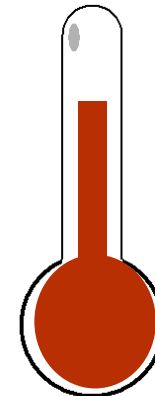




Southcoast Health COVID-19 Update



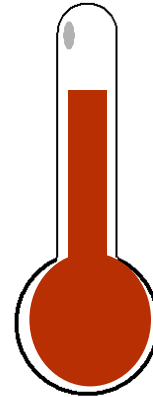
Dani Hackner MD MBA
Chief Clinical Officer, SHG
Physician in Chief, Medicine



SC COVID-19 TEMP

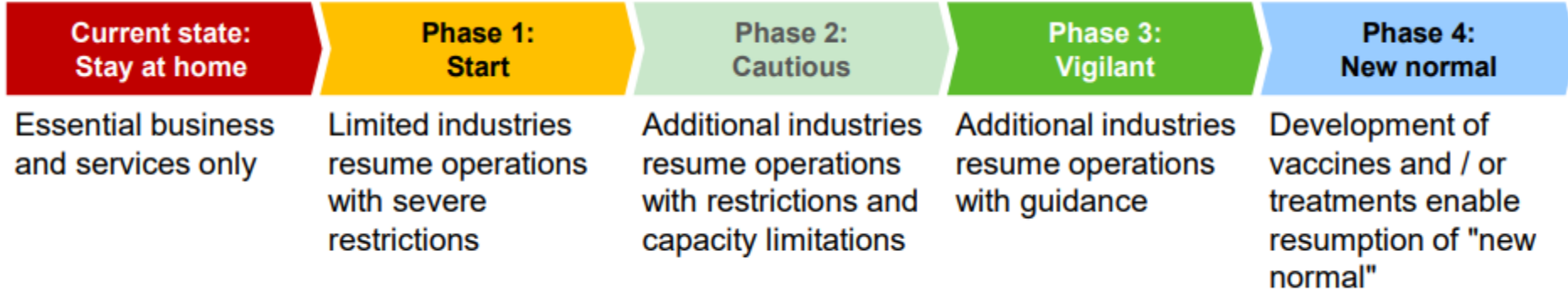
Outline

- + Phases
- + JHU Data
- + DPH Data
- + Testing
- + SC 14 day trends
- + SC bed occupancy
- + Case fatality
- + Convalescent Plasma Results



- Large cluster in Maine
- Small clusters in NB
- Concerns regarding school
- Concerns about gatherings
- Watching holiday outcomes
- Increase inpatient volume (8)

Reopening Phases

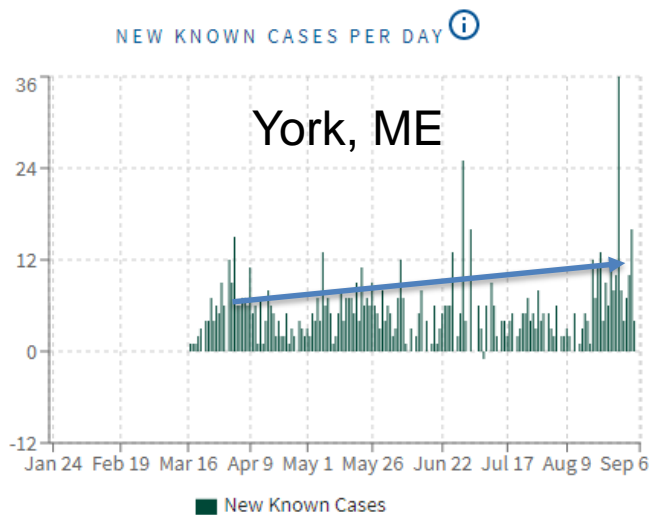


- + Phase 1 Start
- + Phase 2 Cautious
- + Phase 3 **Vigilant**

- + **Statewide Intensive Care Unit (ICU) Bed Capacity:** The 7-day average of the number of available, staffed adult ICU beds statewide must be at least 30% of total staffed adult ICU beds (including staffed surge ICU beds), on an ongoing basis during Phase 3: Vigilant.
- + **Statewide Inpatient Bed Capacity:** The 7-day average of the number of available, staffed adult inpatient beds (adult ICU and adult medical/surgical beds) statewide must be at least 30% of total staffed adult inpatient beds (including staffed surge beds), on an ongoing basis during Phase 3: Vigilant.
- + **Hospital-Specific or Hospital System-Specific Bed Capacity Maintenance:** The 7-day average of the hospital's or hospital system's available, staffed adult inpatient beds (adult ICU and adult medical/surgical beds) must be at least 20% of its total staffed adult inpatient bed capacity (including staffed surge beds) on an ongoing basis during Phase 3: Vigilant.



This past week



147 cases linked to rural Maine wedding at a lodge in Millinocket with

3 deaths

A rural wedding led to dozens of coronavirus cases. Officials see it as a cautionary tale.

<https://www.washingtonpost.com/health/2020/08/30/coronavirus-millinocket-wedding-outbreak/>



Outbreaks at Savoy nursing home and Iglesia Pentecostal Levantate y Anda
NEW BEDFORD — Mayor Jon Mitchell has taken to social media to announce two outbreaks of COVID-19 at a church and a nursing home in the city that each affected at least 10 people.

<https://www.southcoasttoday.com/news/20200904/mitchell-announces-covid-19-clusters-at-nursing-home-and-church>



SC 9-8-2020

Inpatient Positive

Positive Patients in ICU

Report completed: Tue 9/8 07:01 AM

Ventilator Status	Patient Count
> Pedi	0
∨ Adult	2
Ventilated	0
∨ Not Ventilated	2
CMH	1
SLH	1
Total Patient Count	2

Positive Patients in Med/Surg

Report completed: Tue 9/8 07:01 AM

Ventilator Status	Patient Count
> Pedi	0
∨ Adult	6
Ventilated	0
∨ Not Ventilated	6
CMH	1
SLH	4
TOH	1
Total Patient Count	6

Inpatient PUI

Patients Under Investigation in ICU

Report completed: Tue 9/8 07:01 AM

Age	Count unique values of MRN
> Pedi	0
∨ Adult	1
Ventilated	0
∨ Not Ventilated	1
SLH	1
Total Patient Count	1

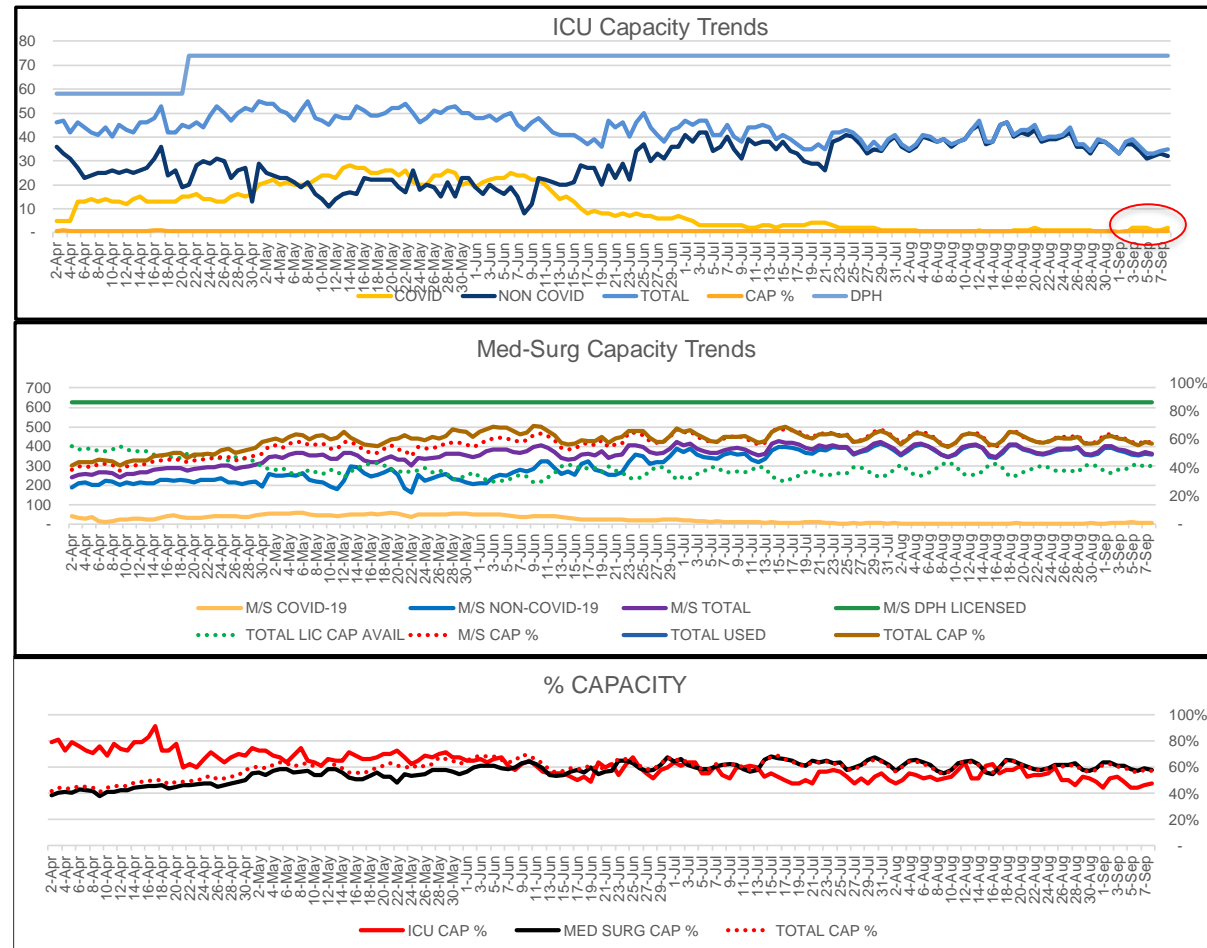
Patients Under Investigation in Med/Surg

Report completed: Tue 9/8 07:01 AM

Age	Count unique values of MRN
> Pedi	0
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Ventilated	0
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SLH	1
TOH	1
Total Patient Count	2

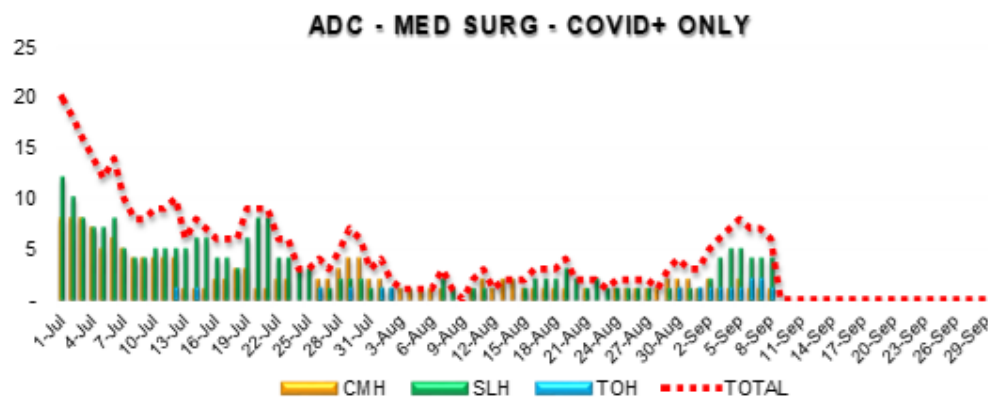
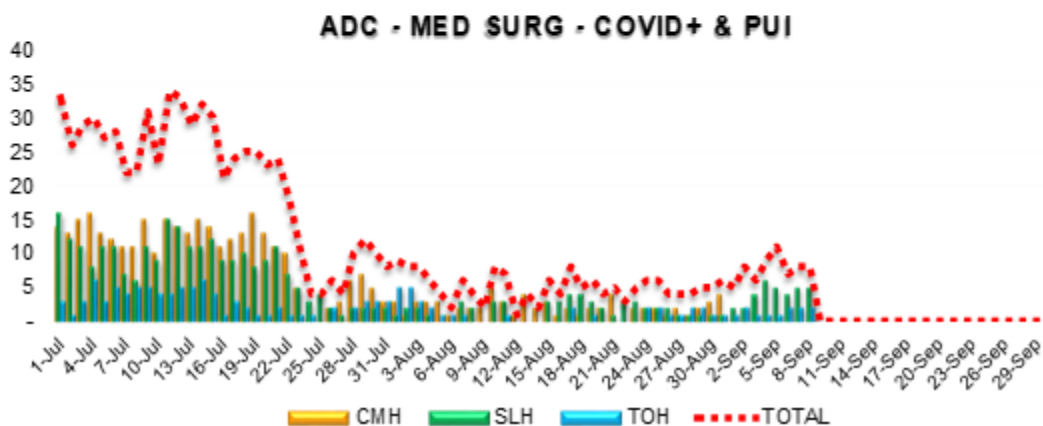
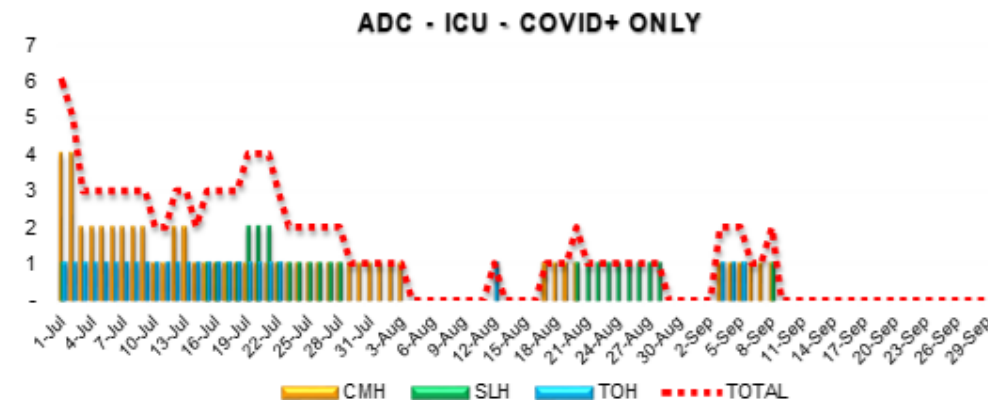
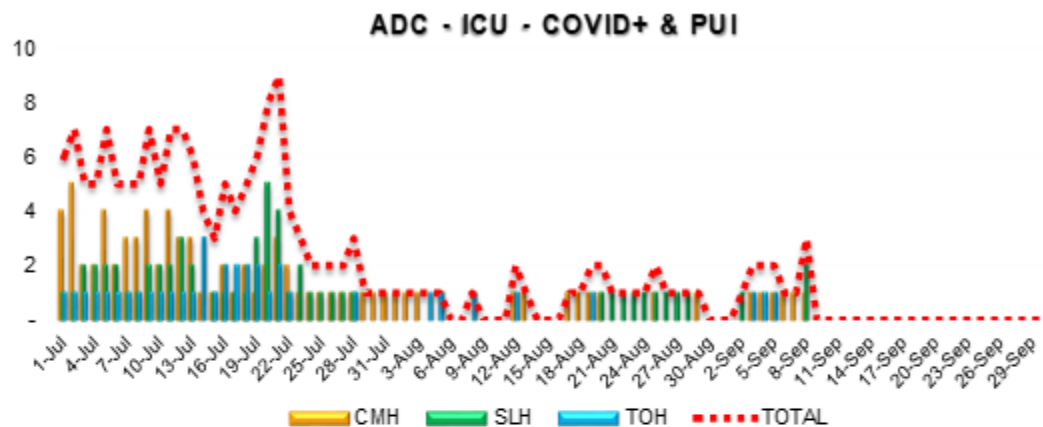


SC COVID-19 Bed Occupancy 9-8-2020





Hospitalization Detail 9/8/2020





MA Aug 9-7-2020



Massachusetts Department of Public Health COVID-19 Dashboard- Monday, September 07, 2020

Dashboard of Public Health Indicators

Newly Reported Confirmed Cases Today
222

Total Confirmed Cases
121,046

Newly Reported Deaths among Confirmed Today
8

Total Deaths among Confirmed Cases
8,925

New Individuals Tested by Molecular Tests
9,870

Total Individuals Tested by Molecular Tests
1,867,534

Total Molecular Tests Administered
2,728,153

Legend
● Positive trend
● In progress
● Negative trend

Below is the current status:

Measure	Status
COVID-19 positive test rate	●
Number of individuals who died from COVID-19	●
Number of patients with COVID-19 in hospitals	●
Healthcare system readiness	●
Testing capacity	●
Contact tracing capabilities	●

The front page of the dashboard has been reformatted. Antibody tests (individual and total numbers) can be found on page 18.



STATE TESTING Sept 7, 2020

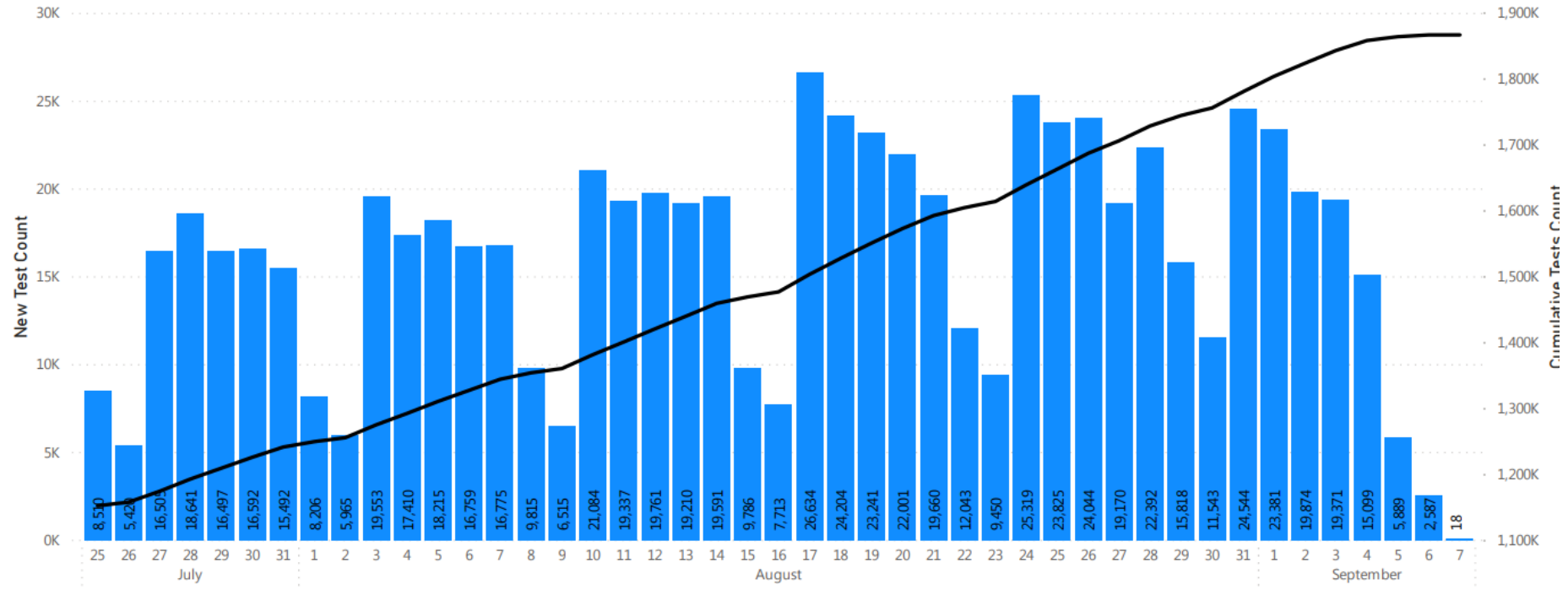


Massachusetts Department of Public Health COVID-19 Dashboard- Monday, September 07, 2020

Testing by Date - Molecular (Individuals)

Total Number of Individuals with at Least One Molecular Test Performed by Date

● New Individuals Tested by Molecular Method ● Cumulative Individuals Tested by Molecular Method





STATE TESTING Sept 7, 2020

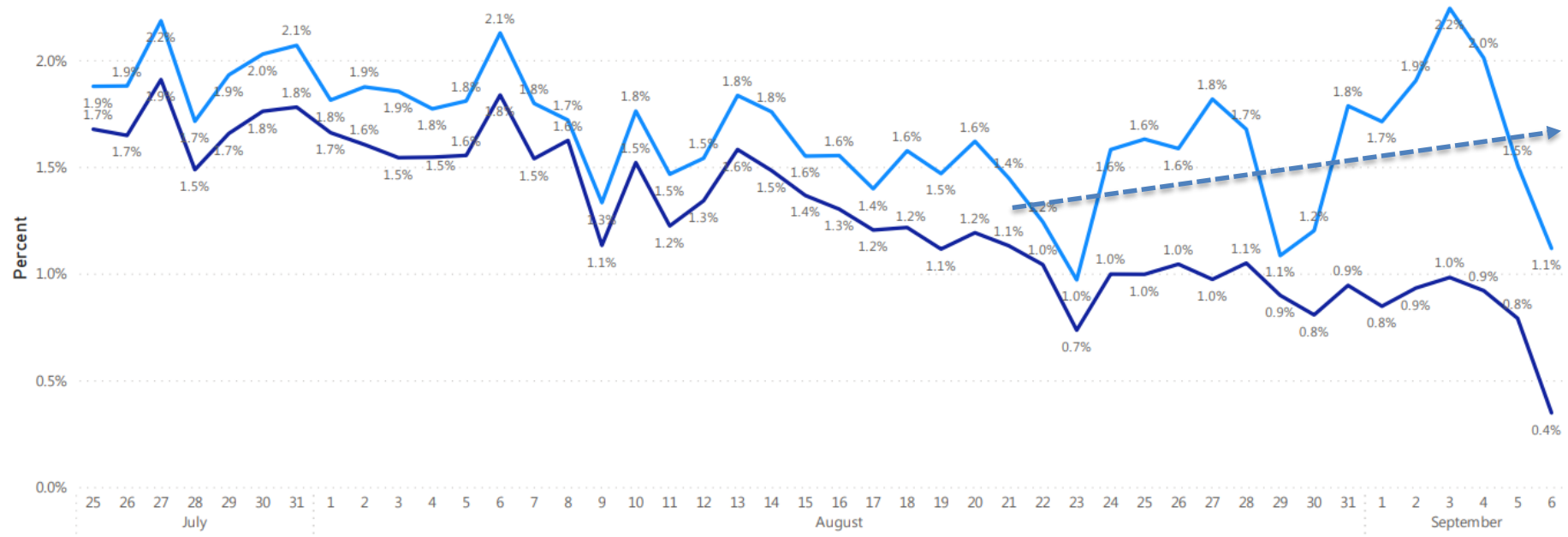


Massachusetts Department of Public Health COVID-19 Dashboard- Monday, September 07, 2020

Testing by Date - Molecular (Percent Positive)

Percent of Tests By Molecular Method that are Positive by Test Date

● Percent of Tested Individuals who are Positive ● Percent of All Molecular Tests that are Positive



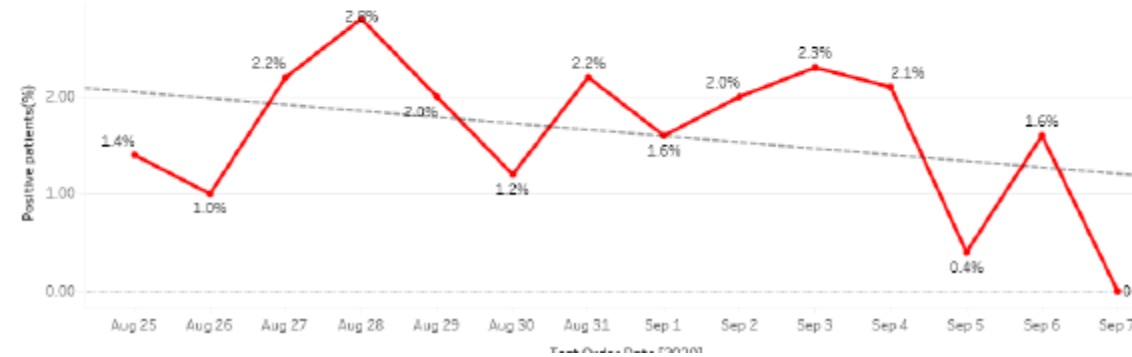


COVID-19 Positivity Trickling Up 9-1-2020

14 Days COVID-19 Positive Cases by Date



14 Days COVID-19 Positive Cases(%) by Date



MA Public Health Indicators: 7 Day Weighted Avg

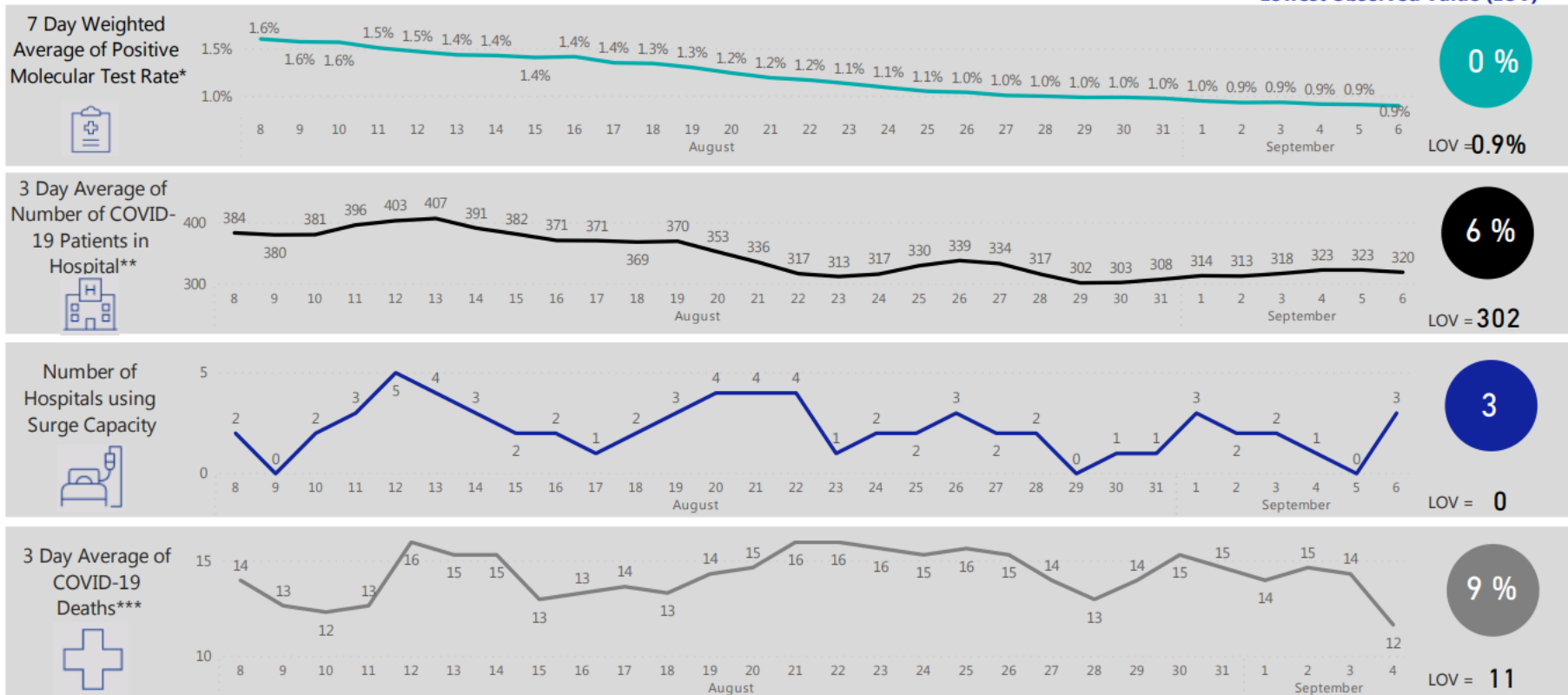
Sept 7, 2020



Massachusetts Department of Public Health COVID-19 Dashboard- Dashboard of Public Health Indicators

Monday, September 07, 2020

Percent or Count of Change Since
Lowest Observed Value (LOV)

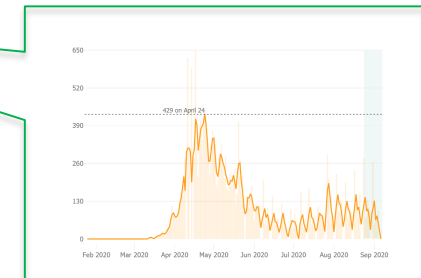
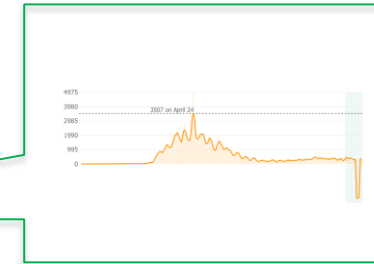
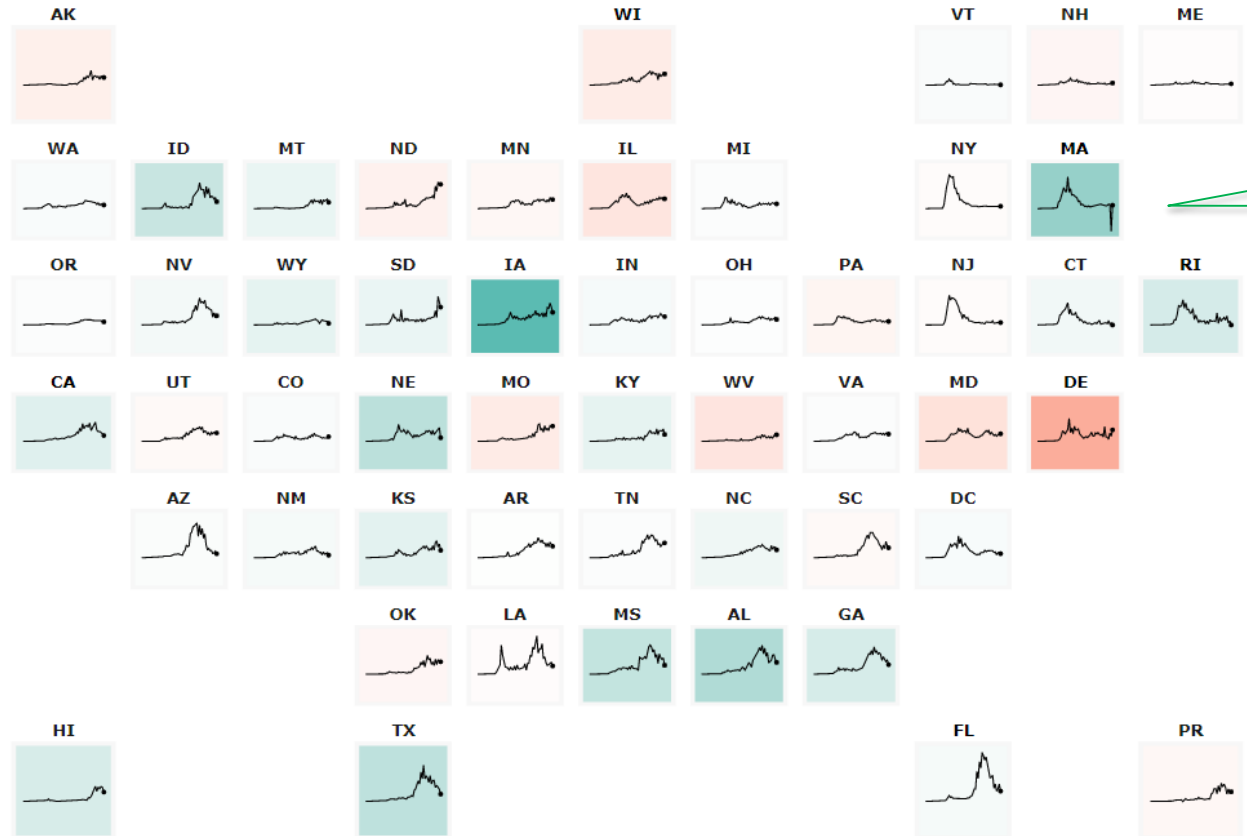


Continued
Drop
statewide



United States 9/7/2020 (JHU)

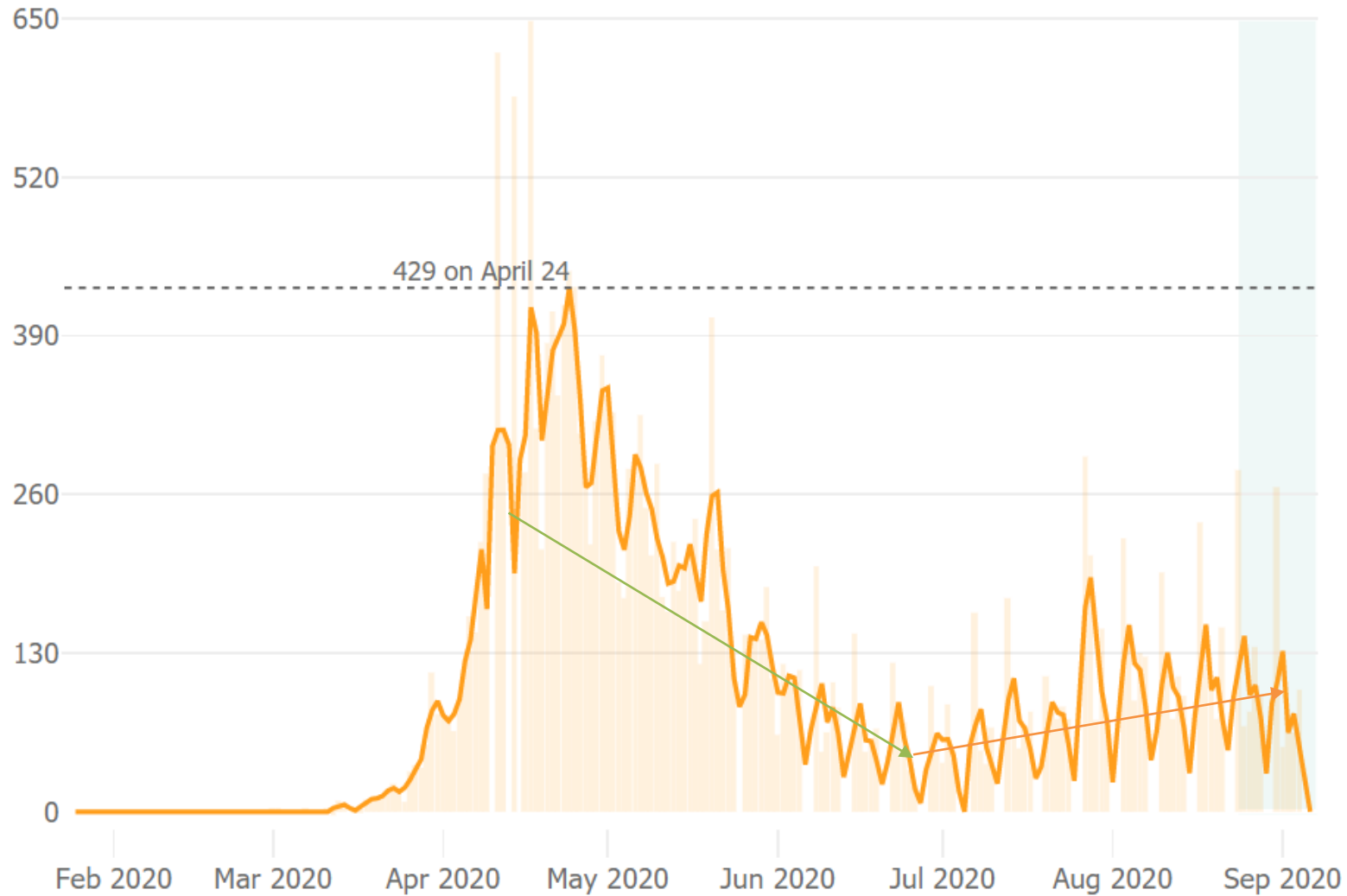
Daily New Cases per 100k people. Data shown from 1/22/20 to 9/7/20.



- Line shows 3-day moving average of **new cases per day** in this state. Dot corresponds to most recent day.
- The **greener** the background, the bigger the **downward trend** of new cases in this state.
- The **redder** the background, the bigger the **upward trend** of new cases in this state.

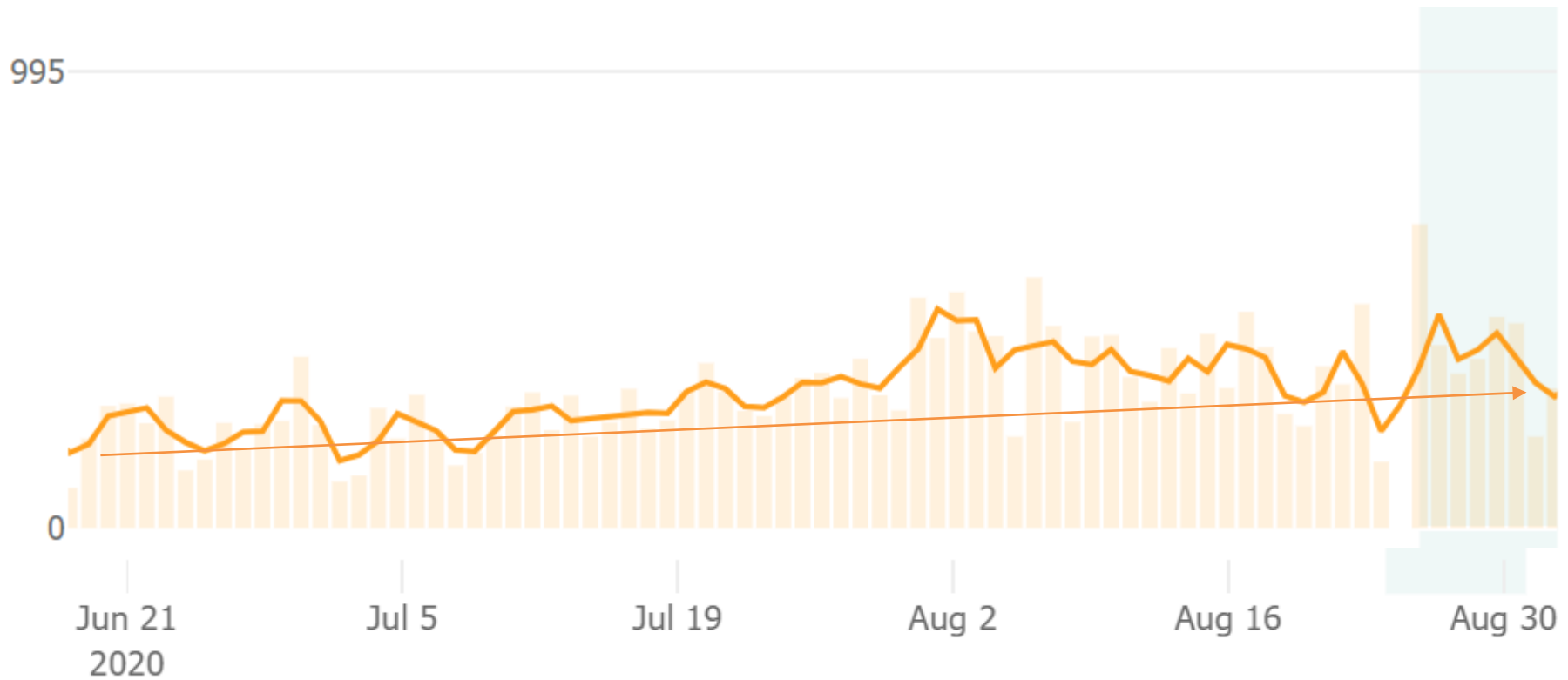
Trend by State – RI 9/7/2020

Daily confirmed new cases (3-day moving average)



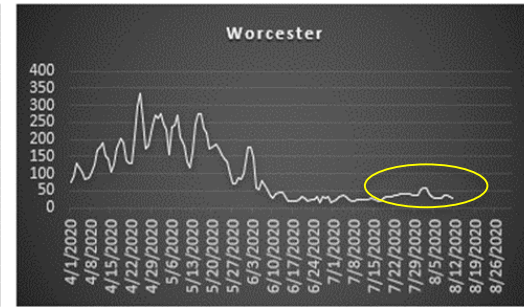
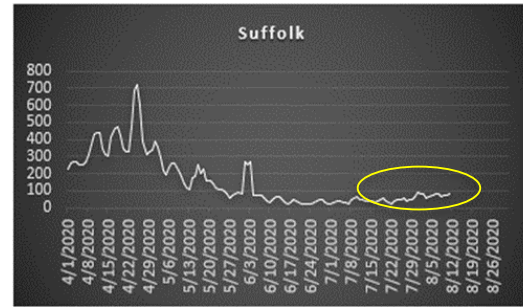
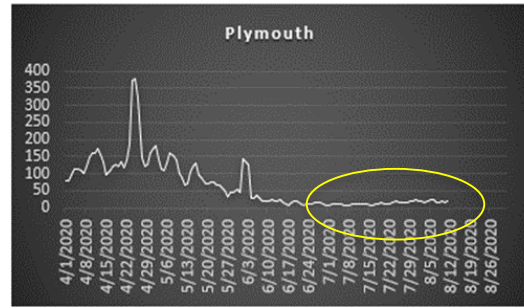
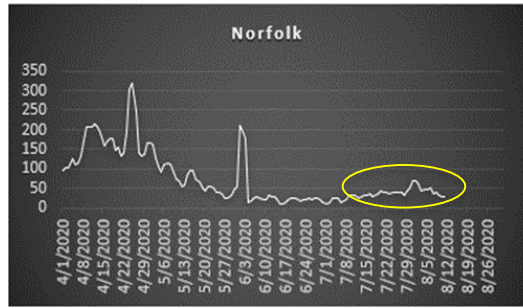
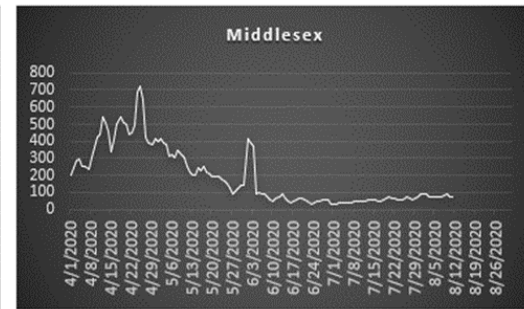
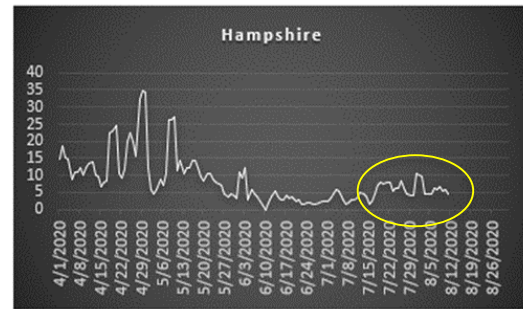
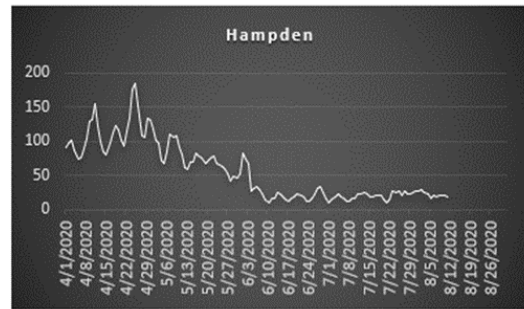
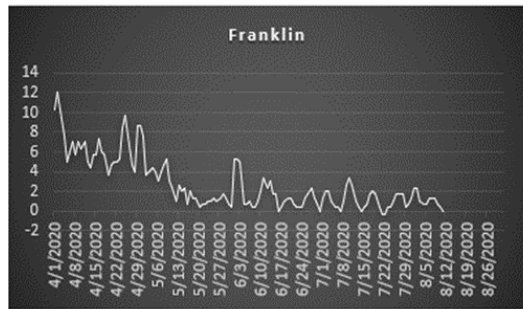
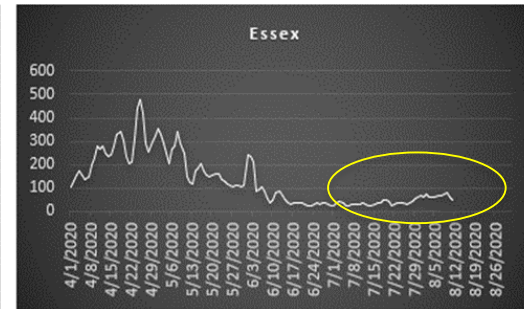
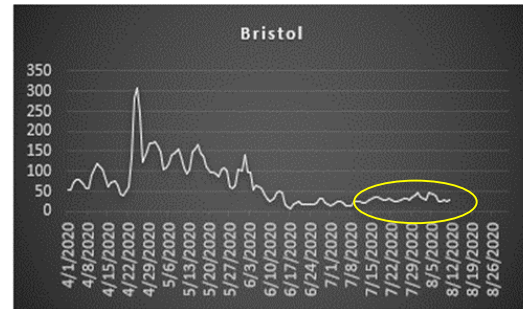
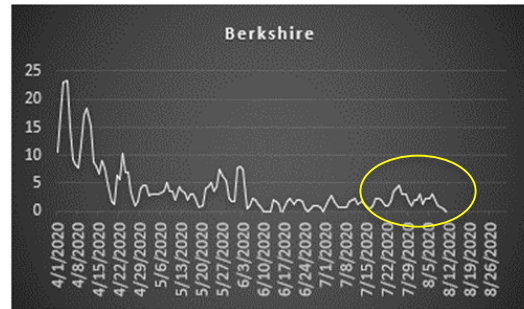
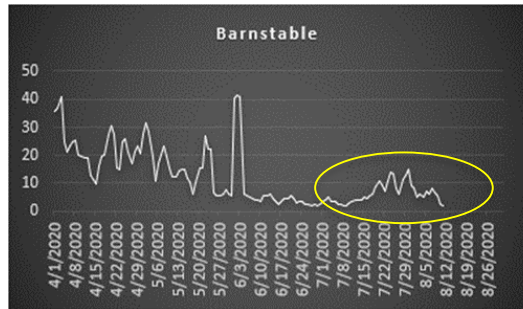
Trend by State – MA 9/7/2020

Daily confirmed new cases (3-day moving average)





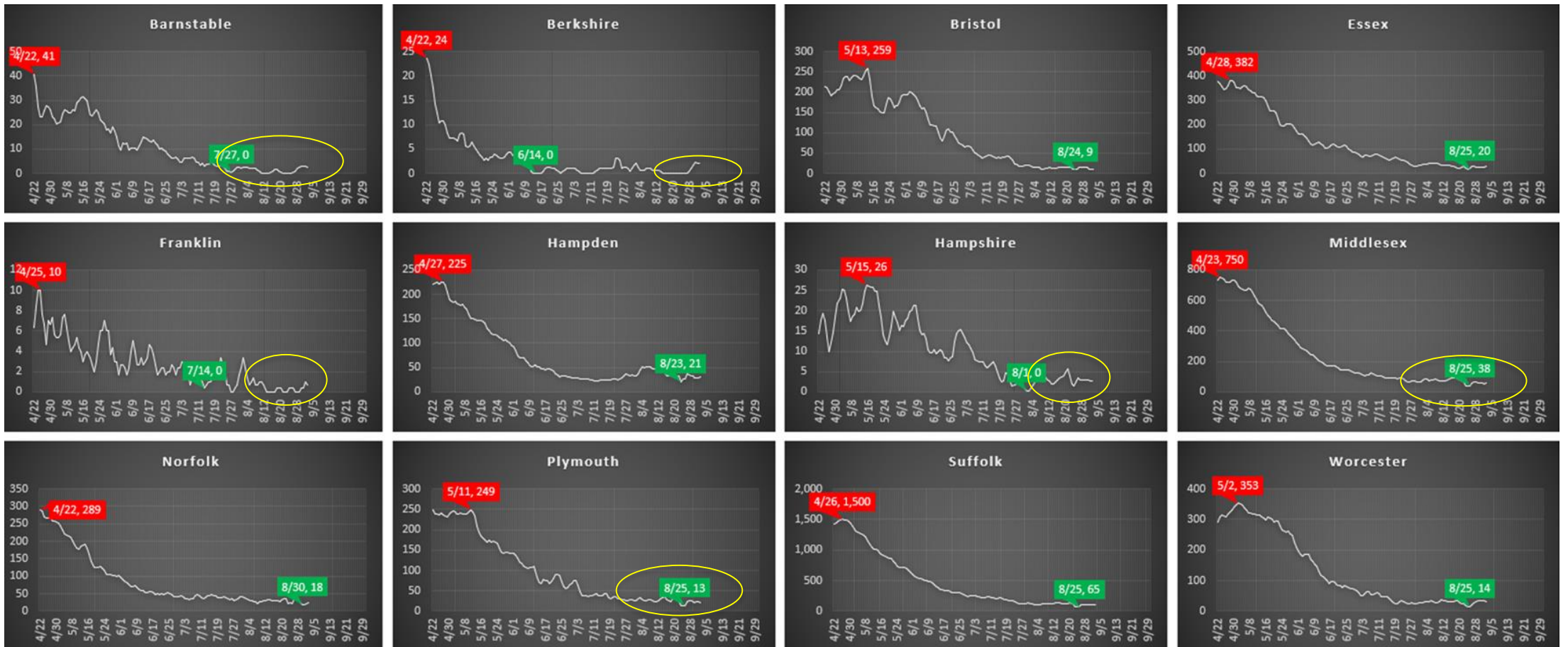
MA County Cases Trend: Rolling 3 Day Average Cases / County 9/8/2020



Upticks visible over time



MA County Hospitalization Trend: Rolling 3 Day Average Cases / County 9/8/2020



Upticks visible over time

City Rate of Increase of Cases by Town (PSA)

9/7/2020

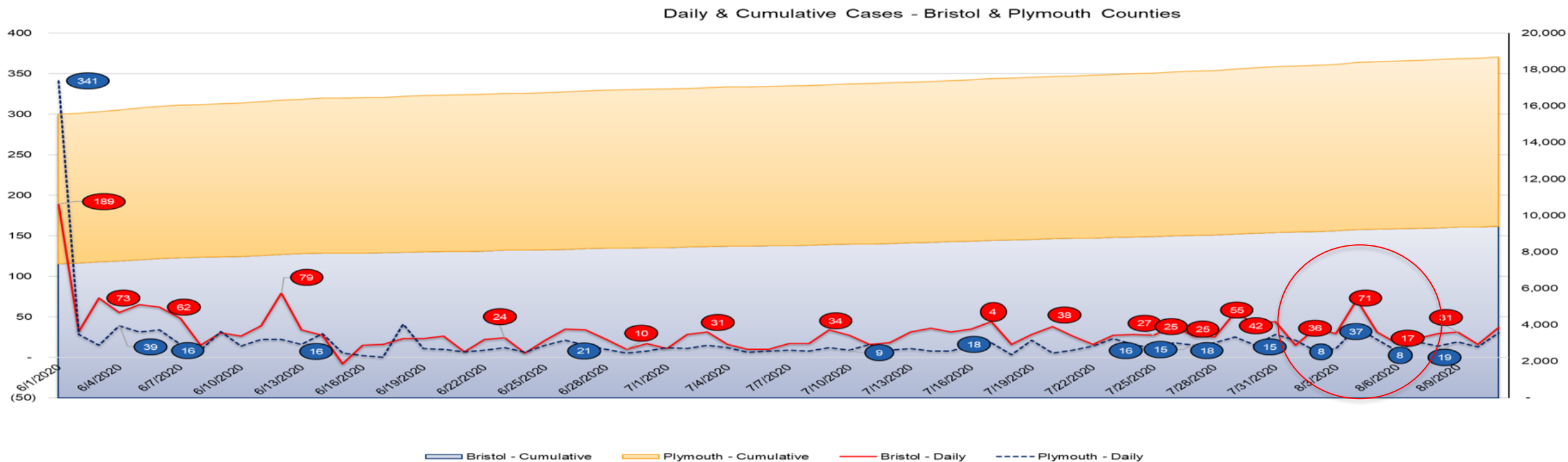


City	8/19 Rate of Growth (vs. Prev 7 Days)	8/26 Rate of Growth (vs. Prev 7 Days)	TREND
Acushnet	2.9%	0.9%	
Dartmouth	2.2%	1.0%	
Fairhaven	1.2%	0.4%	
Fall River	1.0%	0.7%	
Freetown	0.0%	1.8%	
Lakeville	4.8%	6.1%	
Marion	0.0%	0.0%	
Mattapoissett	7.1%	0.0%	
New Bedford	1.5%	1.2%	
Rochester	5.0%	0.0%	
Somerset	0.5%	0.9%	
Swansea	1.3%	9.9%	
Wareham	0.0%	1.3%	
Westport	1.9%	3.7%	





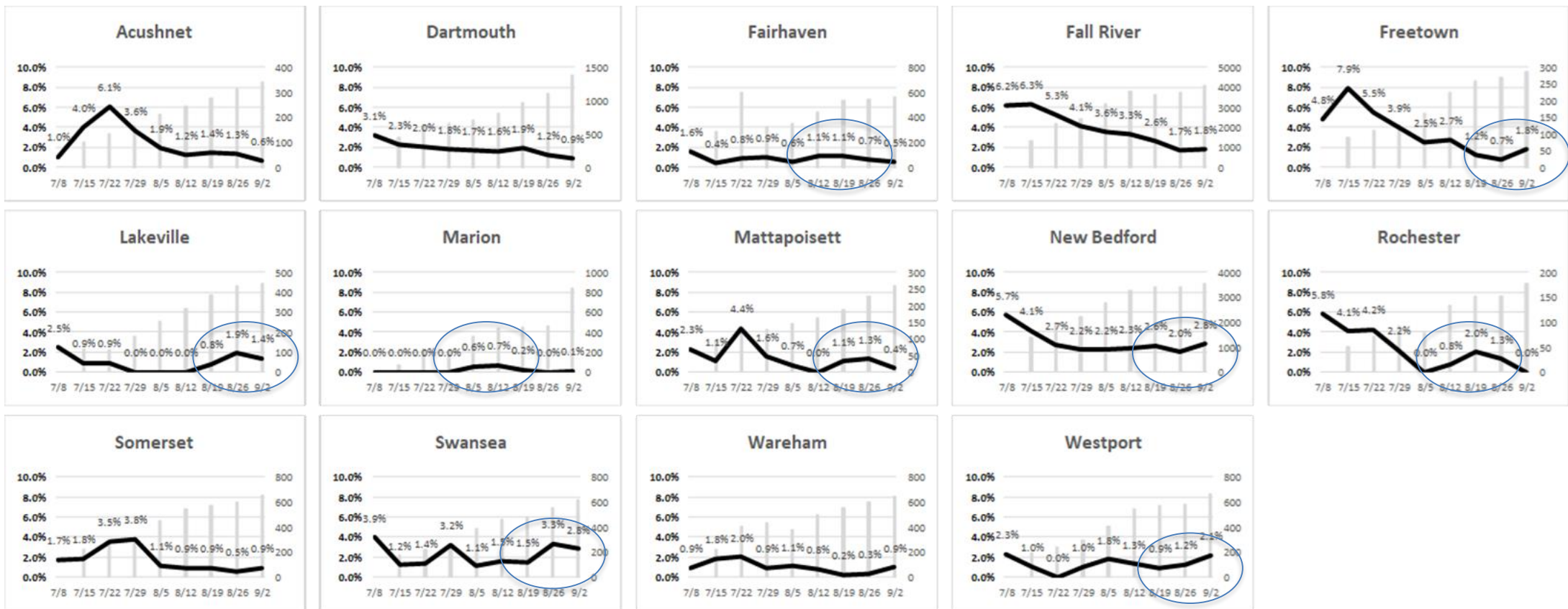
Bristol and Plymouth Daily and Cumulative








Primary Service Area Positivity Rate

9/7/2020



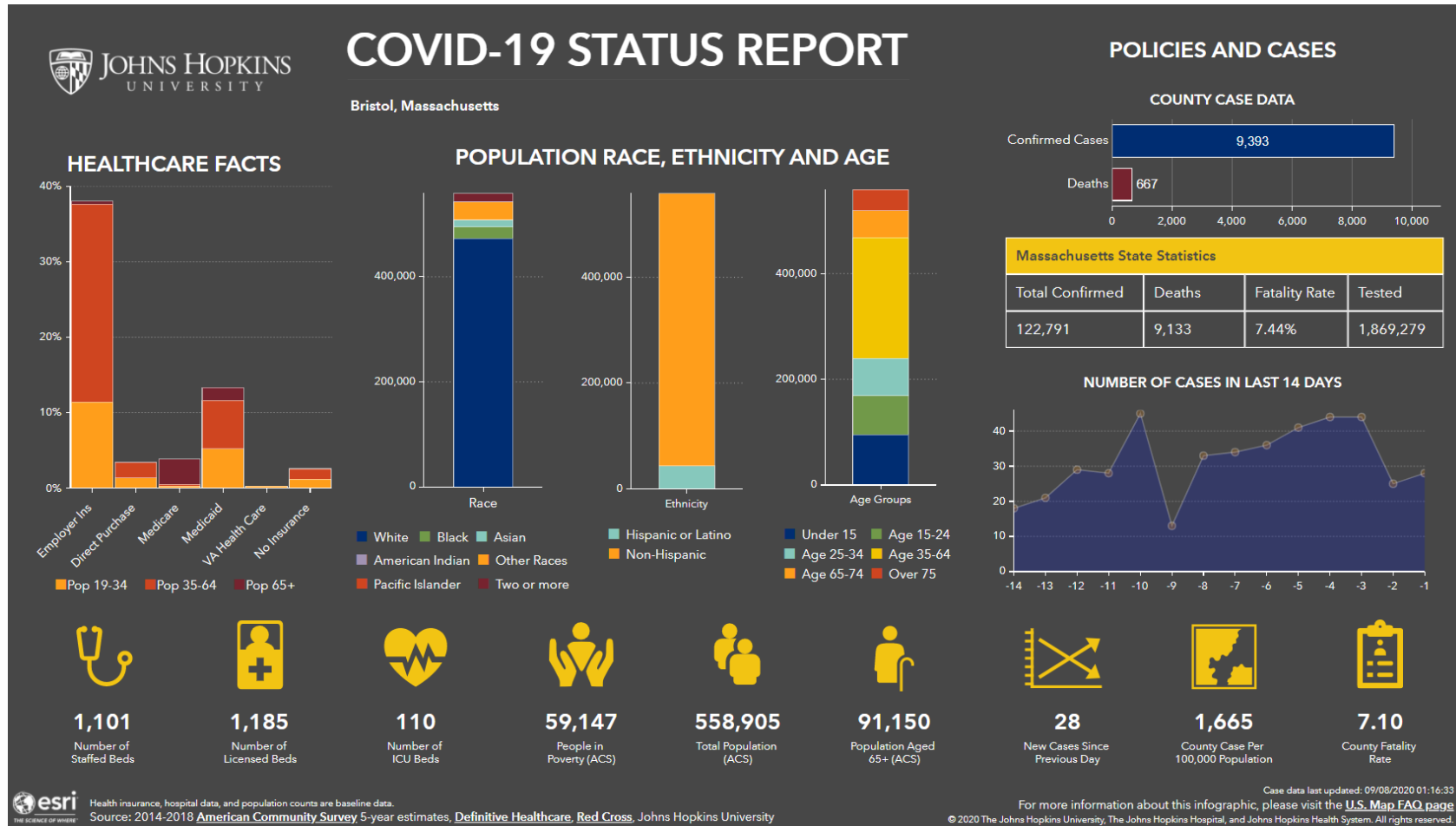


Testing Update, 9/8/2020

State ↑	New Cases i ↑ New daily cases Weekly trend	Tests per 1,000 people ↑ Daily Tests Weekly trend	Percent Positive i ↑ Daily % positive Above threshold?
Massachusetts ↓	 <p>+229 new</p> <p>THIS WEEK ↓ LAST WEEK ↑</p>	 <p>2.6 tests per 1,000</p> <p>THIS WEEK ↓ LAST WEEK ↑</p>	 <p>-4.5% positive</p> <p>THIS WEEK ↓ LAST WEEK ↓</p>



JHU Dashboard 9/8/2020– Bristol, MA



Mortality 9/7/2020



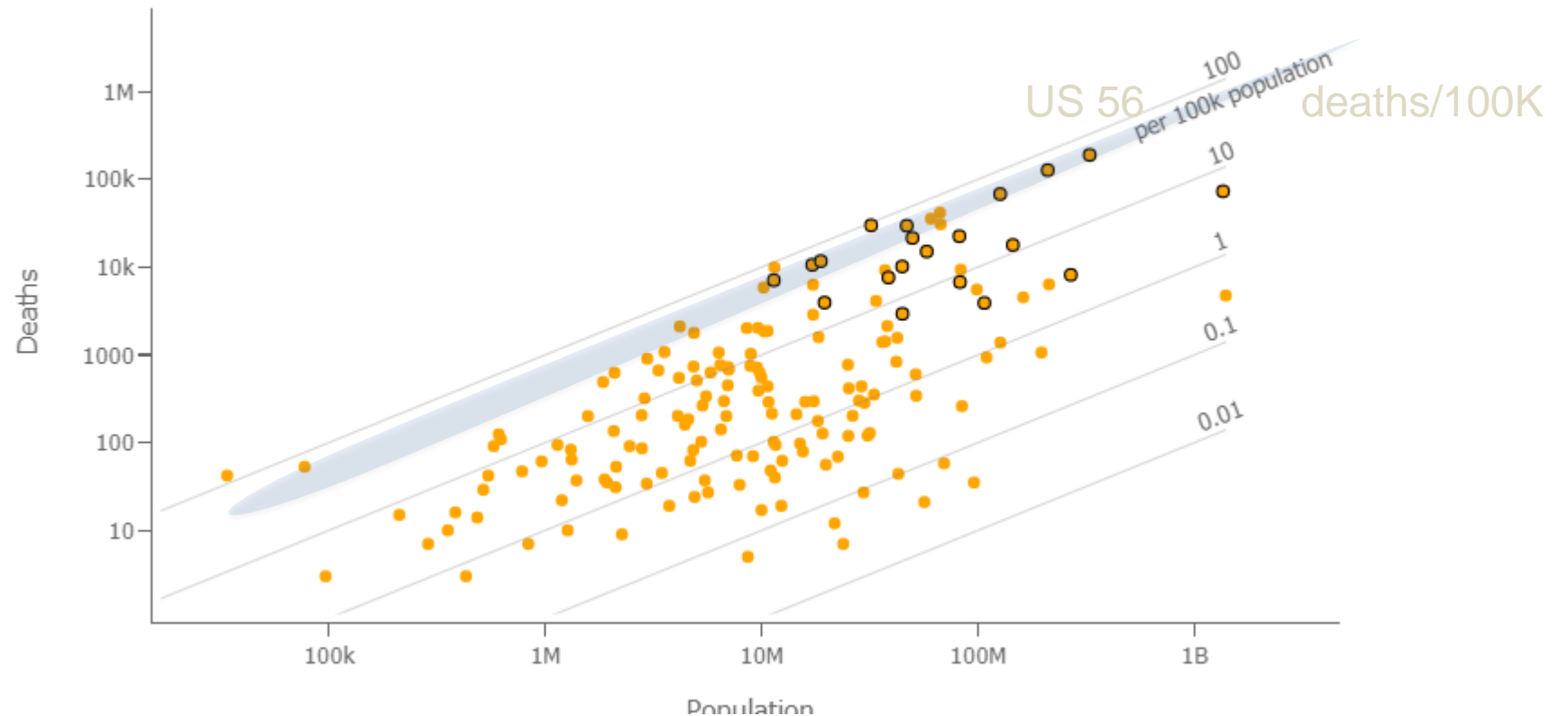
Case Fatality

Bristol, MA	8.08%
MA	7.44%
US	3.0%
	(#11)
#1 is Mexico	10.6

Deaths/100K

Bristol, MA	132
MA	132
US	57.8
	(#7)
#1 is Peru	93.3
SC	59-118

(150-300K catchment)





- + **Effect of Convalescent Plasma on Mortality among Hospitalized Patients with COVID-19: Initial Three-Month Experience**
- + Michael J Joyner, □ Jonathon W Senefeld, □ Stephen A Klassen et al.
- + Aug 12
- + **doi:** <https://doi.org/10.1101/2020.08.12.20169359>
- + Preprint. Non-peer-reviewed.

Convalescent Plasma

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES



BMJ Yale



- + The 35,322 transfused patients had heterogeneous demographic and clinical characteristics. This cohort included a high proportion of critically ill patients, with 52.3% in the intensive care unit (ICU) and 27.5% receiving mechanical ventilation at the time of plasma transfusion.
- + The seven-day mortality rate was 8.7% [95% CI 8.3%-9.2%] inpatients transfused within 3 days of COVID-19 diagnosis but 11.9% [11.4%-12.2%] in patients transfused 4 or more days after diagnosis ($p < 0.001$). Similar findings were observed in 30-day mortality (21.6% vs. 26.7%, $p < 0.0001$).
- + Importantly, a gradient of mortality was seen in relation to IgG antibody levels in the transfused plasma. For patients who received high IgG plasma (> 18.45 S/Co), seven-day mortality was 8.9% (6.8%, 11.7%); for recipients of medium IgG plasma (4.62 to 18.45 S/Co) mortality was 11.6% (10.3%, 13.1%); and for recipients of low IgG plasma (< 4.62 S/Co) mortality was 13.7% (11.1%, 16.8%) ($p = 0.048$). This unadjusted dose-response relationship with IgG was also observed in thirty-day mortality ($p = 0.021$).
- + The pooled relative risk of mortality among patients transfused with high antibody level plasma units was 0.65 [0.47-0.92] for 7 days and 0.77 [0.63-0.94] for 30 days compared to low antibody level plasma units.
- + Conclusions and Relevance: The relationships between reduced mortality and both earlier time to transfusion and higher antibody levels provide signatures of efficacy for convalescent plasma in the treatment of hospitalized COVID-19 patients.

An NIH Panel reviewed the preliminary, non-peer-reviewed findings and did not recommend use of plasma outside of a clinical trial. The FDA extended access under an emergency use authorization.



Summary

- + We have warning signs in both MA and RI
- + We have critical period with the openings of schools
- + Please be safe at work, at home, and at religious gatherings
- + We will need to plan for the resurgence
- + We will need to plan for Flu and COVID-19 together

