

COVID-19 Modeling

September 22, 2020

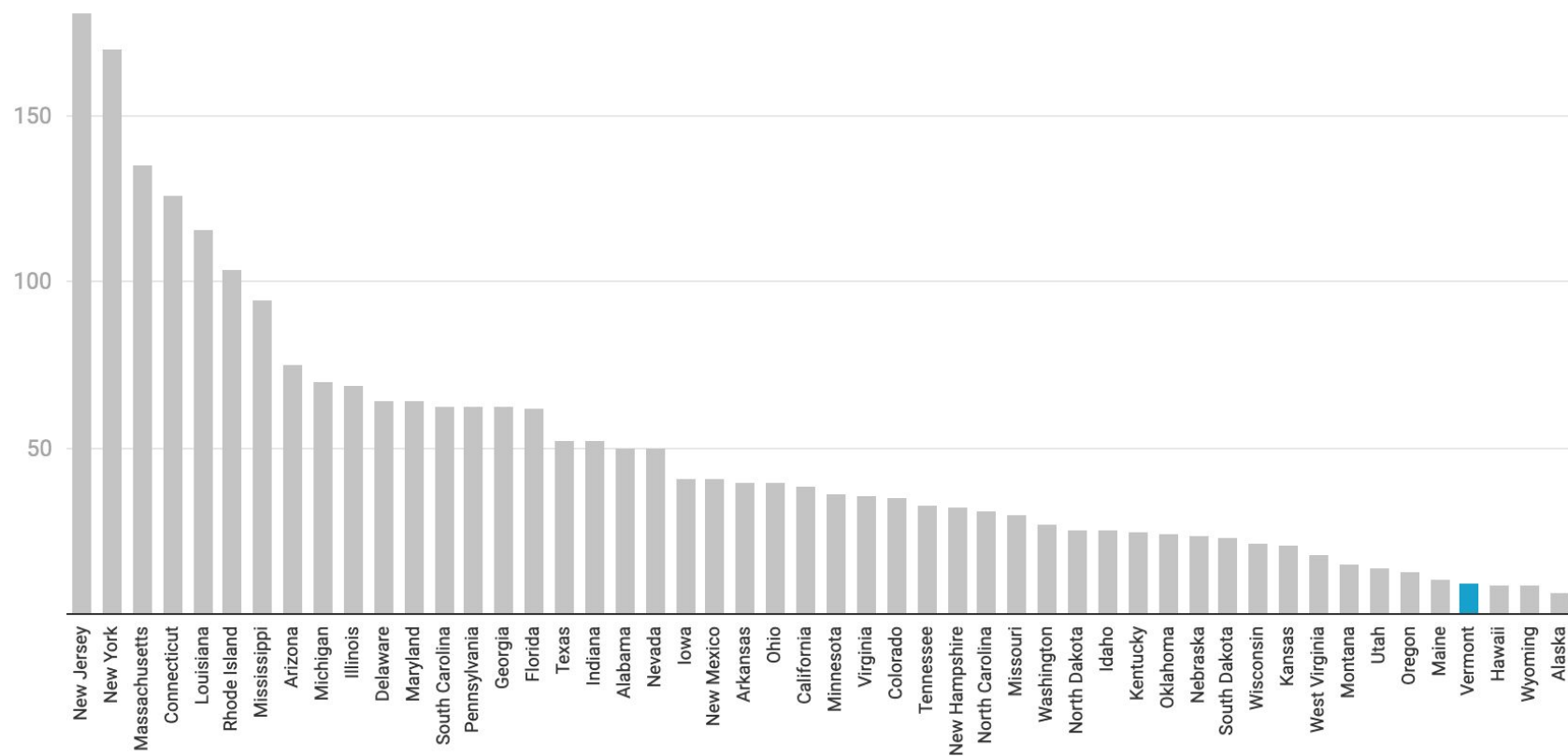
Presentation available at:
dfr.vermont.gov

200,000+

**Projected American COVID-19 deaths
by the end of today***

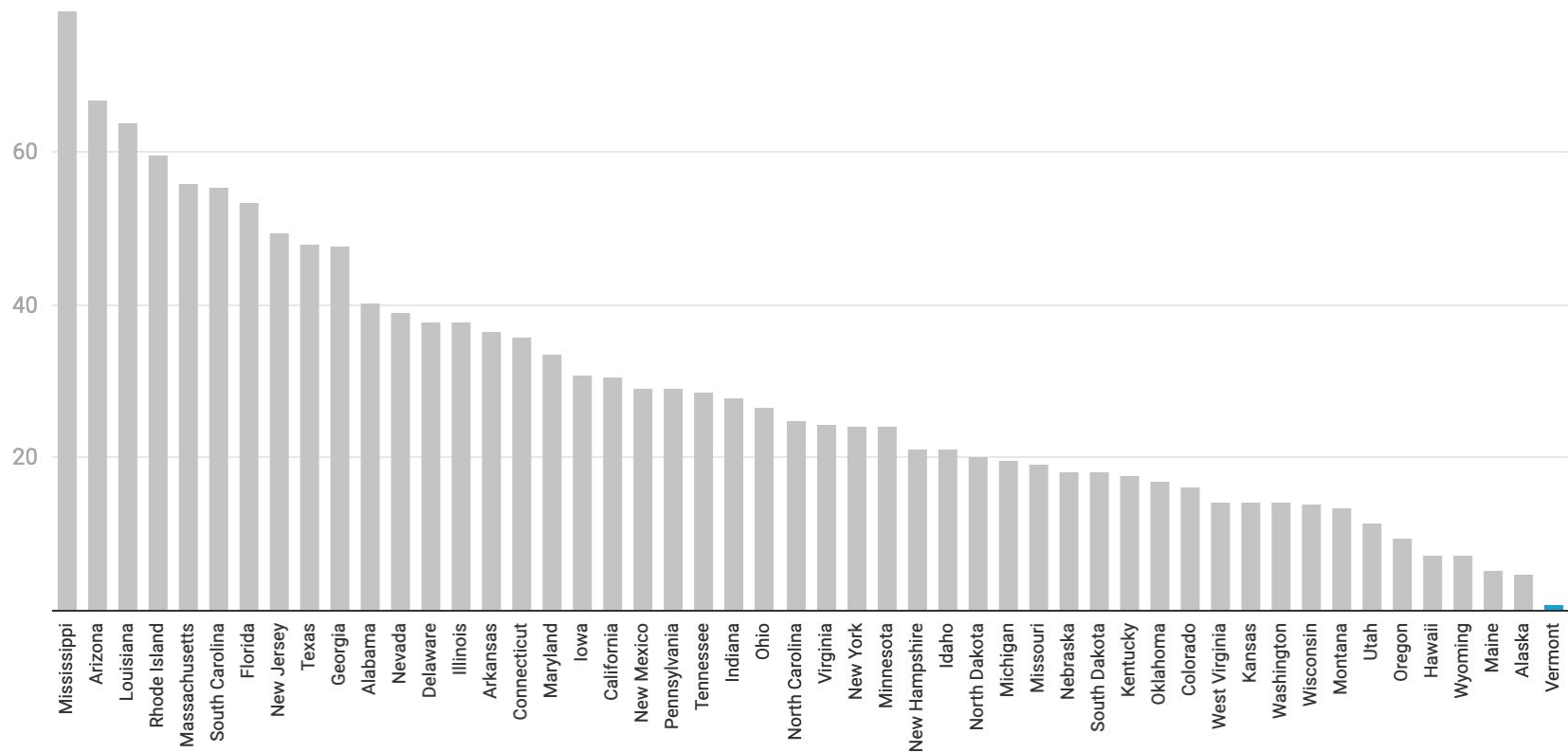
* Based on data from Johns Hopkins University

COVID-19 Deaths per 100K since January 1st

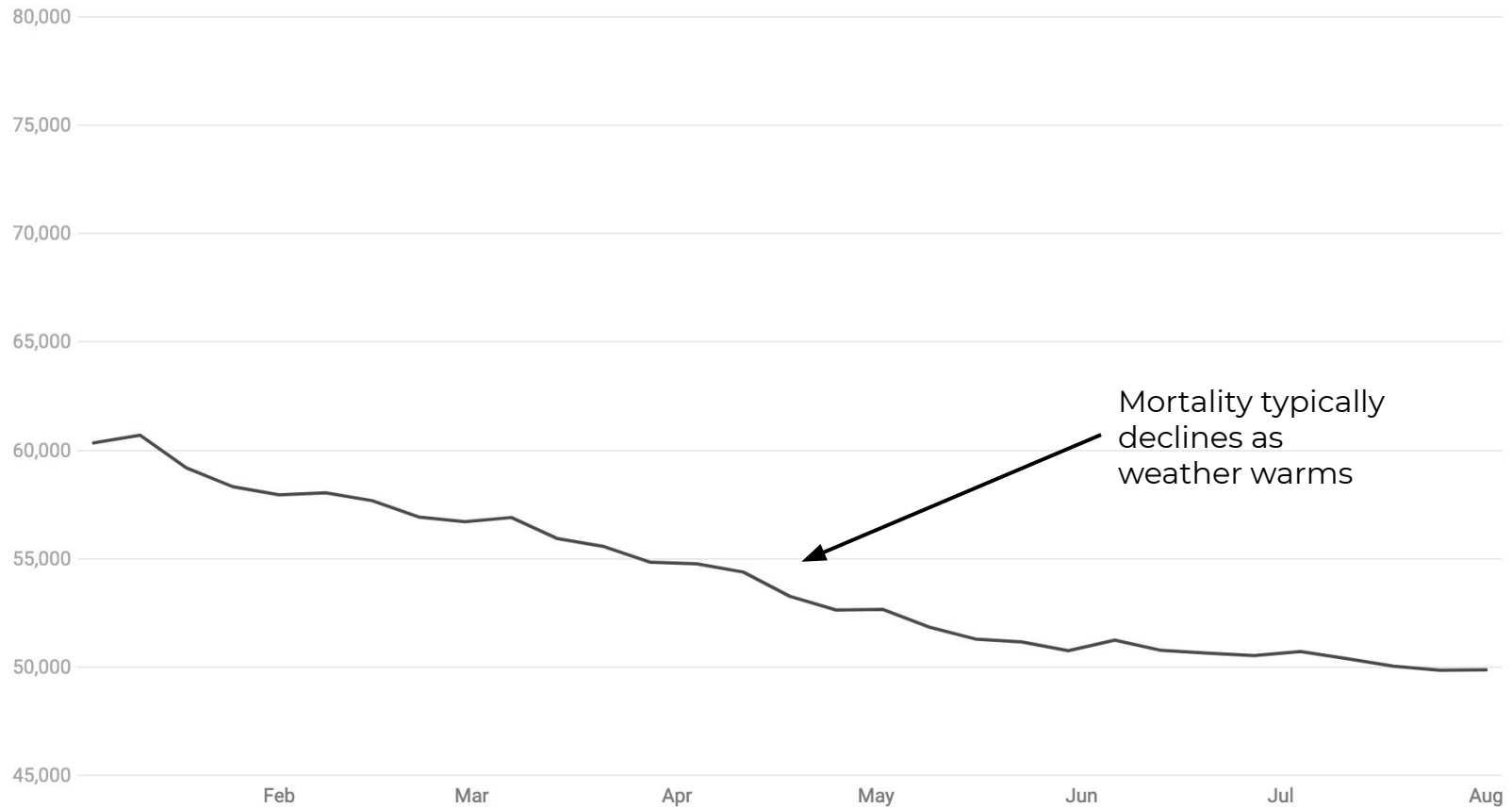


Source: Raw data from Johns Hopkins University—September 21, 2020

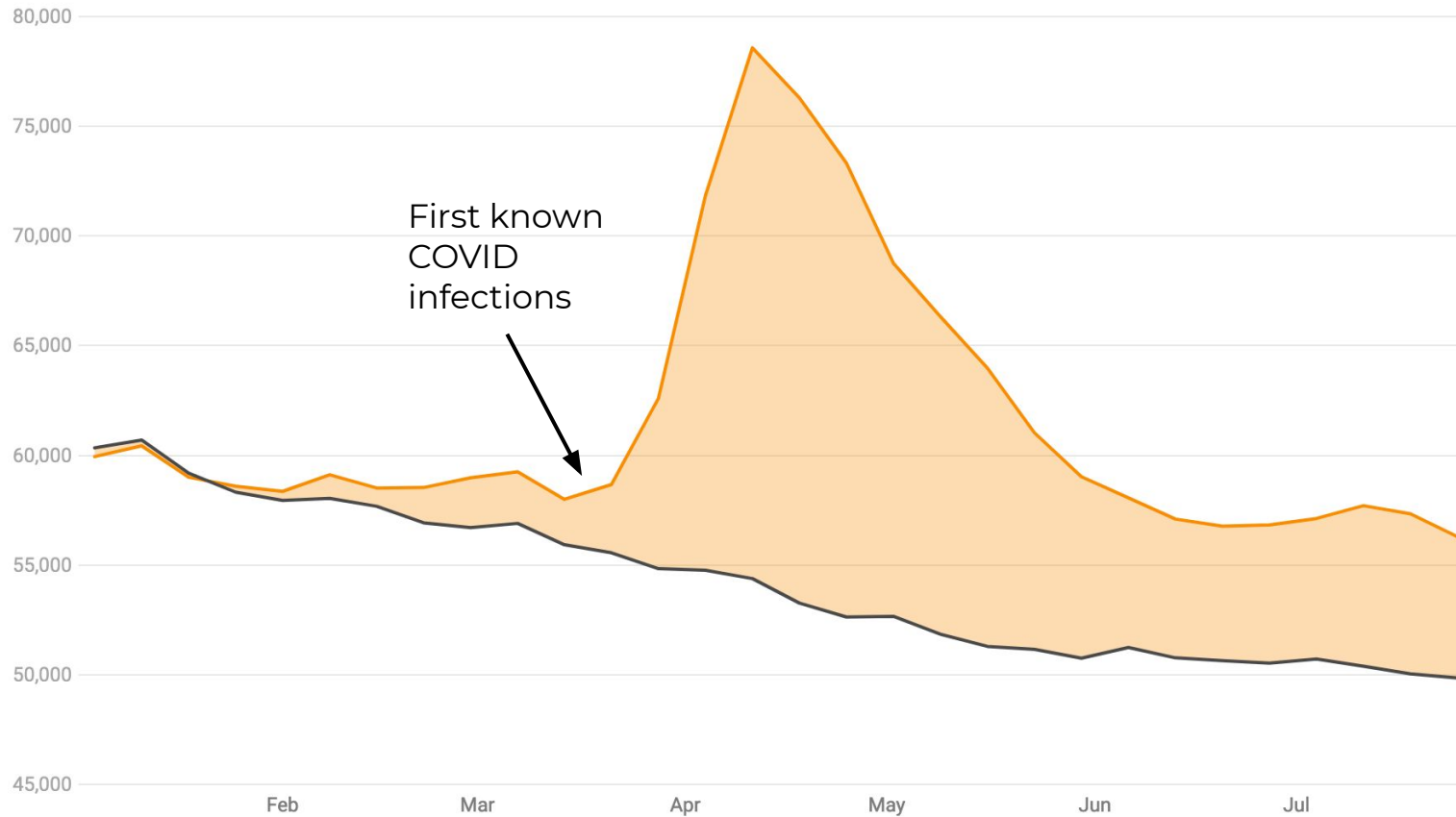
COVID-19 Deaths per 100K since May 15th



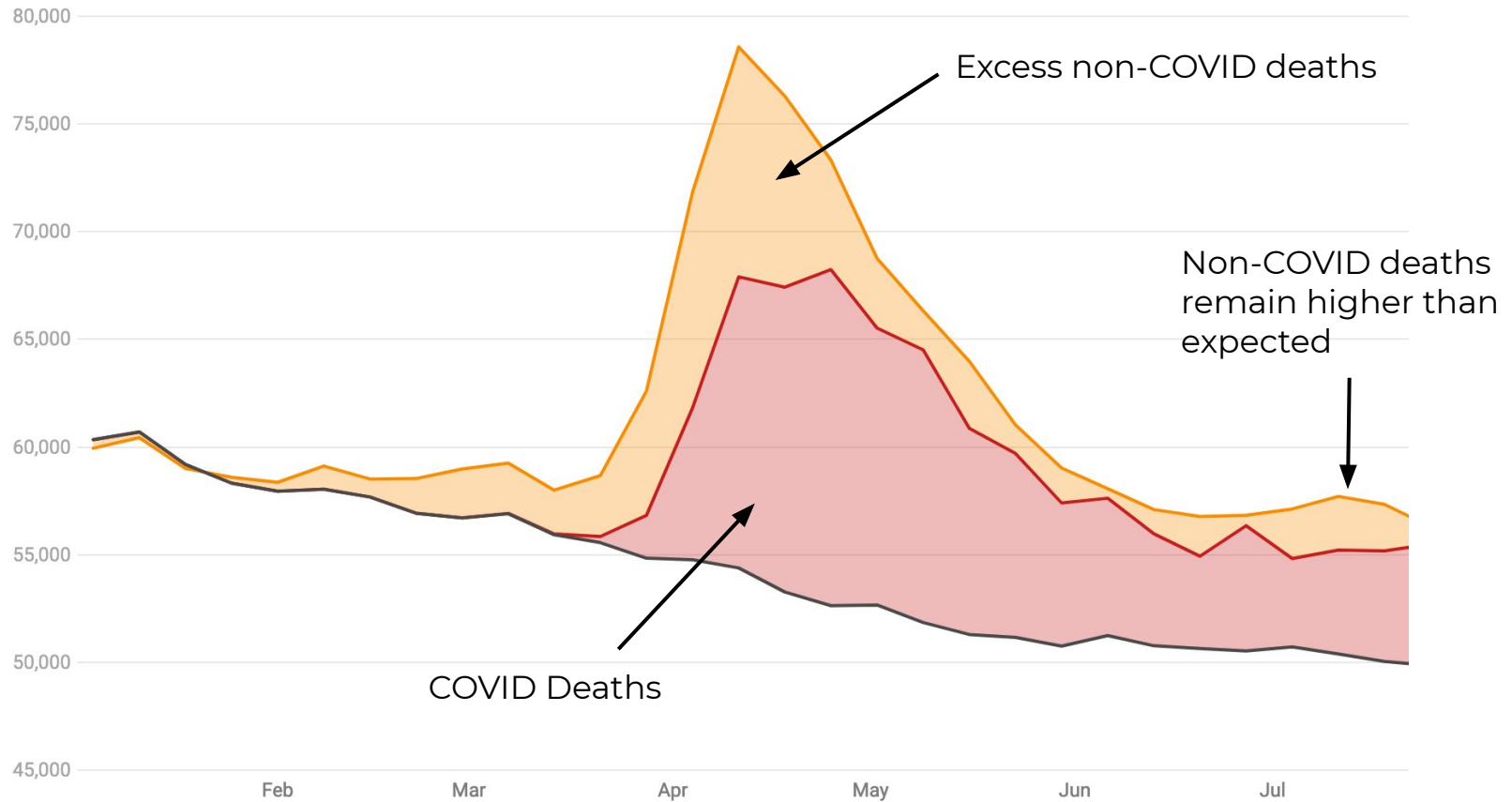
US Average Total Deaths 2015-2019



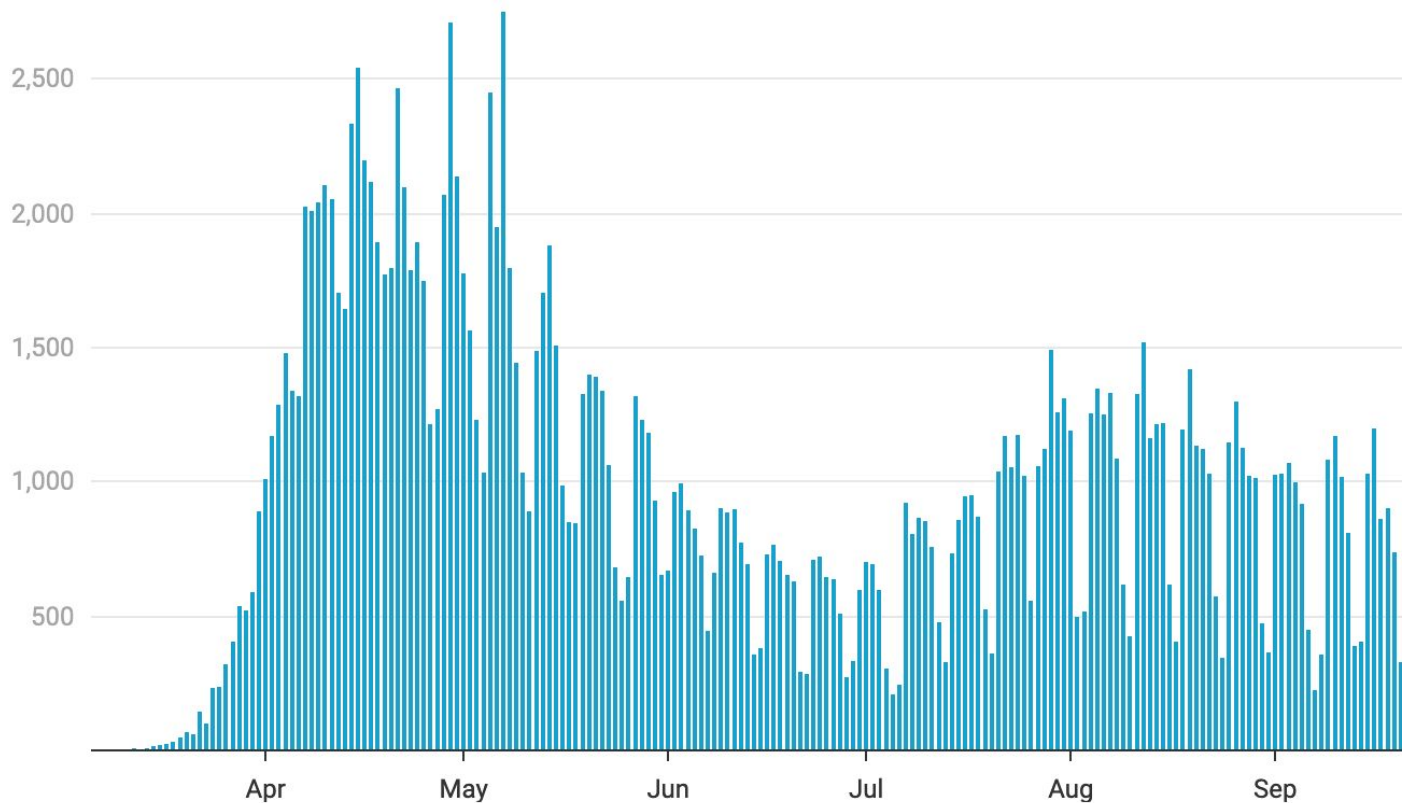
US Actual Deaths 2020



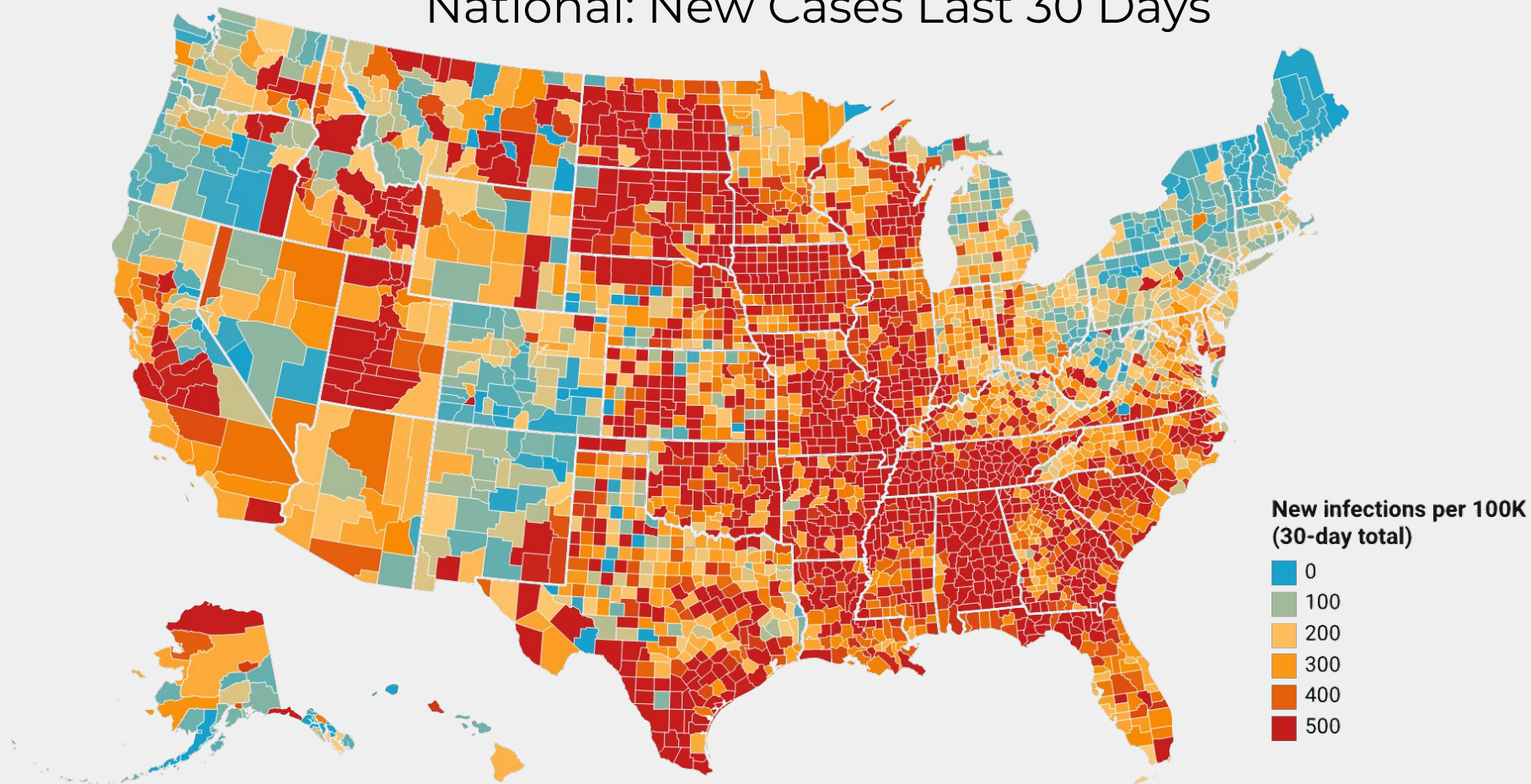
US Actual and COVID Deaths 2020



New COVID-19 deaths per day



National: New Cases Last 30 Days



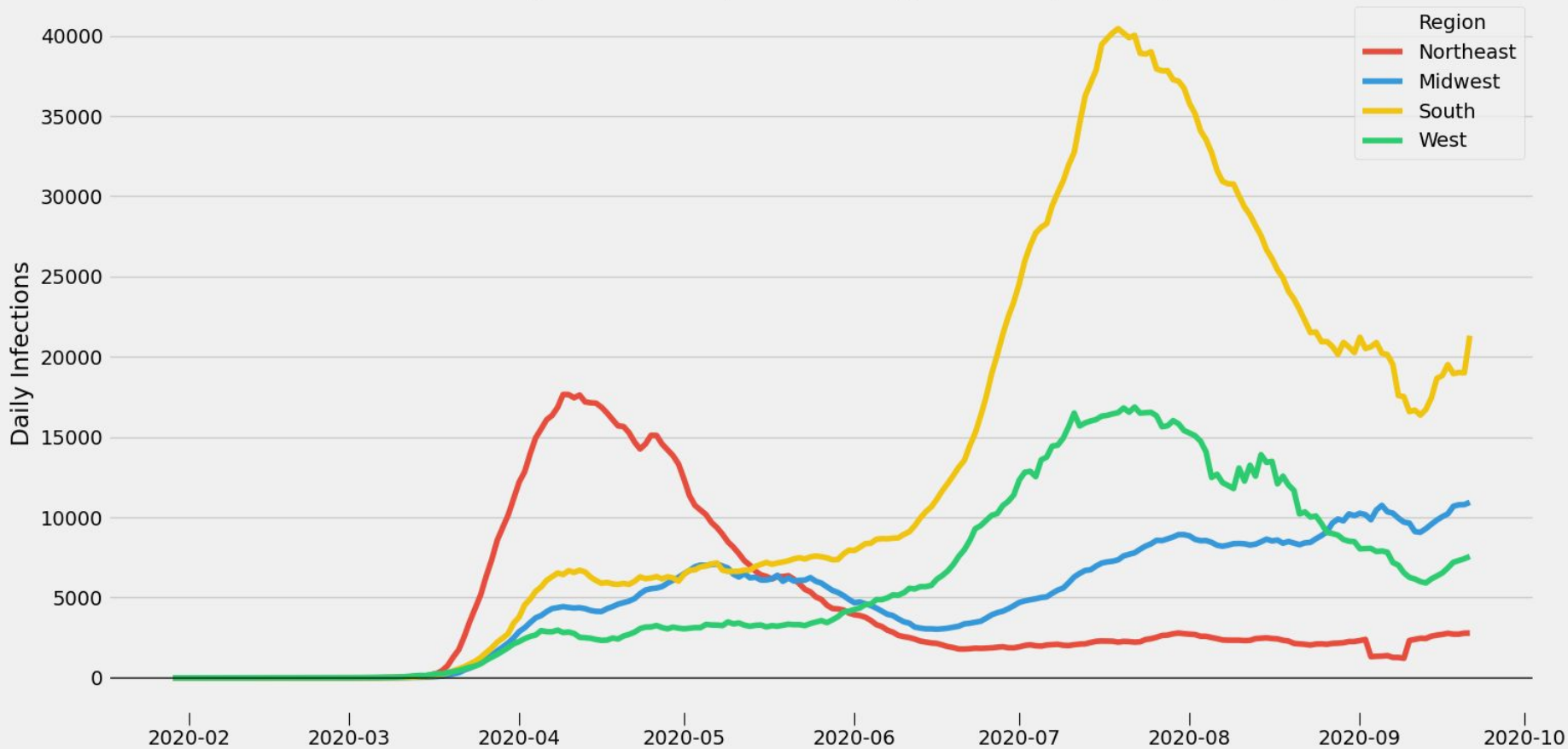
Source: Raw data from Johns Hopkins University—September 21, 2020

New confirmed COVID-19 cases per day



Source: Raw data from Johns Hopkins University—September 22, 2020

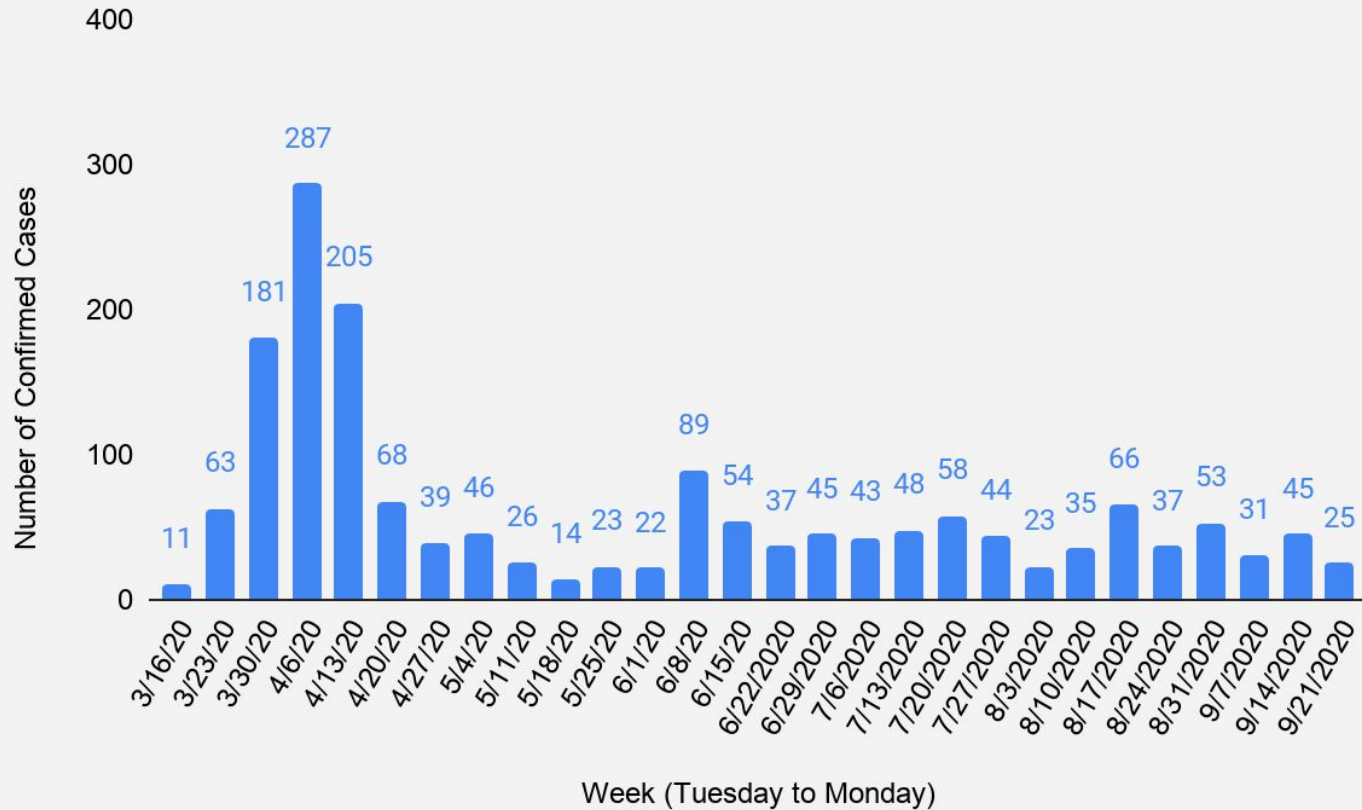
COVID-19 Daily Infections by Census Region (7-Day Moving Average)



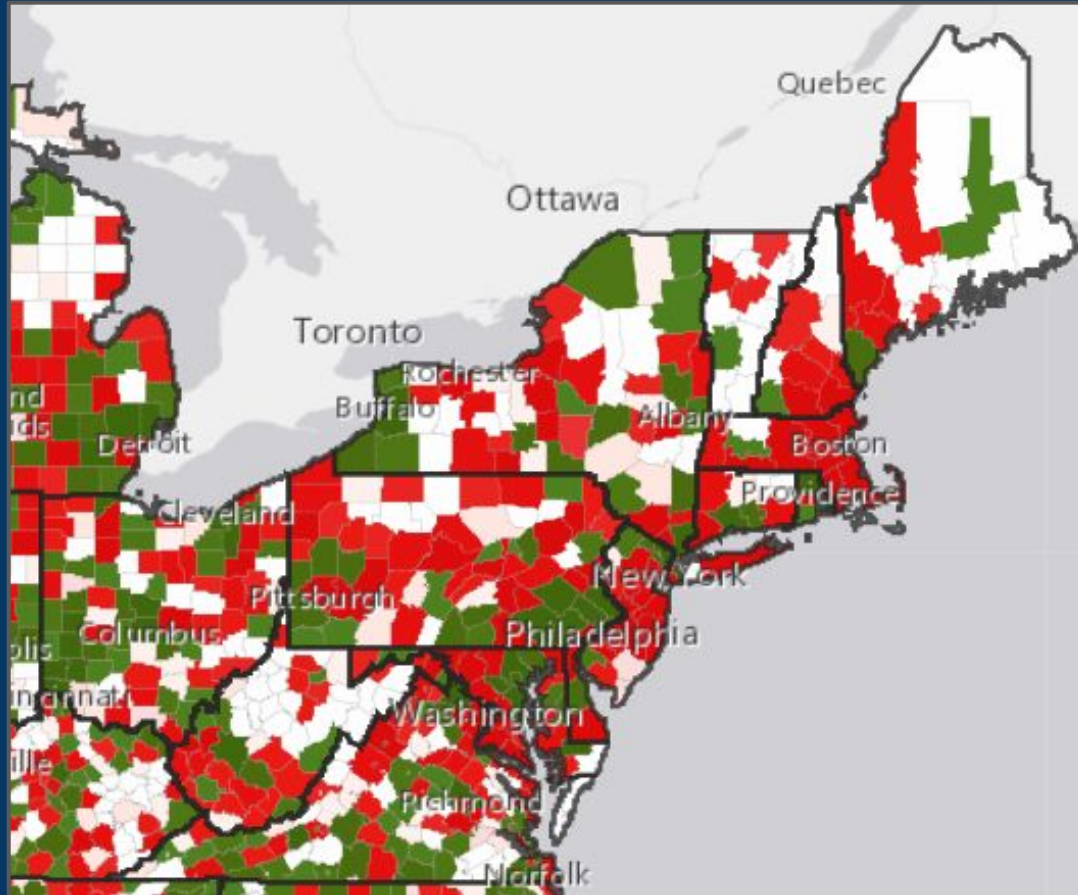
Vermont Summer 2020




- Tests: **188,898***
- Cases: **559**
- Test Positivity: **0.30%**
- Averaged **<2** people in the hospital statewide
- Averaged **<1** people in the ICU statewide
- Deaths: **3**

Vermont Weekly Totals



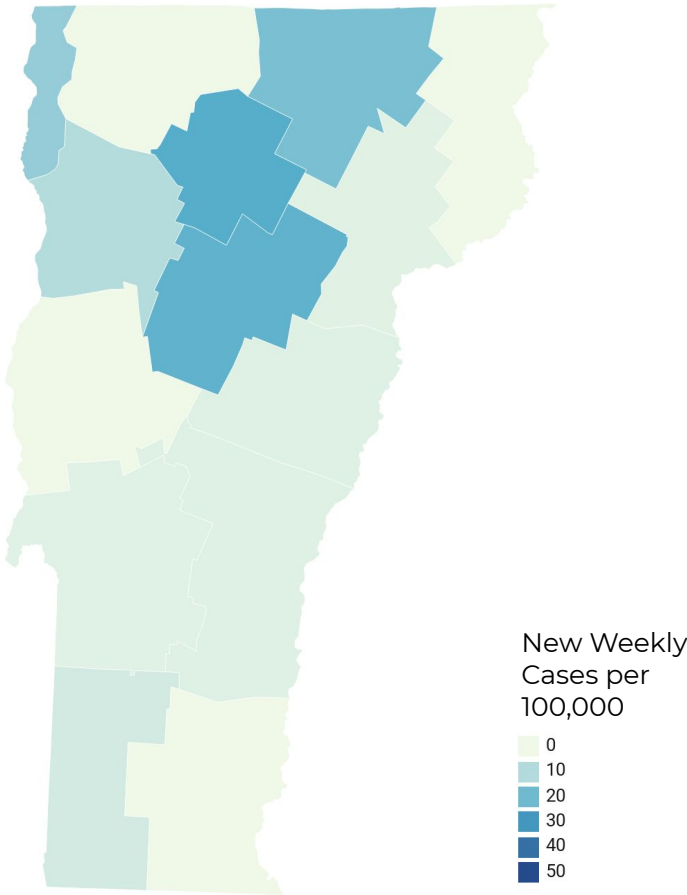
Regional Forecast September 20 to October 10



-  Cases Projected to Decrease
-  Cases Projected to Increase
-  Cases Projected to Remain Flat

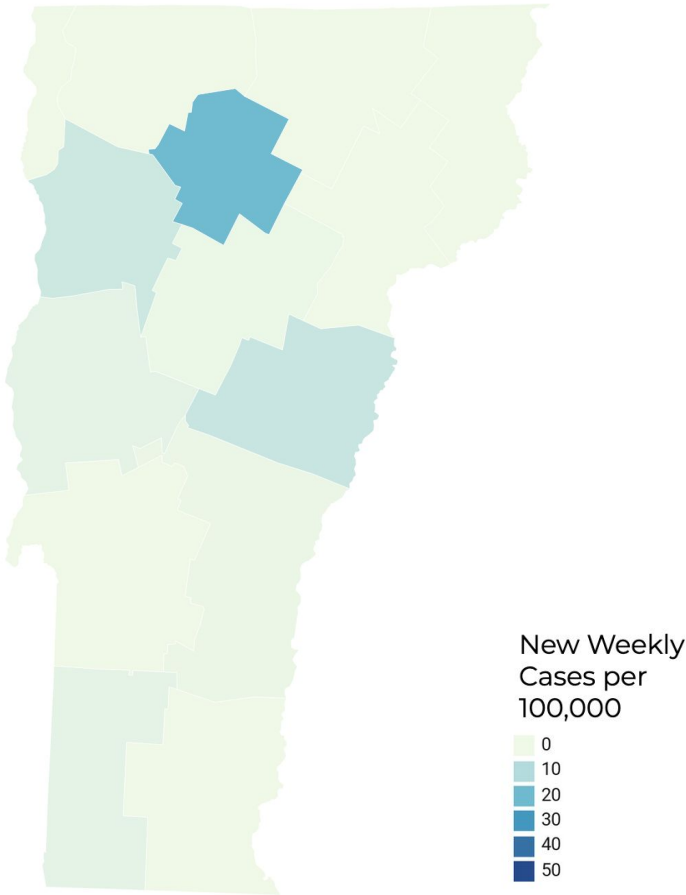
Vermont Weekly Cases by County (per 100,000)

Results Reported September 8 to 14



Vermont Weekly Cases by County (per 100,000)

Results Reported September 15 to 21



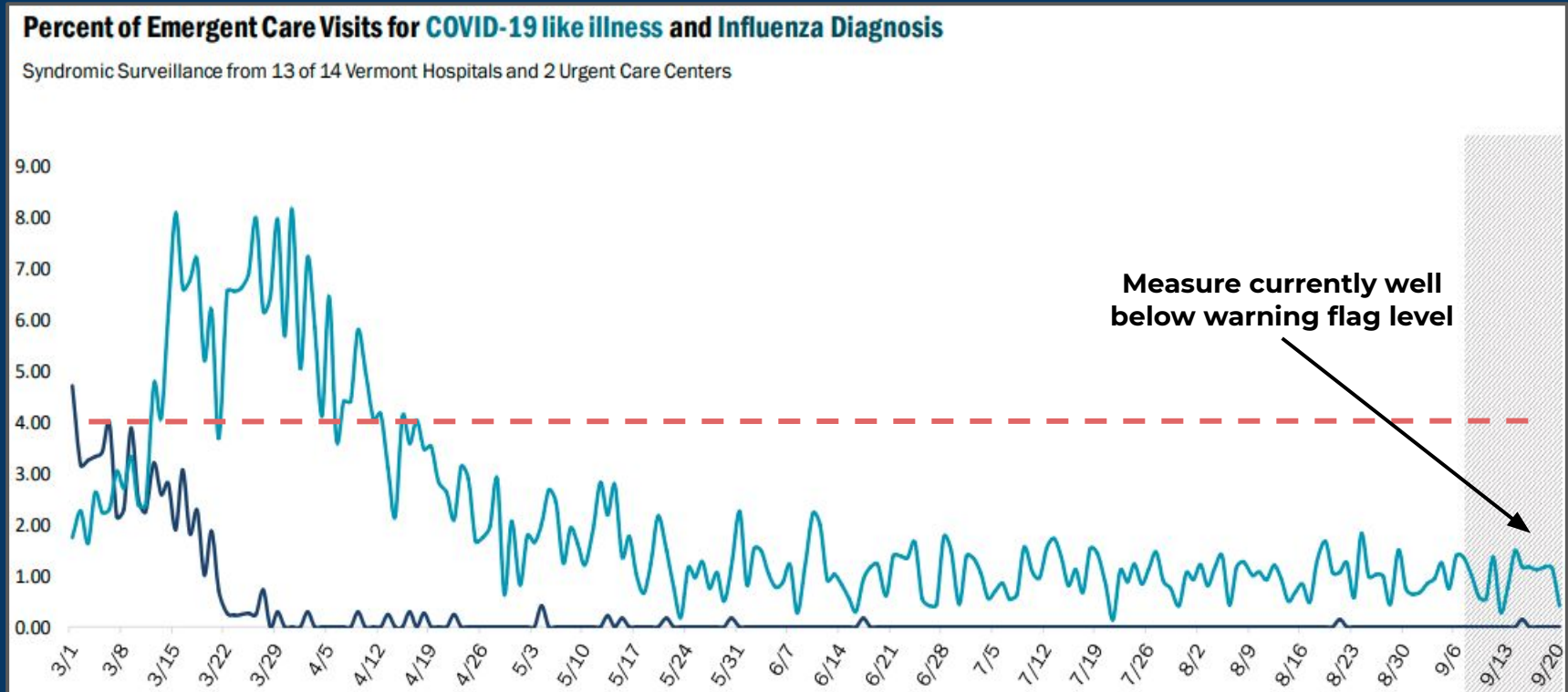
RESTART VERMONT

Reopening Metrics

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

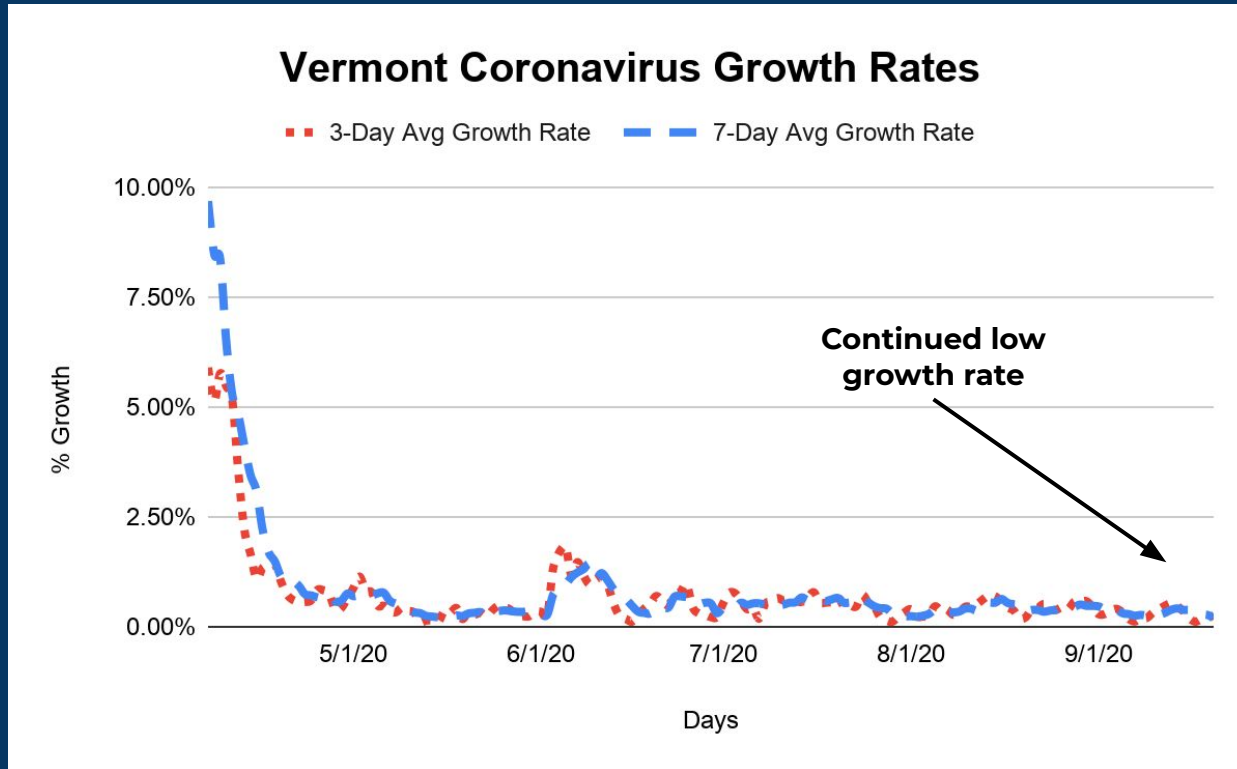
Data Point 1: Syndromic Surveillance

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



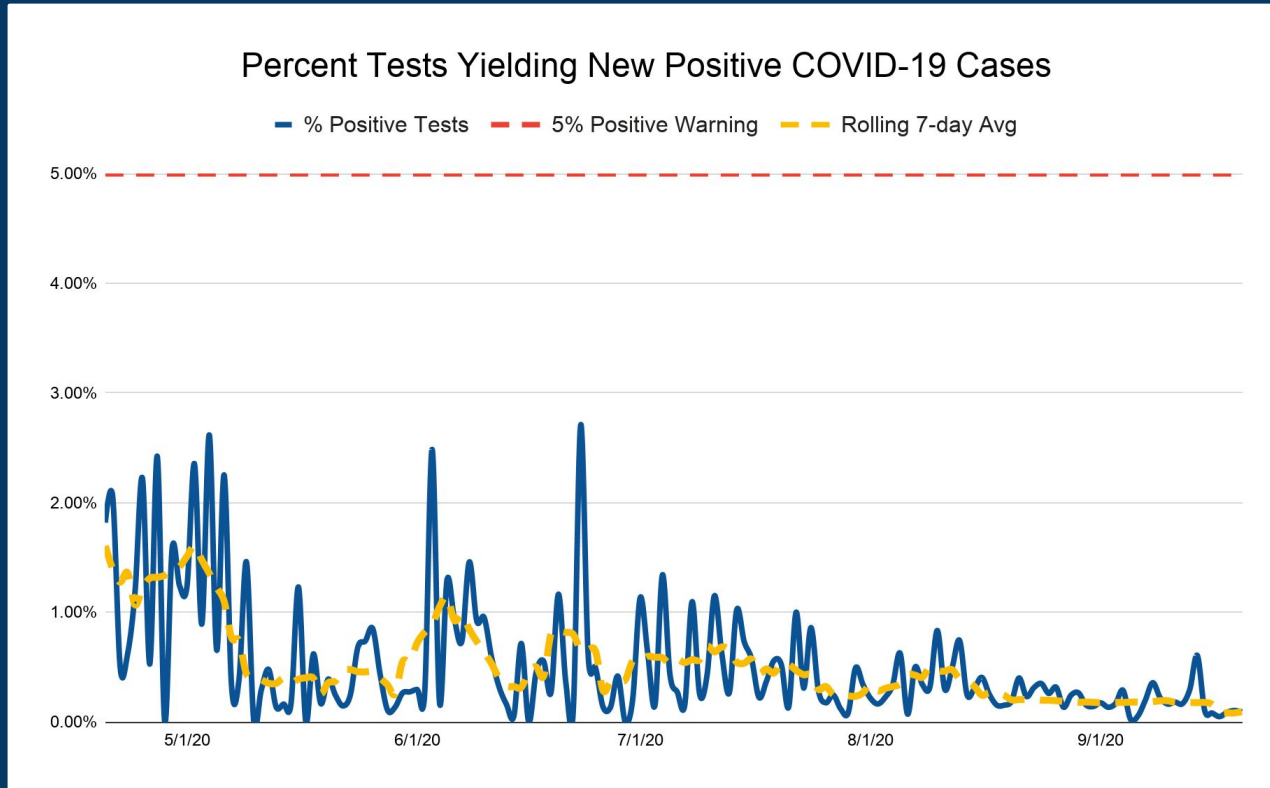
Data Point 2: Viral Growth and Reproductive Rates

- **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



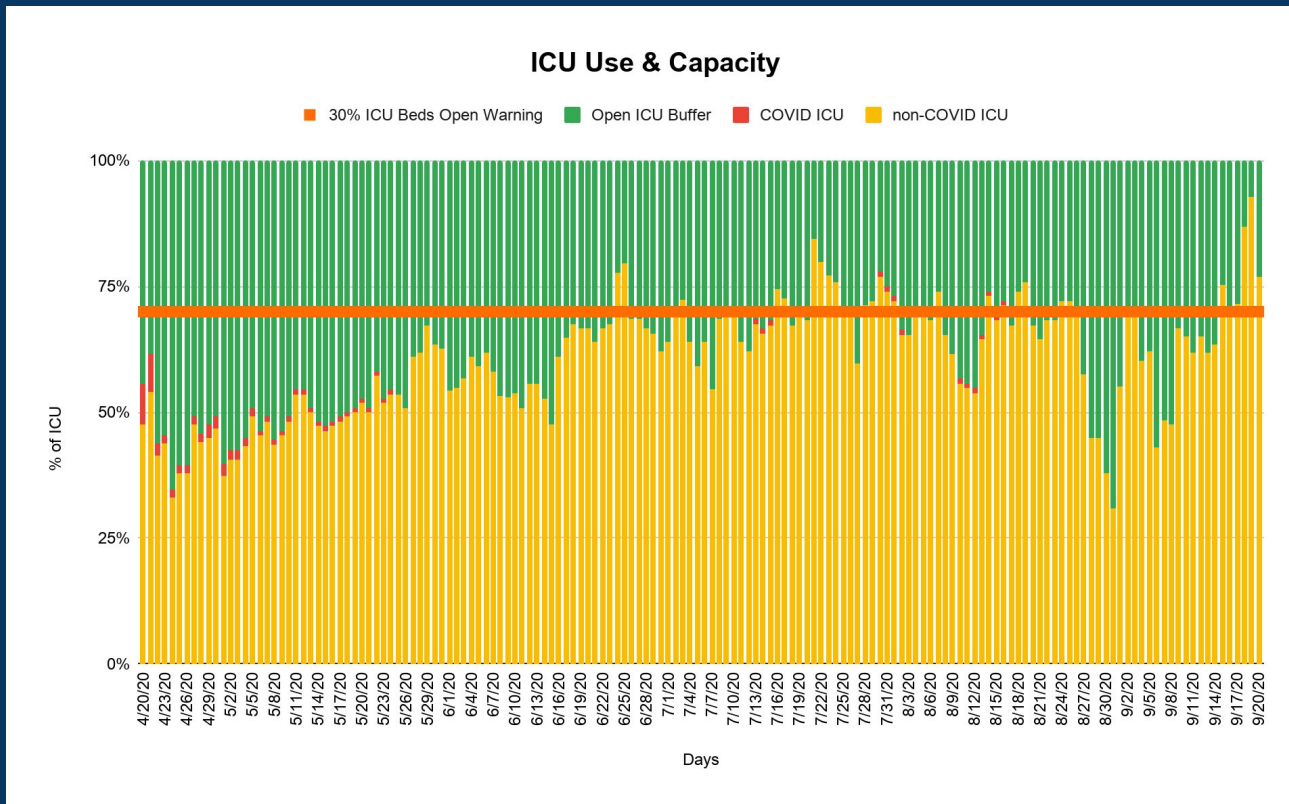
Data Point 3: Percentage of New Positive Tests

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



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%



K-12 & Higher Education Update

Covid-19 Cases in K-12 Public Schools Across Northern New England

New Hampshire

33 Cases
22 Schools

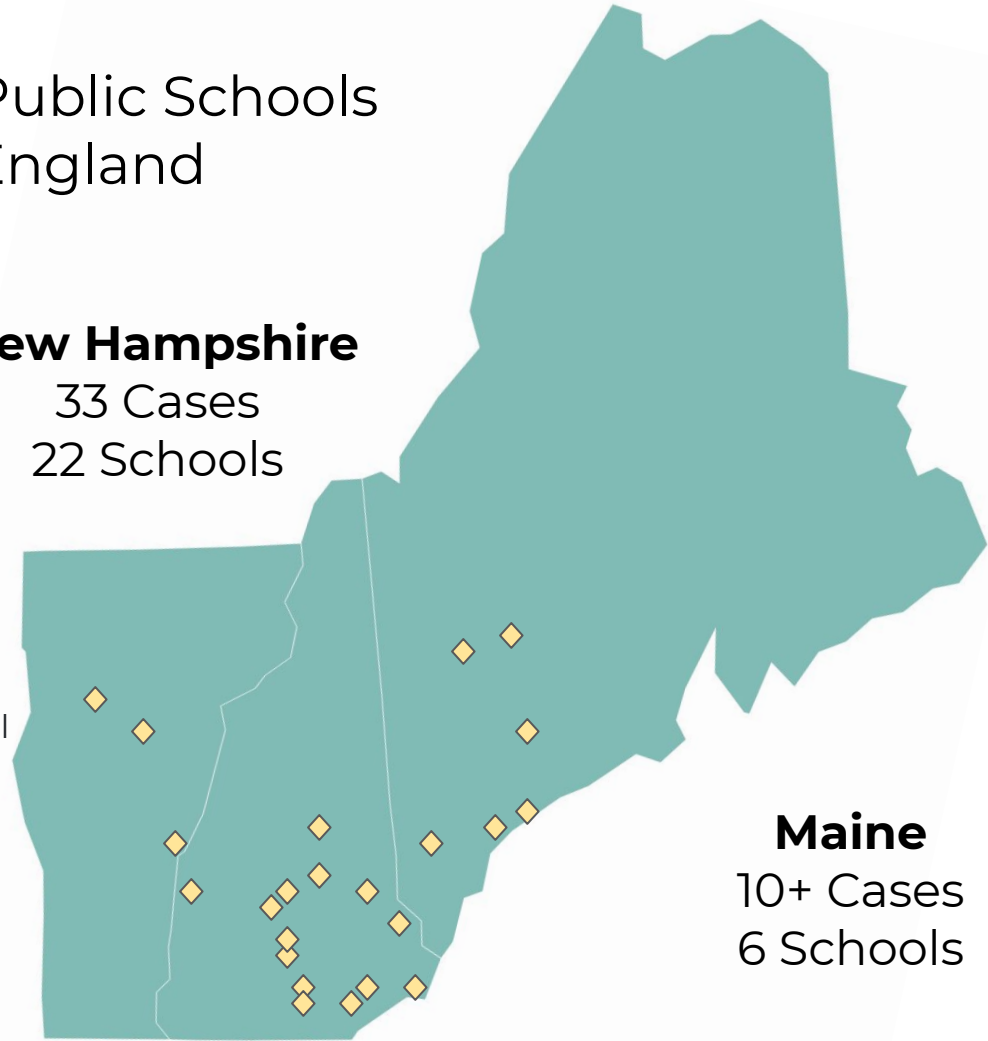
Vermont

4 Cases

- 1 at Williamstown Middle & High School
Williamstown, VT
- 1 at Hartford High School
Hartford, VT
- 2 at Crossett Brook Middle School
Duxbury, VT

Maine

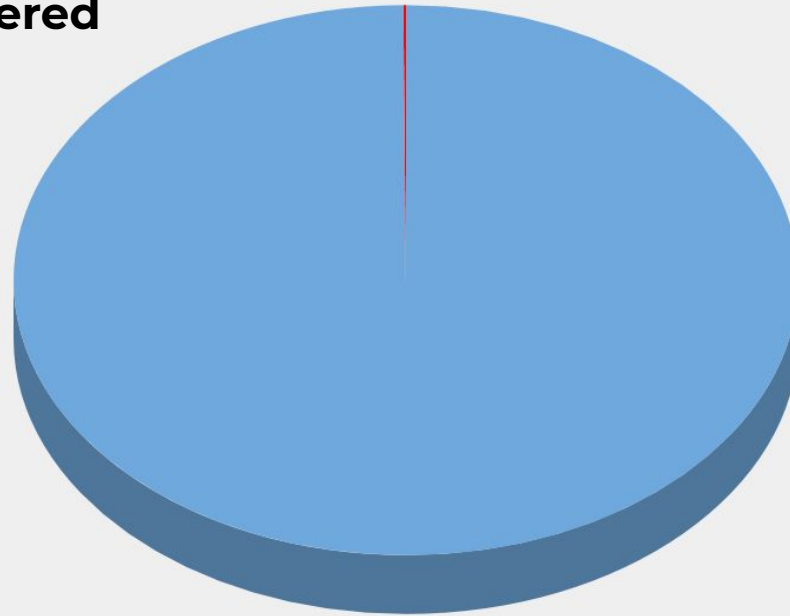
10+ Cases
6 Schools



Cumulative Test Results for Vermont Colleges & Universities as of September 22, 2020

**57,135 Tests
Administered**

43 Positive Tests



0.08% Positivity Rate

Individual Test Results for Vermont Colleges & Universities as of September 21, 2020

College / University	Total Tests	Total Positives	Dashboard / Public Information
Middlebury College	5,901	2	https://www.middlebury.edu/office/midd2021/covid-reporting-dashboard
University of Vermont	31236	25*	https://www.uvm.edu/returntocampus/uvm-weekly-testing-report
Norwich University	5,745	5	https://www.norwich.edu/news/psa
Northern Vermont University	2491	0	https://www.northernvermont.edu/nvu-during-covid-19
Castleton University	1,065	2	https://www.castleton.edu/covid-19-coronavirus-updates/covid-19-test-results/
Vermont Technical College	358	3	https://www.vtc.edu/update-on-the-covid-19-coronavirus/
Saint Michael's College	2001	0	https://www.smcvt.edu/return-to-campus/
Sterling College	86	0	Does not have a public dashboard at this time
Champlain College	5,428	2	https://view.champlain.edu/champlain-college-covid-19-testing-dashboard/
Bennington College	1,690	3	https://www.bennington.edu/covid-19-updates-and-information
Vermont Law School	161	0	Remote learning for Fall 2020 - Some students using campus facilities
Landmark College	875	1	https://www.landmark.edu/student-life/health-counseling-wellness/covid-19/covid-19-dashboard
Albany College of Pharmacy	98	0	https://www.acphs.edu/health-safety
Totals	57,135	43	

Note: Goddard College, Vermont College of Fine Arts, Community College of Vermont

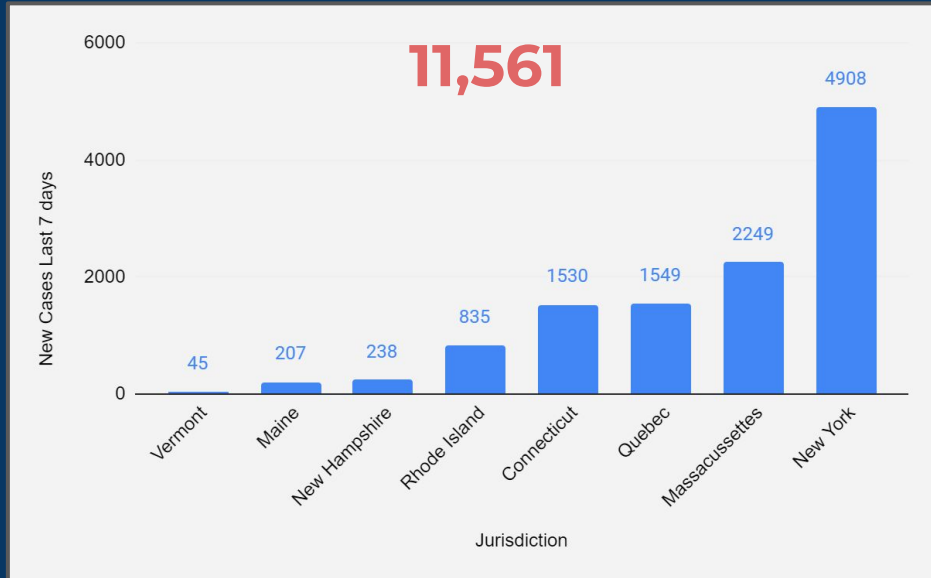
* Reconciling data that could possibly remove up to 6 cases from the UVM count.

Regional Data

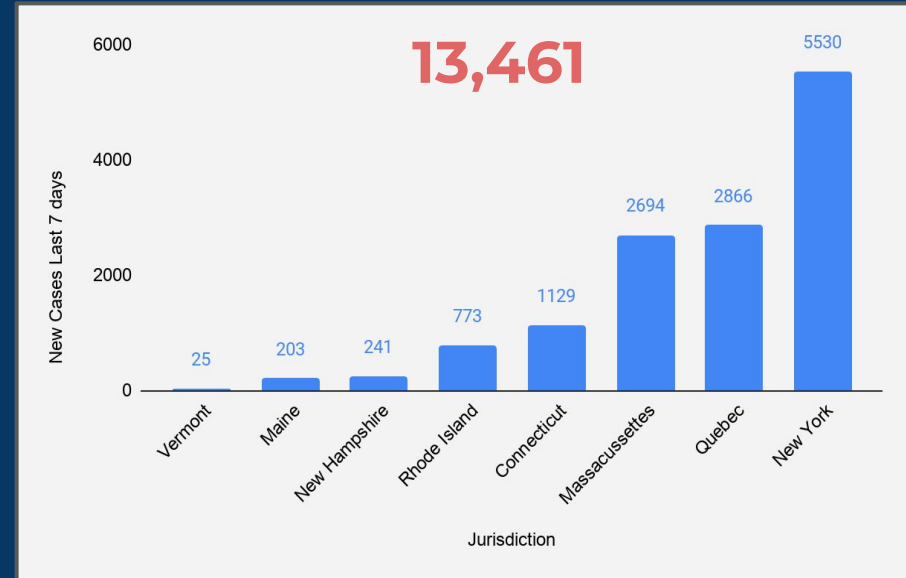
Regional Monitoring: New Cases Week Over Week

16.43% Increase in New Confirmed Cases

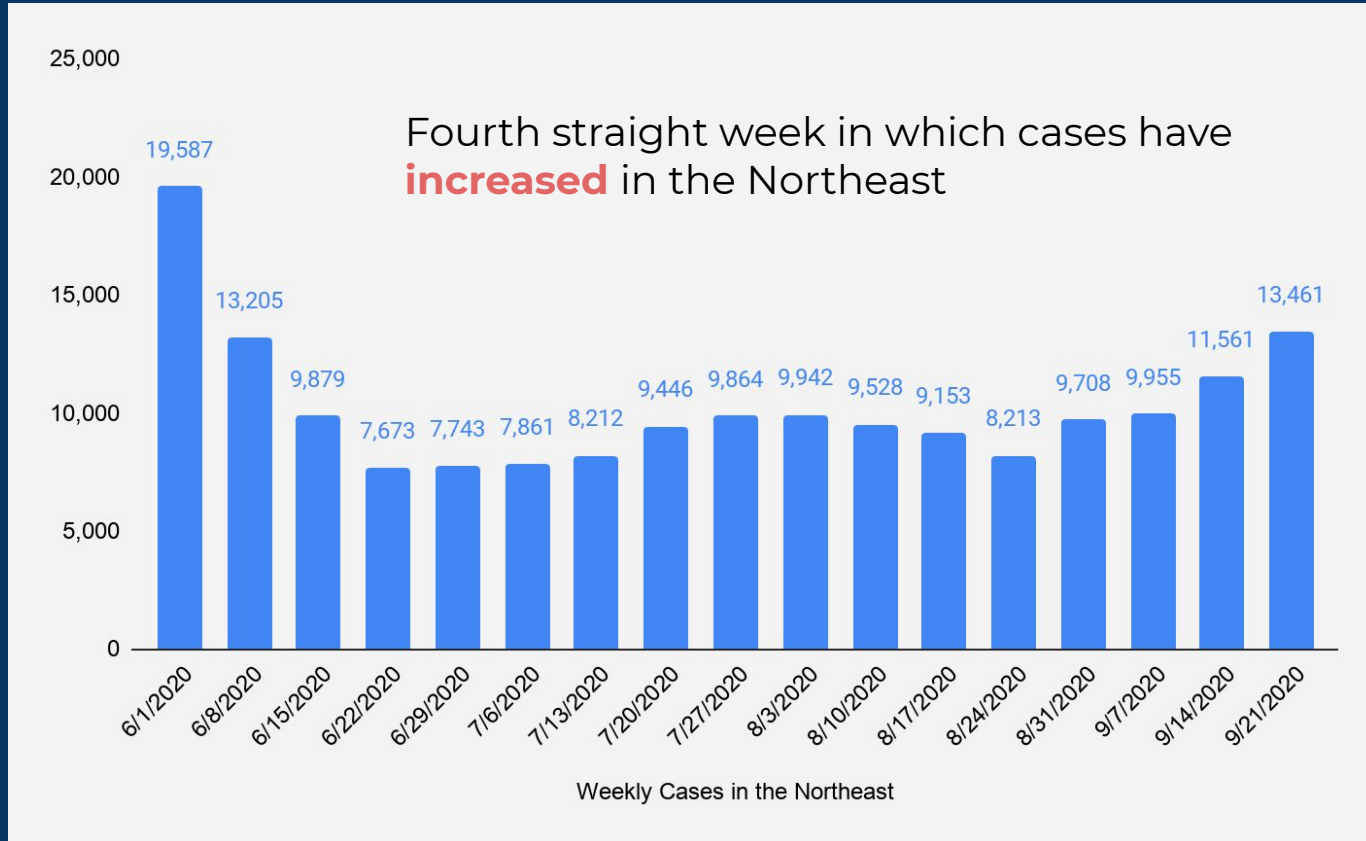
Positive Cases Sept. 7th to Sept. 14th



Positive Cases Sept. 14th to Sept. 20th

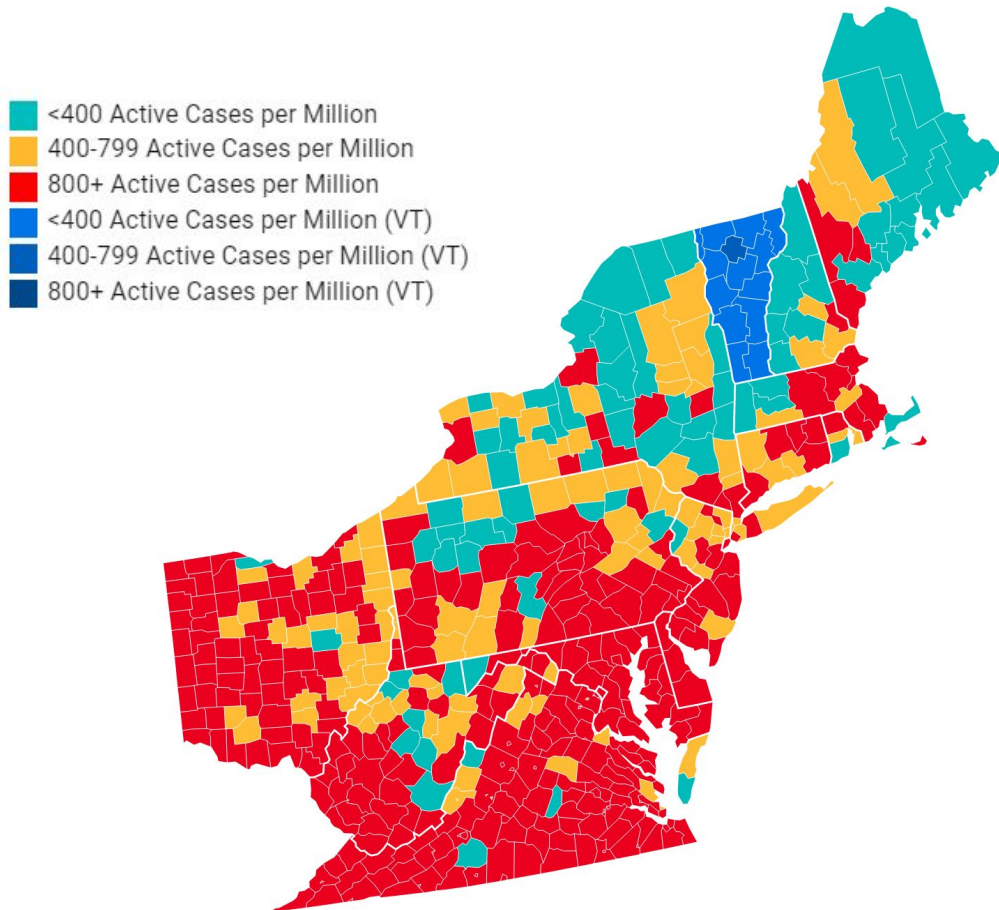


Regional Monitoring: Week Over Week Case Growth Since May 21, 2020



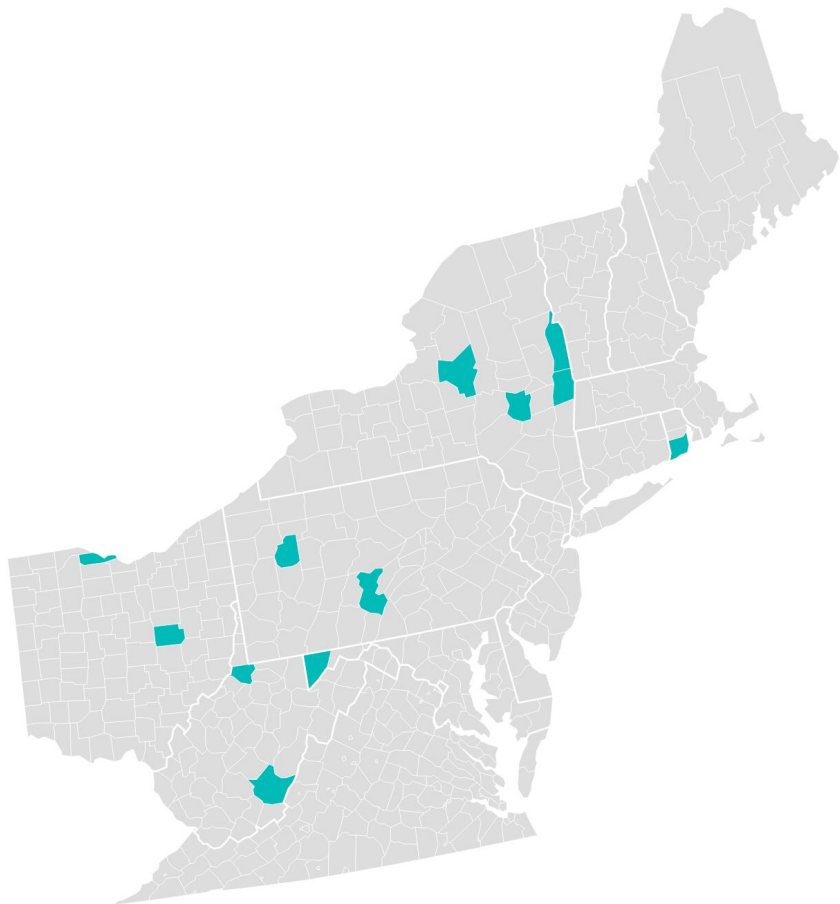
Travel Map Update

Updated Travel Map

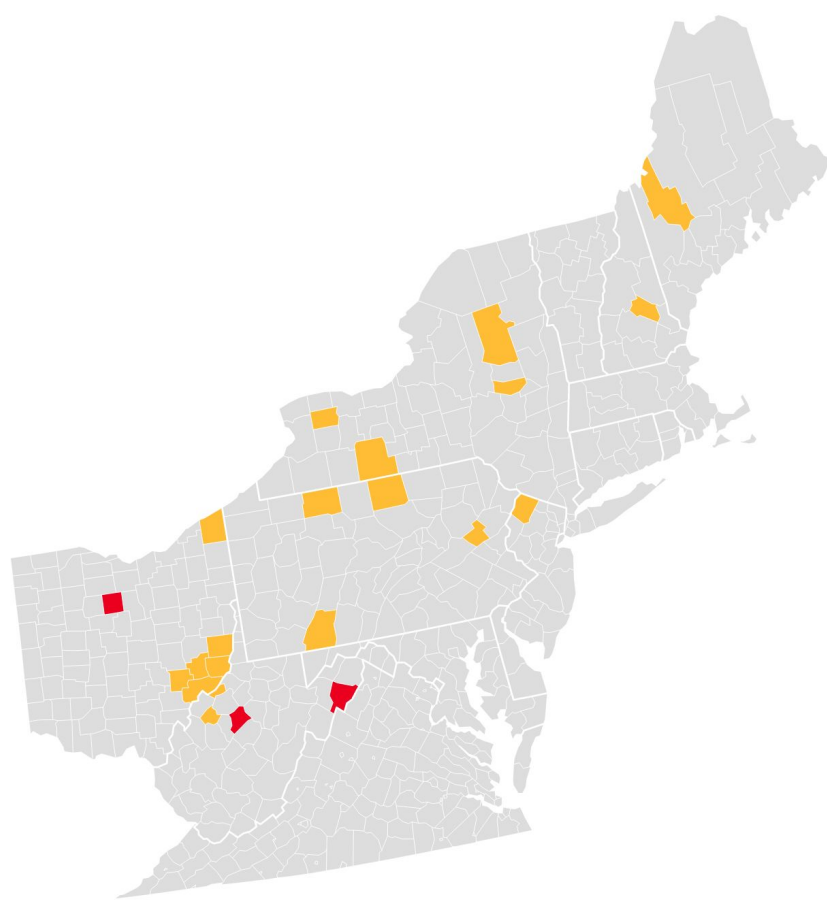


Source: Raw data from Johns Hopkins University—September 21, 2020 (dynamic map available at Vermont ACCD site)

Improving: Moving from Yellow or Red to Green



Worsening: Moving to Yellow or Red



Updated Travel Map

