



Advisory Panel 4:
Public Health, Safety, & Logistics

Metrics Review

February 12, 2021

Community Benchmarks - Status

| Benchmark (each measured over prior 14 days) | Status 1/20/21 | Status 1/27/21 | Status 2/3/21 | Status 2/10/21 |
|--|-------------------|-------------------|------------------|-------------------|
| Avg. daily new case count in Brookline = <10 per 100k people | 27.4 | 24.3 | 19.9 | 15.3 |
| Avg. daily new case count in Mass. = <10 per 100k people | 75.5 | 59.4 | 48.9 | 38.5 |
| Avg. test positivity rate in Brookline = <5.0% | 2.31% | 2.05% | 1.52% | 1.16% |
| Avg. test positivity rate in Massachusetts = <5.0% | 6.85% | 5.51% | 4.32% | 3.40% |

Because at least two of these four thresholds have been exceeded, Panel 4 has advised PSB to make further enhancements to anti-transmission measures:

www.brookline.k12.ma.us/cms/lib/MA01907509/Centricity/Domain/62/PSB%20Advisory%20Panel%204%20-%20Statement%20of%20Recommendations%20for%20Times%20of%20Elevated%20Community%20Spread_12.11.20.pdf

MA DPH Color Scale



Incidence Rate Color Table

Massachusetts Department of Public Health COVID-19 Dashboard - Thursday, November 12, 2020 Average Daily Incidence Rate per 100,000 Color Calculations

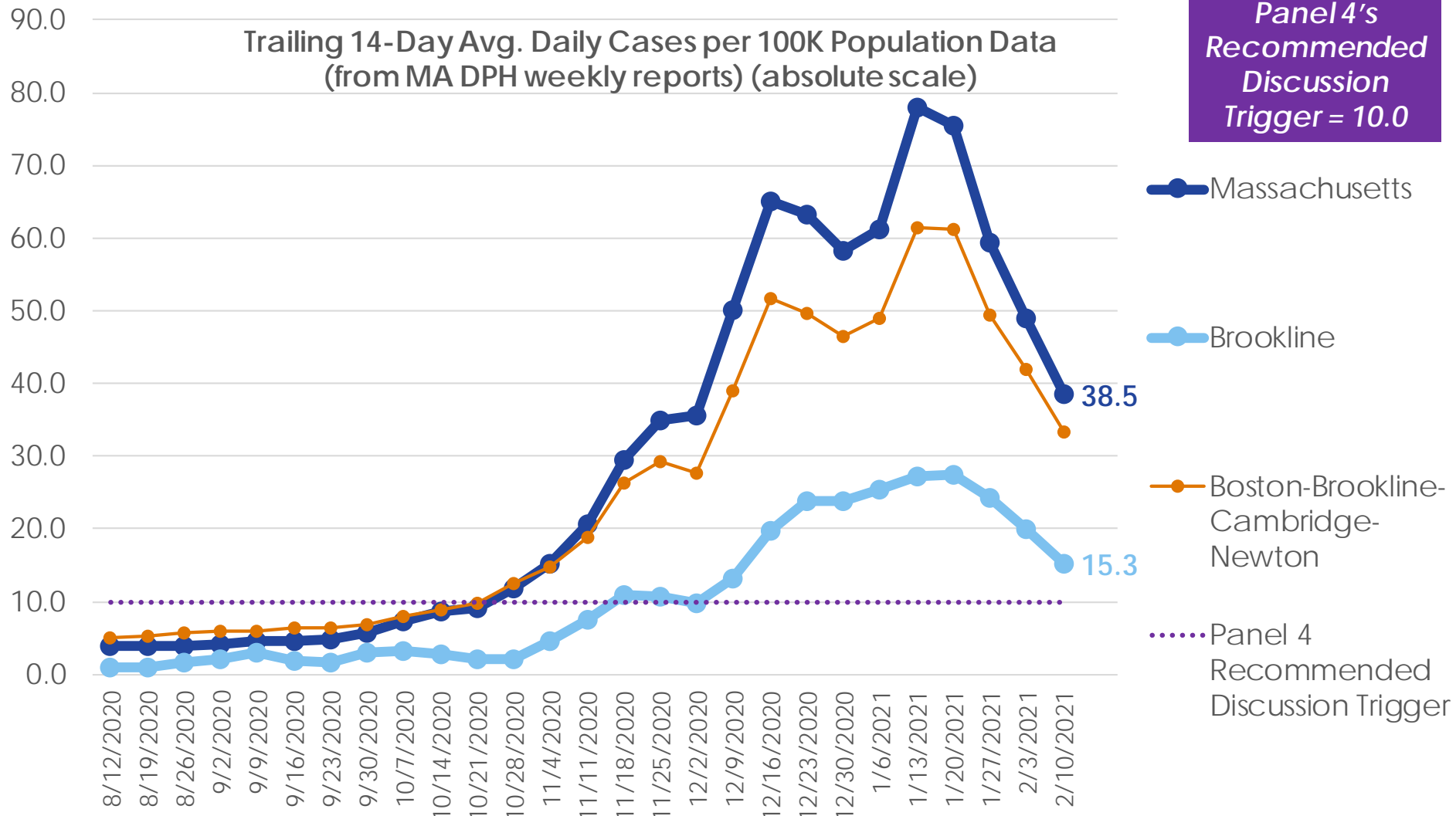
| Group | Population | | |
|--------|--------------------------------------|--|--|
| | Under 10K | 10K-50K | Over 50K |
| Grey | Less than or equal to 10 total cases | Less than or equal to 10 total cases | Less than or equal to 15 total cases |
| Green | Less than or equal to 15 total cases | <10 avg cases/100k AND >10 total cases | <10 avg cases/100k AND >15 total cases |
| Yellow | Less than or equal to 25 total cases | ≥10 avg cases/100k OR ≥5% pos rate | ≥10 avg cases/100k OR ≥ 4% pos rate |
| Red | More than 25 total cases | ≥10 avg cases/100k AND ≥5% pos rate | ≥10 avg cases/100k AND ≥4% pos rate |

Brookline is here as of 2/10/2021 (yellow zone)

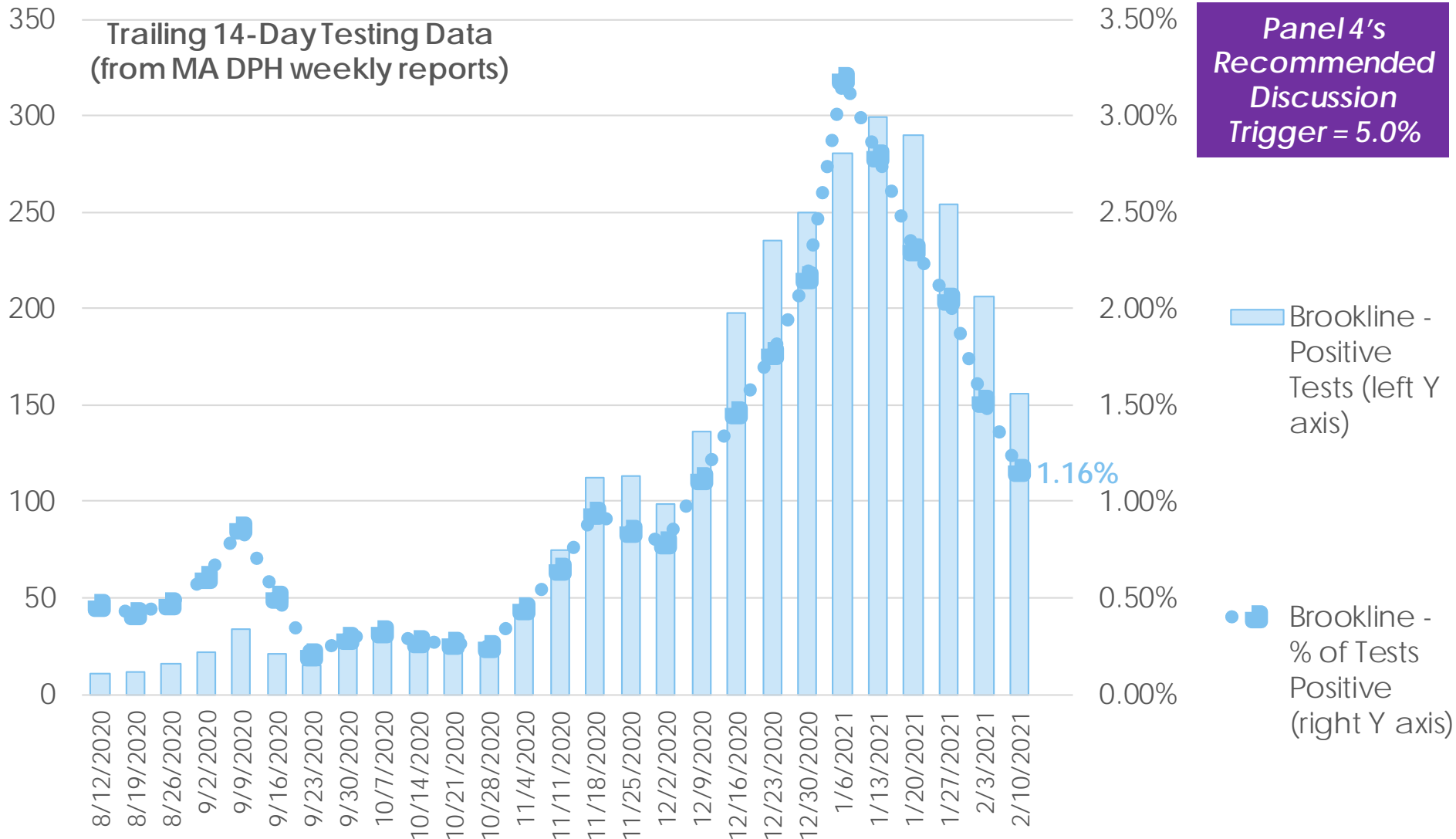
Brookline's population is ~60,000

As of 11/5, DPH is using 2019 population estimates derived from a method developed by the University of Massachusetts Donahue Institute. The 2019 estimates are the most currently available data.

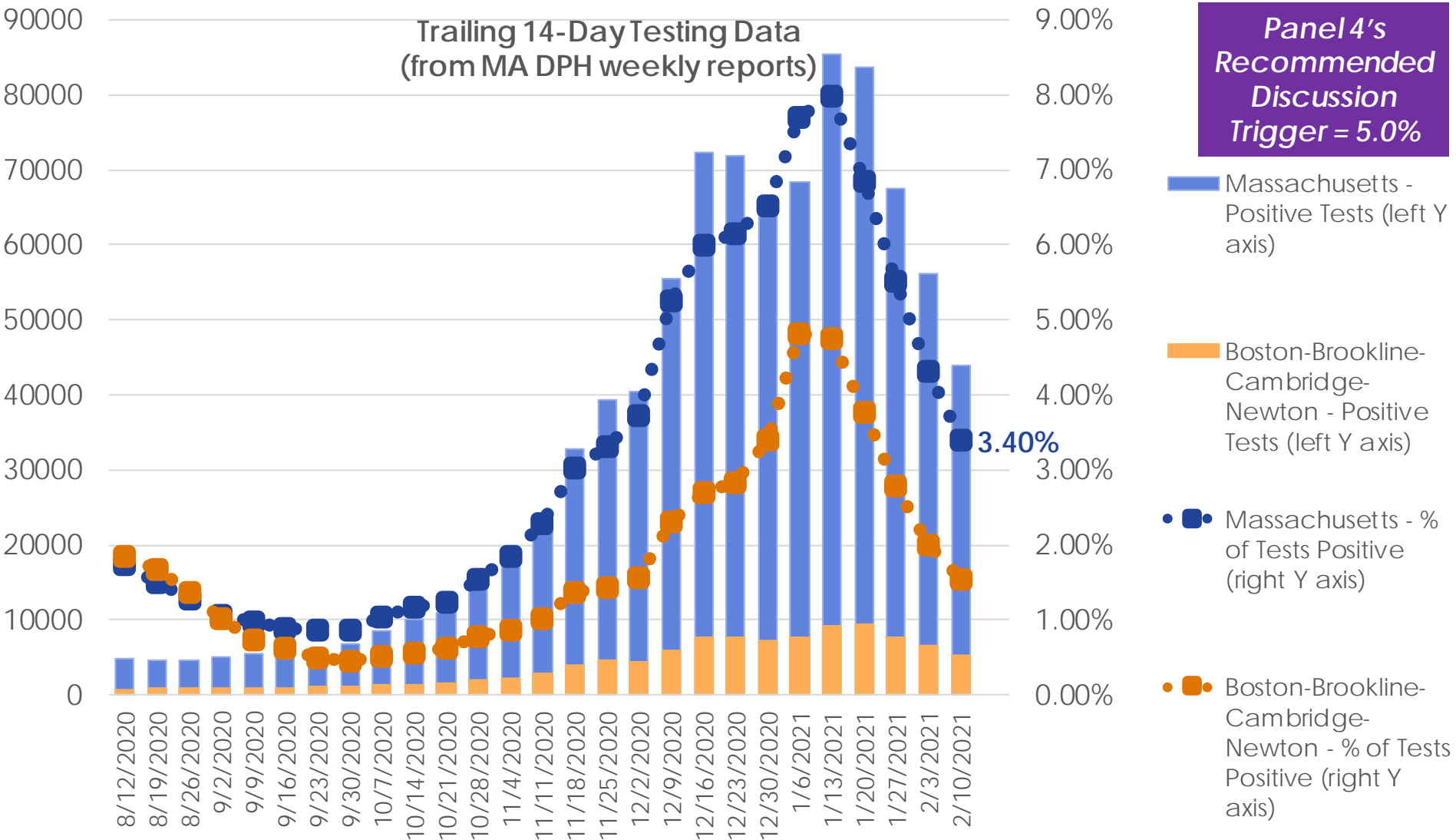
Trends: Avg. Daily New Cases per 100k



Trends: Test Positivity (Brookline)



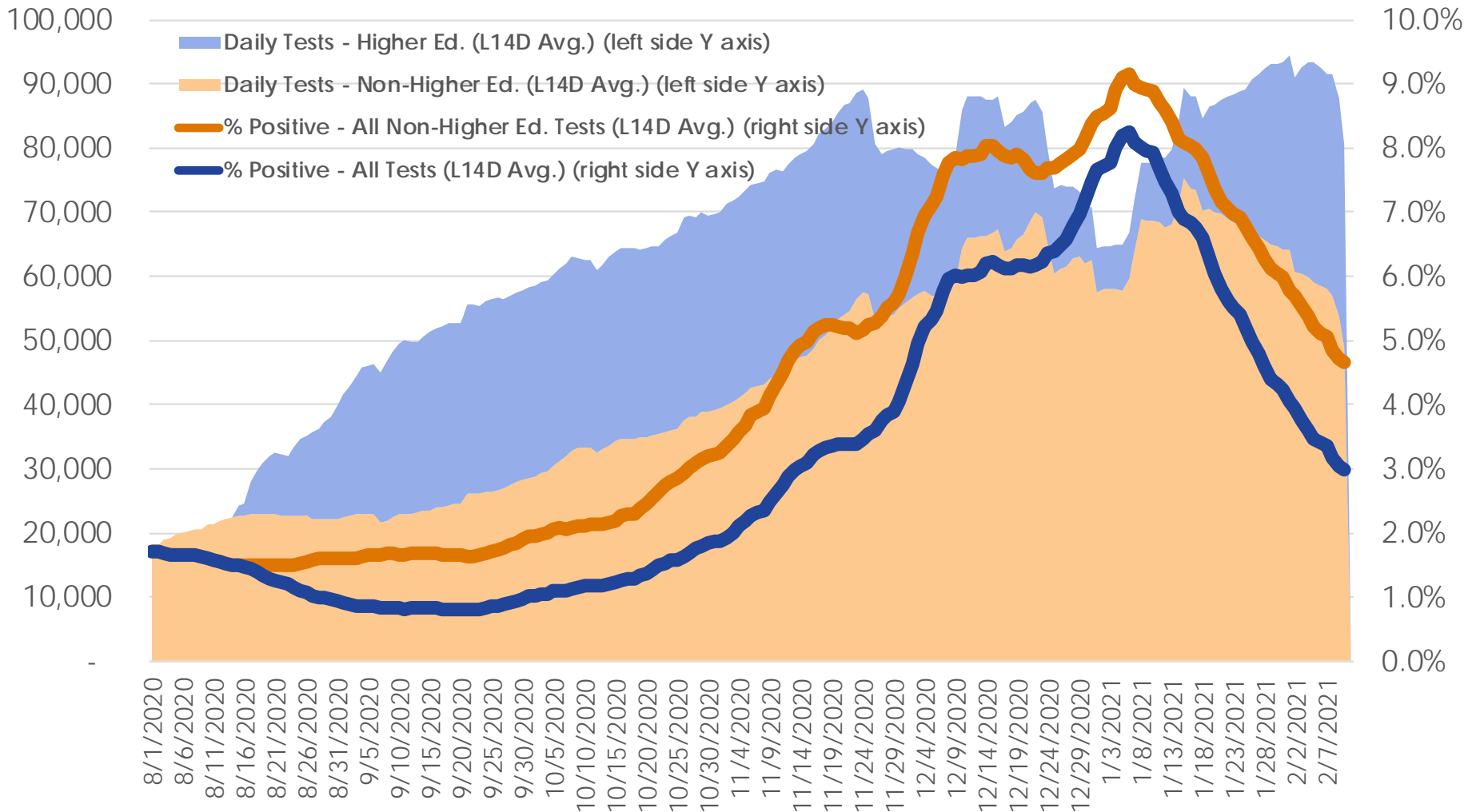
Trends: Test Positivity (Statewide)



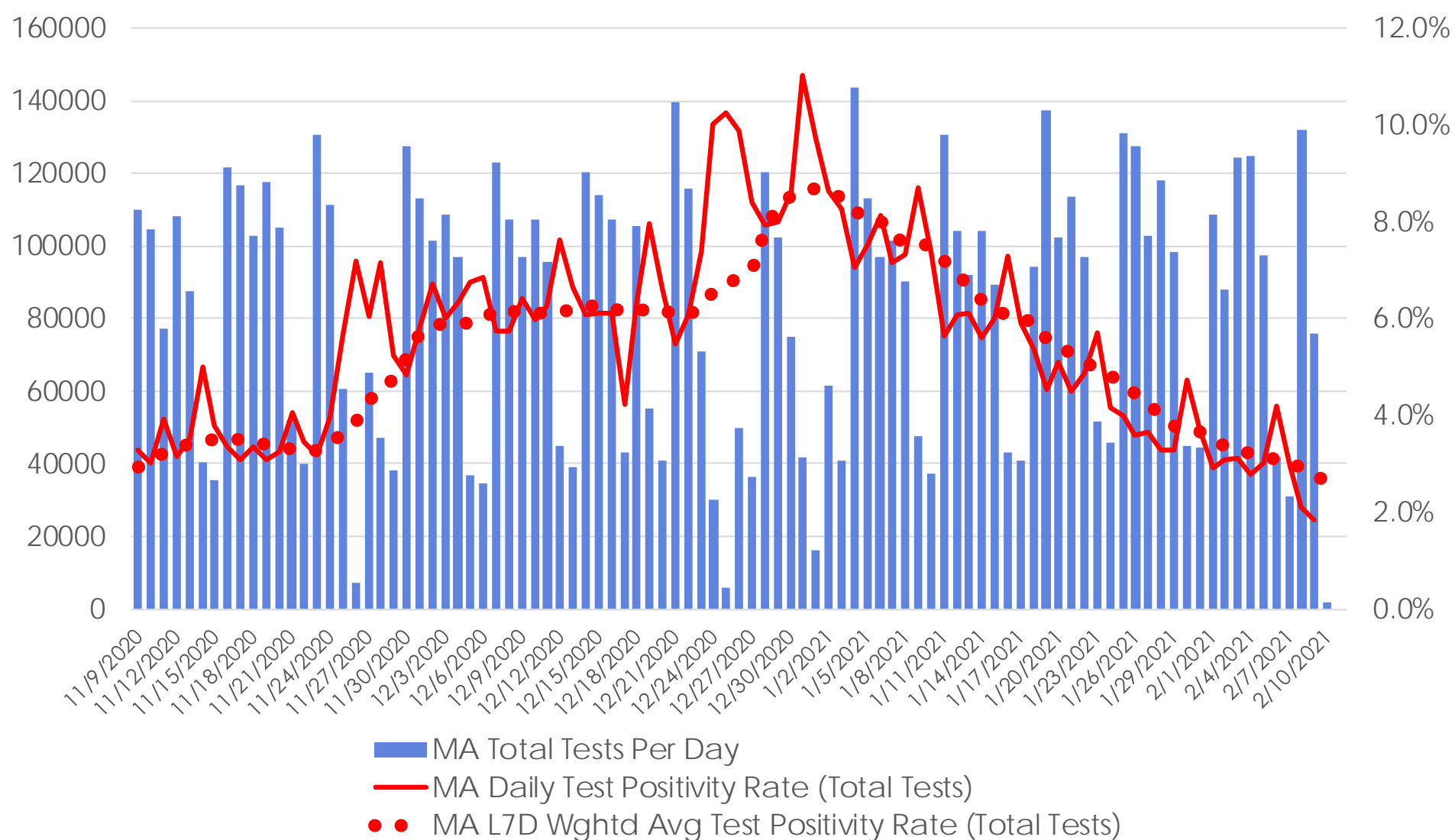
Data source: <https://www.mass.gov/info-details/covid-19-response-reporting# covid-19-weekly-public-health-report->

Trends: Test Positivity and Testing Volume (Statewide)

MA Statewide Test Positivity



Trends: Daily Test Volumes and Positivity (Statewide)



Data source: <https://www.mass.gov/info-details/covid-19-response-reporting>

Brookline in Regional Context

(as of 2/10/2021)

| Municipality | Avg. Daily Cases/100k L14D | % of Tests Positive L14D | Total Tests L14D / Muni. Population |
|------------------|----------------------------|--------------------------|-------------------------------------|
| Dedham | 66.2 | 6.3% | 16% |
| Boston | 38.8 | 1.8% | 34% |
| Milton | 36.8 | 2.3% | 24% |
| Somerville | 30.1 | 1.1% | 43% |
| Watertown | 28.8 | 2.3% | 21% |
| Needham | 28.1 | 2.0% | 23% |
| Cambridge | 21.5 | 0.8% | 48% |
| Arlington | 20.7 | 2.0% | 16% |
| Newton | 20.3 | 0.8% | 40% |
| Wellesley | 20.2 | 0.8% | 36% |
| Belmont | 16.2 | 1.9% | 16% |
| Brookline | 15.3 | 1.2% | 21% |

Public Schools of Brookline Case Counts: Trends Over Time

Data Last Updated: 2/12/21

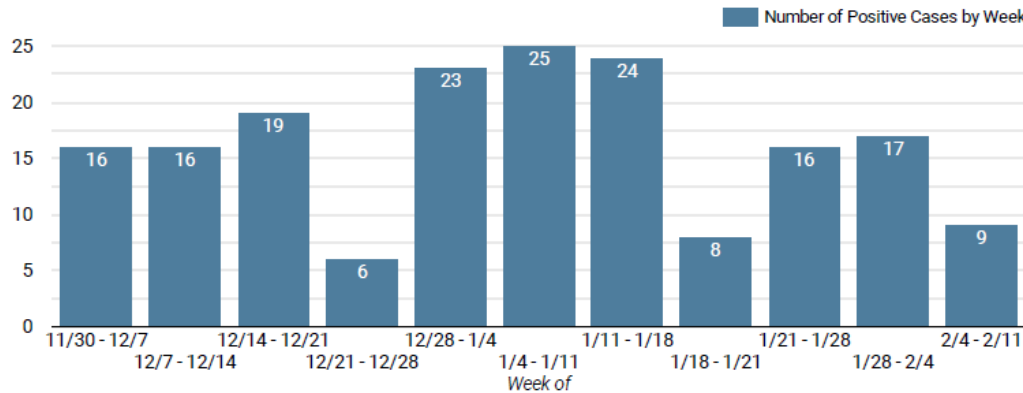


COVID-19 CASES: DISTRICT DASHBOARD

Dashboard outlines number of positive COVID-19 cases in the PSB school community by week and learning model. For the purpose of this dataset, weeks run **Friday to Thursday**.

Source: Public Schools of Brookline School Health Services Department

Number of Positive Cases, by Week

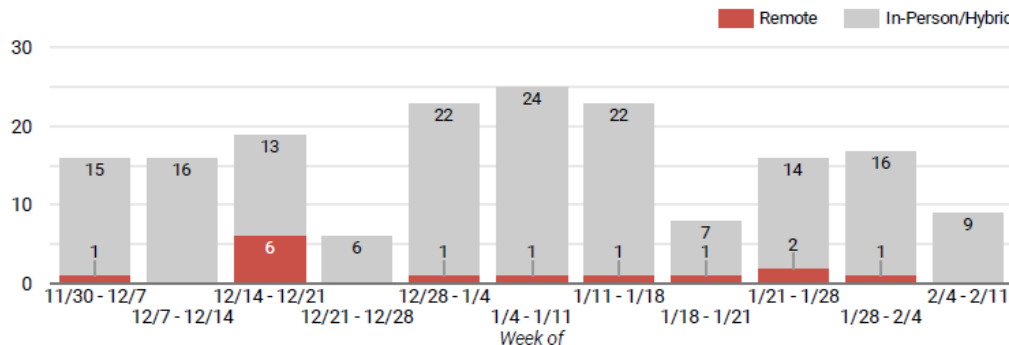


TOTAL PSB CASES TO DATE: 223

Remote: 25
Hybrid/In-Person: 198

Total among school-based students and staff: 219

Number of Positive Cases, by Week and Learning Model



TOTAL CLOSE CONTACTS*: 227 connected to 49 cases

Total positive cases with no close contacts* at school: 162

*Close contacts are defined as anyone who has been within 6 feet of an positive case for at least 15 minutes during the infectious period.

Public Schools of Brookline Case Counts: By School

Data Last Updated: 2/12/21



COVID-19 CASES: SCHOOL BY SCHOOL DASHBOARD

The table outlines the number of positive COVID-19 cases by week and the number of cumulative cases for the year at each school. For the purpose of this dataset, weeks run **Friday to Thursday**.
Source: Public Schools of Brookline School Health Services Department

Number of Positive Cases, by School & District Offices (Week of 2/4 - 2/11)

| School/Building | Weekly Positive Cases | Cumulative Positive Cases | Close Contacts | Cases with Close Contacts |
|-----------------------------|-----------------------|---------------------------|----------------|---------------------------|
| BEEP @ Beacon | 0 | 3 | - | - |
| BEEP @ Clark | 0 | 2 | - | - |
| BEEP @ Lynch | 0 | 1 | - | - |
| BEEP @ Putterham | 0 | 1 | - | - |
| Baker | 3 | 35 | - | - |
| Driscoll | 1 | 16 | - | - |
| Florida Ruffin Ridley | 0 | 18 | - | - |
| Heath | 0 | 10 | - | - |
| Lawrence | 2 | 18 | 1 | 1 |
| Lincoln | 0 | 21 | - | - |
| Pierce | 1 | 21 | 3 | 1 |
| Runkle | 0 | 13 | - | - |
| Remote Learning Academy K-8 | 0 | 10 | - | - |
| Brookline High School | 2 | 51 | 2 | 1 |
| Total* | 9 | 220 | 6 | 3 |

*1 staff case shared between schools during week of 1.28-2.4

| School/Building | Weekly Positive Cases | Cumulative Positive Cases | Close Contacts | Cases with Close Contacts |
|-----------------|-----------------------|---------------------------|----------------|---------------------------|
| District Office | 0 | 4 | - | - |

Public Schools of Brookline Case Counts: Students (By Grade) and Staff

Data Last Updated: 2/12/21



COVID-19 CASES: SCHOOL BY SCHOOL DASHBOARD

The table outlines the number of positive COVID-19 cases by week and the number of cumulative cases for the year at each school. For the purpose of this dataset, weeks run **Friday to Thursday**.

Source: Public Schools of Brookline School Health Services Department

Total Number of Positive Cases, by Grade Level and Staffing (Week of 2/4 - 2/11)

| Grade Level | Weekly Positive Cases | Cumulative Positive Cases |
|-------------------------|-----------------------|---------------------------|
| BEEP/Pre-K | 0 | 3 |
| Kindergarten | 1 | 18 |
| 1st Grade | 1 | 18 |
| 2nd Grade | 2 | 10 |
| 3rd Grade | 0 | 9 |
| 4th Grade | 1 | 8 |
| 5th Grade | 0 | 10 |
| 6th Grade | 0 | 7 |
| 7th Grade | 0 | 11 |
| 8th Grade | 0 | 17 |
| 9th Grade | 0 | 6 |
| 10th - 12th Grade | 0 | 31 |
| Staff (School-Based)* | 4 | 70 |
| Staff (District Office) | 0 | 4 |
| Total | 9 | 222 |

*1 staff case shared between schools during week of 1.28-2.4

Public Schools of Brookline Case Counts: Asymptomatic Testing Program Results

Data Last Updated: 2/12/21



COVID-19 CASES: SCHOOL BY SCHOOL DASHBOARD

The table outlines the number of positive COVID-19 cases by week and the number of cumulative cases for the year at each school. For the purpose of this dataset, weeks run **Friday to Thursday**.
Source: Public Schools of Brookline School Health Services Department

Staff Asymptomatic Testing Program Results

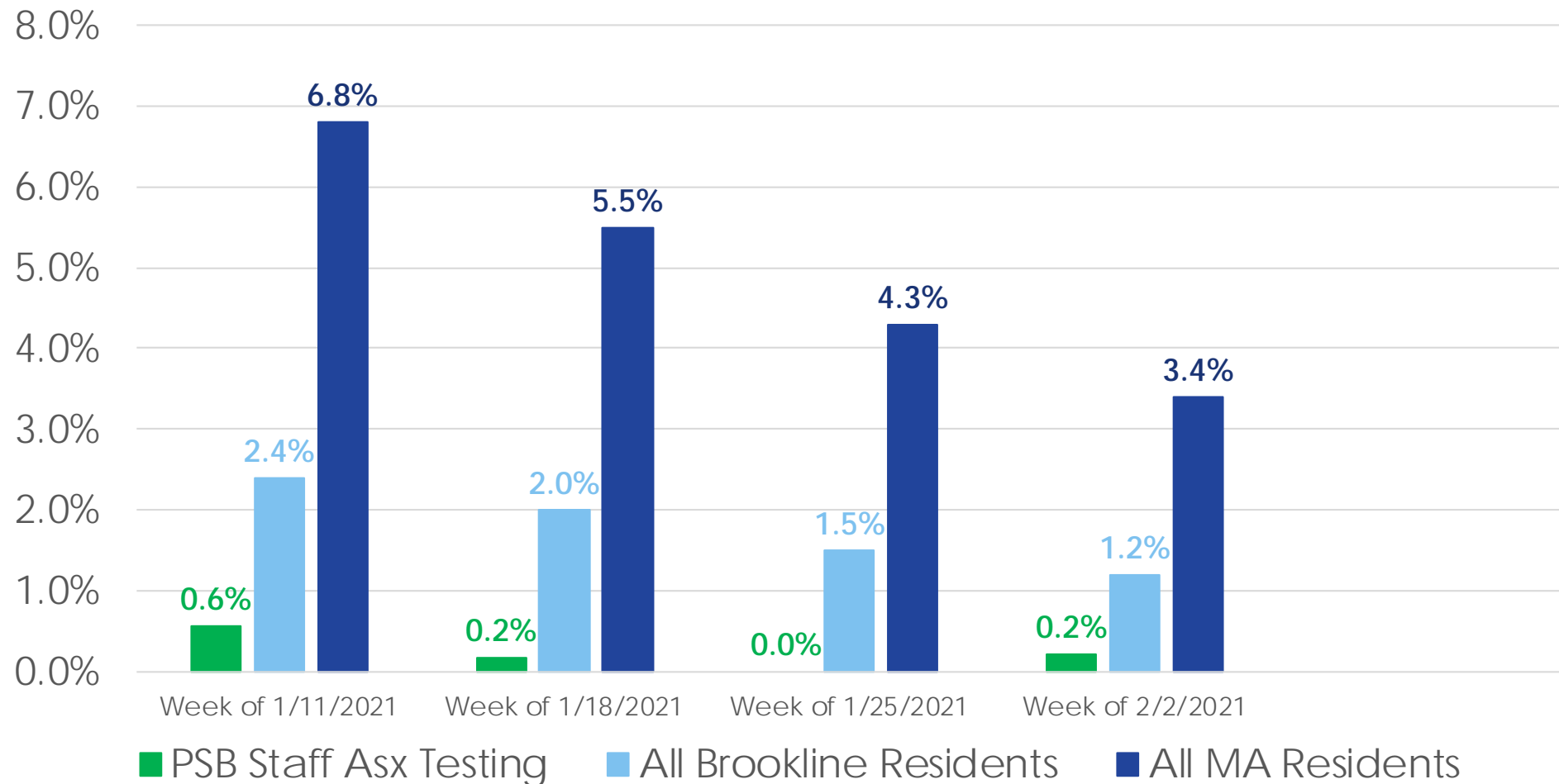
On Friday, January 15, 2021, the Public Schools of Brookline launched the voluntary staff COVID-19 PCR testing program for all "student-facing staff". **This program is strictly for asymptomatic staff.** This program is piloted by the Broad Institute, with tests collected and brought to each school. The turn-around time for these test results is within 24 hours.

| Week of | Tests Processed | Positive Results | Negative Results | TNP (Tests Not Processed) | Positivity % |
|--------------|-----------------|------------------|------------------|---------------------------|--------------|
| 1/11 - 1/15 | 175 | 1 | 174 | 5 | 0.57% |
| 1/18 - 1/22 | 571 | 1 | 570 | 15 | 0.18% |
| 1/25 - 1/29 | 612 | 0 | 612 | 11 | 0% |
| 2/2 - 2/4 | 447 | 1 | 446 | 10 | 0.22% |
| Total | 1,805 | 3 | 1,802 | 41 | 0.17% |

- 1,805 total tests processed over four weeks
 - **3 positives** and **1,802 negatives**
 - = **0.17%** cumulative avg. test positivity

Public Schools of Brookline Case Counts: Asymptomatic Testing Program Results

Comparison - Approximate Avg. Test Positivity by Week



Brand New CDC Guidance Today

- **Five key mitigation strategies to achieve “limited to no transmission in the schools”:**
 - *Universal and correct use of masks*
 - *Physical distancing**
 - Handwashing and respiratory etiquette
 - Cleaning and maintaining healthy facilities
 - Contact tracing in combination with isolation and quarantine, in collaboration with the health department
- **Also helpful:**
 - Ventilation
 - Surveillance testing

Brand New CDC Guidance Today, ctd.

Schools providing in-person instruction should prioritize two mitigation strategies:

1. Universal and correct use of masks should be required, at all levels of community transmission.
2. ***Physical distancing (at least 6 feet) should be maximized to the greatest extent possible.*** In hybrid instruction, scheduling should be planned to ensure physical distancing.

Brand New CDC Guidance Today, ctd.

Core principle for physical distancing: Establish school policies and implement structural interventions **to promote physical distance of at least 6 feet between people. In areas with substantial and high community transmission, physical distancing is essential** in providing protection, minimizing risk of exposure, and limiting the number of close contacts among cases. The interventions presented in this section provide examples of ways to promote physical distancing and **alternatives when physical distancing is not always feasible.**

Brand New CDC Guidance, ctd.

Table 1. CDC Indicators and Thresholds for Community Transmission of COVID-19¹

| Indicator | Low Transmission Blue | Moderate Transmission Yellow | Substantial Transmission Orange | High Transmission Red |
|---|--------------------------|---------------------------------|------------------------------------|--------------------------|
| Total new cases per 100,000 persons in the past 7 days ² | 0-9 | 10-49 | 50-99 | ≥100 |
| Percentage of NAATs that are positive during the past 7 days ³ | <5.0% | 5.0%-7.9% | 8.0%-9.9% | ≥10.0% |

¹If the two indicators suggest different levels, the actions corresponding to the higher threshold should be chosen. County-level data on total new cases in the past 7 days and test percent positivity are available on the County View tab in [CDC's COVID Data Tracker](#).

²Total number of new cases per 100,000 persons within the last 7 days is calculated by adding the number of new cases in the county (or other community type) in the last 7 days divided by the population in the county (or other community type) and multiplying by 100,000.

³Percentage of positive diagnostic and screening NAATs during the last 7 days is calculated by dividing the number of positive tests in the county (or other administrative level) during the last 7 days by the total number of tests resulted over the last 7 days. Additional information can be found on the [Calculating Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) Laboratory Test Percent Positivity: CDC Methods and Considerations for Comparisons and Interpretation](#) webpage.

Brand New CDC Guidance, ctd.

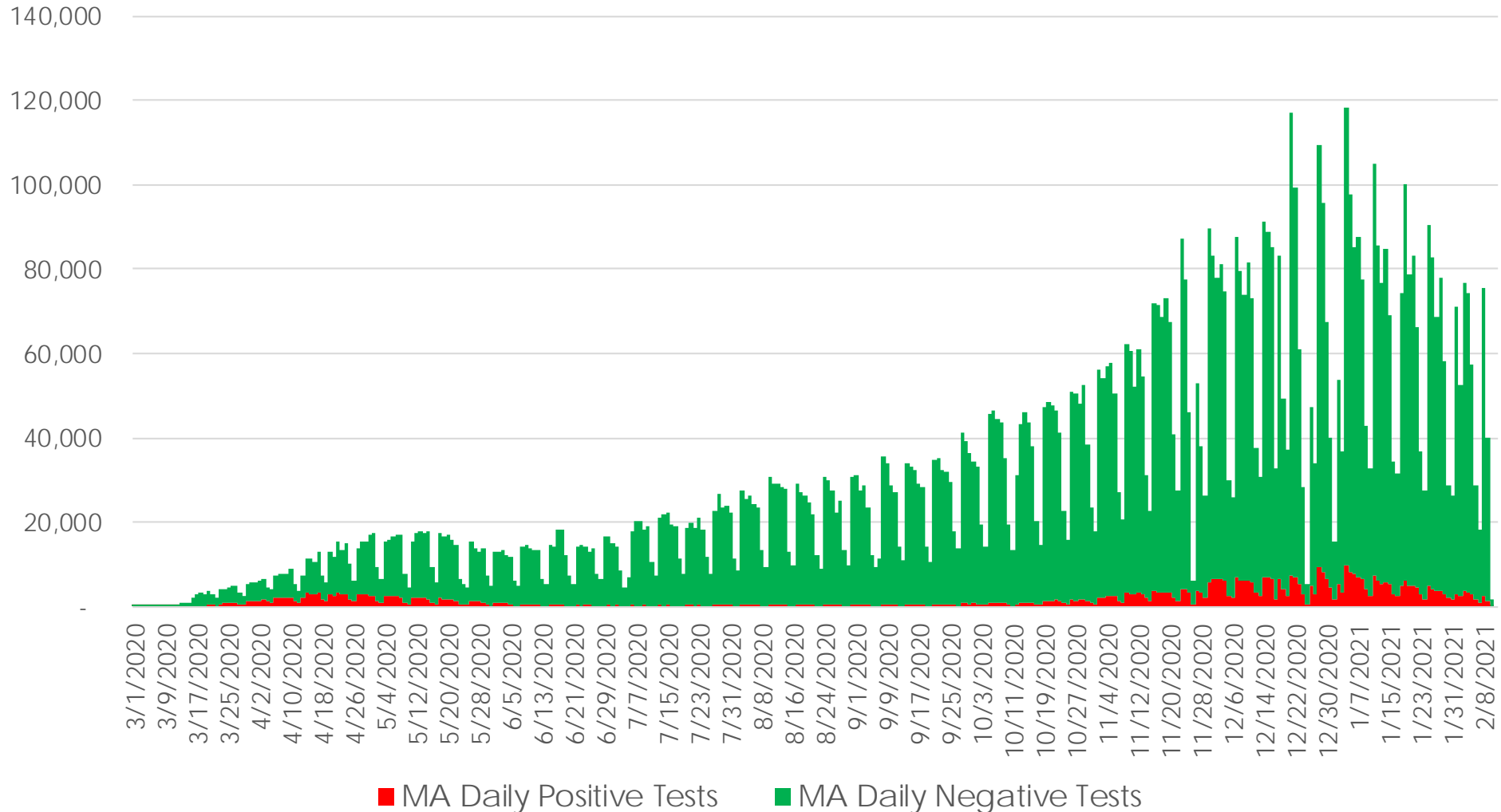
Table 2. Recommended Implementation of Mitigation Strategies and K-12 School Learning Modes by Level of Community Transmission for Schools That Do Not Implement Expanded Screening Testing

| Low Transmission ¹ Blue | Moderate Transmission Yellow | Substantial Transmission Orange | High Transmission Red |
|---|--|---|--|
| <p>All schools implement 5 key mitigation strategies: Universal and correct use of masks required; physical distancing; handwashing and respiratory etiquette; cleaning and maintaining healthy facilities; contact tracing in combination with isolation and quarantine.</p> <p>Diagnostic testing²: Symptomatic students, teachers, and staff and close contacts referred for diagnostic testing</p> | | | |
| <p>K-12 schools open for full in-person instruction Physical distancing of 6 feet or more to the greatest extent possible³</p> | | <p>Elementary schools in hybrid learning mode or reduced attendance⁴ Physical distancing of 6 feet or more is required</p> | <p>Middle and high schools in virtual only instruction unless they can strictly implement all mitigation strategies, and have few cases; schools that are already open for in-person instruction can remain open, but only if they strictly implement mitigation strategies and have few cases⁵</p> |
| | | <p>Middle and high schools in hybrid learning mode or reduced attendance Physical distancing of 6 feet or more is required</p> | |
| <p>Sports and extracurricular activities occur; physical distancing of 6 feet or more to the greatest extent possible⁶</p> | <p>Sports and extracurricular activities occur with physical distancing of 6 feet or more required</p> | <p>Sports and extracurricular activities occur only if they can be held outdoors, with physical distancing of 6 feet or more</p> | <p>Sports and extracurricular activities are virtual only</p> |

Appendix – For Reference As Needed

Statewide Test Results by Day

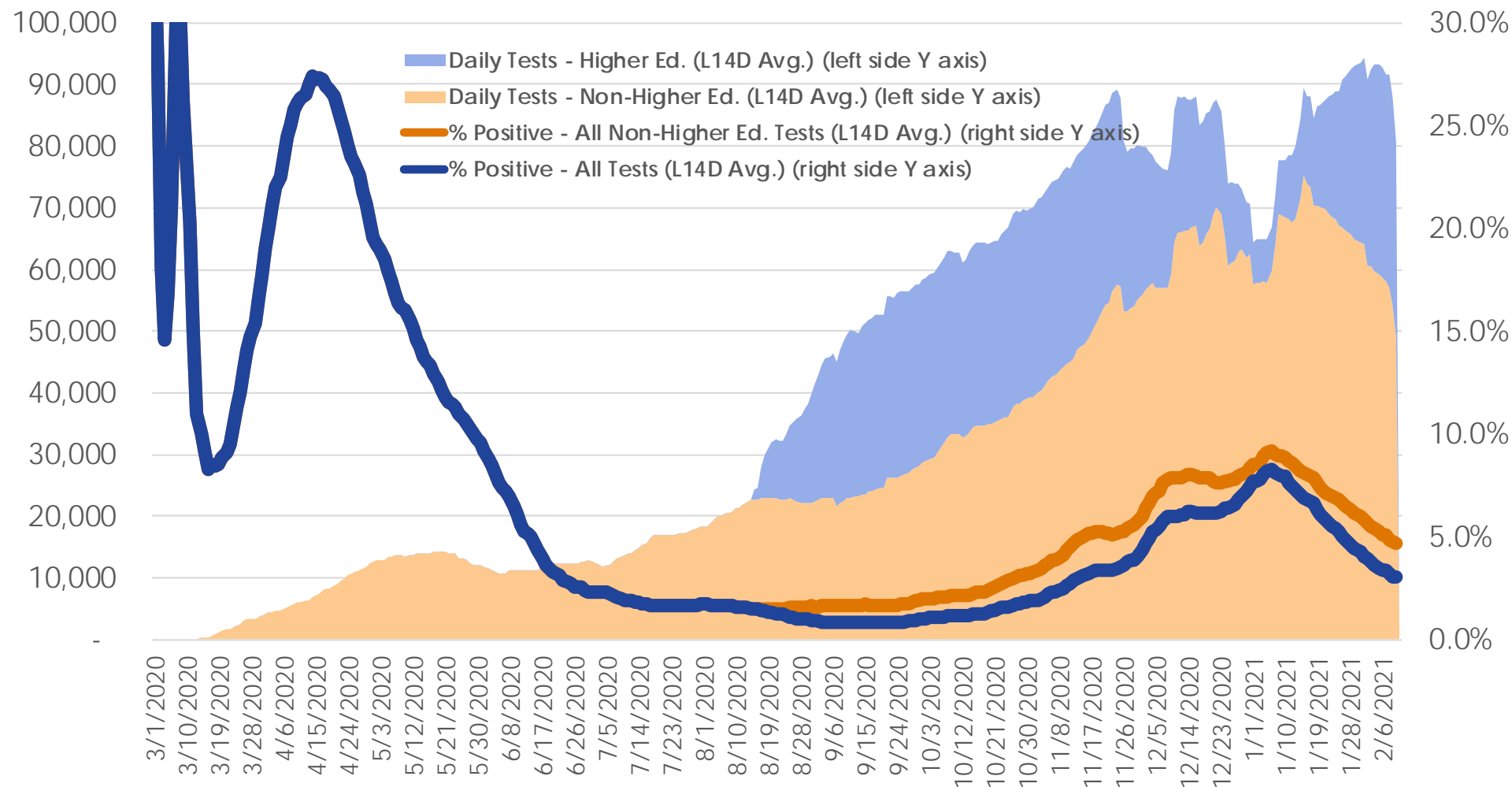
MA Daily Testing History



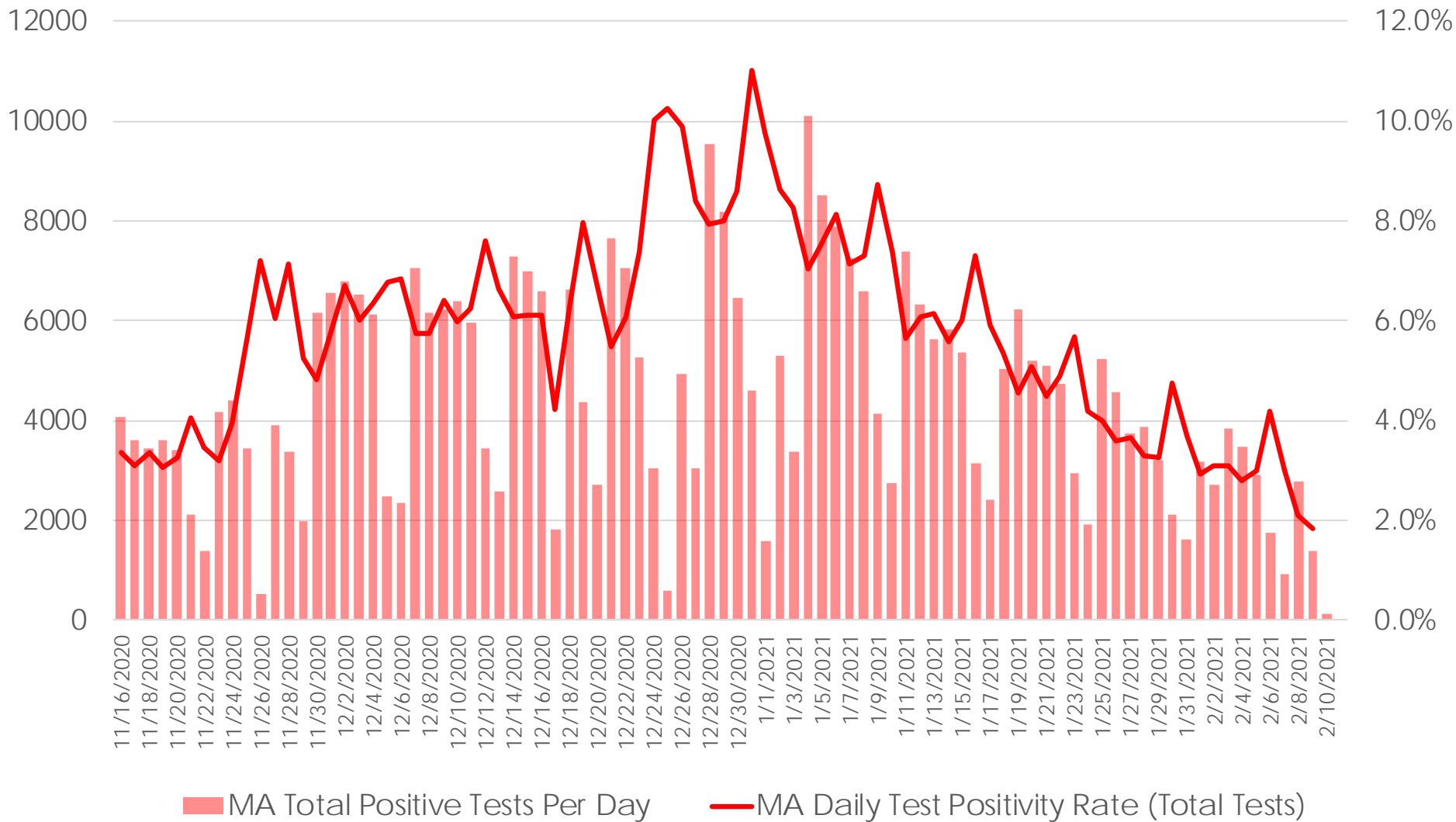
Data source: <https://www.mass.gov/info-details/covid-19-response-reporting>

Trends: Test Positivity and Testing Volume (Statewide)

MA Statewide Test Positivity



Trends: Daily Positive Test Counts and Positivity (Statewide)



MA DESE Guidance – In-Person/Remote

<https://www.doe.mass.edu/covid19/on-desktop/interpreting-dph-metrics.html>

- *Districts are expected to prioritize in-person learning across all color-coded categories, unless there is suspected in-school transmission, in accordance with DESE's Guidance on Responding to COVID-19 Scenarios. Transmission in schools is defined as spread of the virus between people during interactions in the school setting. While there have been positive COVID-19 cases of staff and students in schools, most of these infections have occurred outside of the school setting. If there is suspected in-school transmission, then the affected classrooms or schools should temporarily shift to remote learning, in accordance with DESE's Guidance on Responding to COVID-19 Scenarios. Classrooms and schools should reopen after appropriate mitigation strategies have been implemented, as determined in consultation with the local board of health, DPH, and DESE.*

MA DESE Guidance – In-Person/Remote

<https://www.doe.mass.edu/covid19/on-desktop/interpreting-dph-metrics.html>

- *Districts and schools in communities designated gray, green, or yellow are expected to have students learning fully in-person, if feasible. A hybrid model should be used only if there is no other way to meet health and safety requirements. Parents and caregivers will continue to have the option to choose a district's remote learning program for their children.*
- *Schools in red communities should implement hybrid models, while maximizing in-person learning time for high-needs students.*
- ...
- *Fully remote instructional models should be implemented only as a last resort in classrooms, schools, or districts when there is suspected in-school transmission or a significant municipal outbreak, in accordance with DESE's Guidance on Responding to COVID-19 Scenarios. Classrooms and schools should reopen after appropriate mitigation strategies have been implemented, as determined in consultation with the local board of health, DPH, and DESE.*