



Advisory Panel 4:  
Public Health, Safety, & Logistics

Metrics Review

October 30, 2020

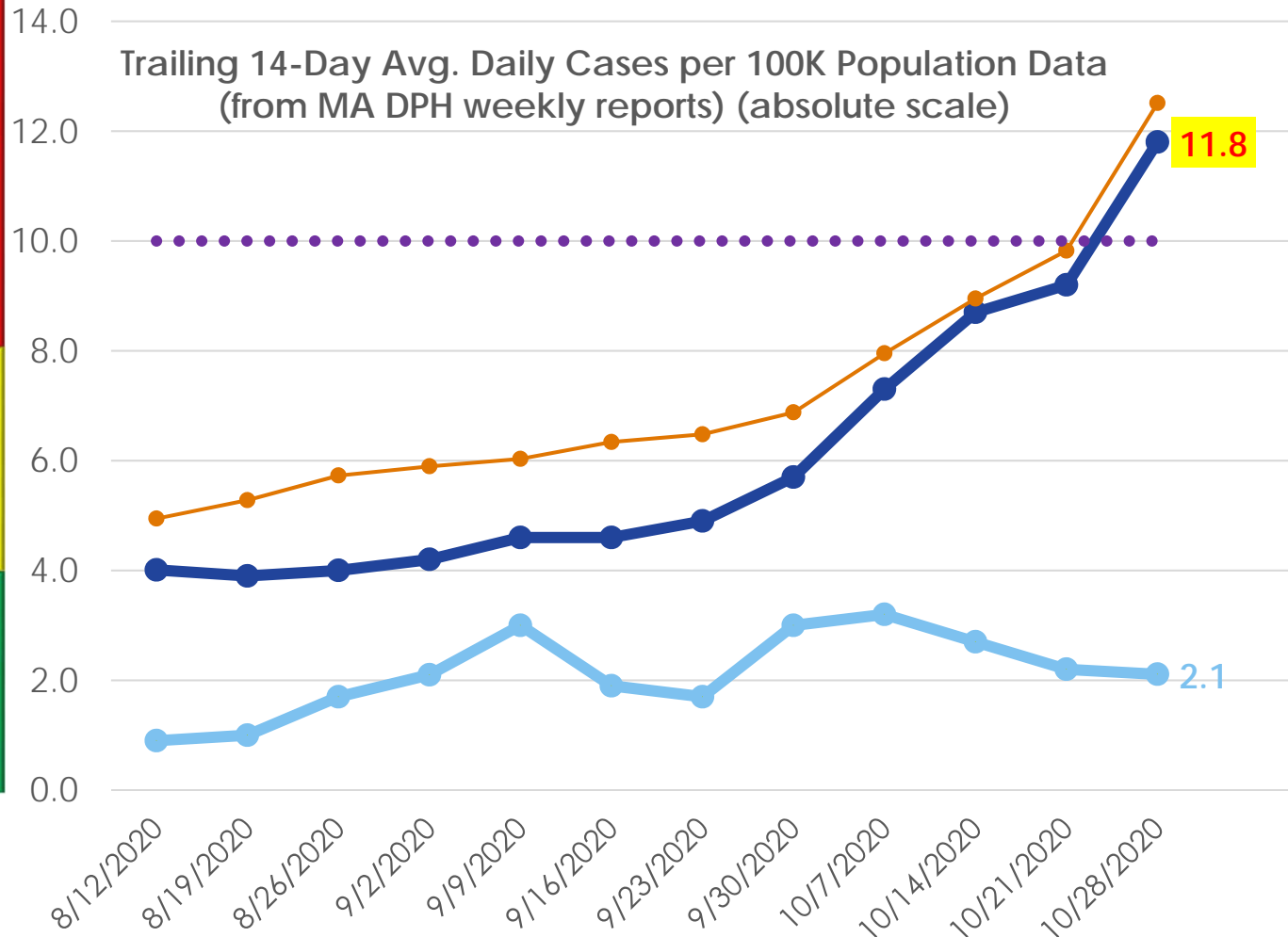
# Community Benchmarks - Status

Benchmark	Status
Avg. daily new case count in Brookline = <10 (last 14 days)	2.1
Avg. daily new case count in Massachusetts = <10 (last 14 days)	11.8
Avg. test positivity rate in Brookline = <5.0% (last 14 days)	0.25%
Avg. test positivity rate in Massachusetts = <5.0% (last 14 days)	1.55%

*If any two of these four thresholds are exceeded, a more focused discussion should take place about potential pause, roll-back, or other modification of in-person PSB operations.*

# Community Benchmarks - Status

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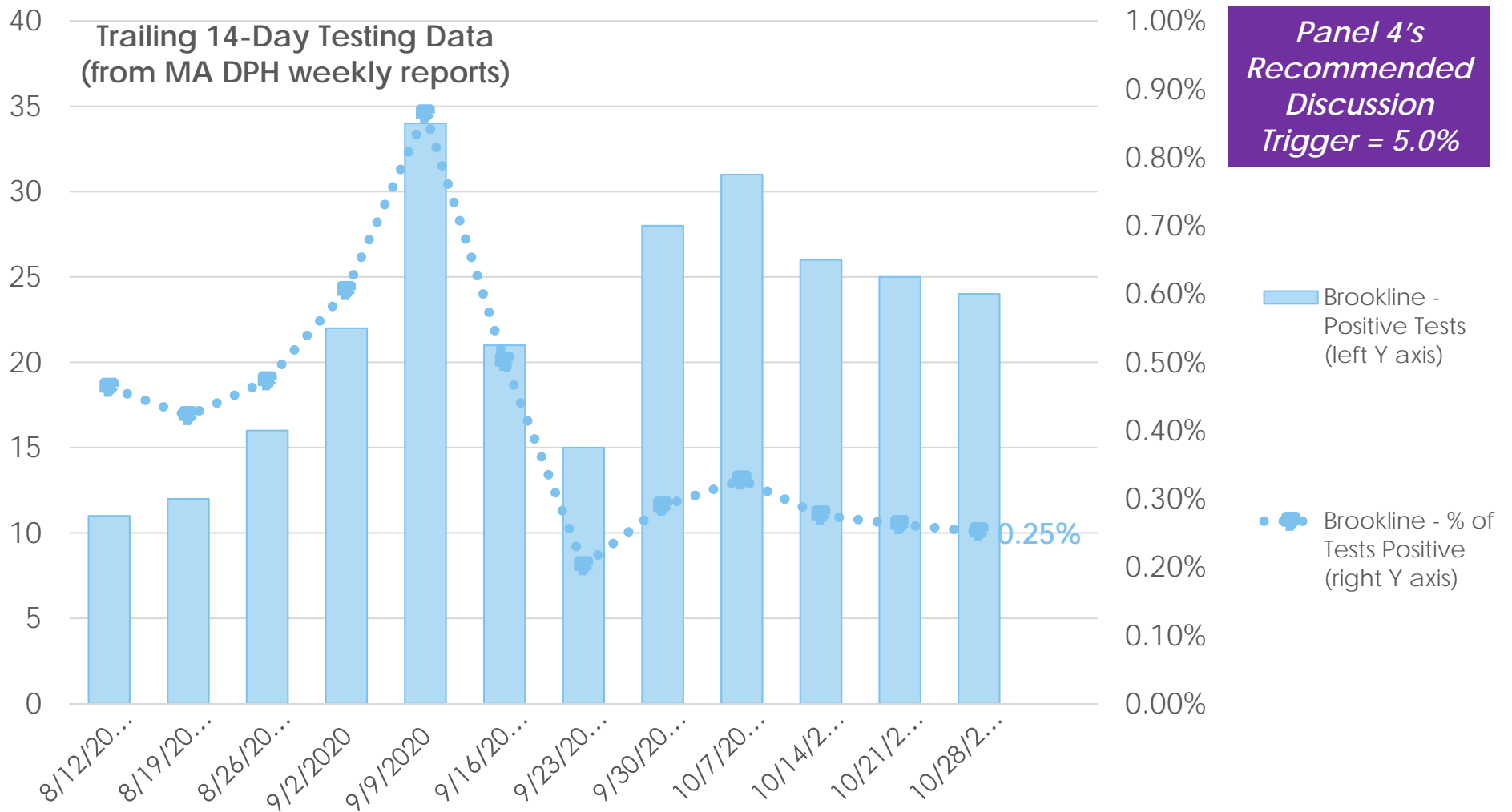


Panel 4's Recommended Discussion Trigger = 10.0

- Massachusetts
- Brookline
- Boston-Brookline-Cambridge-Newton
- Panel 4 Recommended Discussion Trigger

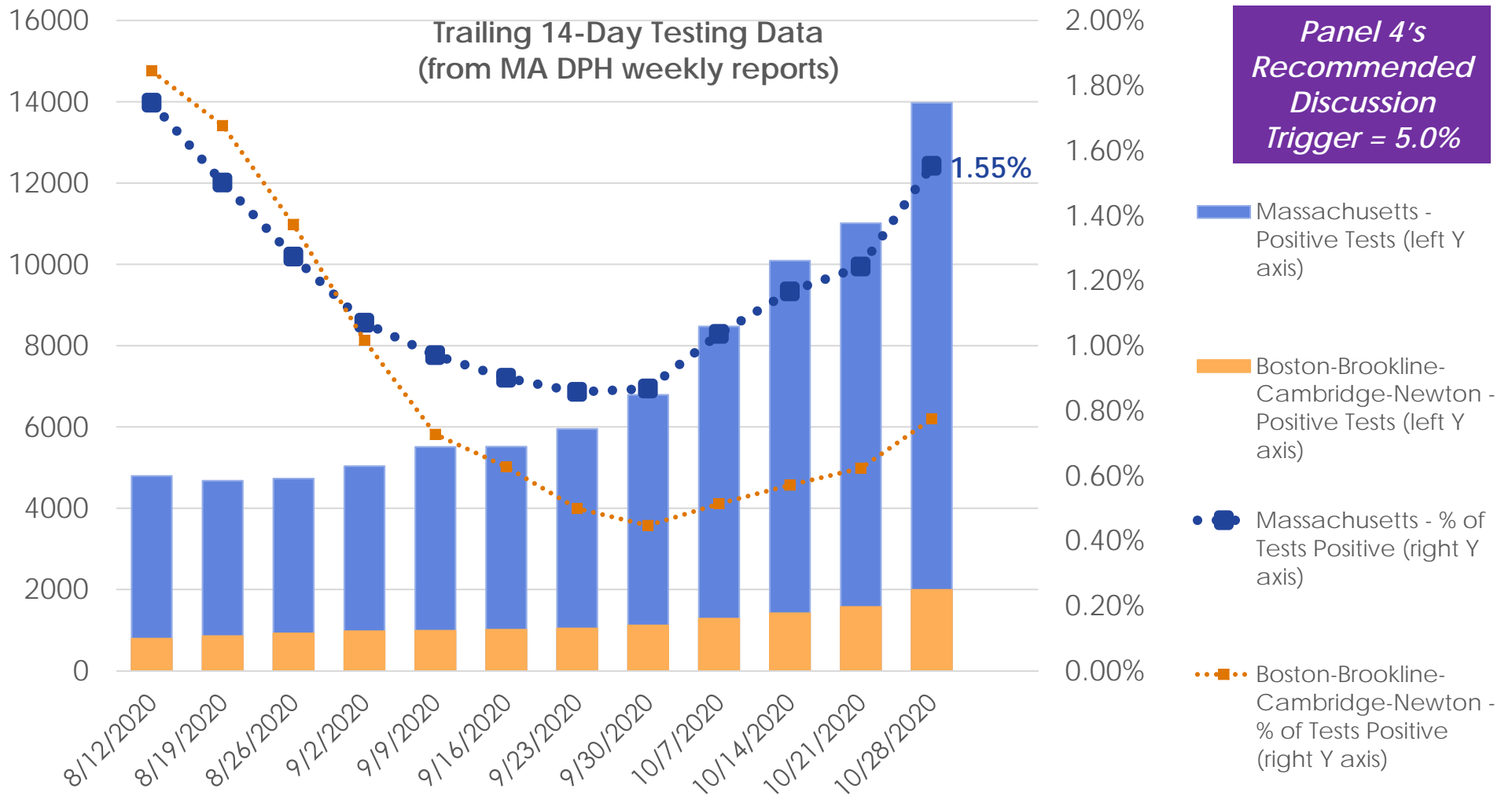
Sources: <https://www.mass.gov/info-details/covid-19-response-reporting# covid-19-weekly-public-health-report->  
<https://globalepidemics.org/key-metrics-for-covid-suppression/>

# Community Benchmarks - Status



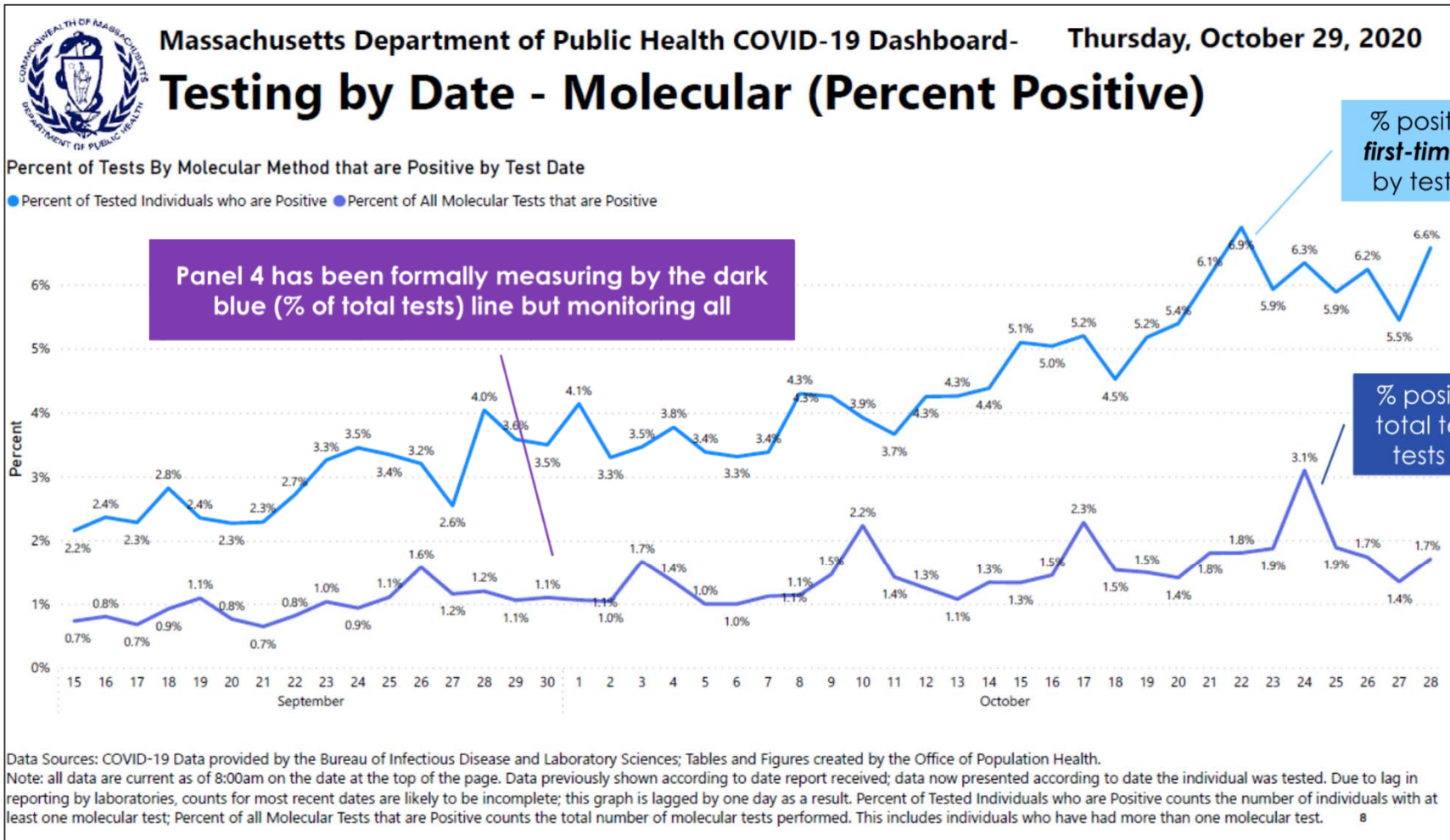
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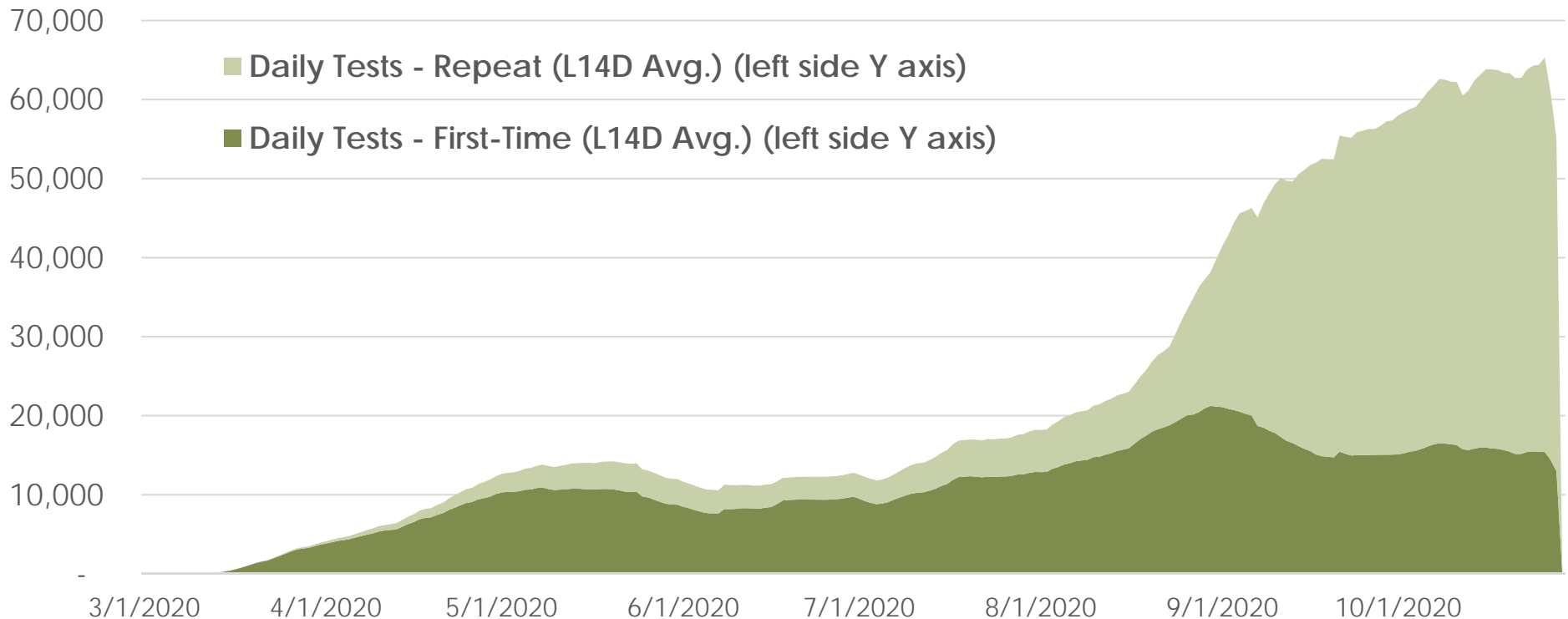
# Understanding Test Positivity



*Roughly 35% of MA residents have now been tested at least once and, thus, are excluded from DPH's "first-time" measure going forward.*

# Understanding Test Positivity

MA Statewide Test Positivity

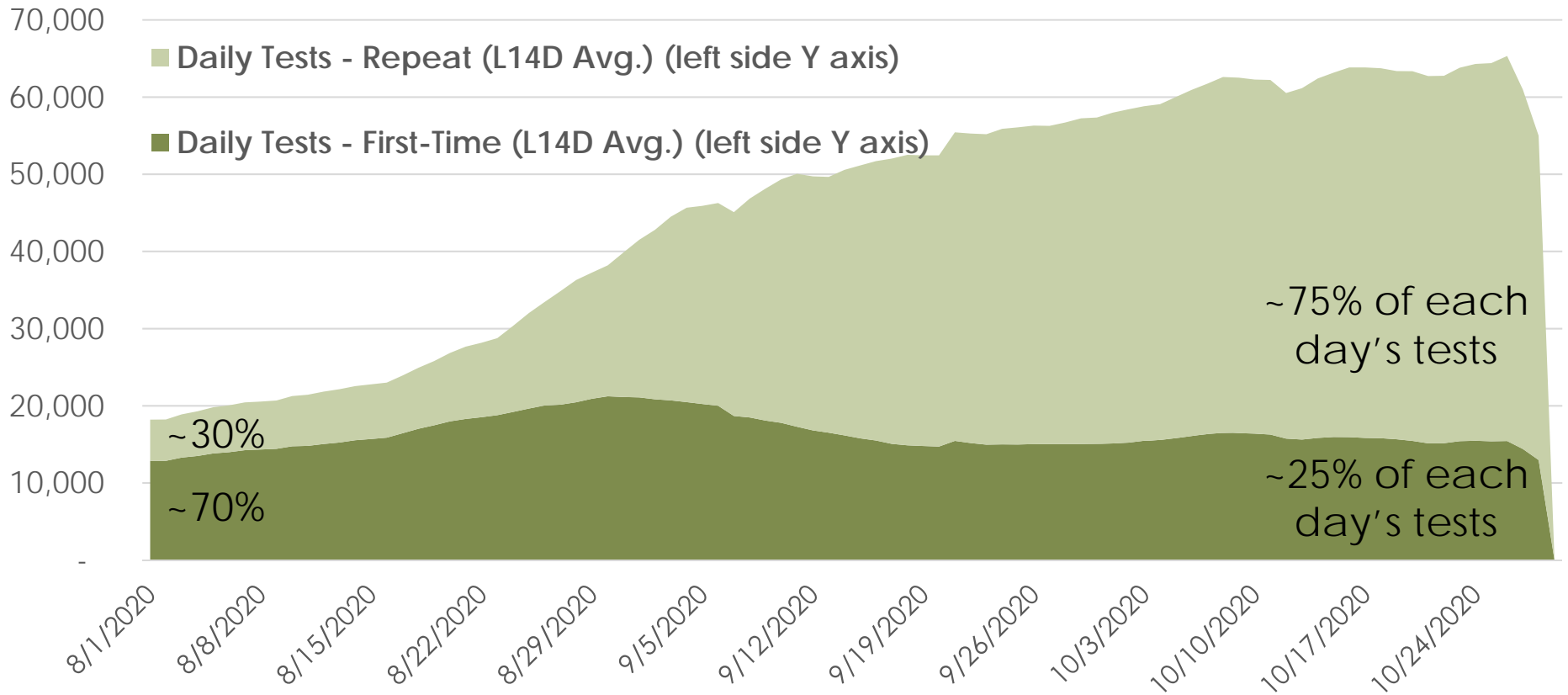


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Source: <https://www.mass.gov/info-details/covid-19-response-reporting> (daily and weekly raw data)

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MA Statewide Test Positivity



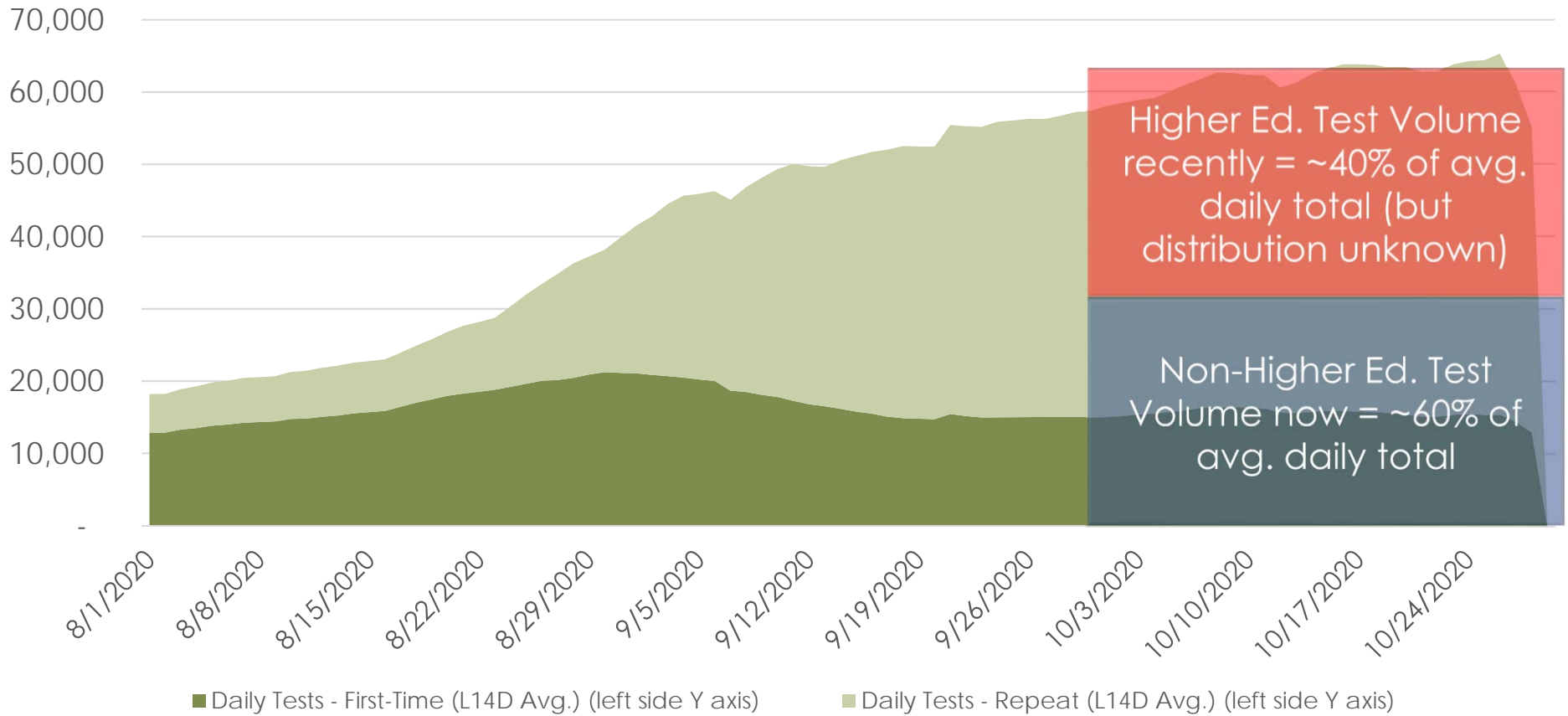
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# Understanding Test Positivity

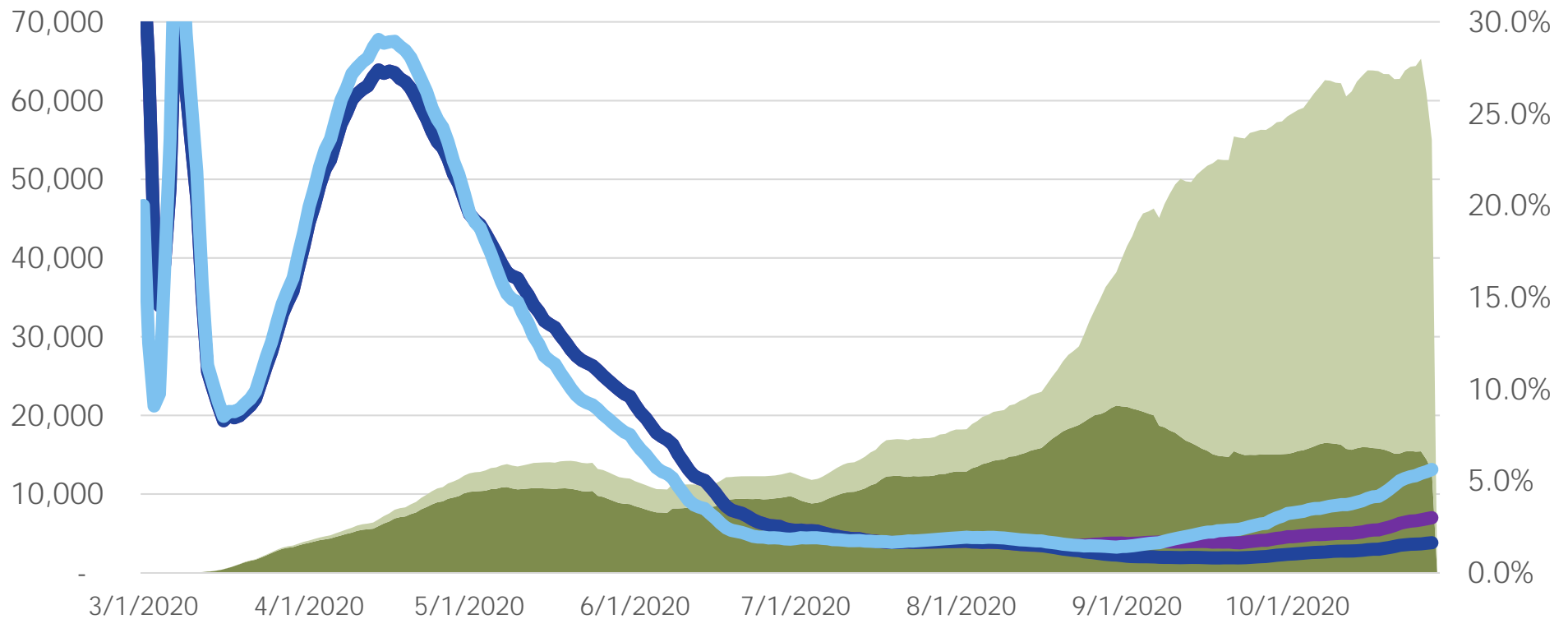
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MA Statewide Test Positivity



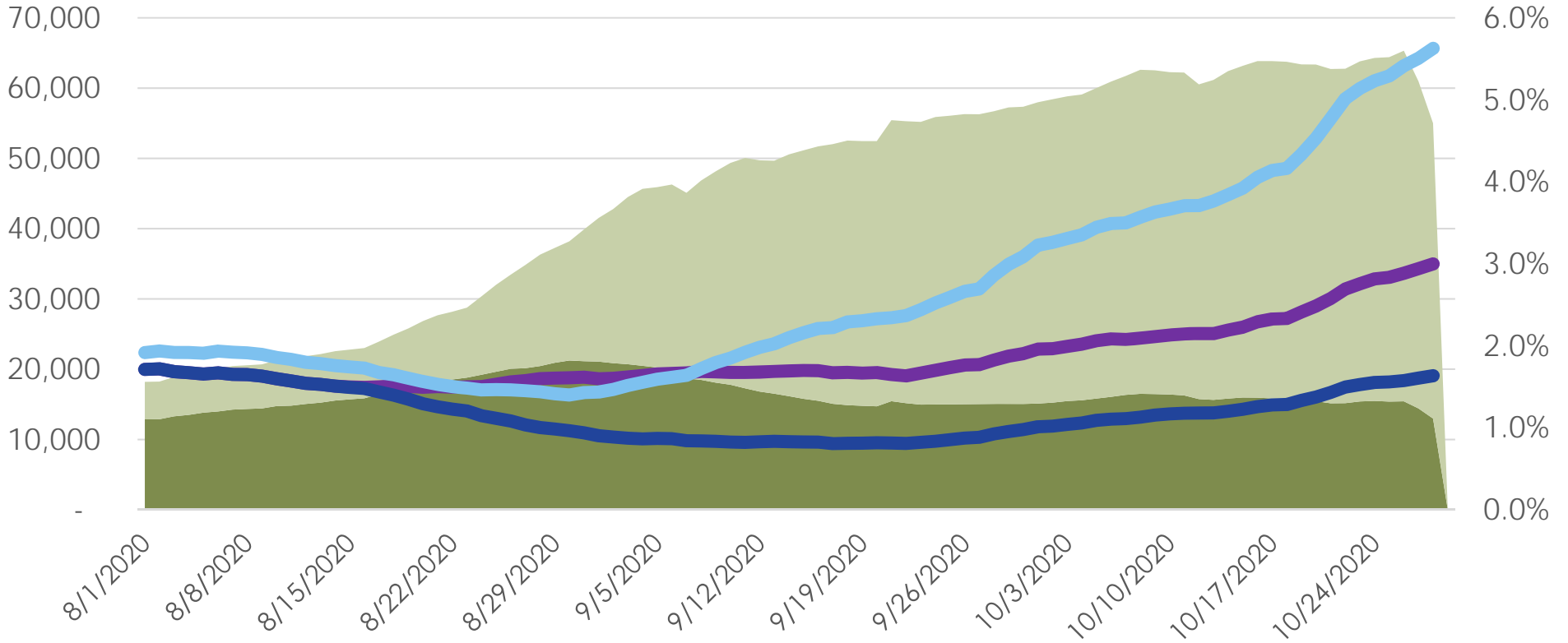
- Daily Tests - Repeat (L14D Avg.) (left side Y axis)
- Daily Tests - First-Time (L14D Avg.) (left side Y axis)
- % Positive - All Non-Higher Ed. Tests (L14D Avg.) (right side Y axis)
- % Positive - All Tests (L14D Avg.) (right side Y axis)
- % Positive - All First-Time Tests (L14D Avg.) (right side Y axis)

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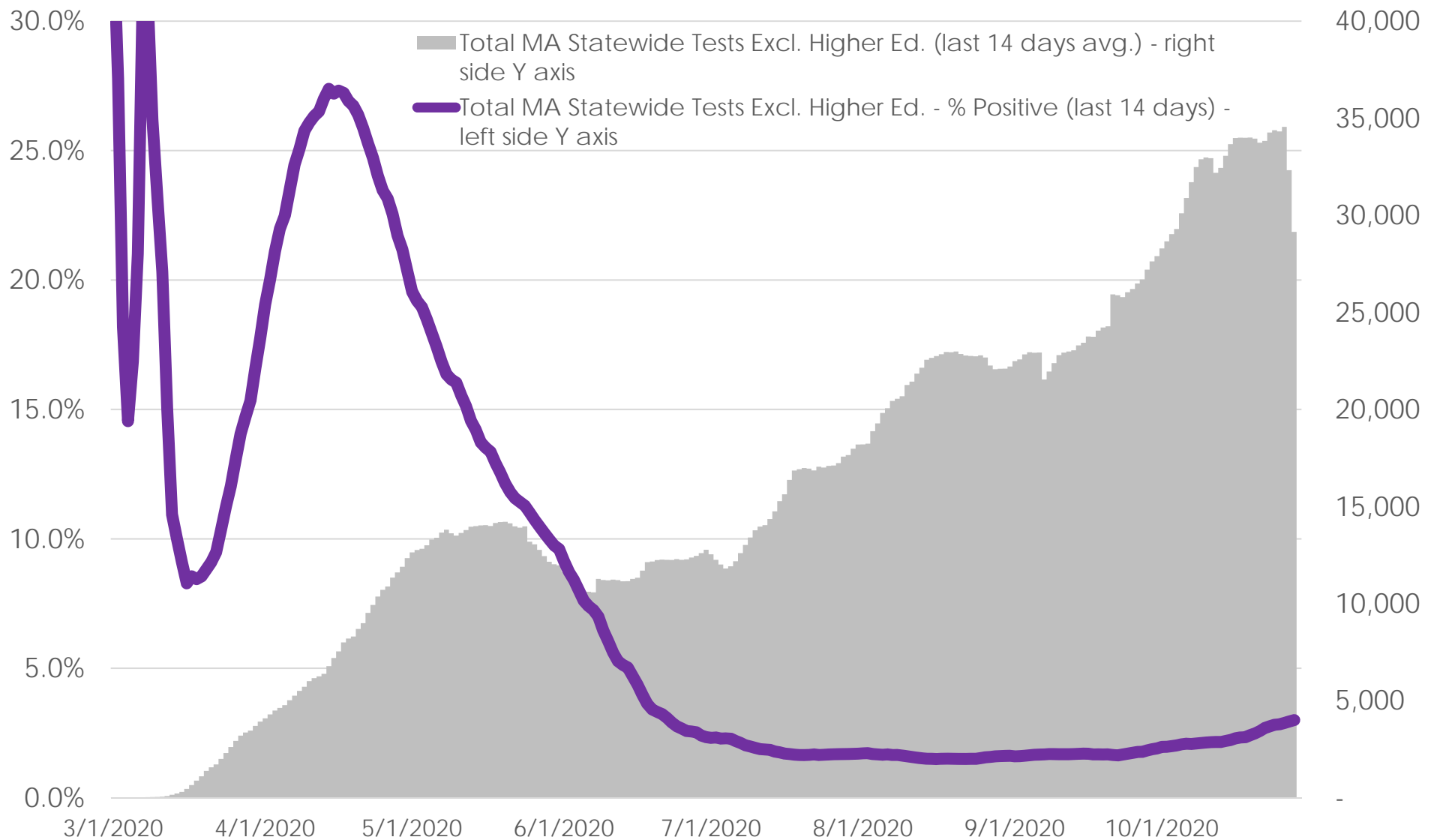


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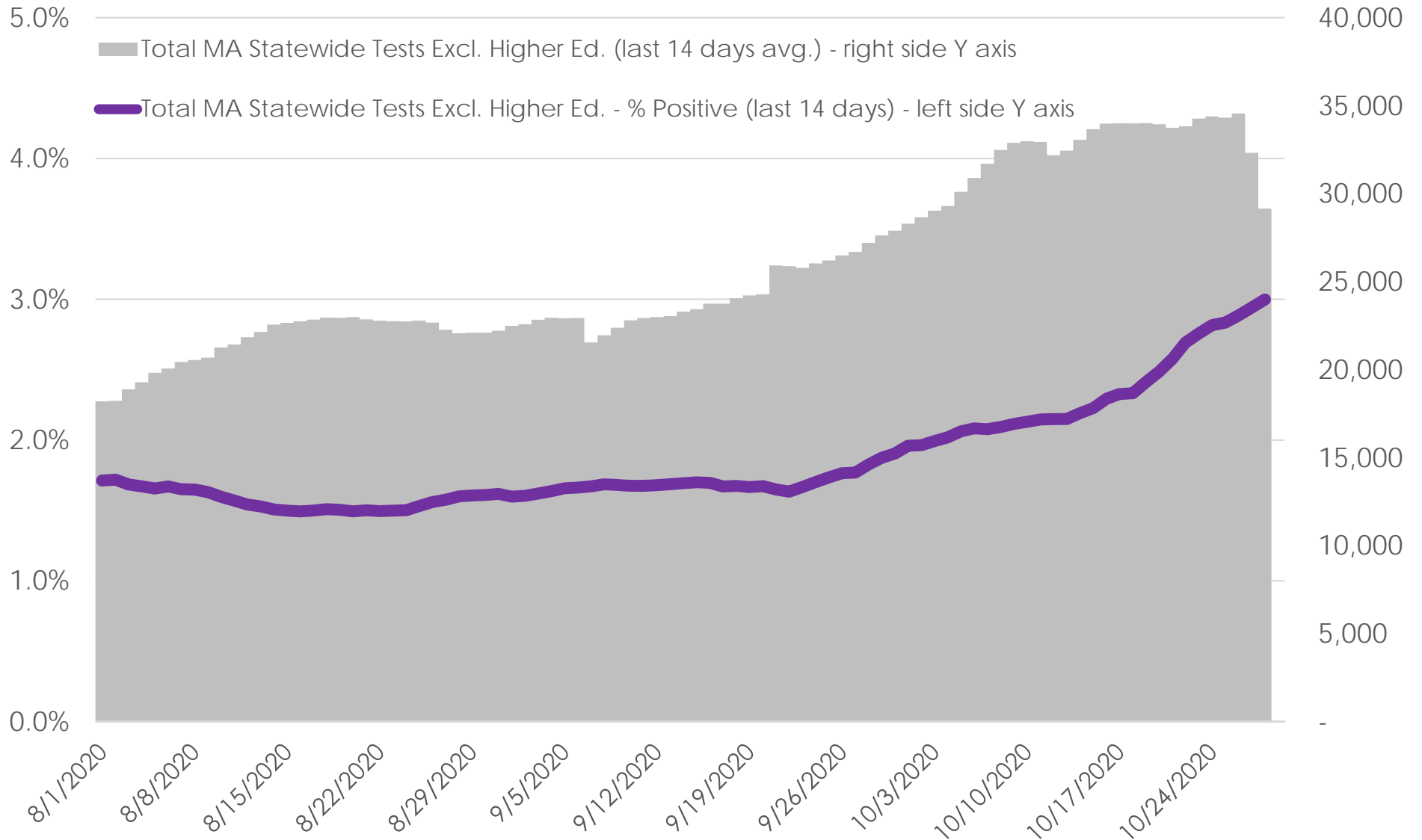
Source: <https://www.mass.gov/info-details/covid-19-response-reporting> (daily and weekly raw data)

# Statewide Non-Higher Ed. Testing



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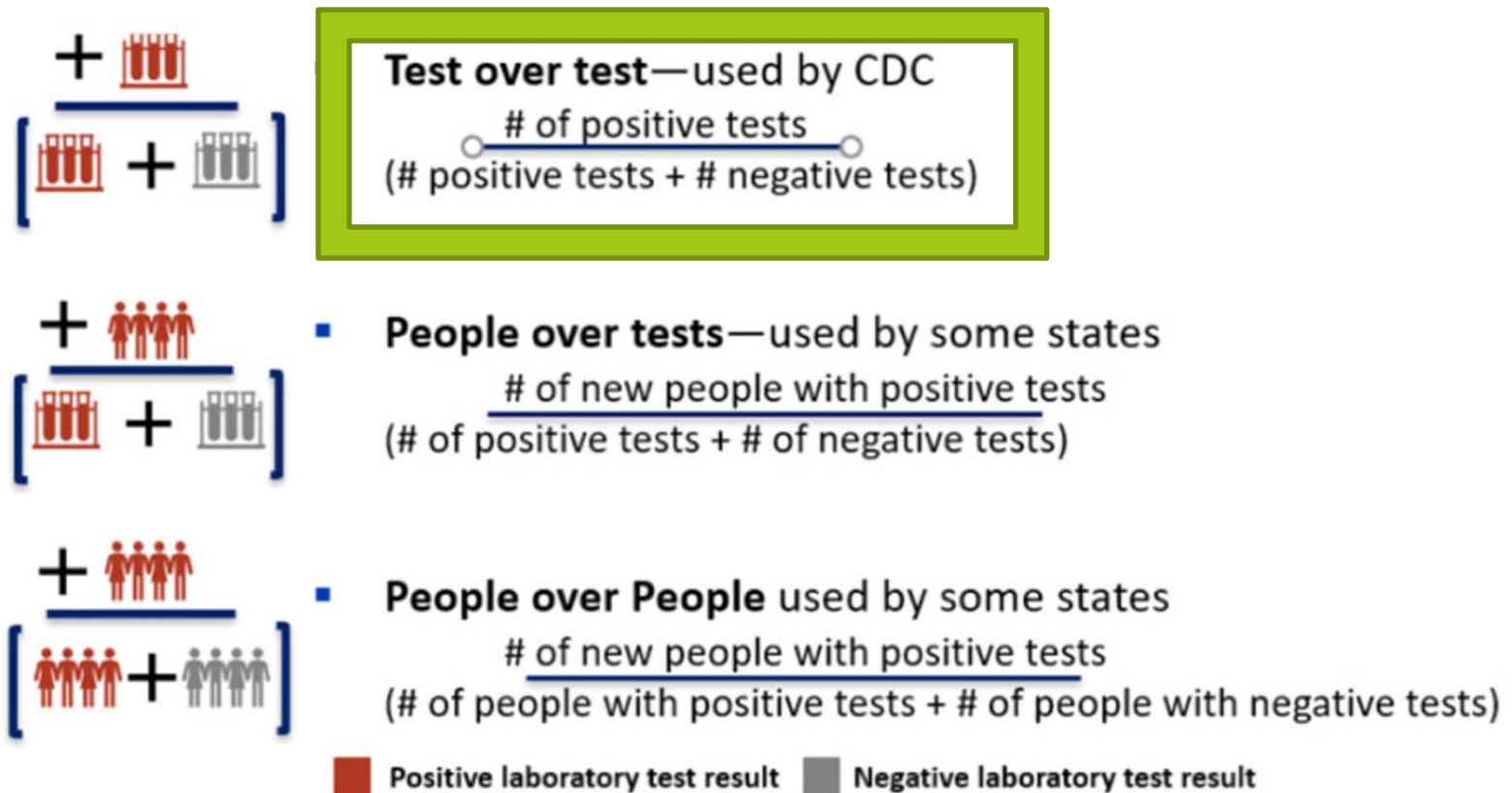
# Statewide Non-Higher Ed. Testing



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# Understanding Test Positivity

Figure 1: Three ways in which percent positivity can be calculated for COVID-19 laboratory tests



[Read Text Equivalent](#) (for Section 508 access).

# Understanding Test Positivity

## Challenges with “% of people positive”

- First, it's a metric where the 5% benchmark may no longer apply. That threshold came from multiple organizations' recommendations\* for a different metric, the % positive tests. We have no reason to assume 5% is the relevant cut-point here, and it's unclear what it should be.
- More problematic is that the “% people positive” rate is no longer a snapshot in time – it either captures the long-term total effect of the pandemic, or only looks at new people being tested, who are likely quite different than the general population and people who are re-testing
  - Who hasn't been tested so far and decides to get tested now?
  - Likely someone with more severe symptoms, meaning higher positive test rates
  - We re-ran state numbers to see what this pattern looks like

*\* World Health Organization and American Federation of Teachers*