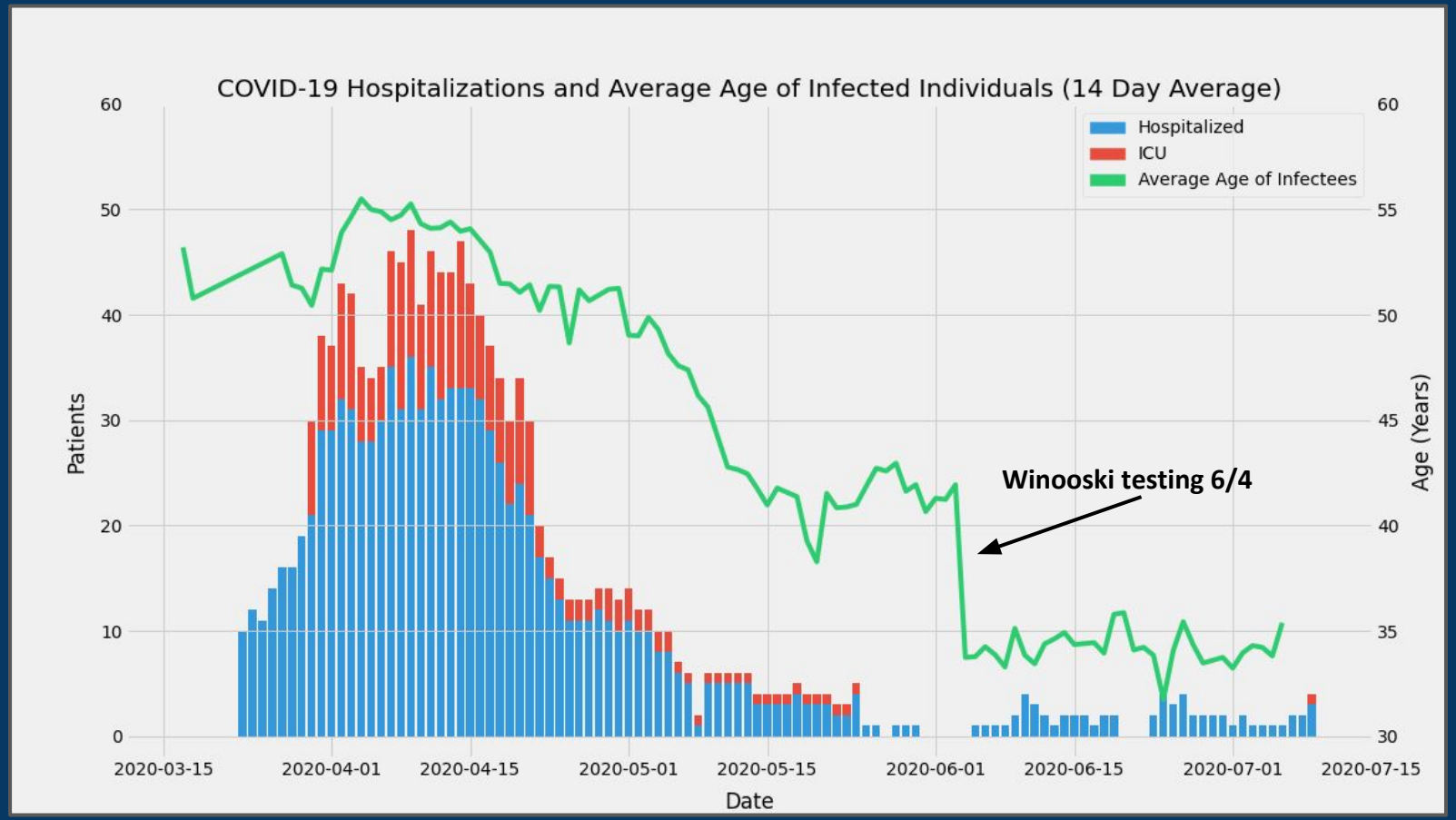
Source: Oliver Wyman (OW) July 9, 2020 Model

Vermont: Data Update



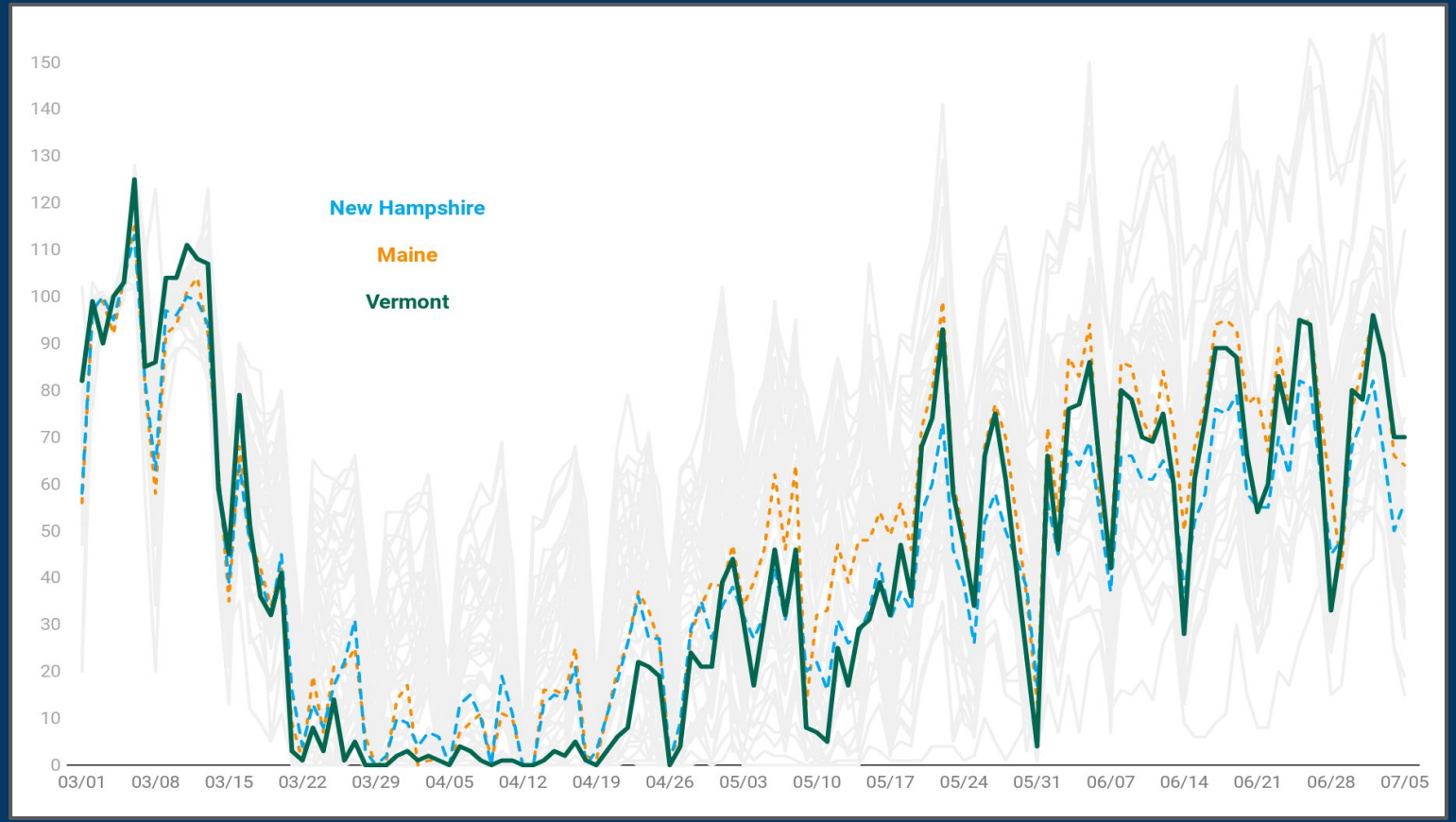
Source: Raw data from VDH - July 10, 2020

Vermont: Data Update



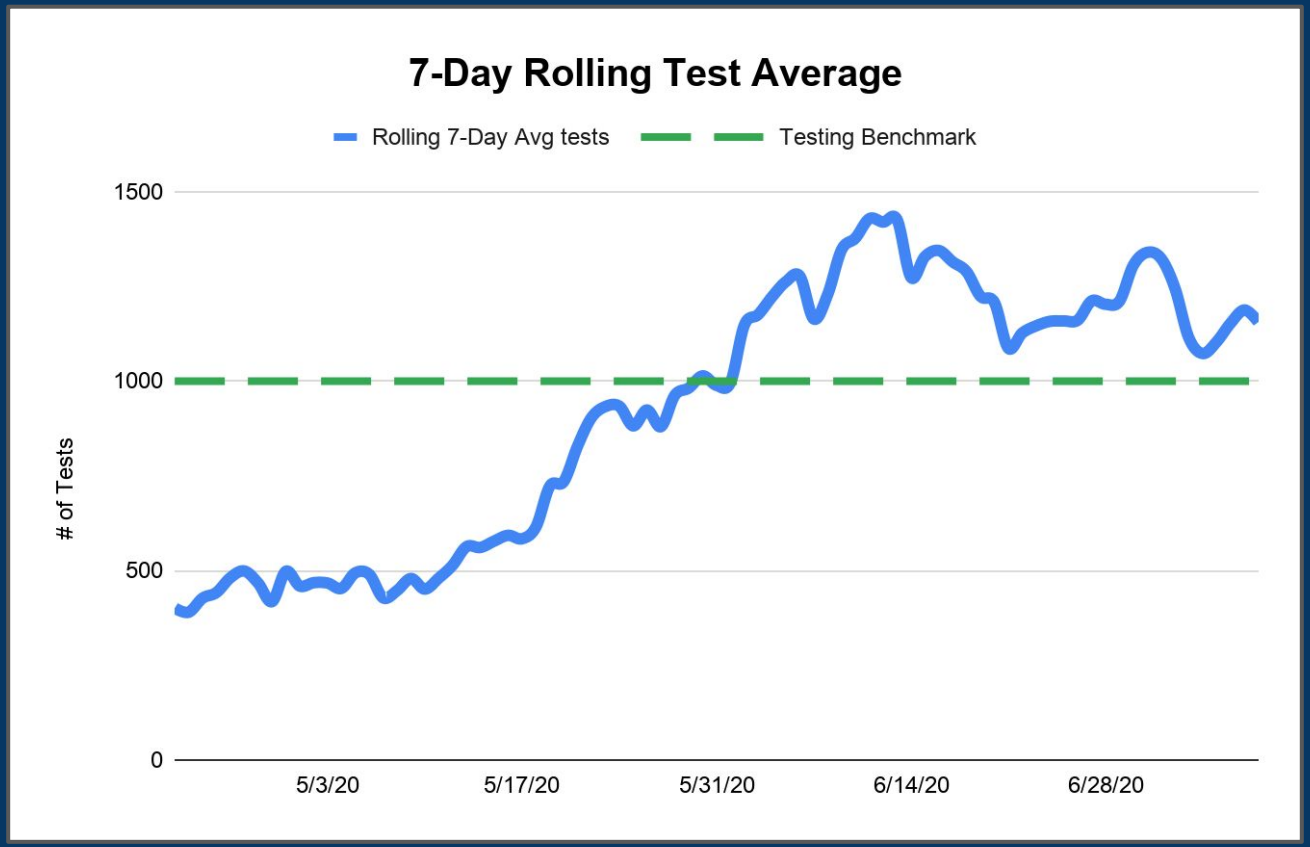
Source: Raw data from VDH - July 10, 2020

Mobility Data: Continued Increased Movement



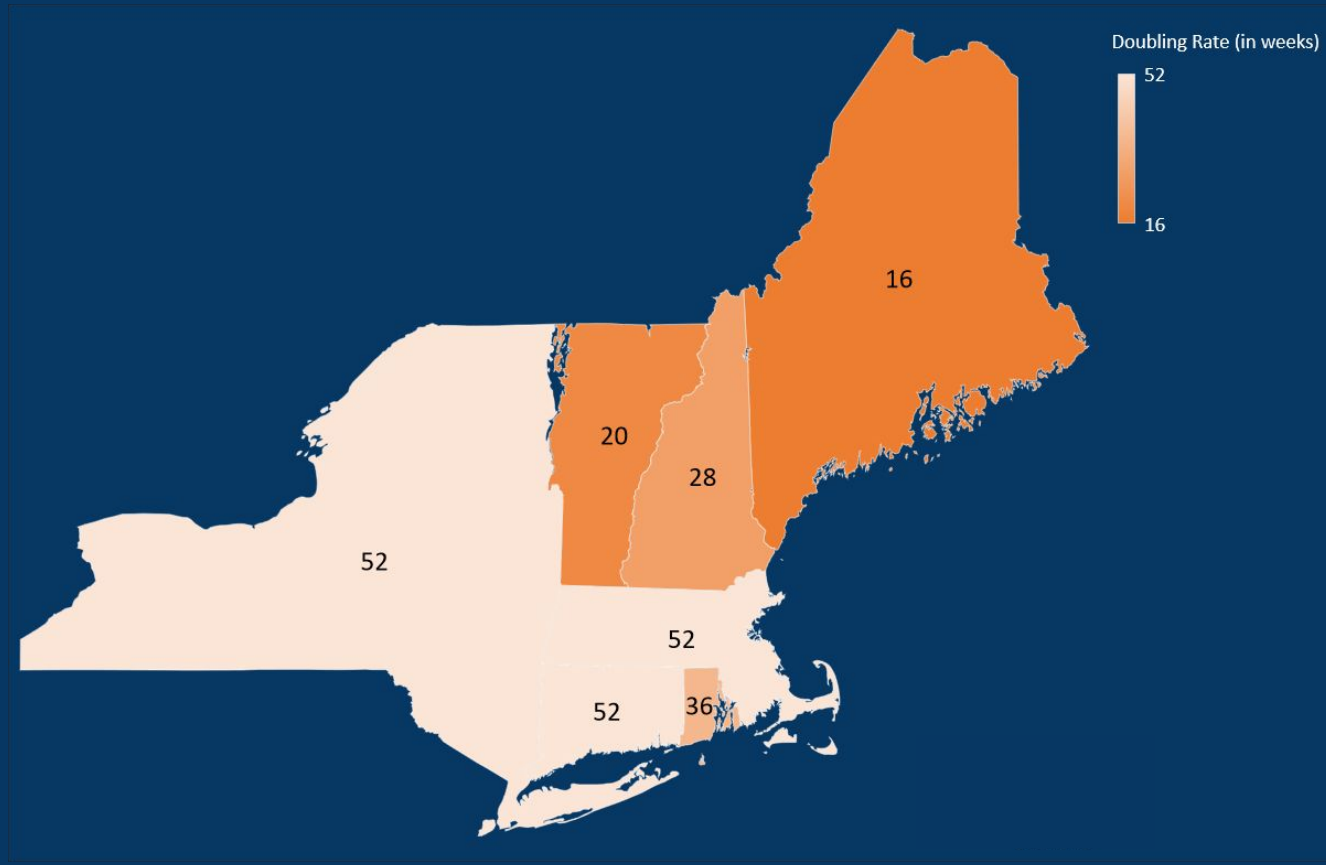
Source: Descartes Labs – July 6, 2020

Vermont COVID-19 PCR Testing



Source: Vermont Department of Health; tests measured as results reported to VDH by day

Vermont's Doubling Rate: 20 Weeks



Data Source: Johns Hopkins University - July 10, 2020

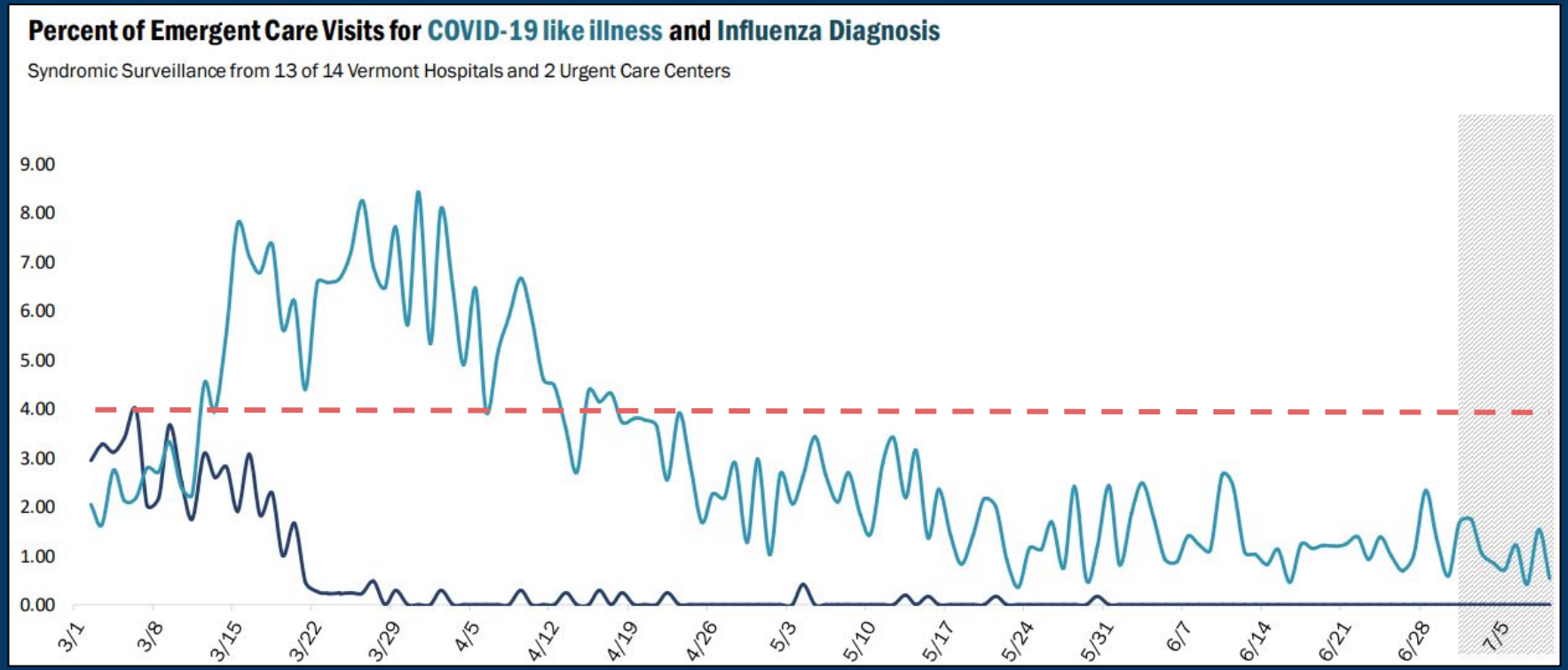
RESTART VERMONT

Reopening Metrics

1. Syndromic Surveillance
2. Viral Growth & Reproductive Rates
3. Percentage of New Positive Tests
4. Hospital & Critical Care Bed Capacity

Data Point 1: Syndromic Surveillance

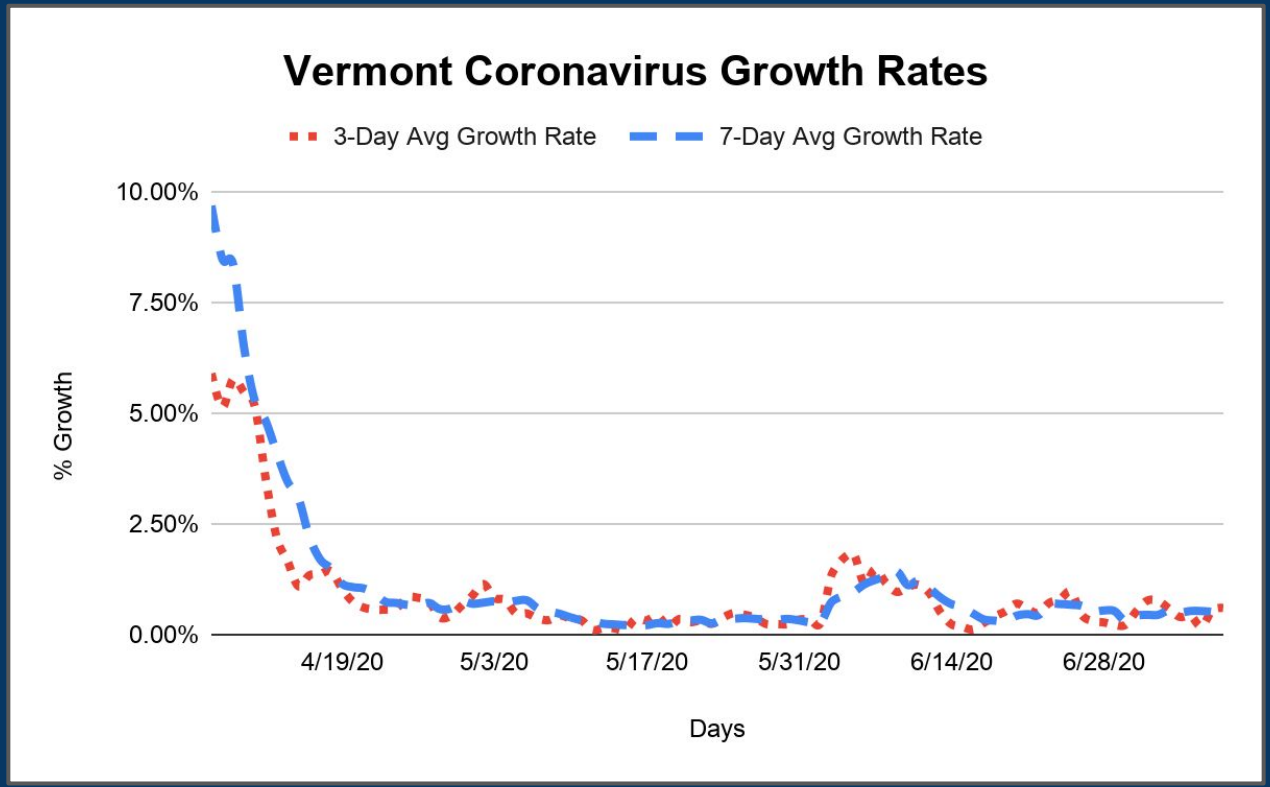
- **Summary:** Percentage of visits with COVID-19 like illness and Influenza diagnosis
- **Warning Flag:** Percentage of visits exceeding 4% for multiple consecutive days



Source: Vermont Department of Health

Data Point 2: Viral Growth and Reproductive Rates

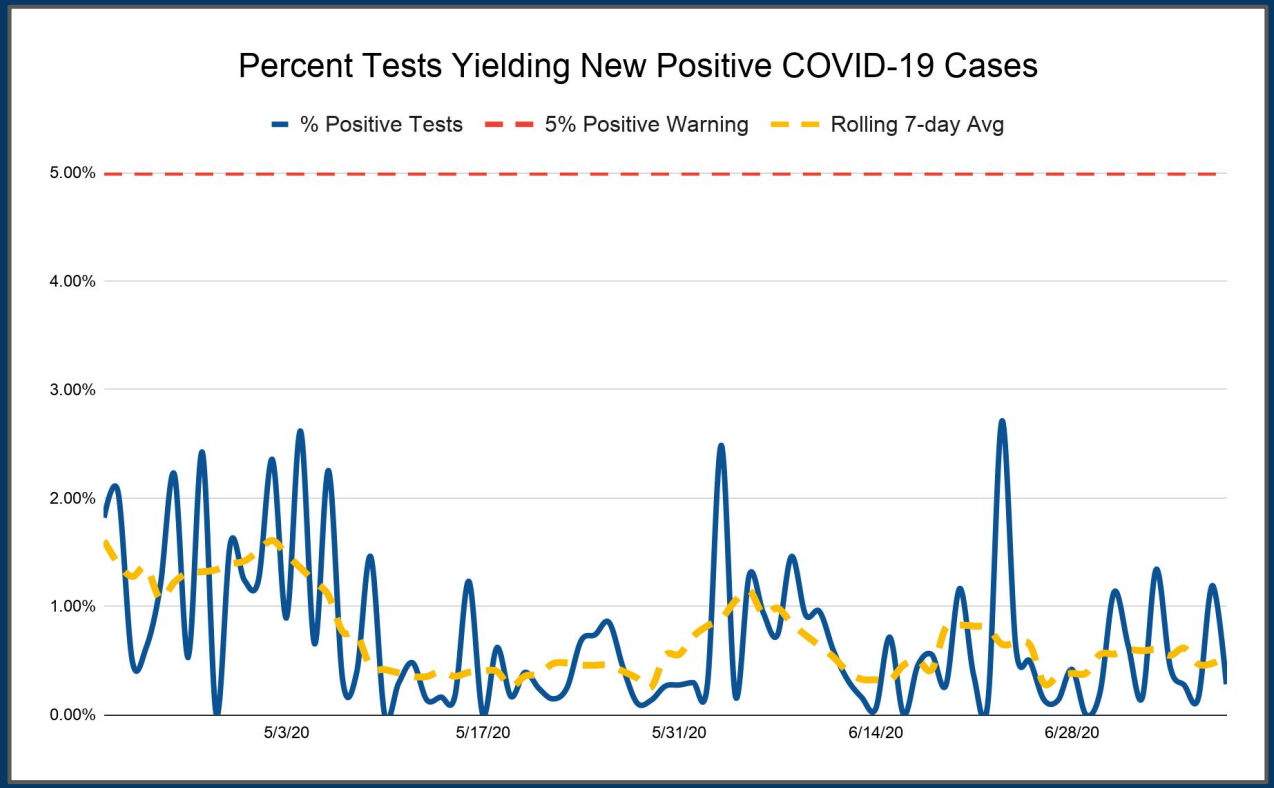
- **Summary**: Case growth measured by daily, 3-day, 7-day, and effective reproductive rate (R_t)
- **Warning Flags**: Sustained viral growth that would lead to <30% of open ICU beds



Source: Vermont Department of Health

Data Point 3: Percentage of New Positive Tests

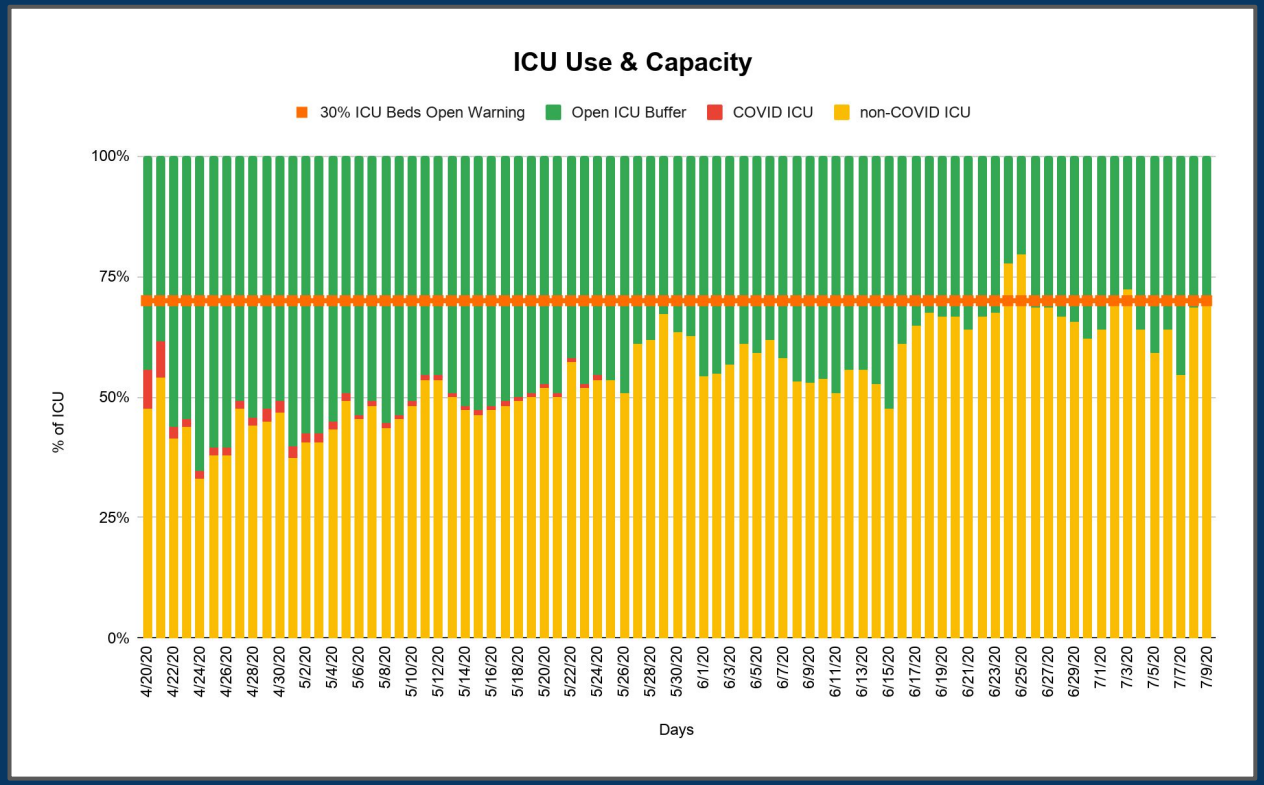
- **Summary**: Percent of tests resulting in a new positive case
- **Warning Flags**: New positives represent >5% of daily results



Source: Vermont Department of Health

Data Point 4: Hospital & Critical Care Beds

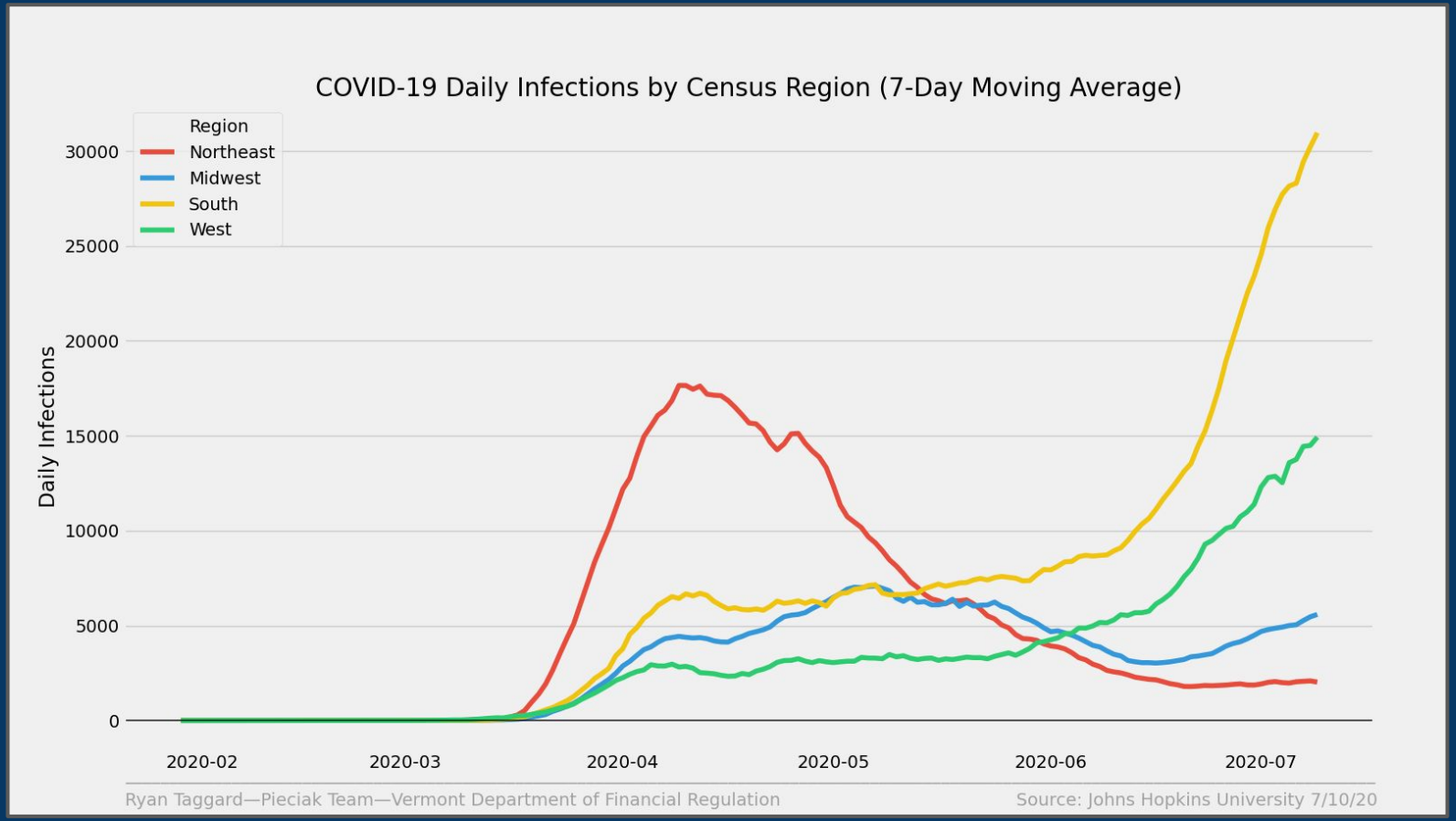
- **Summary**: Number of occupied and unoccupied medical surgical and ICU beds
- **Warning Flags**: Reduction in ICU open beds to less than 30%



Source: Vermont Department of Health

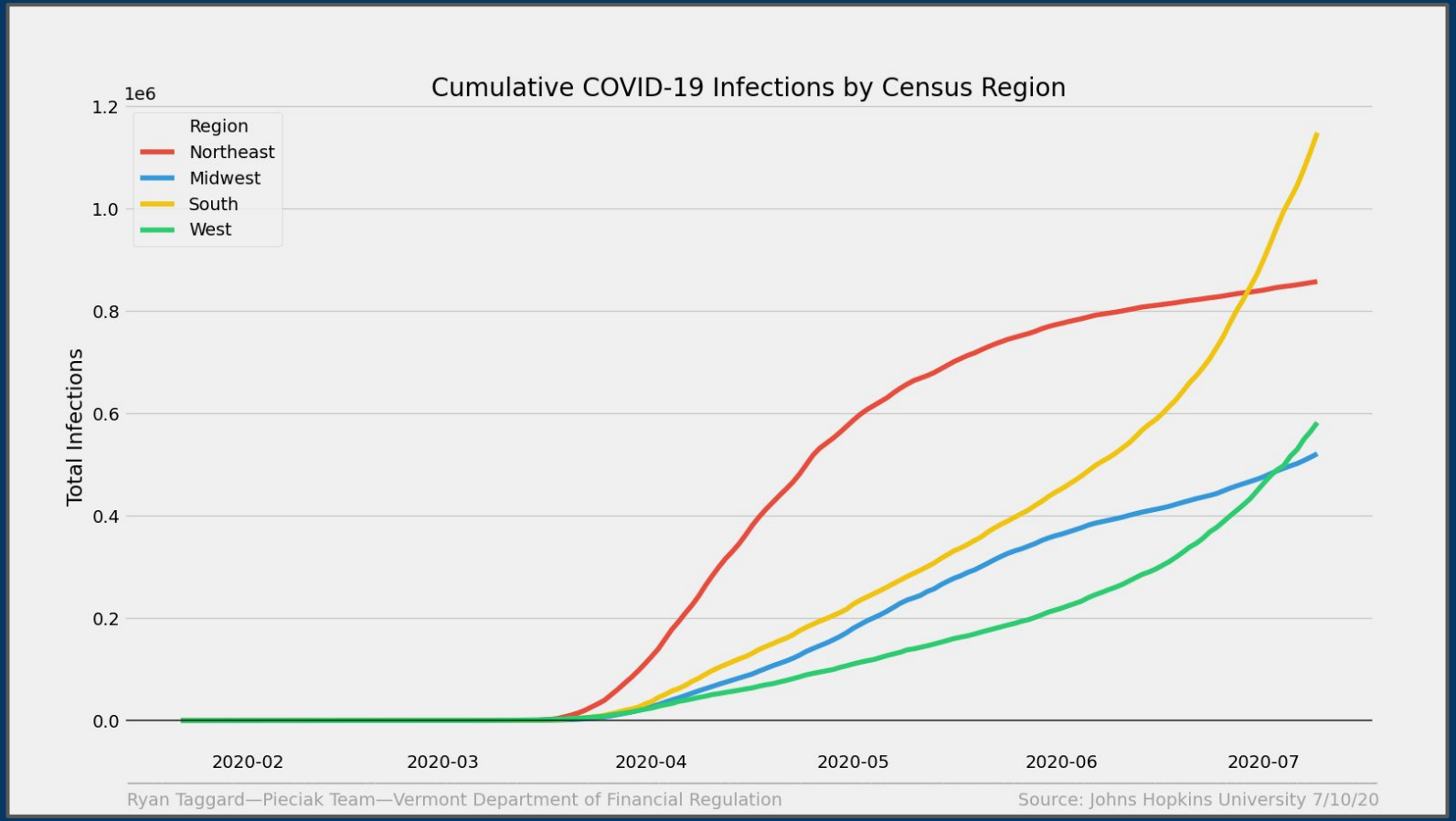
National & Regional Data

National Data



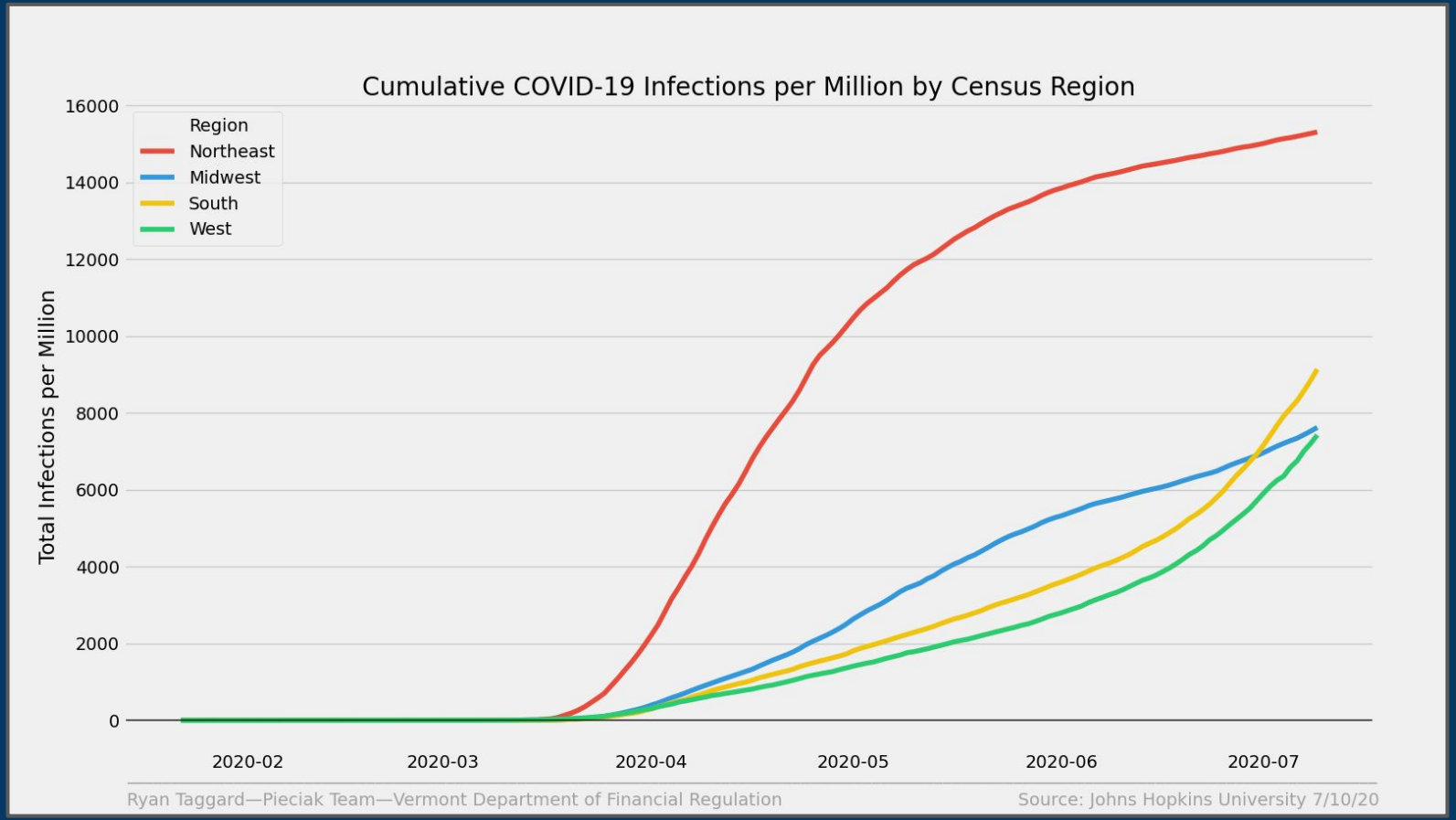
Source: Raw data from Johns Hopkins University - July 10, 2020

National Data



Source: Raw data from Johns Hopkins University - July 10, 2020

National Data

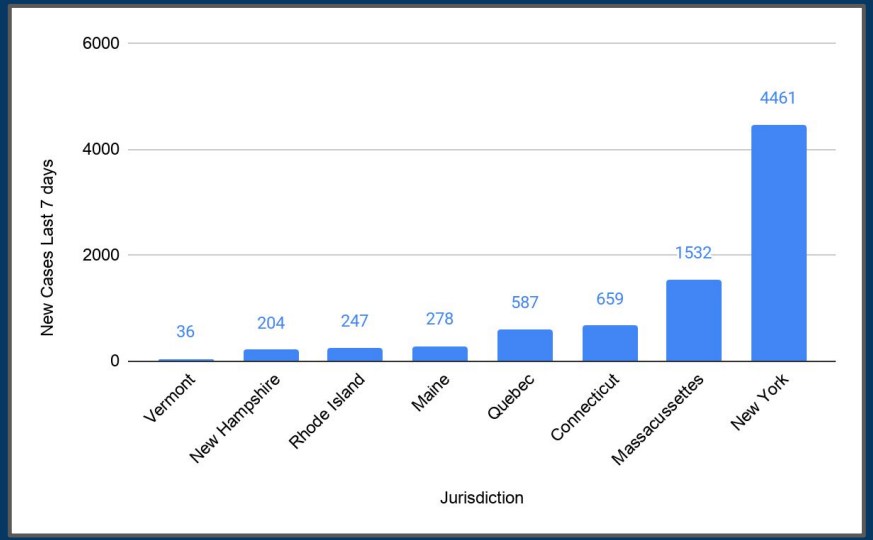


Source: Raw data from Johns Hopkins University - July 10, 2020

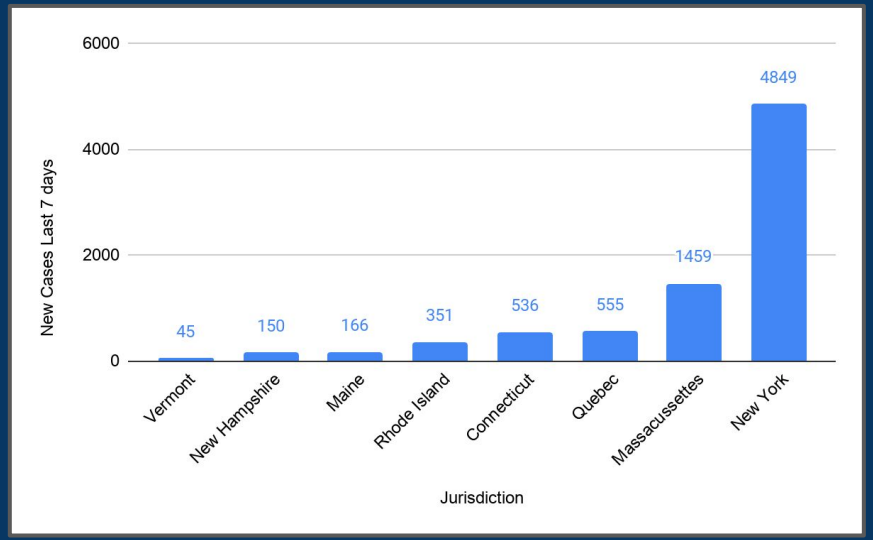
Regional Monitoring: New Cases Last 7 Days

1.33% Increase in New Confirmed Cases

Positive Cases June 26th to July 1st

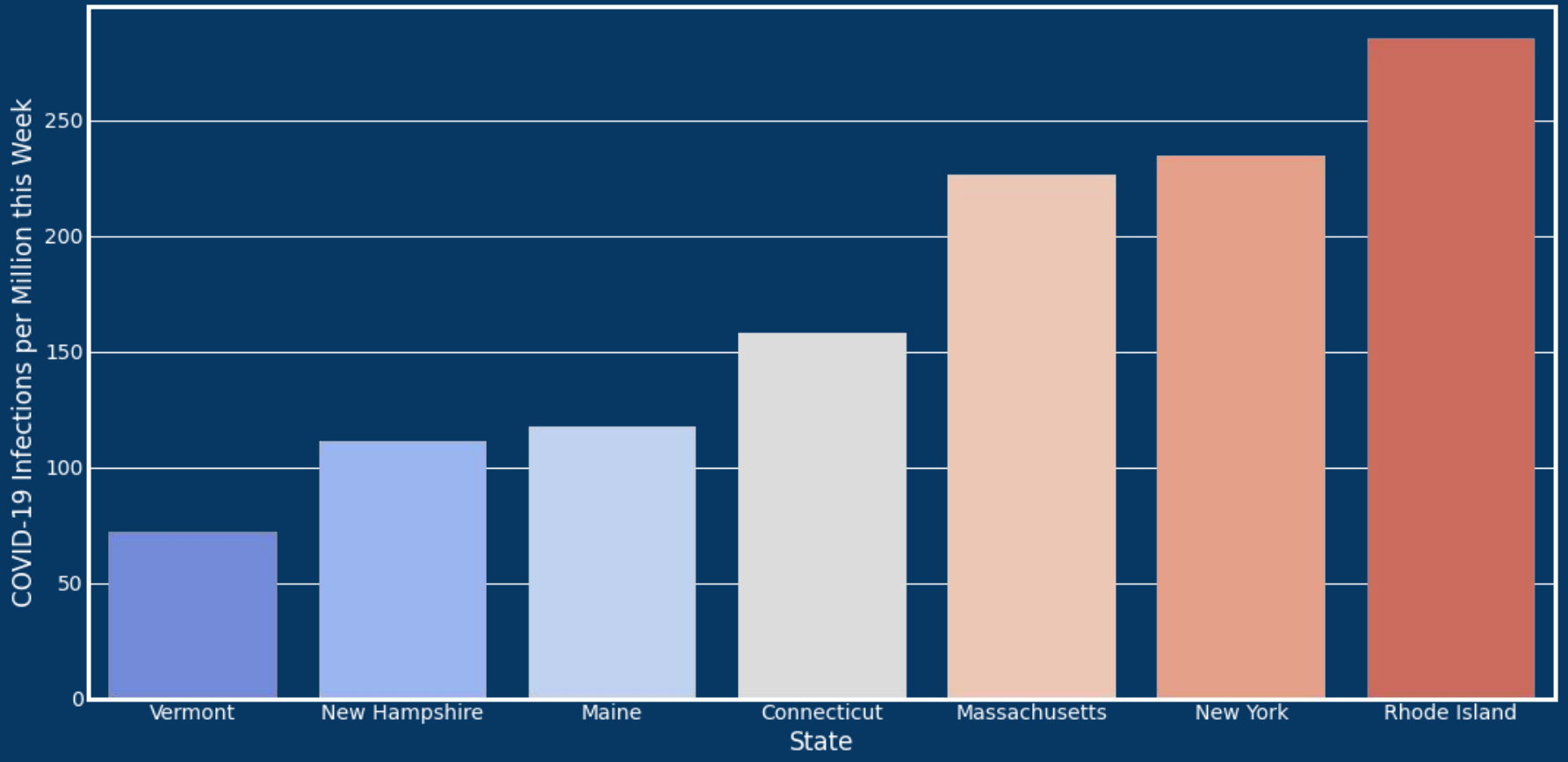


Positive Cases July 2nd to July 8th



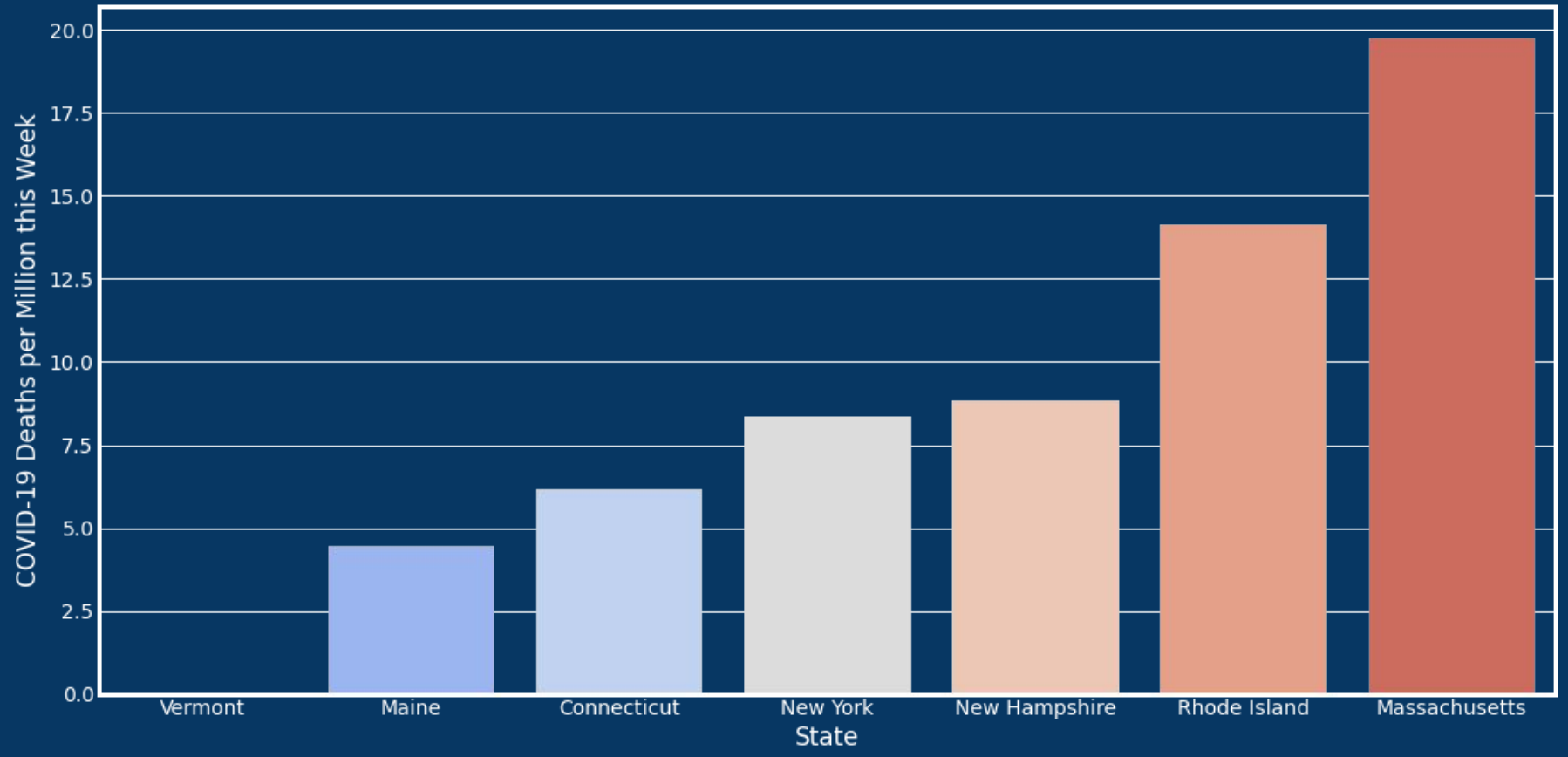
Source: Johns Hopkins University

Weekly Infections per Million



Source: Johns Hopkins University, July 3 - July 10, 2020

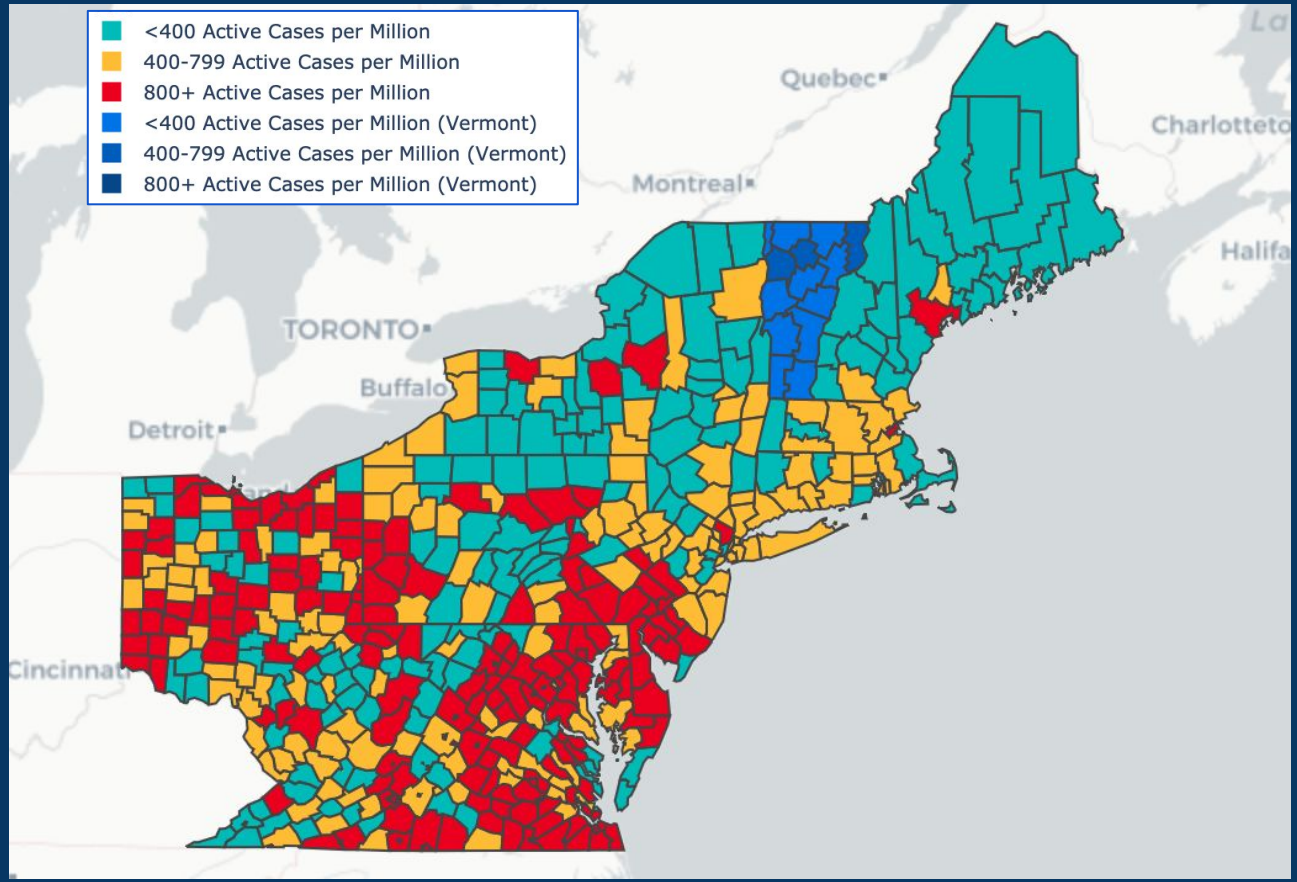
Weekly Deaths per Million



Source: Johns Hopkins University, July 3 - July 10, 2020

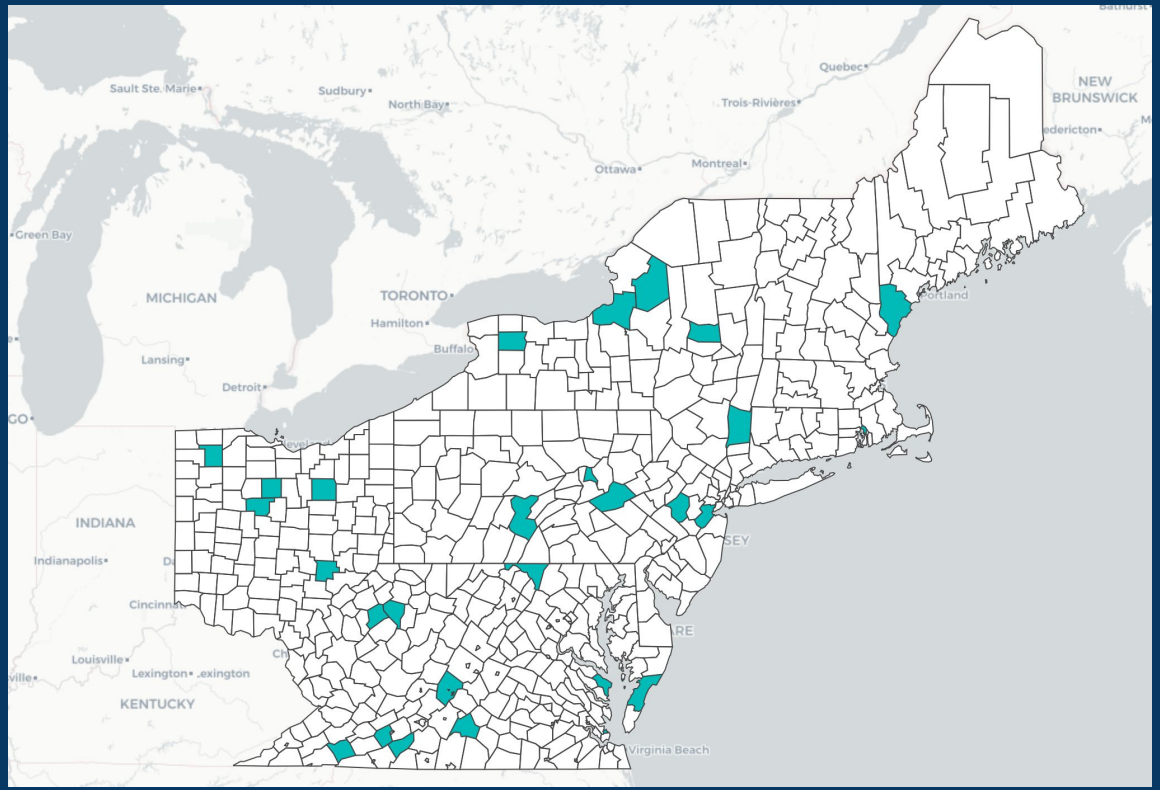
Travel Policy Update

Travel Policy: Data Updates



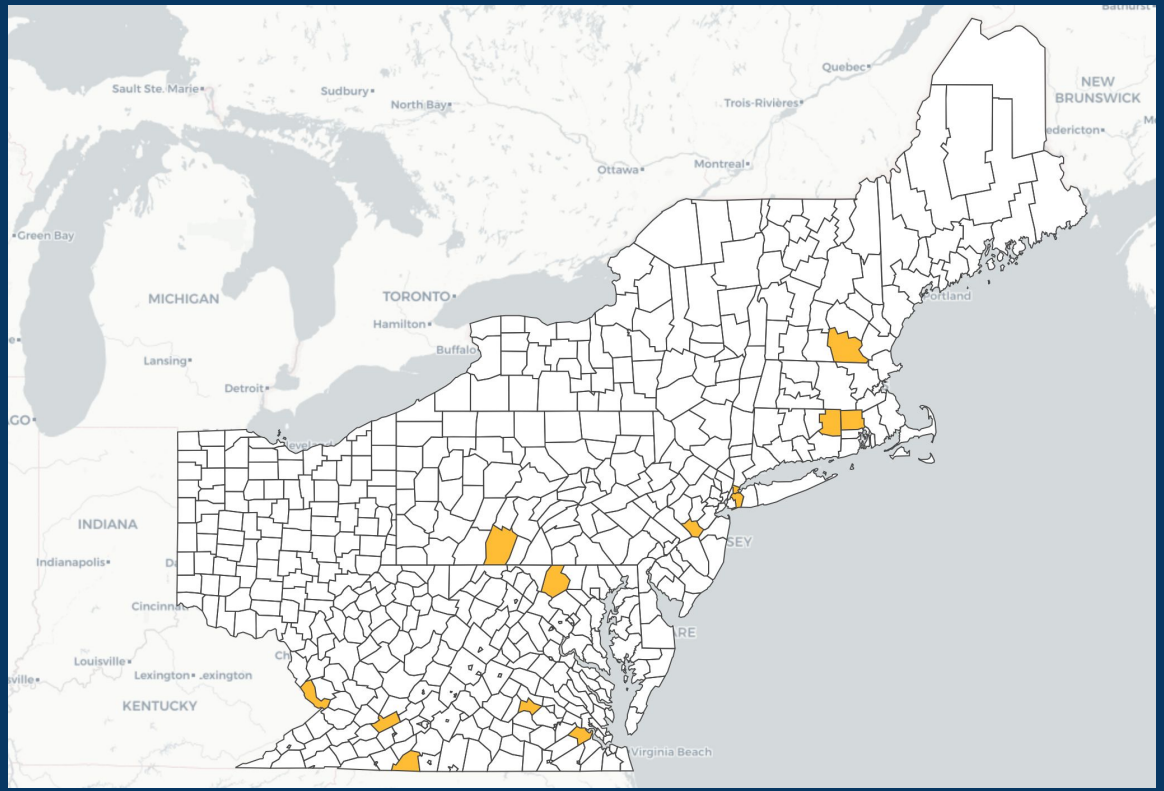
Source: Raw data from Johns Hopkins University—July 10, 2020 (dynamic map available at Vermont ACCD site)

Trending Favorably: Counties Moving from Yellow or Red to Green



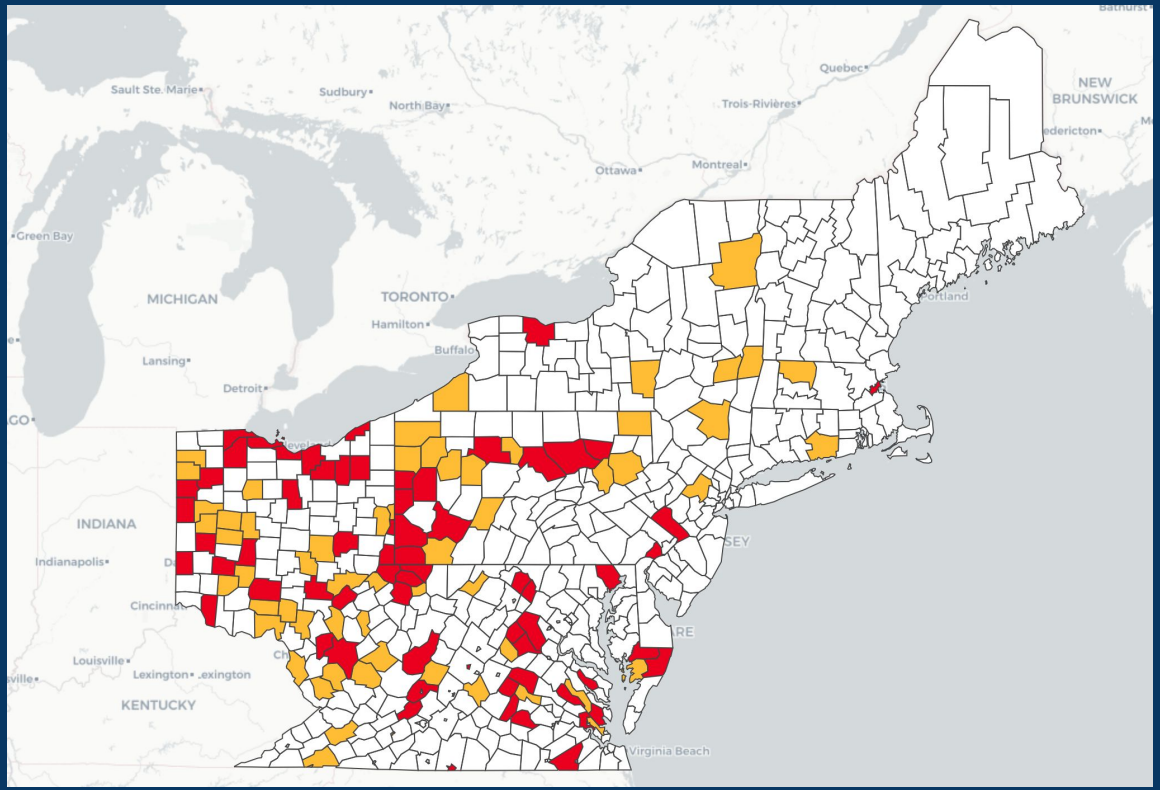
Source: Raw data from Johns Hopkins University—July 10, 2020 (dynamic map available at Vermont ACCD site)

Trending Favorably: Counties Moving from Red to Yellow



Source: Raw data from Johns Hopkins University—July 10, 2020 (dynamic map available at Vermont ACCD site)

Trending Unfavorably: Counties Moving to Yellow or Red



Source: Raw data from Johns Hopkins University—July 10, 2020 (dynamic map available at Vermont ACCD site)