COVID-19 Modeling
August 14, 2020

Presentation available at: dfr.vermont.gov
National Data
National Data

New confirmed COVID–19 cases per day

Source: Johns Hopkins University - August 14, 2020
National Data

New COVID-19 deaths per day

Most recorded deaths since May 15th

Source: COVID Tracking Project - August 14, 2020
Regional Data
Regional Monitoring: New Cases Week Over Week

7.11% Decrease in New Confirmed Cases

Positive Cases July 31st to August 6th

Positive Cases August 7th to August 13th

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

Vermont Forecast Model

Focus for next three weeks: Possible spikes from returning out-of-state college students
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 - August 13, 2020
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 - August 13, 2020
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 - August 13, 2020
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 - August 13, 2020
7-Day Rolling Test Average

- Rolling 7-Day Avg tests
- Testing Benchmark

Source: Vermont Department of Health - August 13, 2020; tests measured as results reported to VDH by day
Travel Map Update
Updated Travel Map

Source: Raw data from Johns Hopkins University—August 14, 2020 (dynamic map available at Vermont ACCD site)
Improving: Moving from Yellow or Red to Green

Worsening: Moving to Yellow or Red
Travel Policy Standards

New York/Connecticut/New Jersey

Vermont

European Union

Source: Raw data from Johns Hopkins University—August 14, 2020
Updated Travel Map

Population Not Subject to Vermont Quarantine Policy Over Time

Travel Map Expanded