PUBLIC SCHOOLS of BROOKLINE

Advisory Panel 4:
Public Health, Safety, & Logistics

Metrics Review

November 20, 2020

Community Benchmarks - Status

Benchmark (each measured over prior 14 days)	Status 10/28/20	Status 11/4/20	Status 11/11/20	**Status 11/18/20**
Avg. daily new case count in Brookline = <10	2.1	4.5	7.5	**10.9**
Avg. daily new case count in Massachusetts = <10	11.8	15.3	20.7	**29.4**
Avg. test positivity rate in Brookline = <5.0%	0.25%	0.44%	0.65%	**0.94%**
Avg. test positivity rate in Massachusetts = <5.0%	1.55%	1.84%	2.29%	**3.02%**

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.

Updated 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

	Population		
Group	**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's population is ~60,000

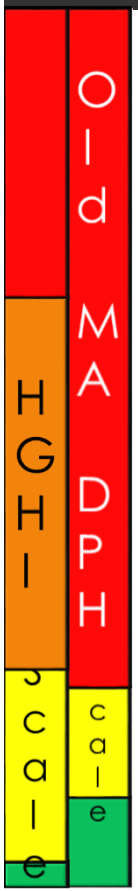
As of 11/5, DPH is using 2019 population estimates derived from a method developed by the University of Massachusetts Donahue Institute. The 2019 estimates are the most currently available data.

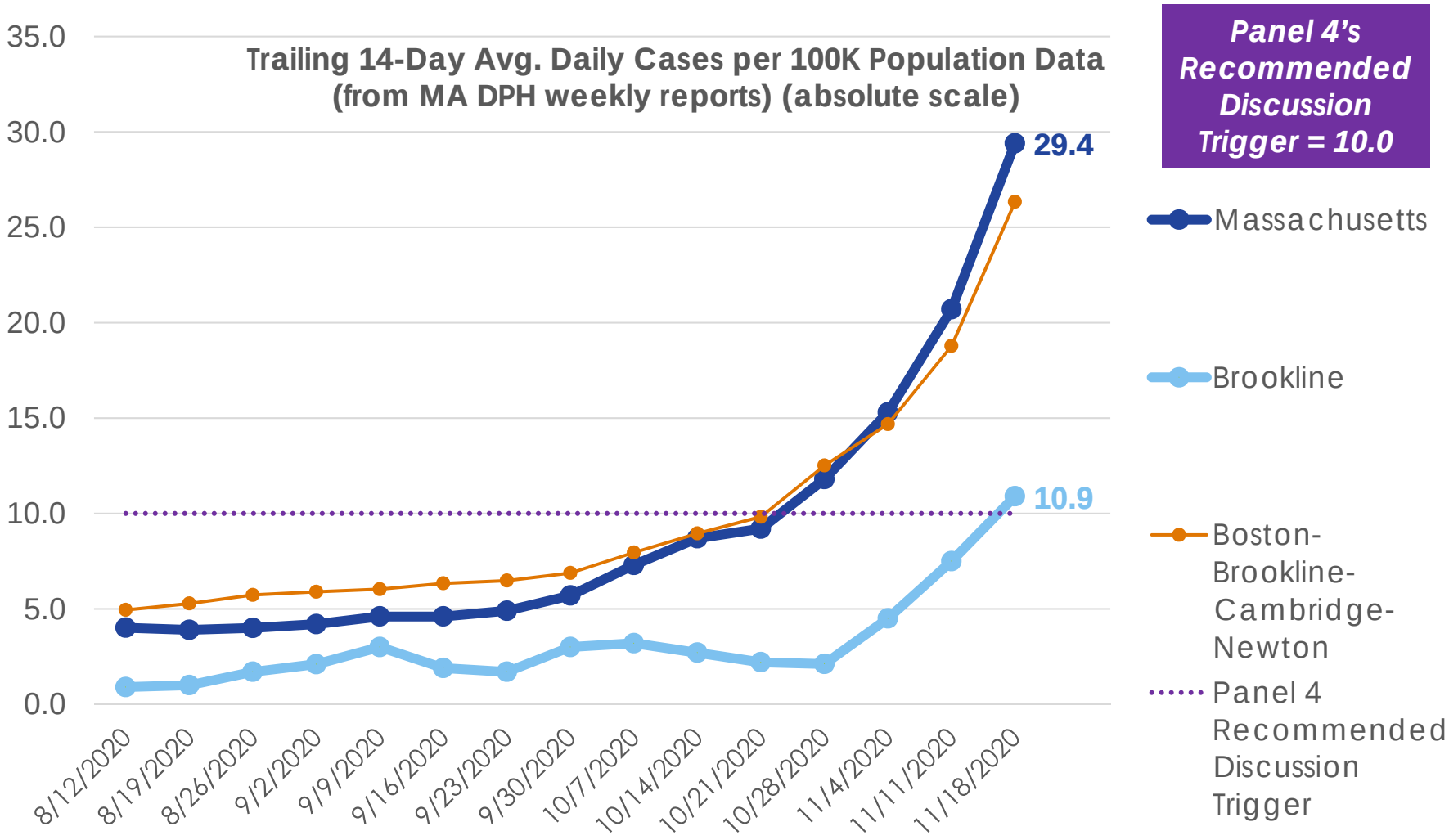
What does the 10 cases/100,000 population metric actually mean?

- The metric is based on the average daily new cases over the measuring period (14 days in our case)
- 10 new cases/day per 100k people = 0.01% of the population is being diagnosed COVID+ each day (1 in 10,000 people)

Cohort	Population	Expected New Cases Per Week
Town of Brookline residents	~60,000	Roughly 40
PSB student body	~7,500	Roughly 5
PSB staff	~1,500	Roughly 1

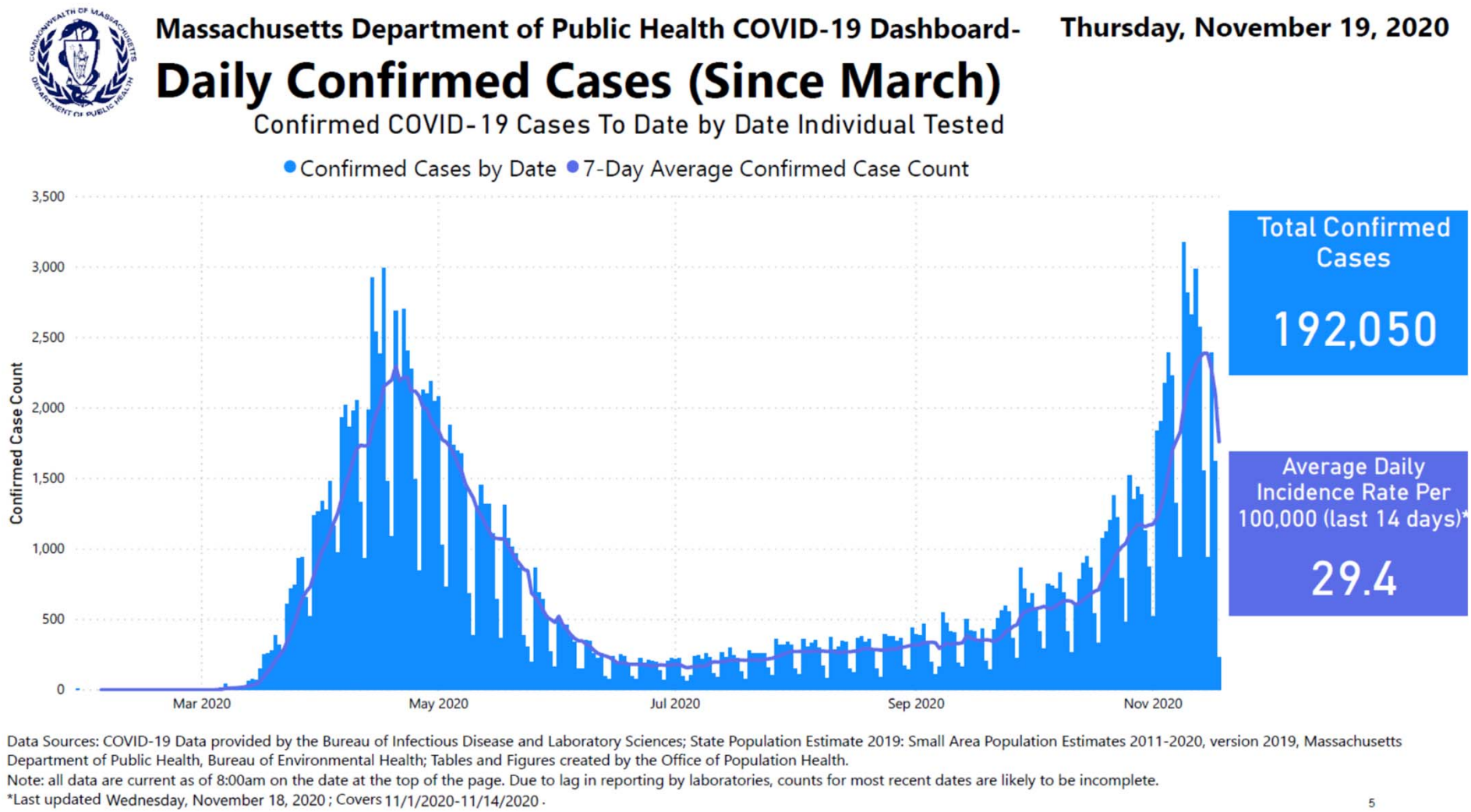
Community Benchmarks - Status





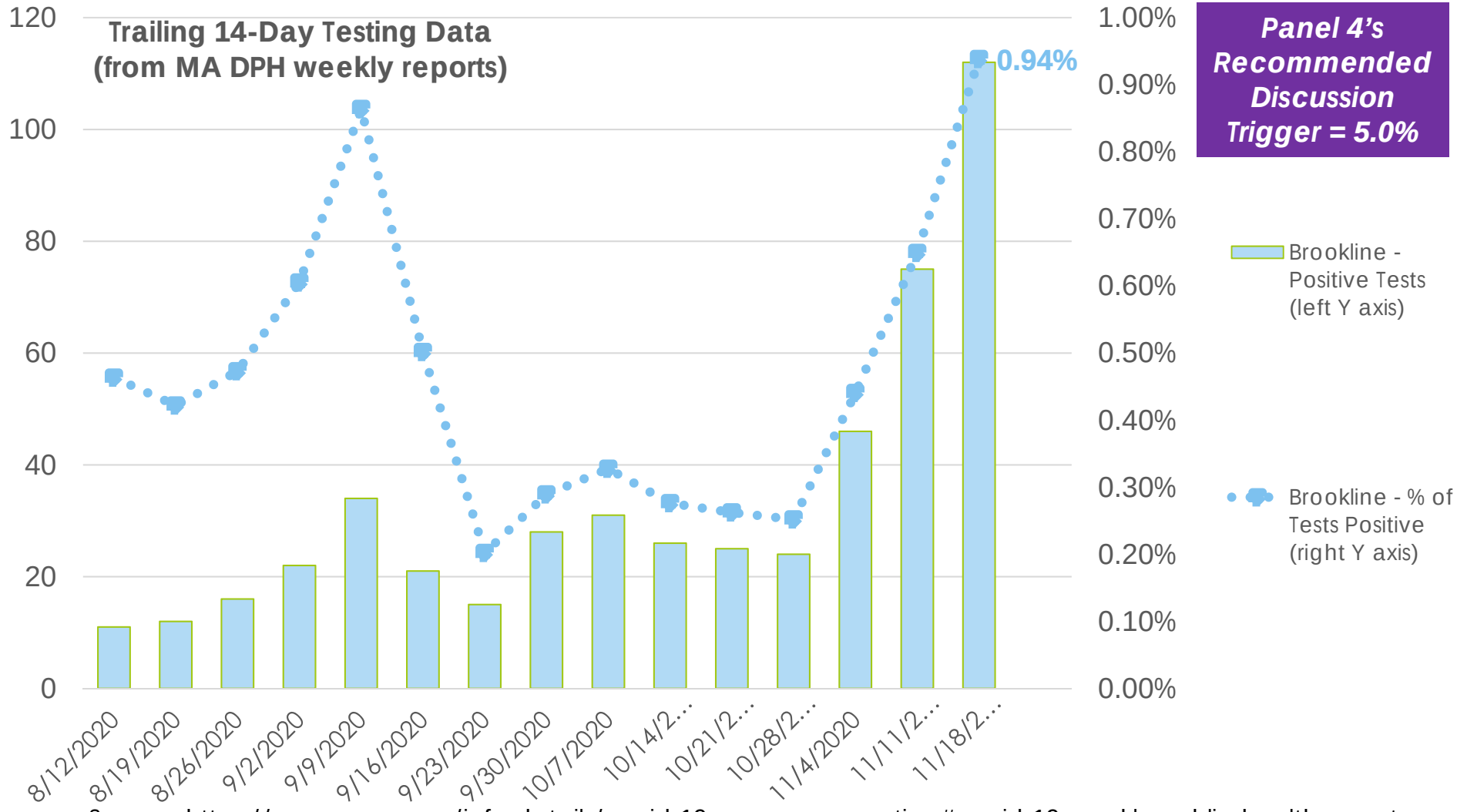
Sources: https://www.mass.gov/info-details/covid-19-response-reporting#covid-19-weekly-public-health-report- ; https://globalepidemics.org/key-metrics-for-covid-suppression/

Statewide Case Count



Source: https://www.mass.gov/doc/covid-19-dashboard-november-19-2020/download

Community Benchmarks - Status



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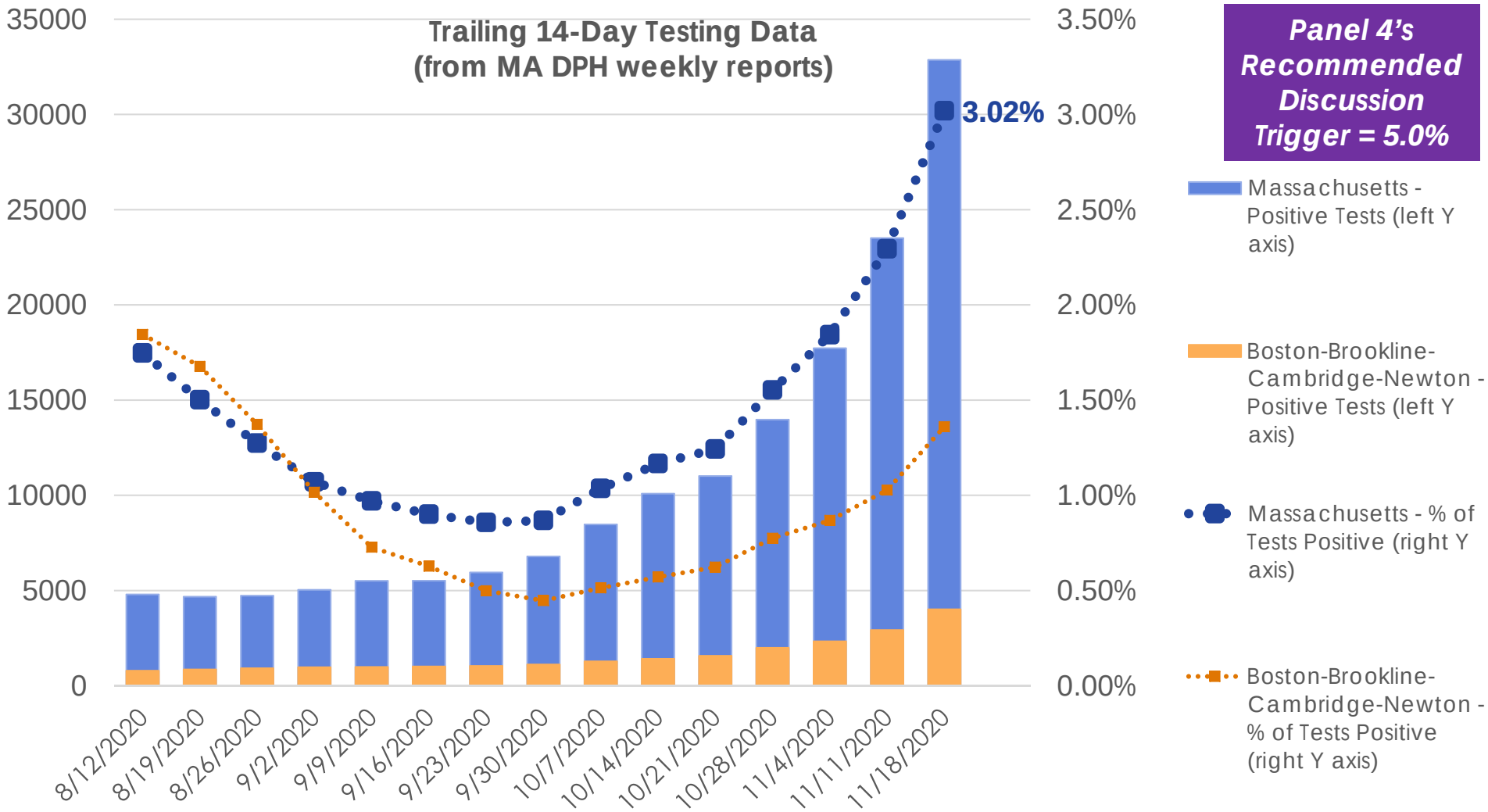
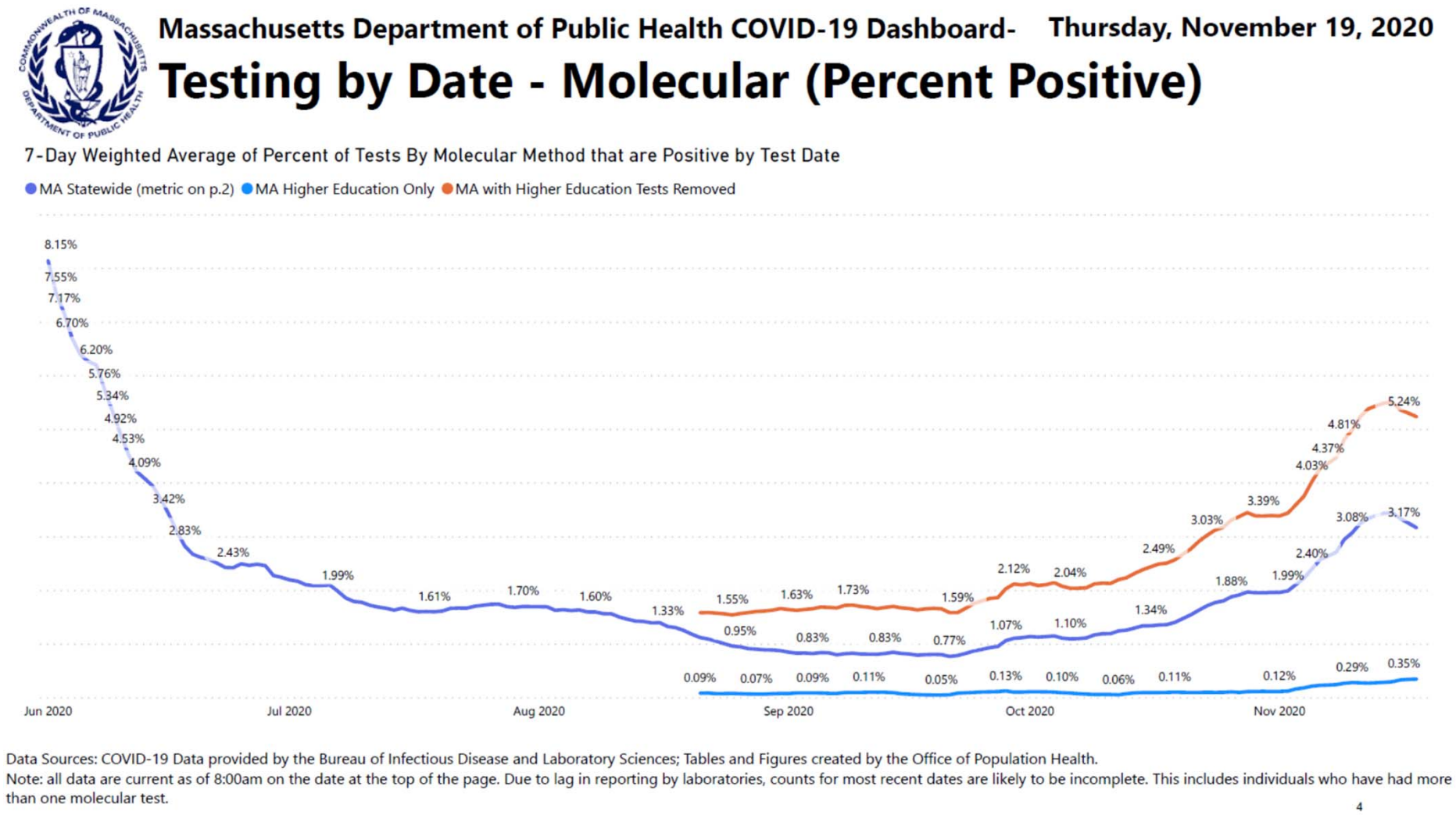
Community Benchmarks - Status



Source: https://www.mass.gov/info-details/covid-19-response-reporting#covid-19-weekly-public-health-report-

Statewide Test Positivity



Source: https://www.mass.gov/doc/covid-19-dashboard-november-5-2020/download

New MA DESE Guidance

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.*

New MA DESE Guidance, ctd.

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.*

CDC Guidance (updated Oct. 29, 2020)

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

Deciding how to reopen

School officials should make decisions about school reopening based on available data including levels of community transmission and their capacity to implement appropriate mitigation measures in schools to protect students, teachers, administrators, and other staff. Schools should also consider other aspects of students' risk and wellbeing that arise when schools do not reopen for in-person classes. This includes the potential adverse impacts on students' social-emotional, behavioral, and mental health, as well as the critical services provided to students to help mitigate health disparities and serve children in need, such as school lunch programs, special education services, after-school programs and mental health services.

The unique and critical role that schools play makes them a priority for reopening and remaining open, enabling students to receive both academic instruction and enable the provision of other critical services and supports. By strictly implementing mitigation strategies, schools will be able to meet the needs of their students and community, while reducing the risk of COVID-19 spread.

CDC Guidance, ctd. (updated Oct. 29, 2020)

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

Continuum of risk

By model of learning and implementation of proven mitigation strategies

In general, the risk of COVID-19 spread in schools increases across the continuum of virtual, hybrid, to in-person learning with the risk moderated for hybrid and in-person learning based upon the range of mitigation strategies put in place and the extent they are conscientiously followed.

While not exhaustive, this stratification attempts to characterize the risks of spread among students, teachers, and staff across this continuum:

Lowest risk:

- Students and teachers engage in virtual-only classes, activities, and events

Some risk:

- Hybrid Learning Model: Some students participate in virtual learning and other students participate in in-person learning
- Small, in-person classes, activities, and events
- Cohorting, alternating schedules, and staggered schedules are applied rigorously
- No mixing of groups of students and teachers throughout/across school days
- Students and teachers do not share objects
- Students, teachers, and staff follow all steps to protect themselves and others at all times including proper use of face masks, social distancing, hand hygiene
- Regularly scheduled (i.e., at least daily or between uses) cleaning and disinfection of frequently touched areas implemented with fidelity

CDC Guidance, ctd. (updated Oct. 29, 2020)

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

Medium risk:

- Hybrid Learning Model: Most students participate in in-person learning, some students participate in virtual learning
- Larger in-person classes, activities, and events
- Cohorting, alternating schedules, and staggered schedules are applied with some exceptions
- Some mixing of groups of students and teachers throughout/across school days
- Students and teachers minimally share objects
- Students, teachers, and staff follow all steps to protect themselves and others such as proper use of face masks, social distancing, hand hygiene
- Regularly scheduled cleaning and disinfection of frequently touched areas largely implemented with fidelity

CDC Guidance, ctd. (updated Oct. 29, 2020)

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

Higher risk:

- Students and teachers engage in in-person only learning, activities, and events
- Students minimally mix between classes and activities
- Students and teachers share some objects
- Students, teachers, and staff follow some steps to protect themselves and others at all times such as proper use of face masks, social distancing, hand hygiene
- Irregular cleaning and disinfection of frequently touched areas

Highest risk:

- Students and teachers engage in in-person only learning, activities, and events
- Students mix freely between classes and activities
- Students and teachers freely share objects
- Students, teachers, and staff do not/are not required to follow steps to protect themselves and others such as proper use of face masks, social distancing, hand hygiene
- Irregular cleaning and disinfection of frequently touched areas