
**PUBLIC SCHOOLS of
BROOKLINE**

Advisory Panel 4:
Public Health, Safety, & Logistics

Meeting Slides

June 4, 2021

Community Benchmarks - Status

Benchmark (each measured over prior 14 days)	Status 5/12/21	Status 5/19/21	Status 5/26/21	Status 6/2/21
Avg. daily new case count in Brookline = <10 per 100k people	3.6	2.8	2.2	1.9
Avg. daily new case count in Mass. = <10 per 100k people	12.5	8.7	6.1	3.9
Avg. test positivity rate in Brookline = <5.0%	0.45%	0.39%	0.35%	0.45%
Avg. test positivity rate in Massachusetts = <5.0%	1.48%	1.21%	1.03%	0.85%

Panel 4 selected these four community transmission benchmarks in August 2020 as triggers for focused evaluation and discussion of whether changes in operations are warranted, not as definitive indicators of in-school risk or thresholds for automatic action. Research and PSB-specific data since that time have convincingly shown that in-school transmission risk can be kept very low even at high levels of community case incidence.

MA DPH Color Scale



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

Incidence Rate Color Table

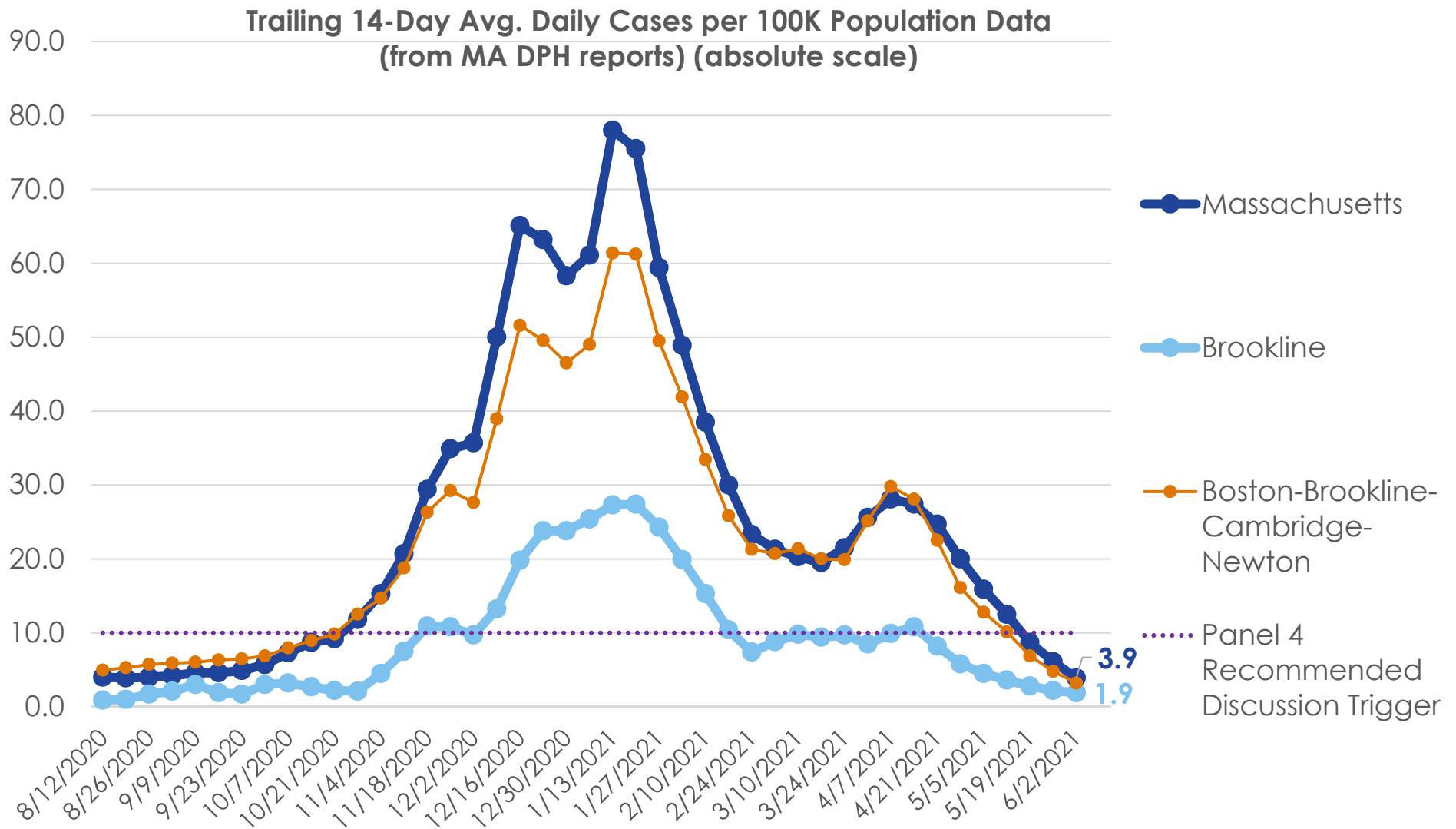
Group	Population		
	Under 10K	10K-50K	Over 50K
Grey	Less than or equal to 10 total cases	Less than or equal to 10 total cases	Less than or equal to 15 total cases
Green	Less than or equal to 15 total cases	<10 avg cases/100k AND >10 total cases	<10 avg cases/100k AND >15 total cases
Yellow	Less than 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 6/2/2021 (green)

Brookline's population is ~60,000

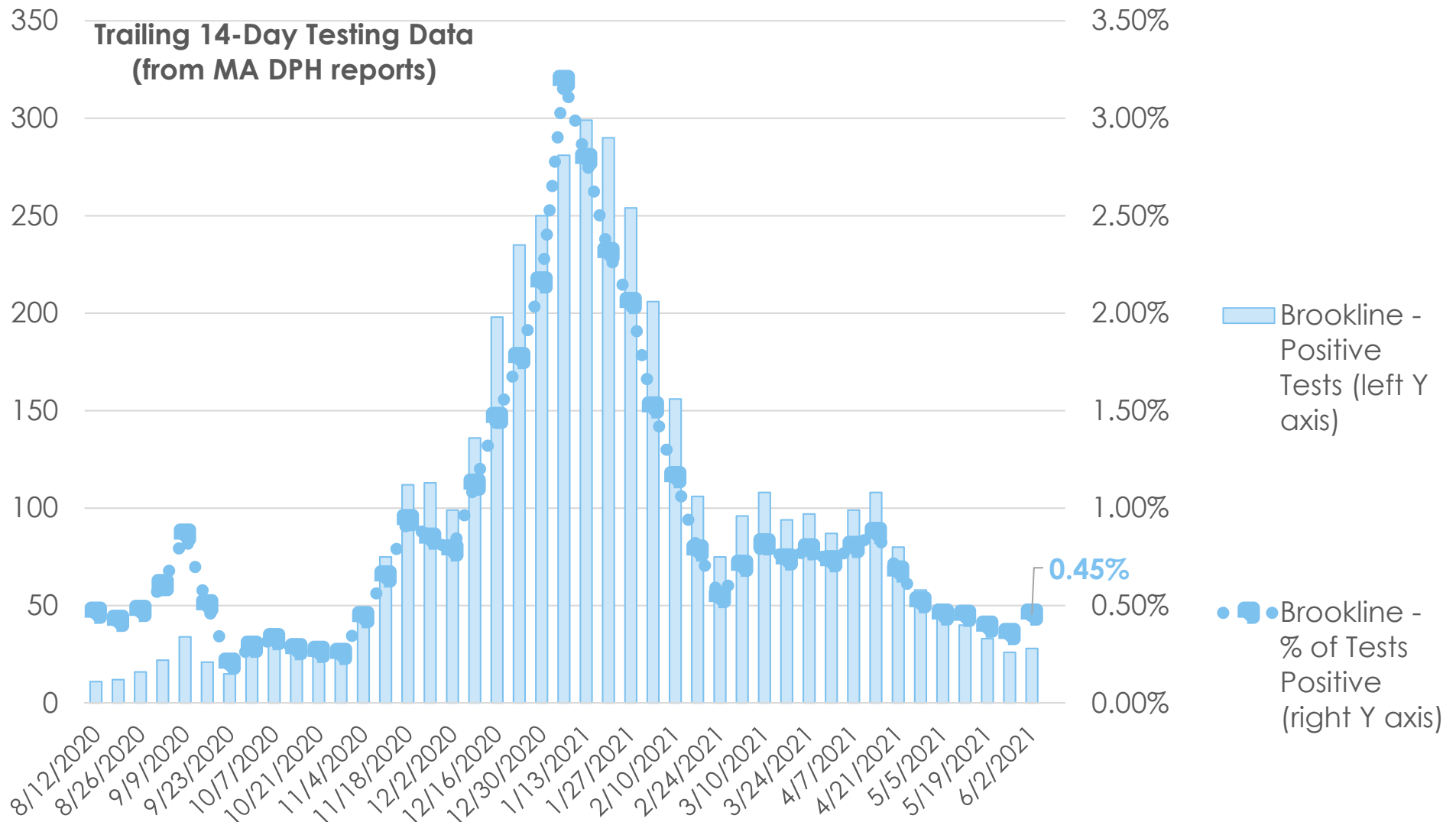
As of 11/5, DPH is using 2019 population estimates derived from a method developed by the University of Massachusetts Donahue Institute. The 2019 estimates are the most currently available data.

Trends: Avg. Daily New Cases per 100k

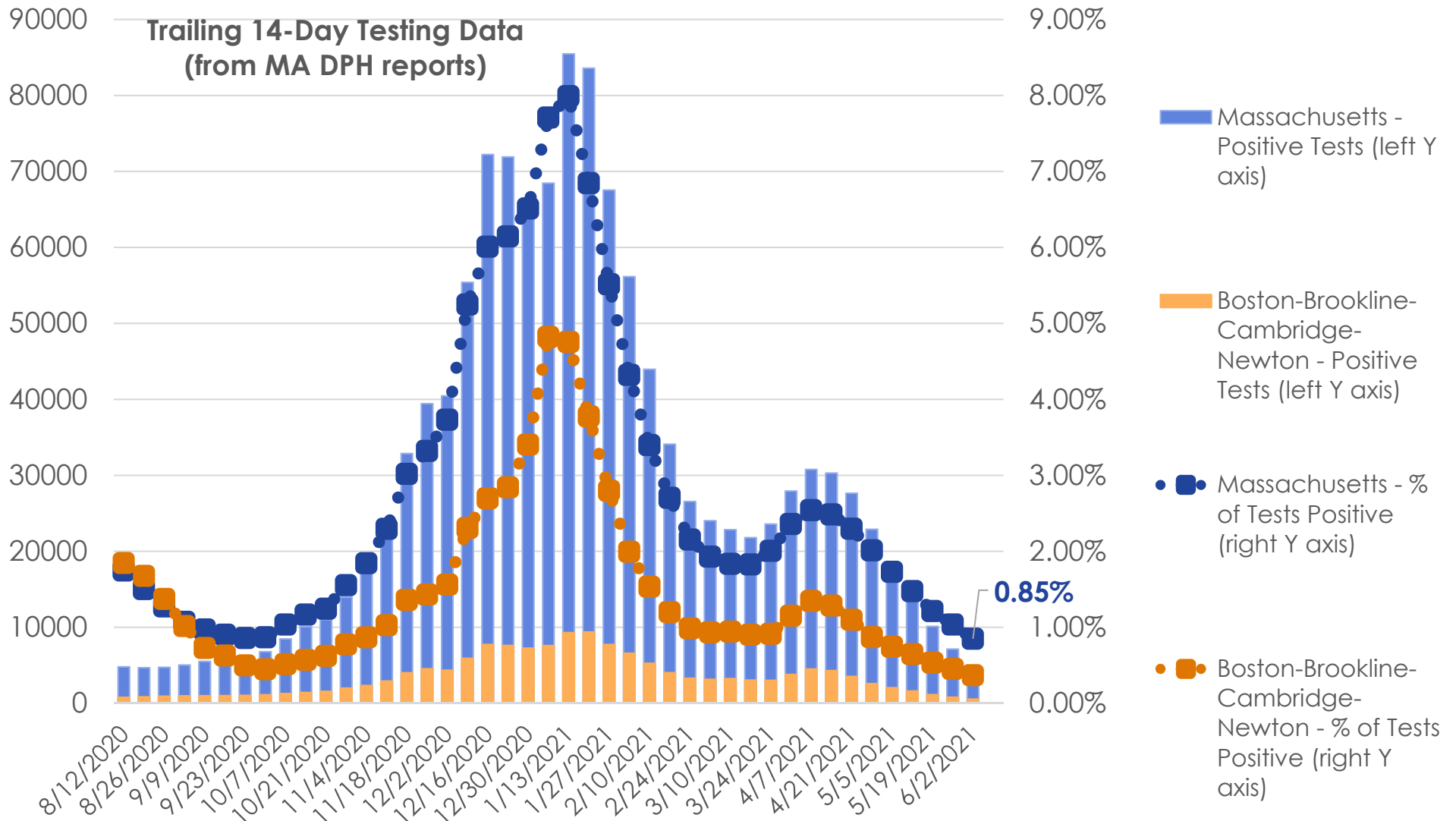


Data source: <https://www.mass.gov/info-details/covid-19-response-reporting>

Trends: Test Positivity (Brookline)

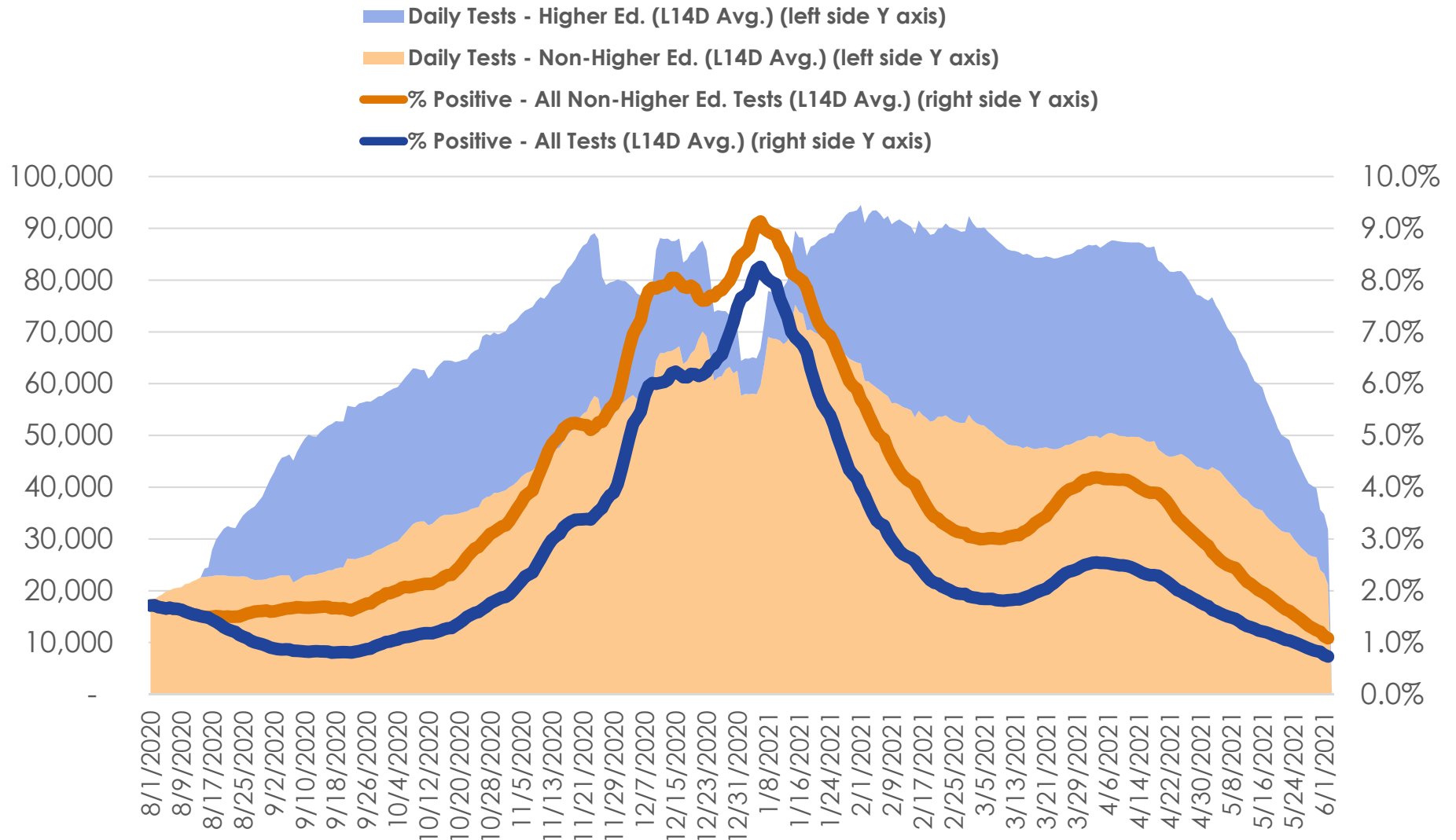


Trends: Test Positivity (Statewide)

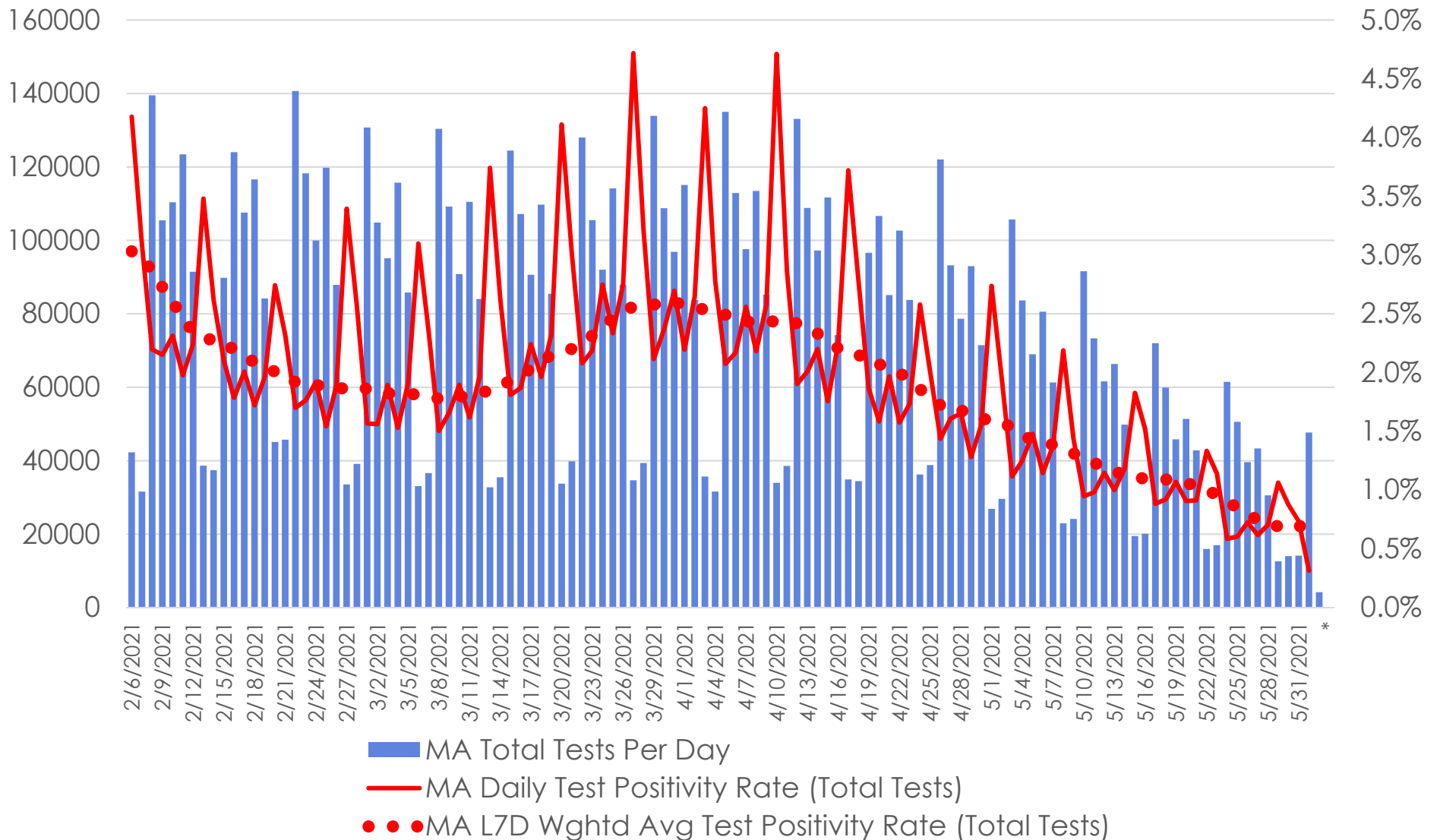


Data source: <https://www.mass.gov/info-details/covid-19-response-reporting>

Trends: Test Positivity and Testing Volume (Statewide)

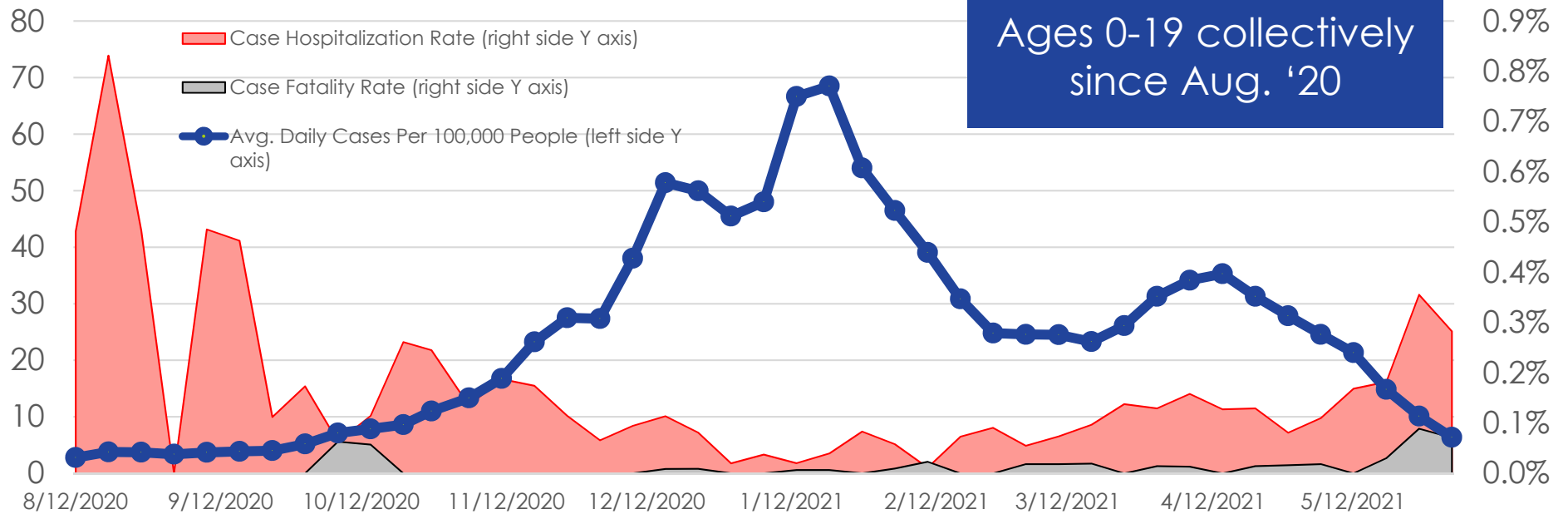


Trends: Daily Test Volumes and Positivity (Statewide)



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

Trends: 0-19 Year-Old Age Cohort (MA Statewide)



More specific, for period of 5/16 – 5/29/2021:	Avg. Daily Cases/100k	Case Hospitalization Rate (approx.)	Case Fatality Rate (approx.)
<5 yo	5.2	0.8%	0.00%
5-9 yo	6.3	0.0%	0.00%
10-14 yo	7.9	0.2%	0.00%
15-19 yo	6.0	0.3%	0.26%
All ages (incl. vaccinated people)	4.6	1.2%	2.08%

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

Public Schools of Brookline Case Counts: Trends Over Time

Data Last Updated: 6/4/21

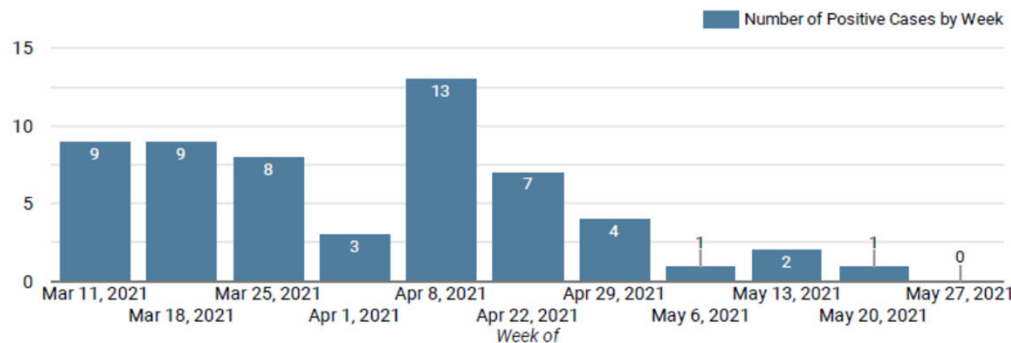


COVID-19 CASES: DISTRICT DASHBOARD

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*



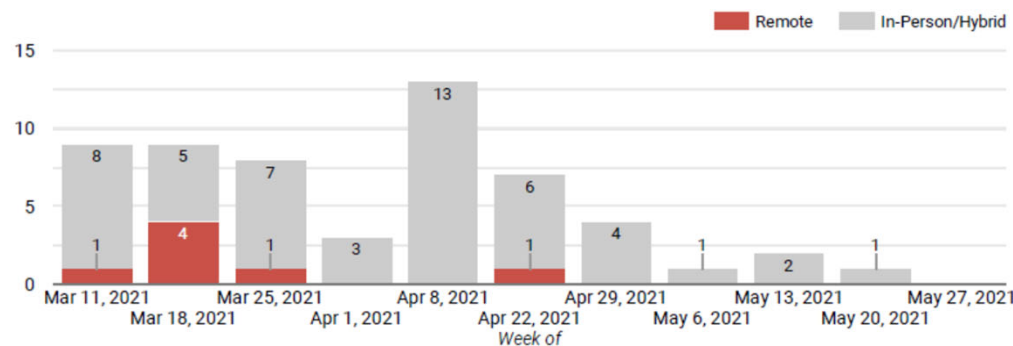
TOTAL PSB CASES TO DATE*: 303

Remote: 35
Hybrid/In-Person: 268

Total among school-based students and staff: 299

*Testing paused from 4.16 - 4.22 due to April Vacation.

Number of Positive Cases, by Week and Learning Model



TOTAL CLOSE CONTACTS: 376 connected to 70 cases**

Total positive cases with no close contacts** at school: 206

**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: 6/4/21



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 5/27 - 6/3)

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	3	-	-
Baker	0	39	-	-
Brookline High School	0	81	-	-
Driscoll	0	17	-	-
Florida Ruffin Ridley	0	26	-	-
Heath	0	12	-	-
Lawrence	0	26	-	-
Lincoln	0	26	-	-
Pierce	0	36	-	-
Remote Learning Academy K-8	0	12	-	-
Runkle	0	18	-	-
Total*	0	302	0	0

*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	-	-

Chart source: <https://sites.google.com/psbma.org/psb-reopening-hub/dashboard>

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

Data Last Updated: 6/4/21



COVID-19 CASES: GRADE LEVEL AND STAFF 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 5/27 - 6/3)

Grade Level	Weekly Positive Cases	Cumulative Positive Cases
BEEP/Pre-K	0	5
Kindergarten	0	23
1st Grade	0	20
2nd Grade	0	13
3rd Grade	0	12
4th Grade	0	11
5th Grade	0	14
6th Grade	0	15
7th Grade	0	13
8th Grade	0	24
9th Grade	0	13
10th - 12th Grade	0	49
Staff (School-Based)*	0	85
Staff (District Office)	0	4
Total	0	301

*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: 6/1/21



COVID-19 CASES: STAFF ASYMPTOMATIC TESTING

The table outlines the test results of our COVID-19 pooled testing program. 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.

The asymptomatic testing was paused from February 5 through February 26 as the district expanded the program to include pooled testing with students with support from the Massachusetts Department of Elementary and Secondary Education (DESE). Pooled testing involves mixing several test samples together in a "pool" and then testing the pooled sample with a PCR test for detection of SARS-CoV-2. Staff were put into pools of 5. The first week of this program launched on Monday, March 1, 2021. Testing was paused for the week of April 19 due to April Vacation.

Week of	Tests Processed	Positive Results	TNP (Tests Not Processed)	Test Positivity %	Pools Submitted	Positive Pools	Pool Positivity %
2021-03-01	395	2	0	0.51%	81	2	2.47%
2021-03-08	433	0	0	0%	88	0	0%
2021-03-15	450	0	0	0%	91	0	0%
2021-03-22	501	1	2	0.2%	92	1	1.09%
2021-03-29	520	0	0	0%	94	0	0%
2021-04-05	481	0	0	0%	87	0	0%
2021-04-12	495	0	0	0%	94	0	0%
2021-04-26	504	0	0	0%	94	0	0%
2021-05-03	490	0	0	0%	89	0	0%
2021-05-10	475	0	0	0%	84	0	0%
2021-05-17	473	0	0	0%	69	0	0%
2021-05-24	444	0	0	0%	75	0	0%
Total	7,466	6	43	0.08%	1,038	3	0.29%

Public Schools of Brookline Case Counts: Asymptomatic Testing Program Results

Data Last Updated: 6/1/21



COVID-19 CASES: STUDENT ASYMPTOMATIC TESTING

The table outlines the test results of our COVID-19 pooled testing program. For the purpose of this dataset, weeks run Friday to Thursday.

Source: Public Schools of Brookline School Health Services Department

Student Asymptomatic Testing Program Results

In March 2021, the district expanded the asymptomatic testing program to include pooled testing with students with support from the Massachusetts Department of Elementary and Secondary Education (DESE). Pooled testing involves mixing several test samples together in a "pool" and then testing the pooled sample with a PCR test for detection of SARS-CoV-2. The first week of this program launched on Monday, March 8, 2021. Testing was paused for the week of April 19 due to April Vacation.

Week of ▲	Tests Processed	Positive Results	Test Positivity %	Pools Submitted	Positive Pools	Pool Positivity %
2021-03-08	157	0	0%	19	0	0%
2021-03-15	395	1	0.25%	47	1	2.13%
2021-03-22	1,463	0	0%	161	0	0%
2021-03-29	1,474	0	0%	121	0	0%
2021-04-05	2,014	0	0%	214	0	0%
2021-04-12	2,180	2	0.09%	225	2	0.89%
2021-04-26	2,256	0	0%	312	0	0%
2021-05-03	2,348	0	0%	234	0	0%
2021-05-10	2,271	0	0%	241	0	0%
2021-05-17	2,293	0	0%	181	0	0%
2021-05-24	2,233	0	0%	199	0	0%
Total	14,558	3	0.02%	1,954	3	0.15%

Public Schools of Brookline Case Counts: Asymptomatic Testing Program Results

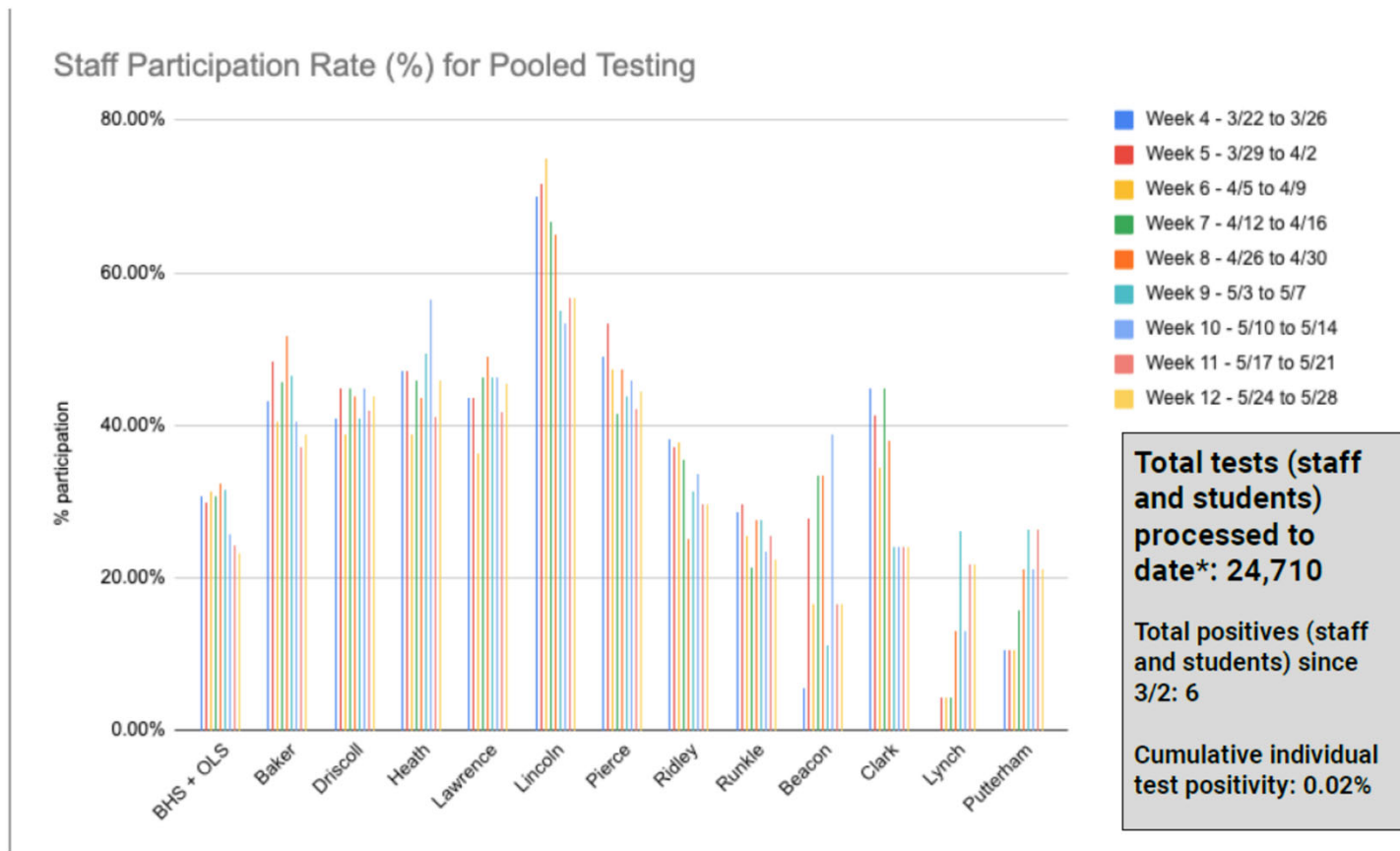
Data Last Updated: 6/1/21



COVID-19 TESTING: PARTICIPTION RATE

The table outlines the test results of our COVID-19 pooled testing program. For the purpose of this dataset, weeks run Friday to Thursday.

Source: Public Schools of Brookline School Health Services Department



Public Schools of Brookline Case Counts: Asymptomatic Testing Program Results

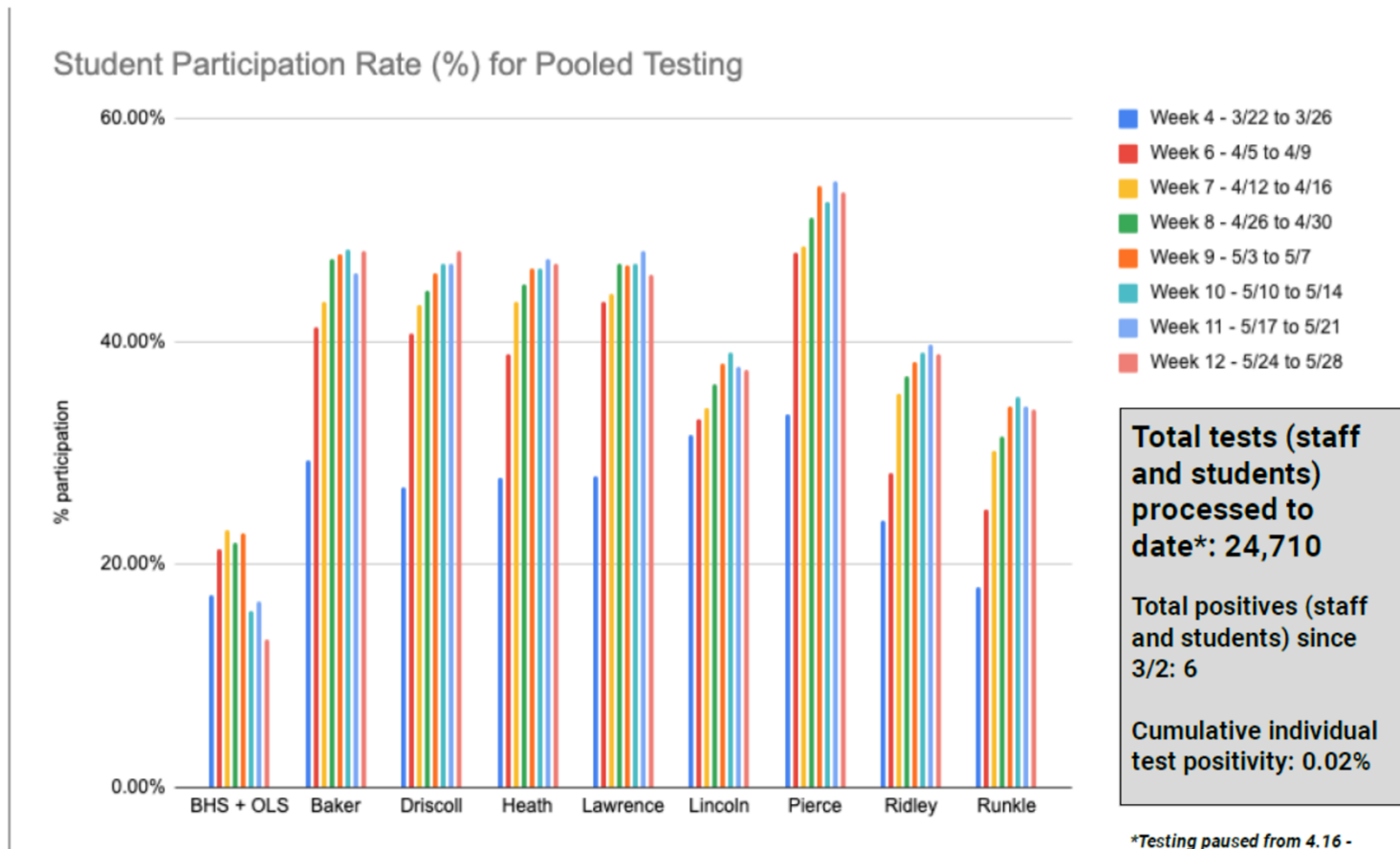
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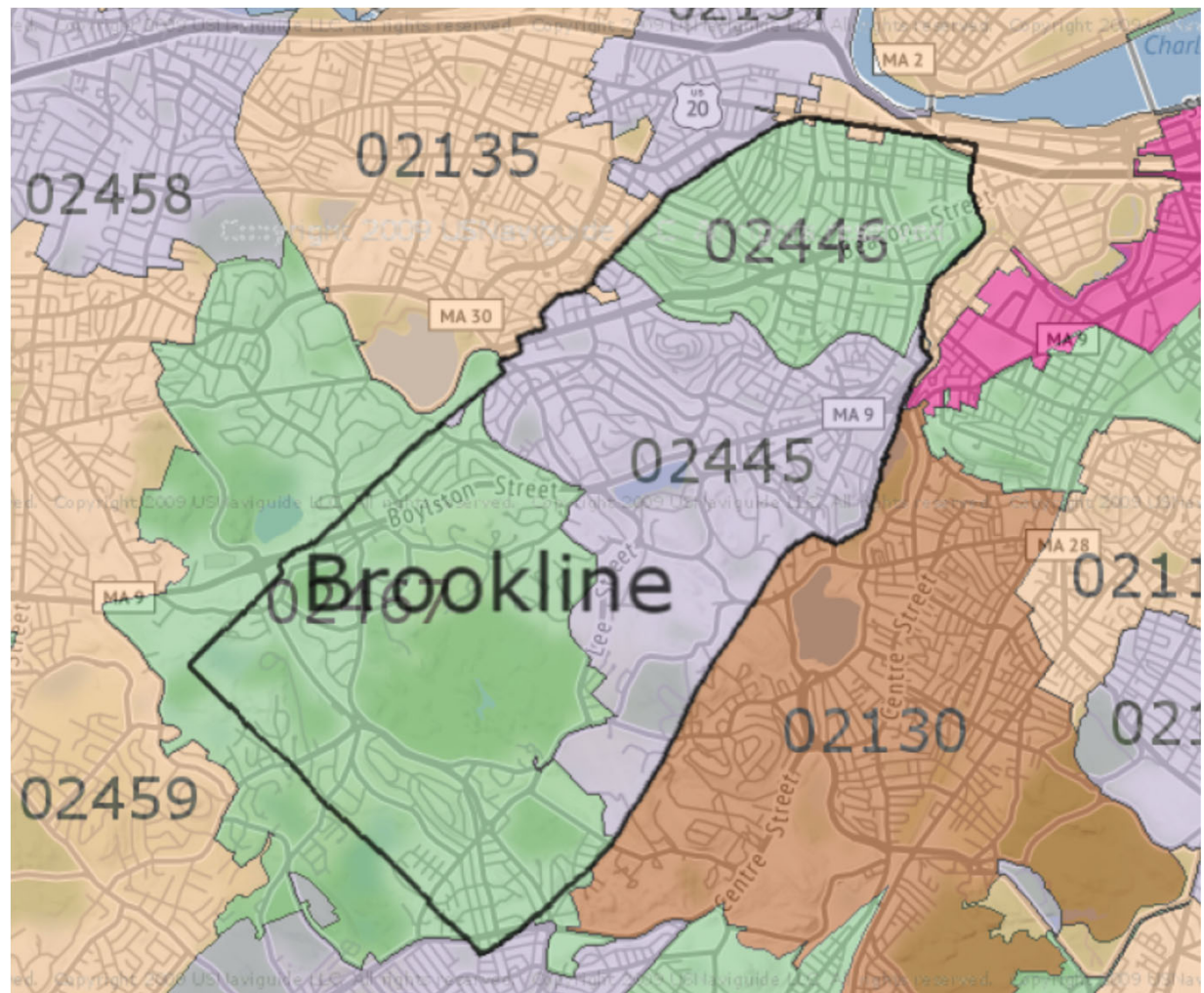
Summary of PSB's COVID-19 Experience to Date (through 6/3/2021)

- Since the fall:
 - **175,000+ staff member-days** in buildings
 - **500,000+ student-days** in buildings
- **303 known COVID-19 cases among PSB students and staff**
 - Contact tracing completed by local health dept. + school nursing team
 - Nearly all believed to be community-acquired (e.g., some individuals were in 100% remote cohorts)
 - **70 were present in buildings during likely contagious periods** (48 hours prior to symptom onset/COVID+ test)
- **Very few instances of suspected in-school transmission:**
 - ~4 likely or “can’t rule out” cases
 - Just ~2 of 376 (0.5%) of in-school close contacts have tested positive or developed COVID-19-consistent symptoms

DPH Vaccination Data Issues

(data as of 6/1/2021)

- Brookline consists of zip codes 02445 and 02446 plus much but not all of 02467 (shared with Newton and Boston)
- Very small portions of 02135 and 02139 also extend into Brookline



DPH Vaccination Data Issues

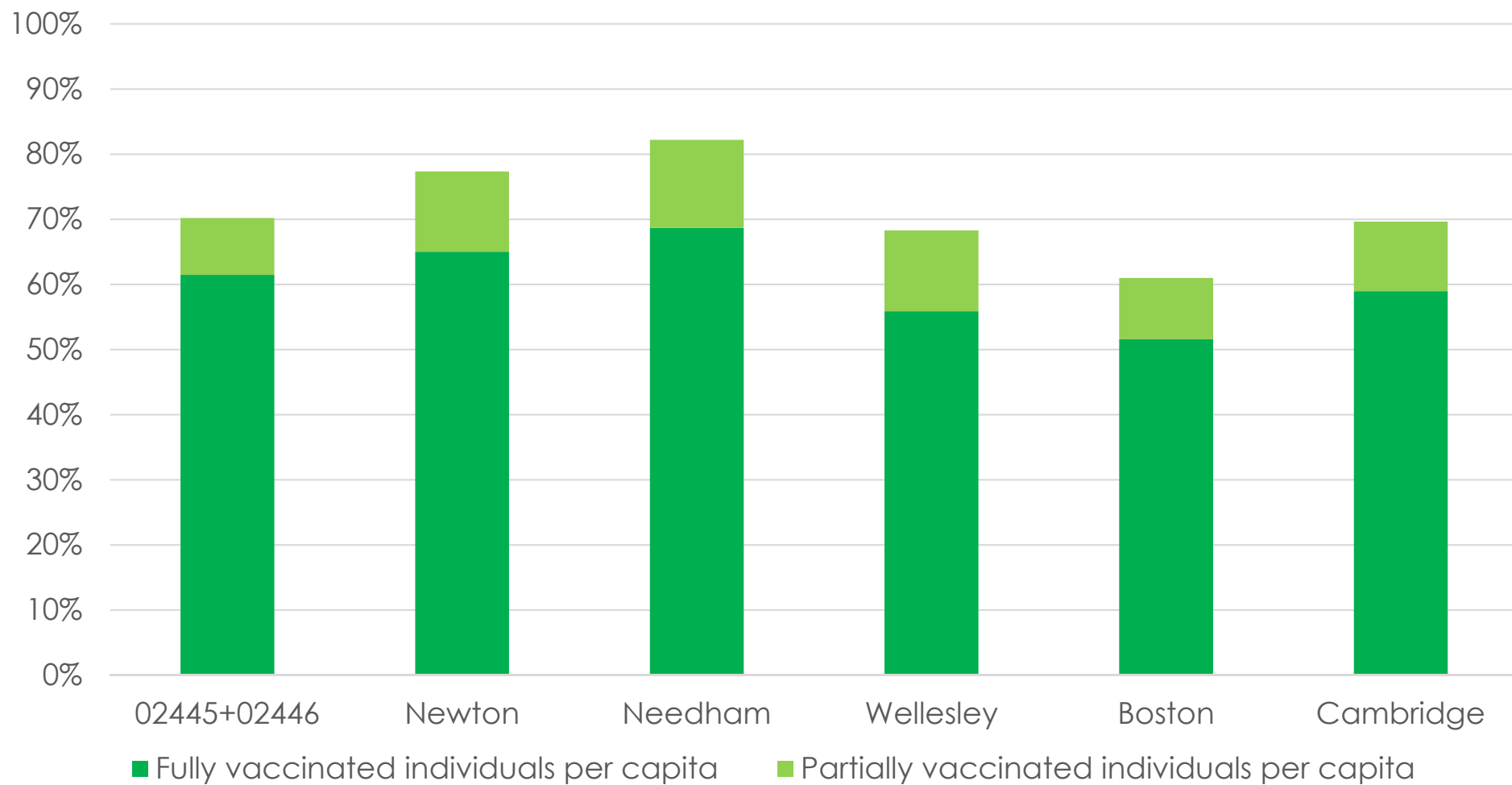
(data as of 6/1/2021)

Geography	Age Group	Est. Population	Fully Vaccinated	Partially Vaccinated
“Brookline”	All	64,727 (per DPH)	31,347 (48%)	5,654 (9%)
Zip Code 02445	All	21,074	12,790 (61%)	2,457 (12%)
Zip Code 02446	All	29,862	18,513 (62%)	3,187 (11%)
02445 + 02446	All	50,936	31,303 (61%)	5,644 (11%)
Zip Code 02467	All	22,269	10,895 (49%)	2,268 (10%)

Data source: <https://www.mass.gov/info-details/massachusetts-covid-19-vaccination-data-and-updates>;
https://www.massachusetts-demographics.com/zip_codes_by_population

MA DPH Vaccination Rate Data: 6/1/2021

All Ages (as of 6/1/2021)



MA DPH Vaccination Rate Data: 6/1/2021

ZIP	Fully vaccinated individuals										
	'12-15 Years'	16-19 Years'	'20-29 Years'	'30-39 Years'	'40-49 Years'	'50-59 Years'	'60-64 Years'	'65-69 Years'	'70-74 Years'	'75-79 Years'	'80+ Years'
02445	*	625	2401	2335	2039	1914	824	757	760	521	614
02446	*	592	4330	3921	2604	2109	1023	1060	1049	760	1065
02467	*	863	1793	1195	1562	1655	789	792	783	582	881
02445 + 02446	0	1217	6731	6256	4643	4023	1847	1817	1809	1281	1679

ZIP	Partially vaccinated individuals										
	'12-15 Years'	16-19 Years'	'20-29 Years'	'30-39 Years'	'40-49 Years'	'50-59 Years'	'60-64 Years'	'65-69 Years'	'70-74 Years'	'75-79 Years'	'80+ Years'
02445	732	170	423	316	249	204	72	101	72	67	51
02446	597	156	730	496	349	282	108	125	109	86	149
02467	567	307	419	187	208	207	79	74	62	60	98
02445 + 02446	1329	326	1153	812	598	486	180	226	181	153	200

DPH Vaccination Data Issues - Takeaways

- DPH's "Brookline" vaccination data understates Brookline's actual vaccination percentage:
 - **Denominator too large:** total population used by DPH is an overestimate of the entire Town population (including zip codes 02445, 02446, and Brookline's part of 02467)
 - **Numerator too small:** numbers of fully/partially vaccinated individuals attributed to Brookline appear to exclude all vaccinated individuals in Brookline's portion of zip code 02467—counting only 02445 and 02446 residents as "Brookline"
- As of 6/1/2021, Brookline's Town-wide fully vaccinated rate is likely close to 60%, plus another ~10% partially vaccinated—more in line with peer communities.

Upcoming Brookline Parents' Org. Presentation of Potential Interest to Panel 4 Audience

- **Navigating the Summer for Families with Unvaccinated Children**
- Sunday, June 13th, 7:00 pm, via Zoom
- Please register here:
https://us02web.zoom.us/webinar/register/WN_ux1dkq2fS4iGdQcQfJL7BA
- Now that so many adults and older children are getting vaccinated, it's exciting to see a return to some kind of normalcy on the horizon. But what about those of us with younger children who can't yet be vaccinated? Or with some of our kids old enough to be vaccinated and others too young? How should we think about camps, playdates, vacations, and visiting family?
- Please join us on Sunday, June 13th at 7:00 pm for a conversation with social epidemiologist **Natalia Linos**, pediatricians **Rosemarie Roqué Gordon** and **Vishakha Sabharwal**, and our moderator, developmental psychologist **Amanda Tarullo**.
- We'll discuss national and state guidance, personal comfort, safety, and risk, as well as answer your questions about navigating the coming months.