

Covid-19 Health Metrics

Based on DPH Weekly Report 12/9/2020



Dashboard of Public Health Indicators

Testing and Cases

Newly Reported Confirmed Cases	Total New Molecular Tests Reported	7-Day Average Positivity	Estimated Active Cases
5,130	97,353	5.67%	63,362

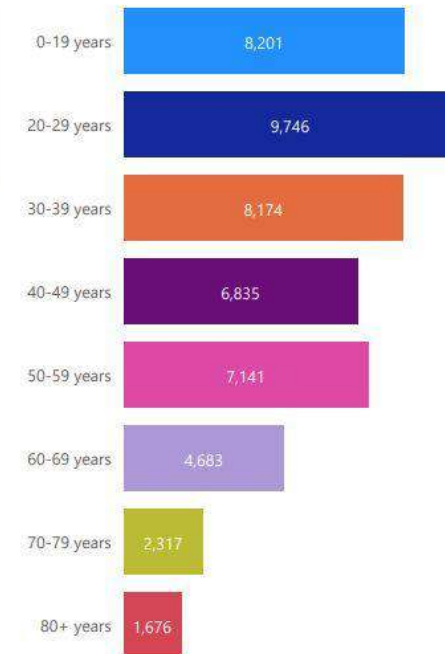
Hospitalization

Total Confirmed COVID Patients in Hospital	Total Confirmed COVID Patients in ICU	Average Age of Cases that were Hospitalized*
1,607	307	69

Deaths

Newly Reported Deaths among Confirmed	Average Age of Deaths*	14-Day Average Turnaround (from Test Sample to Report to DPH)*
41	82	2.00

Total Cases By Age Group from 11/22/2020-12/5/2020 *



Note: For definitions, please see the Glossary at the end of this document in 'Definitions and Disclaimers'. Average age of hospitalized cases and deaths are calculated for a two week period covering 11/22/2020 to 12/5/2020. Please see the most current weekly dashboard for more details <https://www.mass.gov/info-details/covid-19-response-reporting>

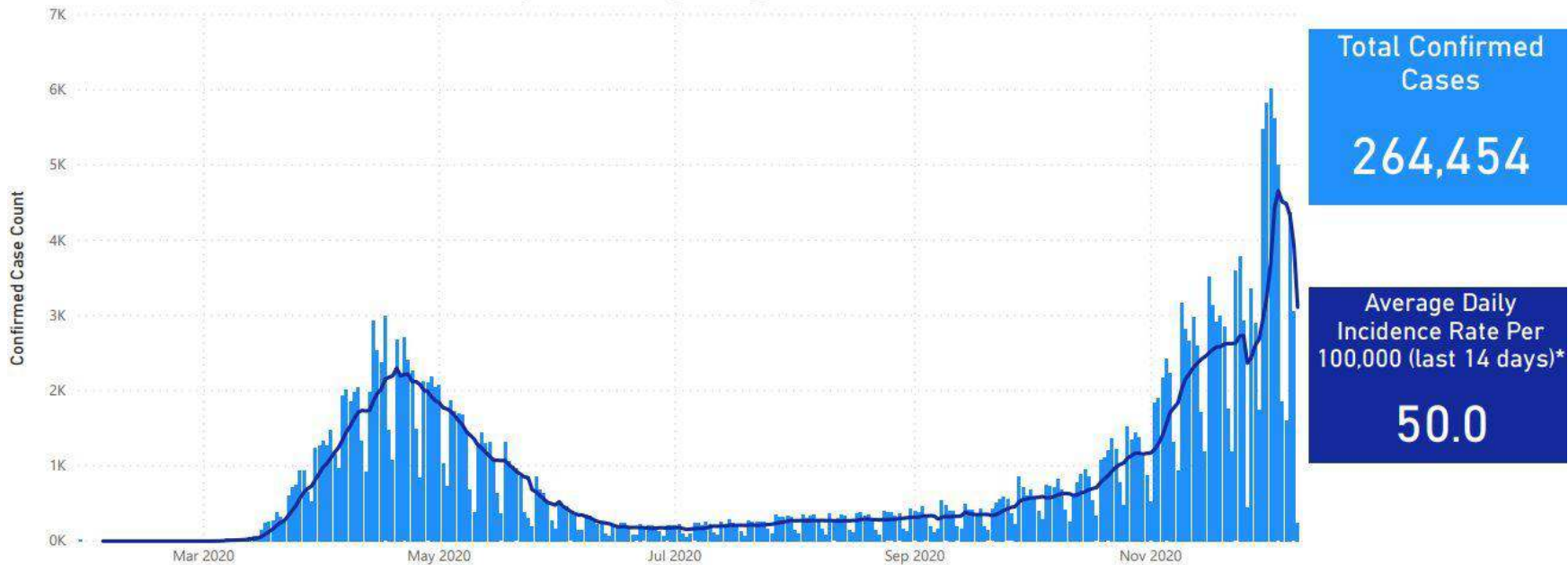
*Last updated Wednesday, 12/9/2020



Daily Confirmed Cases (Since March)

Confirmed COVID-19 Cases To Date by Date Individual Tested

● Confirmed Cases by Date ● 7-Day Average Confirmed Case Count



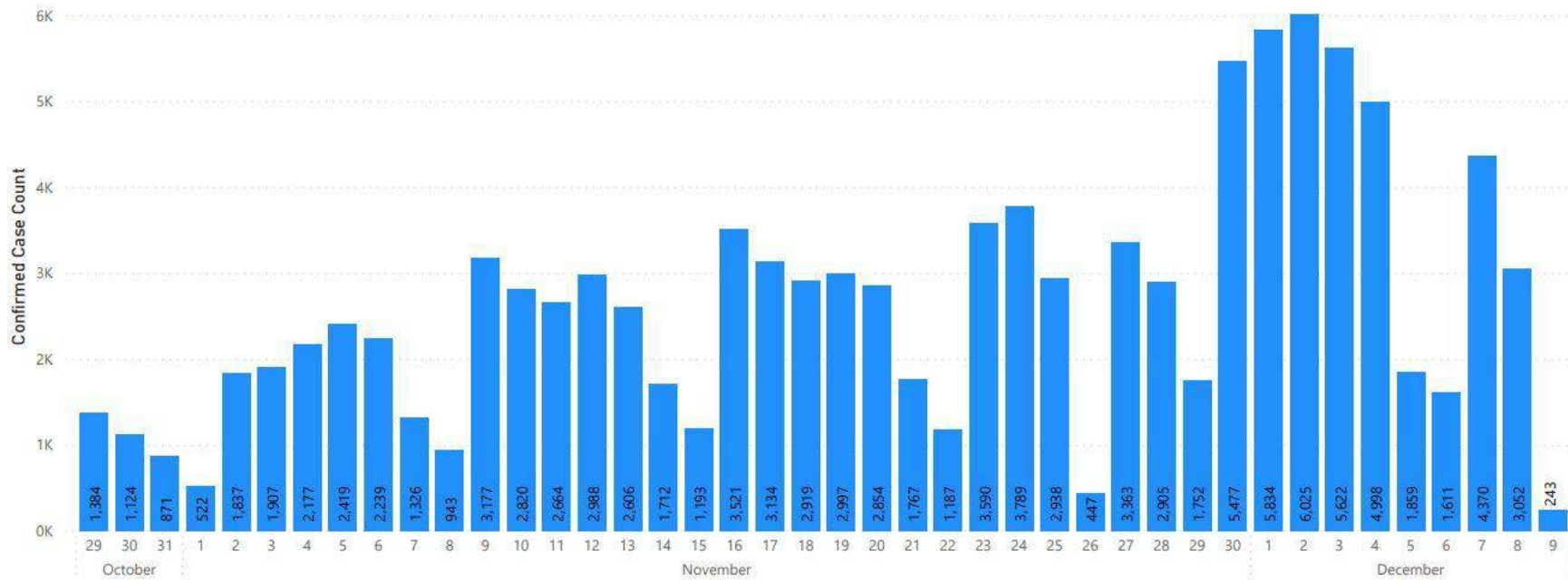
Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences; State Population Estimate 2019: Small Area Population Estimates 2011-2020, version 2019, Massachusetts Department of Public Health, Bureau of Environmental Health; Tables and Figures created by the Office of Population Health. Note: all data are current as of 11:59pm on 12/9/2020. Due to lag in reporting by laboratories, counts for most recent dates are likely to be incomplete.

*Last updated Wednesday, 12/9/2020; Covers 11/22/2020-12/5/2020.



Daily Confirmed Cases (Past 6 Weeks)

Confirmed COVID-19 Cases by Date Individual Tested

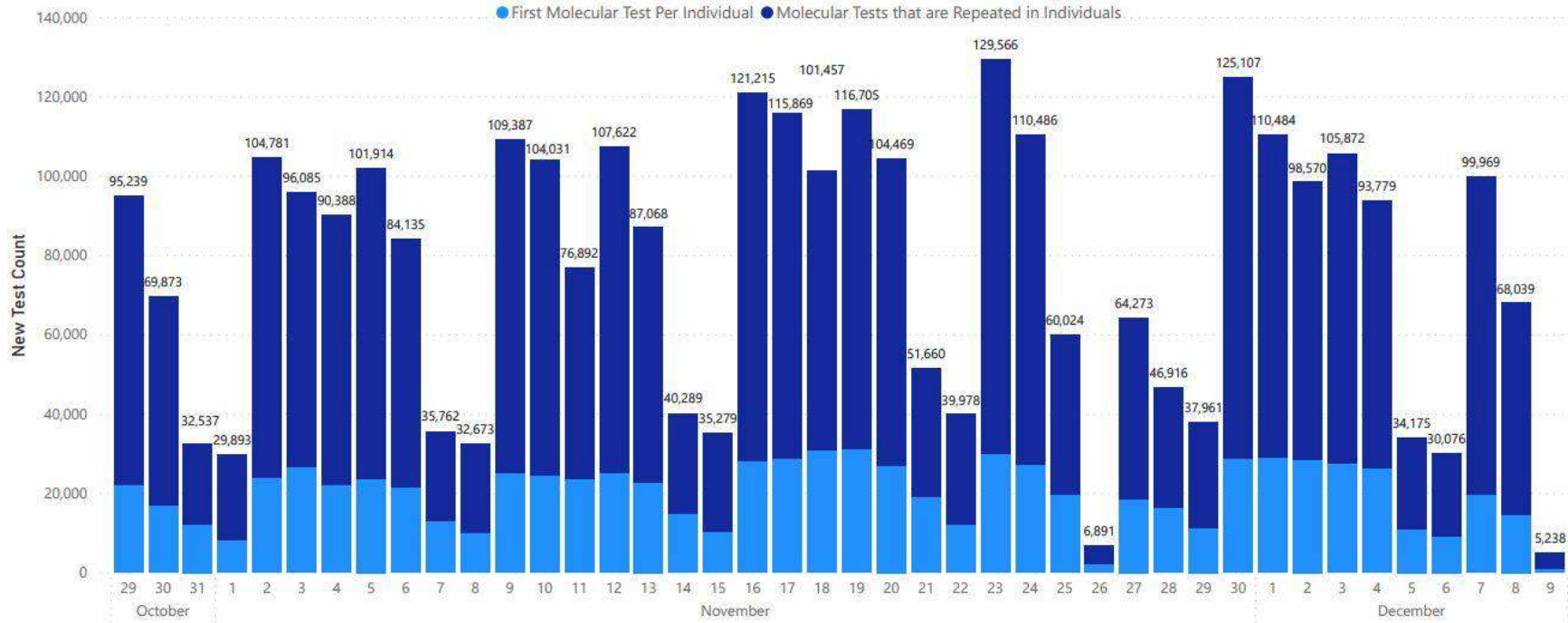


Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences; Tables and Figures created by the Office of Population Health.
Note: all data are current as of 11:59pm on 12/9/2020. Due to lag in reporting by laboratories, counts for most recent dates are likely to be incomplete.



Testing by Date - Molecular (Total Tests Conducted Past 6 Weeks)

Total Number of Molecular Tests Performed by Date



Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences; Tables and Figures created by the Office of Population Health.

Note: all data are current as of 11:59pm on 12/9/2020. Due to lag in reporting by laboratories, counts for most recent dates are likely to be incomplete. This includes individuals who have had more than one molecular test.



Testing by Date - Molecular (Percent Positive)

7-Day Weighted Average of Percent of Tests By Molecular Method that are Positive by Test Date

● MA Statewide (metric on p.2) ● MA Higher Education Only ● MA with Higher Education Tests Removed



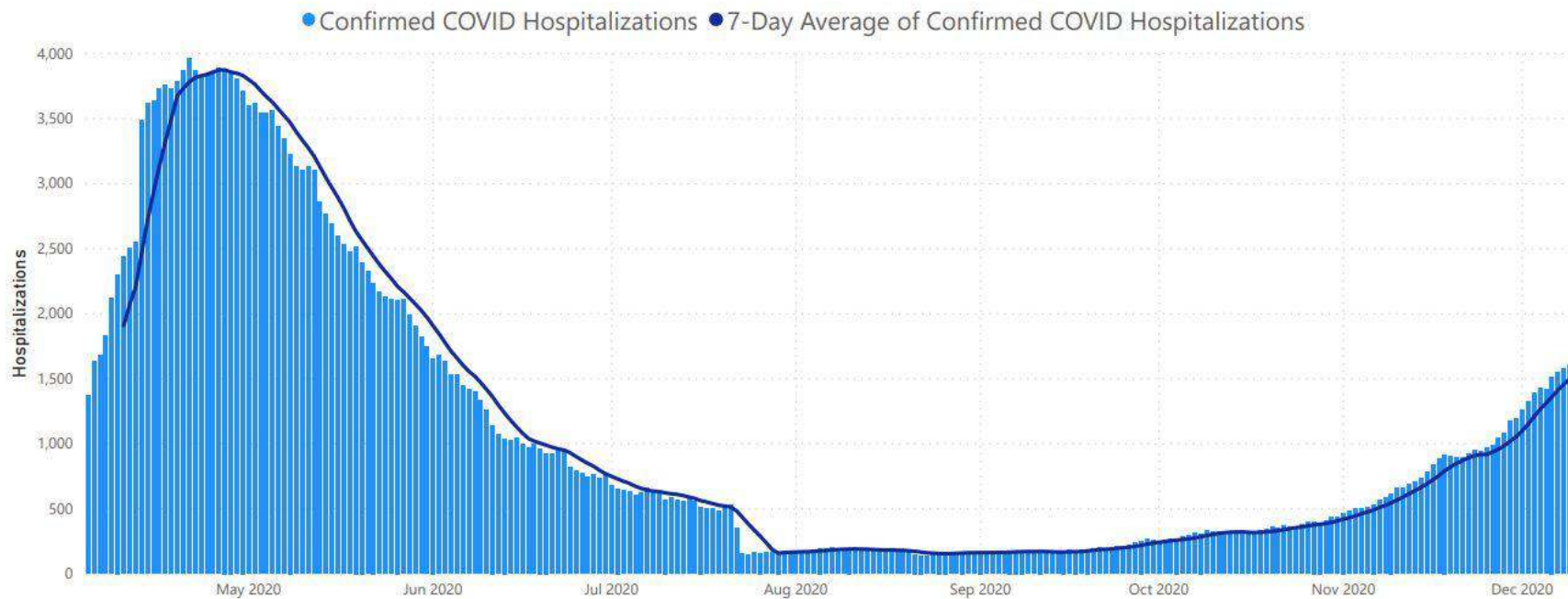
Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences; Tables and Figures created by the Office of Population Health.

Note: all data are current as of 11:59pm on 12/9/2020. Due to lag in reporting by laboratories, counts for most recent dates are likely to be incomplete. This includes individuals who have had more than one molecular test.



Daily Confirmed Hospitalizations

Total Confirmed COVID Patients in Hospital



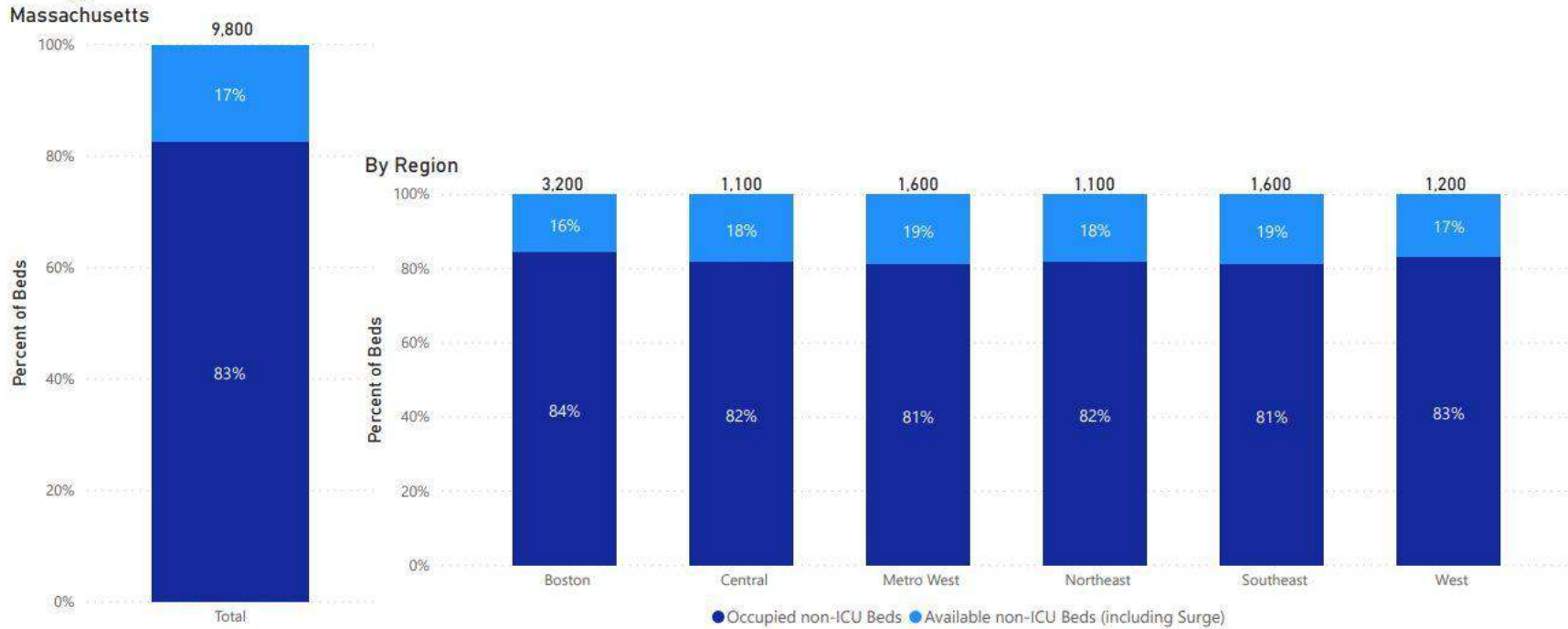
Data Sources: COVID-19 Data provided by the MDPH survey of hospitals (hospital survey data are self-reported); Tables and Figures created by the Office of Population Health.

Notes: data are current as of 3:00pm on 12/9/2020. For purposes of this reporting, "confirmed" are cases with a PCR test. Hospitalization data includes alternate care sites beginning on December 6, 2020. Data prior to July 22, 2020 include both confirmed and suspected COVID hospitalizations, as confirmed COVID hospitalizations were not reported separately during this time.



Total Hospital Capacity by Region (Non-ICU)

Data collected as of 12/9/2020 3:00pm



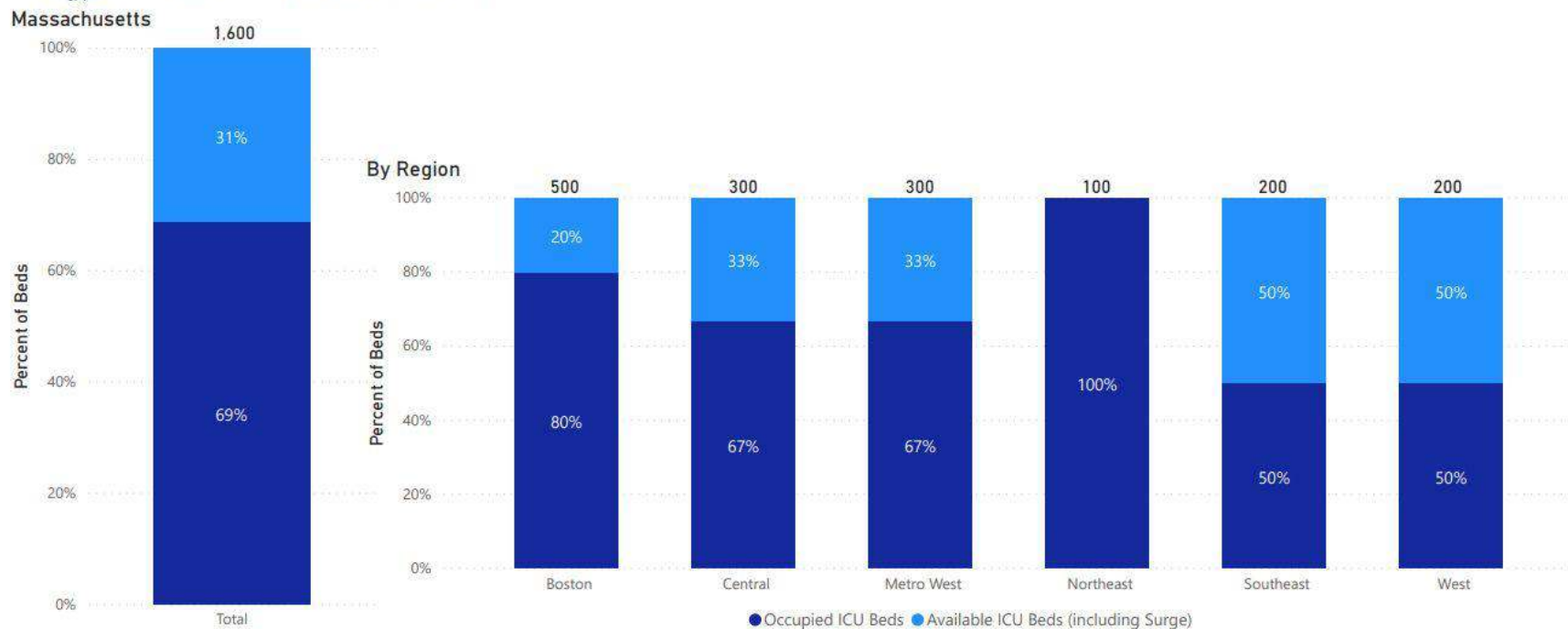
Occupancy/ availability as reported by hospitals to DPH.

Regions shown represent EOHHS Regions. Note that total bed estimates may change day-to-day due to hospitals updating surge planning. As of June 16th, data reflects updated data collection methodology and the removal of unstaffed beds from this analysis. Analysis here reflects total beds that hospitals could staff within 12-24 hours. As of 9/8/20, all observation beds and observation status patients are included in the Available Non-ICU Beds and Occupied Non-ICU Beds categories.



Total Hospital Capacity by Region (ICU)

Data collected as of 12/9/2020 3:00pm



Occupancy/ availability as reported by hospitals to DPH.

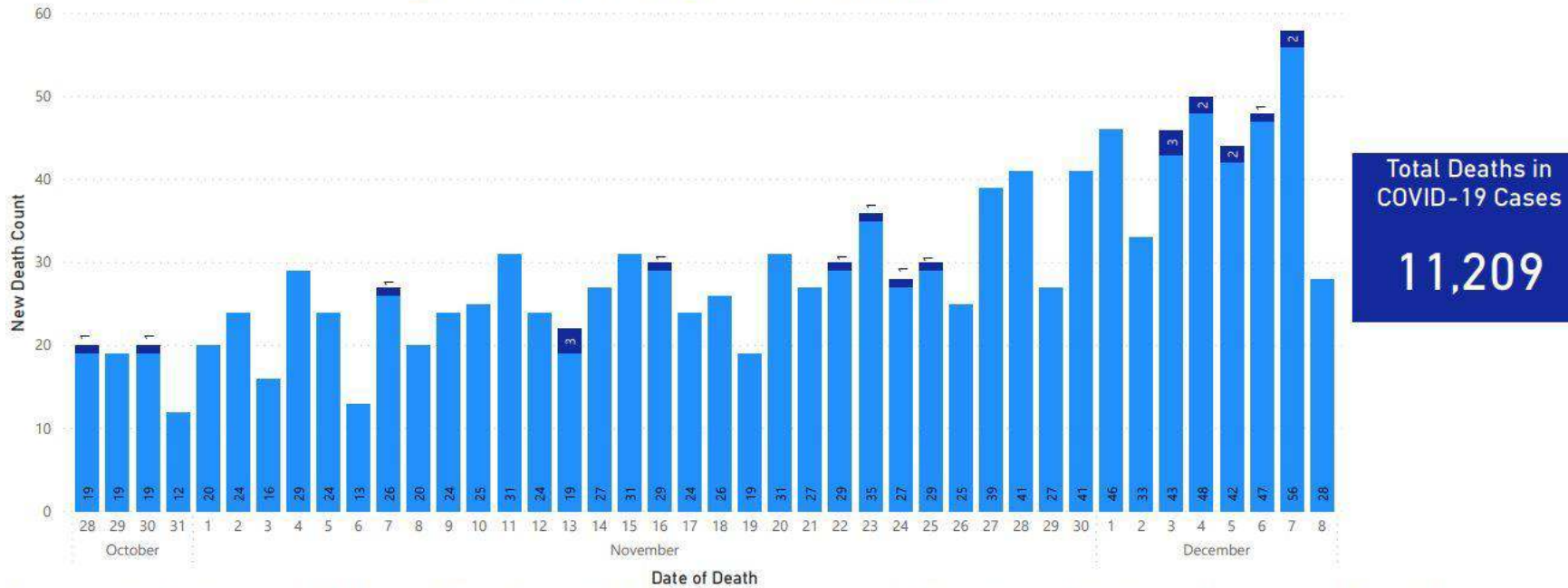
Regions shown represent EOHHS Regions. Note that total bed estimates may change day-to-day due to hospitals updating surge planning. As of June 16th, data reflects updated data collection methodology and the removal of unstaffed beds from this analysis. Analysis here reflects total beds that hospitals could staff within 12-24 hours. As of 9/8/20, all observation beds and observation status patients are included in the Available Non-ICU Beds and Occupied Non-ICU Beds categories.



Daily and Cumulative Deaths

Total Deaths* in COVID-19 Cases by Date of Death

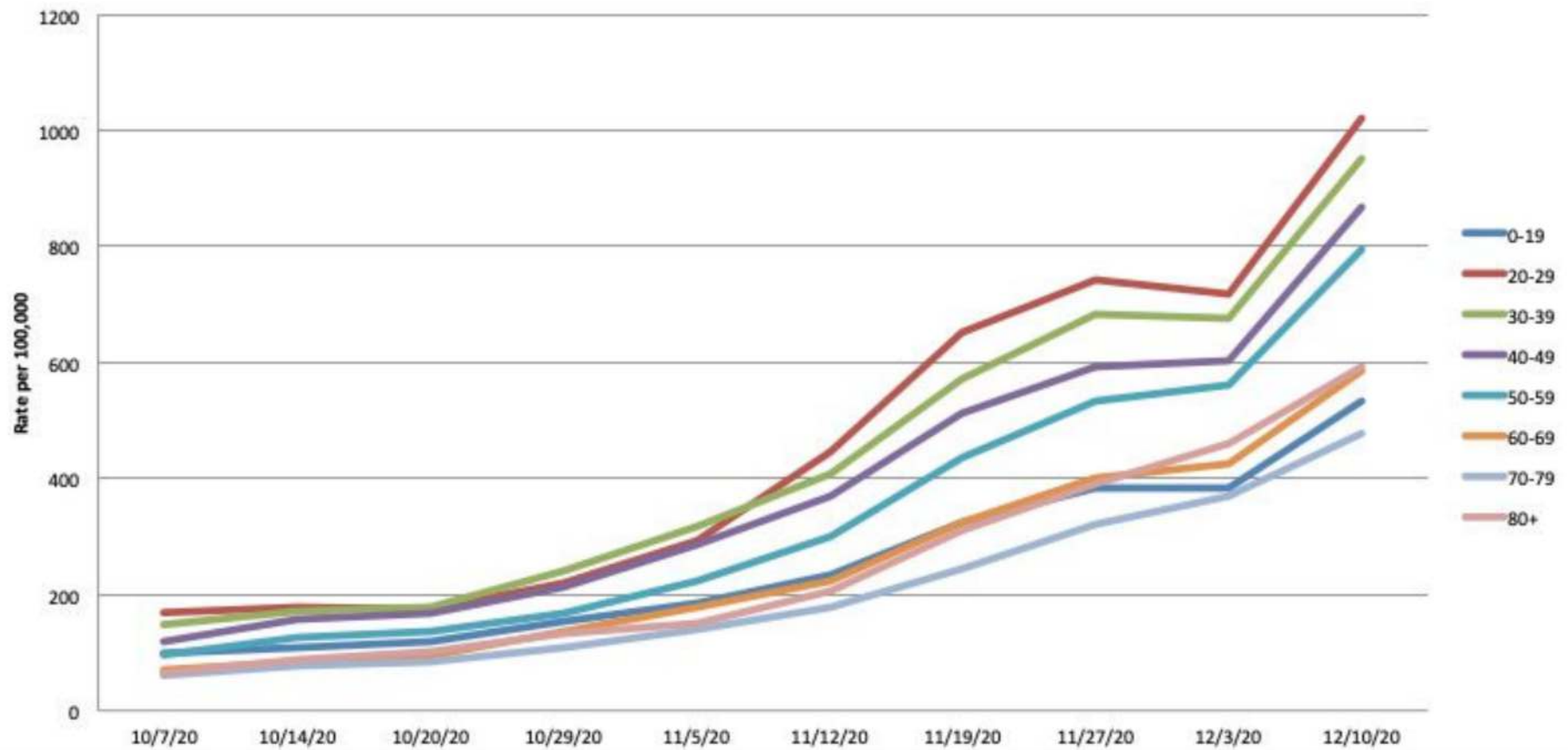
● New Confirmed Deaths ● New Probable Deaths



Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences and the Registry of Vital Records and Statistics; Tables and Figures created by the Office of Population Health.

Note: all data are current as of 11:59pm on 12/9/2020; *Counts on the trend chart do not match total number of deaths reported, as there is a several day lag in reporting by date of death. Includes both probable and confirmed cases For confirmed and probable case definitions please see the Glossary at the end of this document in 'Definitions and Disclaimers'

Rate per 100,000 of total Covid-19 cases by age group for the last 14 days





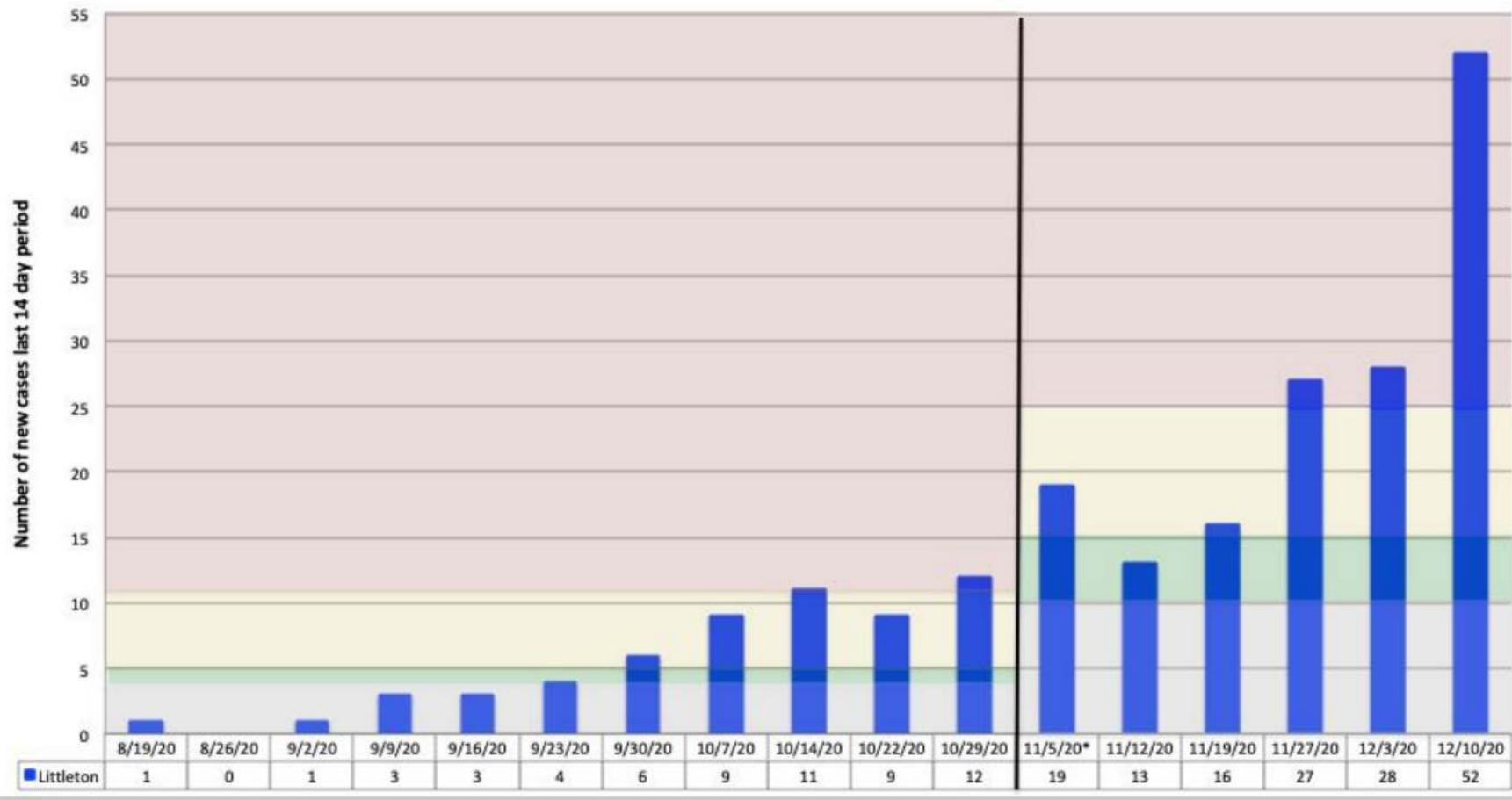
Massachusetts Department of Public Health COVID-19 Dashboard - Friday, November 06, 2020

Average Daily Incidence Rate per 100,000 Color Calculations

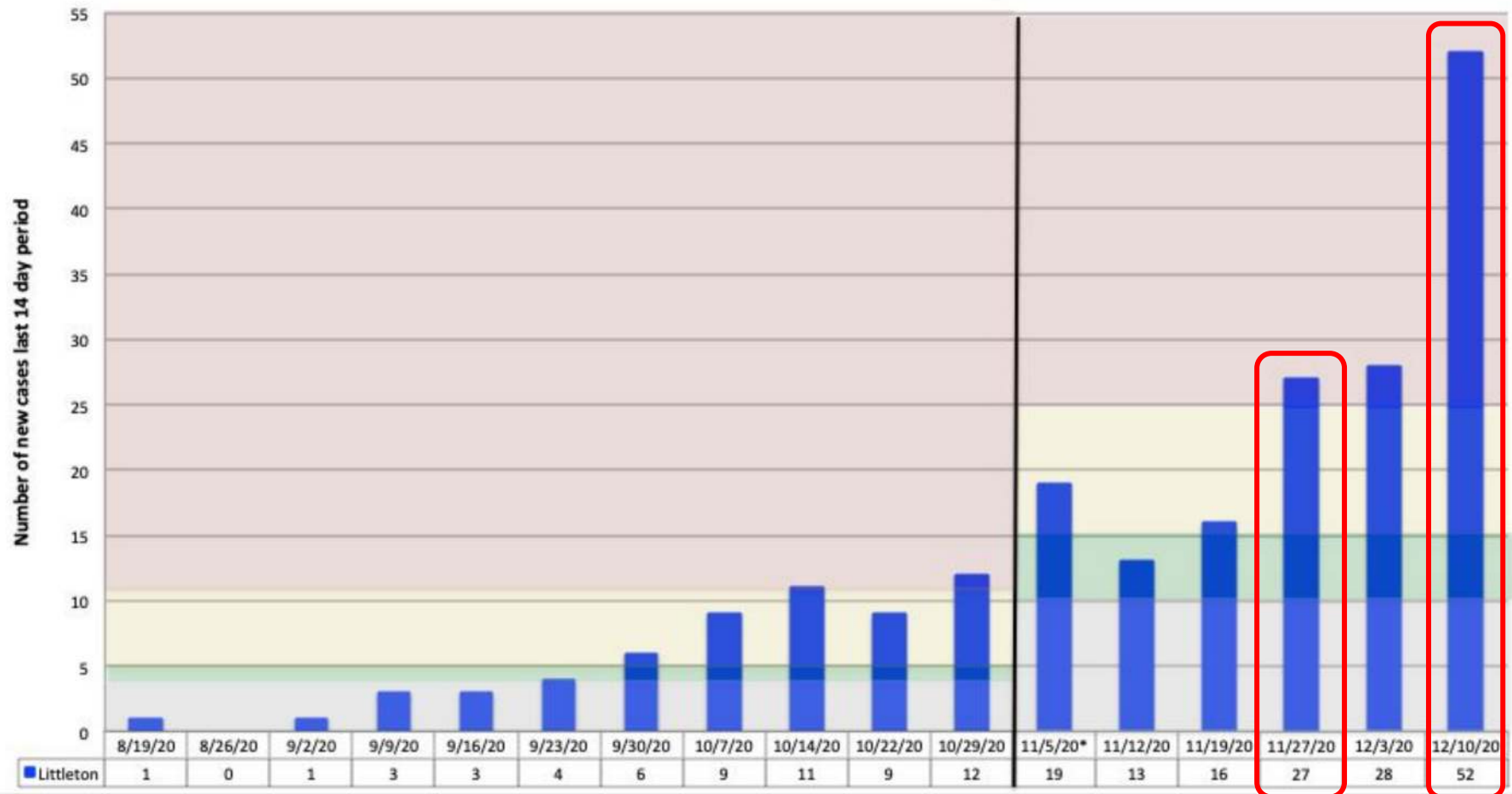
Group	Population		
	Under 10K	10K-50K	Over 50K
Grey	Less than or equal to 10 total cases	Less than or equal to 10 total cases	Less than or equal to 15 total cases
Green	Less than or equal to 15 total cases	<10 avg cases/100k AND >10 total cases	<10 avg cases/100k AND >15 total cases
Yellow	Less than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

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.

Littleton: Number of New Cases in Last 14 Day Period



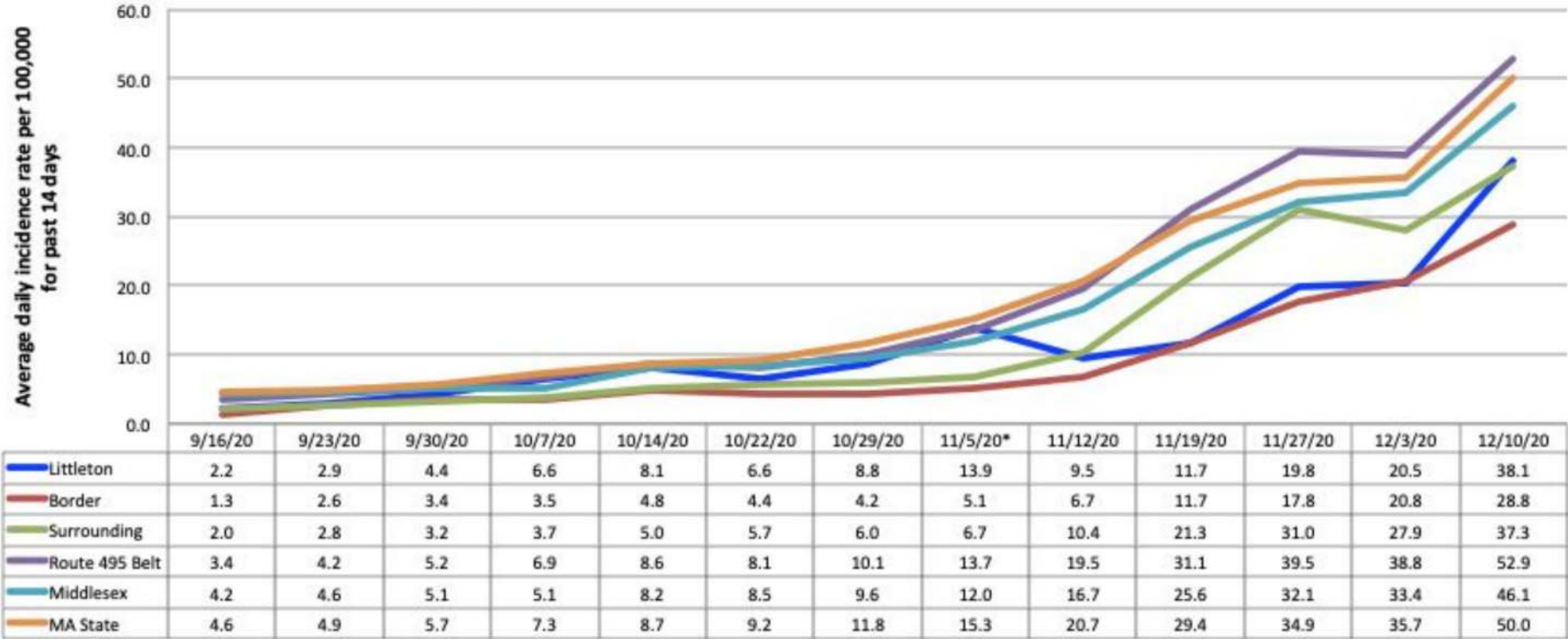
Littleton: Number of New Cases in Last 14 Day Period



Average daily incidence rate per 100,000

	Number of new cases (2 week period)	Average daily case rate per 100,000 over last two weeks	Trend (compared to 2 weeks ago)	Threshold Color (new cut points)
MA State	48,789	50.0 40% higher	Higher (+15.1)	Red
Middlesex County	10,490	46.1 40% higher	Higher (+14.0)	
495 Belt	4,767	52.9	Higher (+13.4)	
Surrounding Communities	1,117	37.3	Higher (+6.3)	
Border Communities	356	28.8 60% higher	Higher (+11.0)	
Littleton	52	38.1 Doubled	Higher (+17.6)	Red (third week)
Data from Weekly DPH report December 10, 2020				

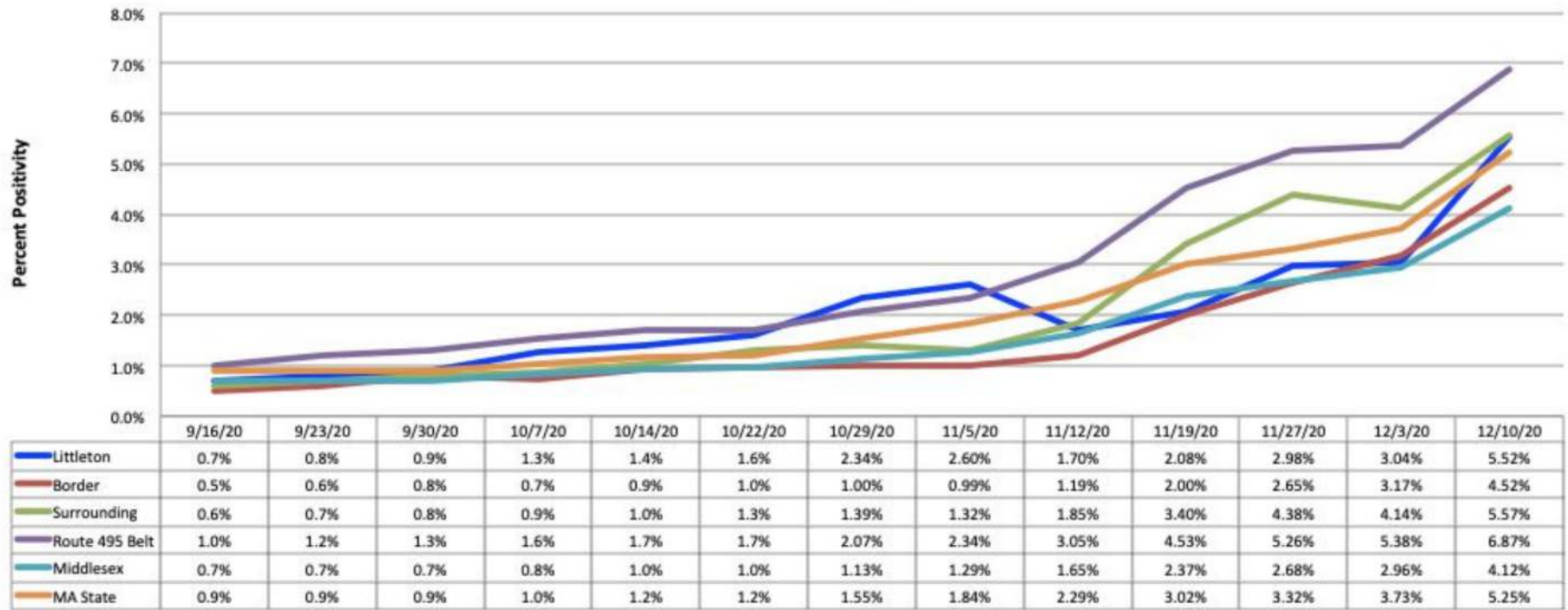
Average Daily Incidence Rate per 100,000 for Past 14 Days



Total Test Positivity

	Total Molecular Tests conducted (last 14 days)	Percent Positivity	Trend (compared to 2 weeks ago)
MA State	1,055,707	5.25%	Higher (+1.93%)
Middlesex County	285,404	4.12%	Higher (+1.44%)
495 Belt	76,754	6.87%	Higher (+1.61%)
Surrounding Communities	21,602	5.57%	Higher (+1.19%)
Border Communities	8697	4.52%	Higher (+1.87%)
Littleton	1068	5.52%	Higher (+2.54%)
Data from Weekly DPH report December 10, 2020			

Total Test Positivity





Massachusetts Department of Public Health COVID-19 Dashboard -
Active COVID Clusters by Exposure Setting Type

Thursday, December 10, 2020

Exposure	New Clusters (Identified 11/08 –12/05)			Ongoing Clusters (Cluster Identified Prior to 11/08 But Not Meeting Criteria for Closing)			Total		
Setting	Clusters	Confirmed Cases	Contacts	Clusters	Confirmed Cases	Contacts	Clusters	Confirmed Cases	Contacts
24/7 Congregate Settings	32	186	39	54	67	33	86	253	72
Child Care	100	283	467	89	47	110	189	330	577
Colleges & Universities	11	79	16	36	25	42	47	104	58
Corrections	5	186	0	11	717	128	16	903	128
Hospitals	13	191	14	17	65	17	30	256	31
Household	12,583	31,921		4,812	2,906		17,395	34,827	
Industrial Settings	19	71	12	57	130	83	76	201	95
K-12 Schools	29	121	131	47	24	58	76	145	189
Long Term Care Facilities	150	1,437		138	1,272		288	2,709	
Offices	2	4	5	13	13	1	15	17	6
Organized Athletics/Camps	8	31	77	29	13	136	37	44	213
Other	2	24	0	7	7	37	9	31	37
Other Food Establishments	2	5	1	7	2	2	9	7	3
Other Healthcare	7	40	35	23	28	15	30	68	50
Other Workplaces	15	70	47	19	39	2	34	109	49
Places of Worship	3	15	1	15	15	15	18	30	16
Recreation/Cultural	2	17	0	4	0	0	6	17	0
Restaurants & Food Courts	18	105	109	56	28	38	74	133	147
Retail & Services	11	28	8	22	19	15	33	47	23
Senior Living	34	159	126	41	196	4	75	355	130
Shelters	1	2	9	4	14	4	5	16	13
Social Gatherings	25	134	71	44	34	52	69	168	123
Travel & Lodging	0	0	0	3	0	3	3	0	3
Total	13,072	35,109	1,168	5,548	5,661	795	18,620	40,770	1,963

New Clusters: Clusters with the first case (indicated by the first positive lab result) identified during the four week period 11/8 – 12/5/2020

Ongoing Clusters: Clusters with the first case identified prior to 11/1 that has not met criteria to be closed. Confirmed cases included in ongoing clusters occurred between 11/8 and 12/5 but are associated with a cluster that began prior to 11/8. Close contacts included in ongoing clusters occurred between 11/8 and 12/5 but are associated with a cluster that began prior to 11/8

Closed Clusters: A cluster is closed after 28 days have passed since the last confirmed case; 18,435 clusters are closed, 93,495 cases are associated with closed clusters

Source of data: Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences. Long Term Care Facility Data from the National Healthcare Safety Network beginning 5/31/2020. All other data from MAVEN and are subject to change. Only clusters consisting of two or more confirmed Massachusetts cases with a common exposure have been included.



Massachusetts Department of Public Health COVID-19 Dashboard – Thursday, December 10, 2020

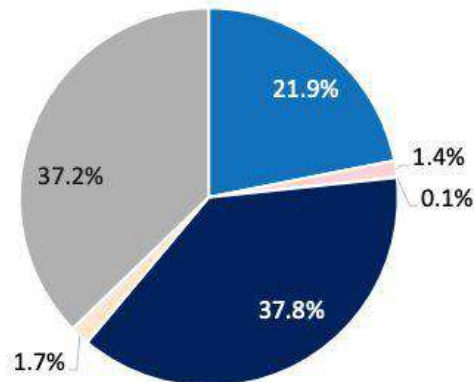
MA Contact Tracing: Case and Contact Outreach Outcomes for Last Two Weeks

Case Outreach Completed:
62.8% of 30,916
(64% Case Outreach Completed Within 1 Day)
Nov. 22- Dec. 5, 2020

Contact Outreach Completed:
74.4% of 18,867
Nov. 22- Dec. 5, 2020

Case Outreach Outcomes

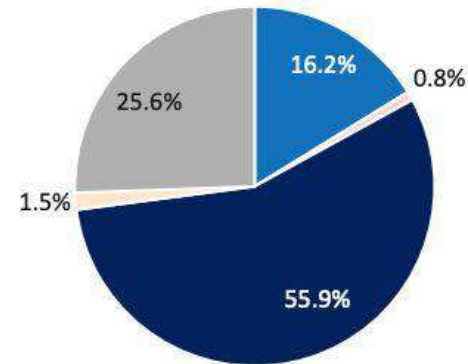
Nov. 22- Dec. 5, 2020



- Isolation/ Quarantine Complete
- Lost-to Follow Up
- Deceased
- Ongoing Monitoring
- Other
- Not Reached

Contact Outreach Outcomes

Nov. 22- Dec. 5, 2020



Total Workforce (Dec. 8, 2020)

3,307

Combined case investigation, contact tracing, and monitoring workforce

Note: The COVID-19 Community Tracing Collaborative (CTC) began operation on April 10, 2020. Data in this dashboard reflect the combined contact tracing conducted by Local Health Departments, Massachusetts Department of Public Health (MDPH) and the CTC since that date. Prior to April 10, 2020, all COVID-19 contact tracing in Massachusetts was conducted by Local Health Departments.

Public Health Education

CONTACT TRACING SLOWS THE SPREAD OF COVID-19

Answer the call!

Contact tracing
helps keep you, your
family, and your
community safe.

cdc.gov/coronavirus

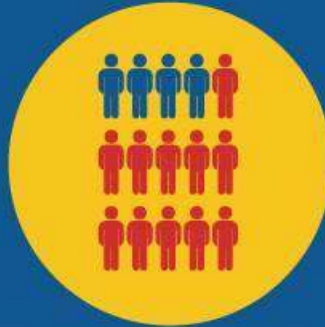
CS 317.662 10/8/20



COVID-19 DOESN'T TAKE **HOLIDAYS** OFF. THIS HAPPENED AT A **DINNER PARTY**.



4 families gather
for a meal



11 of 15 family members infected,
including some children



Elderly family
member to ICU

BASED ON A REAL OUTBREAK INVESTIGATION

For more information visit [Mass.gov/Holidays](https://mass.gov/Holidays)





Holiday gatherings increase the risk of COVID-19 spread

Protect your family and read the Holiday guidelines and Travel Order

<https://www.mass.gov/holidays-during-covid-19-in-massachusetts>

FEWER. SHORTER. SMALLER. SAFER.

A Guide to Gathering



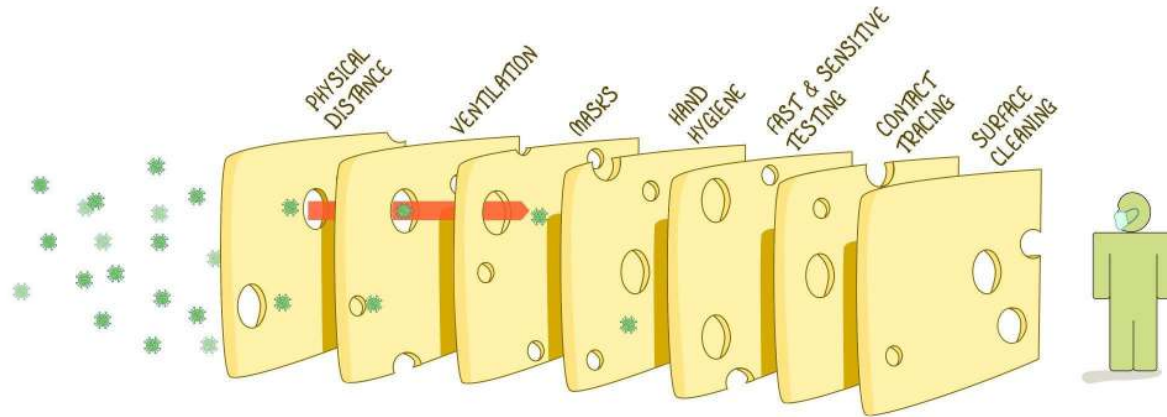
LAYER UP, LITTLETON

Stop the Spread of COVID-19

Anytime you are with people
you don't live with or near
someone who is Covid+:

- Always wear a **mask**
- **Wash** your hands
- Stay at least **6 feet** apart
- Meet **outside** or **improve ventilation** by opening windows and doors
- Take extra precautions around someone at higher risk for severe illness from Covid-19

THE SWISS CHEESE RESPIRATORY VIRUS DEFENCE
RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD



EACH INTERVENTION (LAYER) HAS IMPERFECTIONS (HOLES).
MULTIPLE LAYERS IMPROVE SUCCESS.

IAN M MACKAY
VIOLOGYDOWNUNDER.COM
DERIVED FROM @SKETCHPLANATOR
BASED ON THE SWISS CHEESE MODEL OF ACCIDENT CAUSATION, BY JAMES T REASON, 1990
VERSION 1.3
UPDATE: 12OCT2020

MASK-UP
01460

