

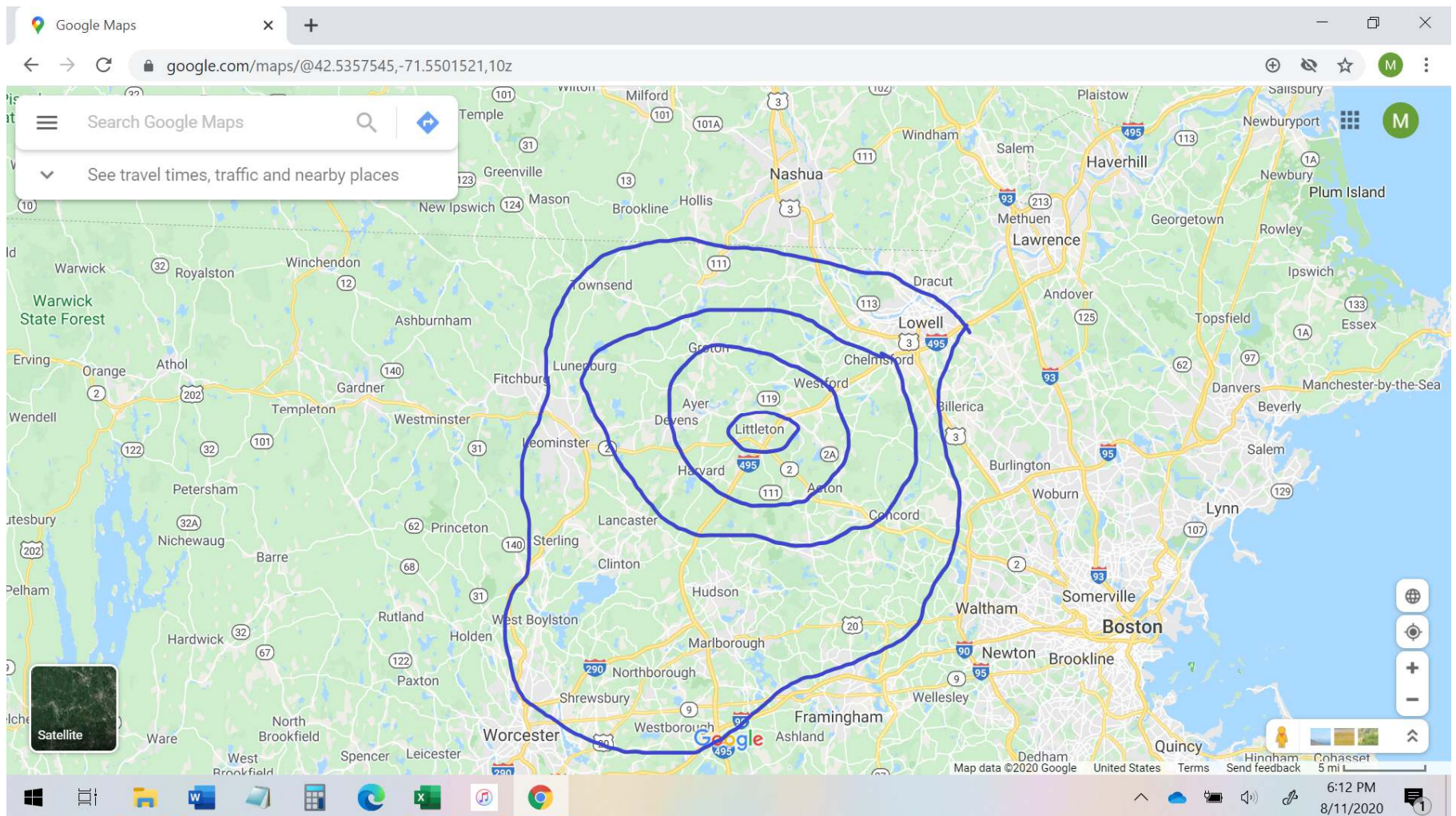
# Covid-19 Health Metrics

Littleton and Surrounding  
Communities

# Town Groupings Evaluated

- **Littleton**
- **Border Communities**
  - Littleton, plus Acton, Ayer, Boxborough, Groton, Harvard, and Westford
- **Contiguous Communities**
  - Border Communities, plus Bolton, Carlisle, Chelmsford, Concord, Dunstable, Lancaster, Lunenburg, Maynard, Pepperell, Shirley, Stow
- **495 Belt**
  - Contiguous Communities, plus Ashby, Bedford, Berlin, Boylston, Clinton, Hudson, Leominster, Lincoln, Lowell, Marlborough, Northborough, Shrewsbury, Southborough, Sterling, Sudbury, Townsend, Tyngsboro, Wayland, West Boylston, Westborough, Weston
- **Middlesex County**
- **Commonwealth of Massachusetts**

# Town Groupings Evaluated



# Average Daily Cases

- Data sources:
  - Weekly COVID-19 Public Health Report:  
<https://www.mass.gov/info-details/covid-19-response-reporting>
    - Where <5 cases, used rate of average daily cases per 100k population reported by DPH to estimate number of cases in that town
  - Population data from UMass Donahue Institute (2019)
- Calculation
  - $((\text{number of cases diagnosed in last 14 days} / 14 \text{ days}) / \text{population}) * 100,000$

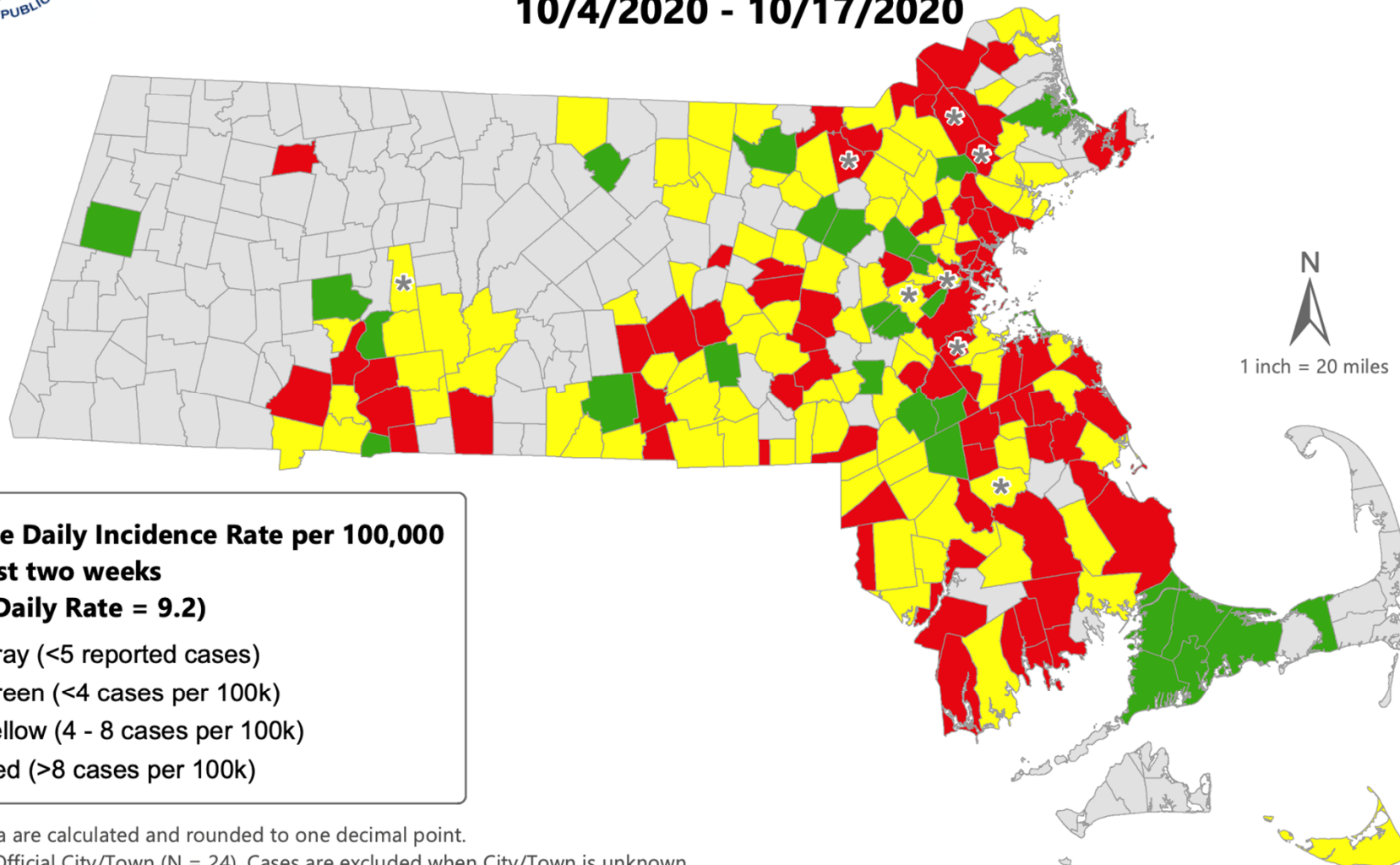
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Massachusetts Department of Public Health COVID-19 Dashboard - Thursday, October 22, 2020

## Average Daily Incidence Rate\* (per 100,000, PCR only) for COVID-19 in MA by City/Town Over Last Two Weeks 10/4/2020 - 10/17/2020



**Average Daily Incidence Rate per 100,000  
over last two weeks  
(State Daily Rate = 9.2)**

- Gray (<5 reported cases)
- Green (<4 cases per 100k)
- Yellow (4 - 8 cases per 100k)
- Red (>8 cases per 100k)

\*These data are calculated and rounded to one decimal point.  
Unknown Official City/Town (N = 24). Cases are excluded when City/Town is unknown.

Municipalities marked with an asterisk (\*) have either a long term care facility, institution of higher education and/or correction facility with 1) more than 10 confirmed cases in the last 14 days and 2) these cases make up more than 30% of the total cases for that municipality in the last 14 days.

\* Data as of 21OCT2020  
and are subject to change.

Bureau of Infectious Disease and Laboratory Sciences

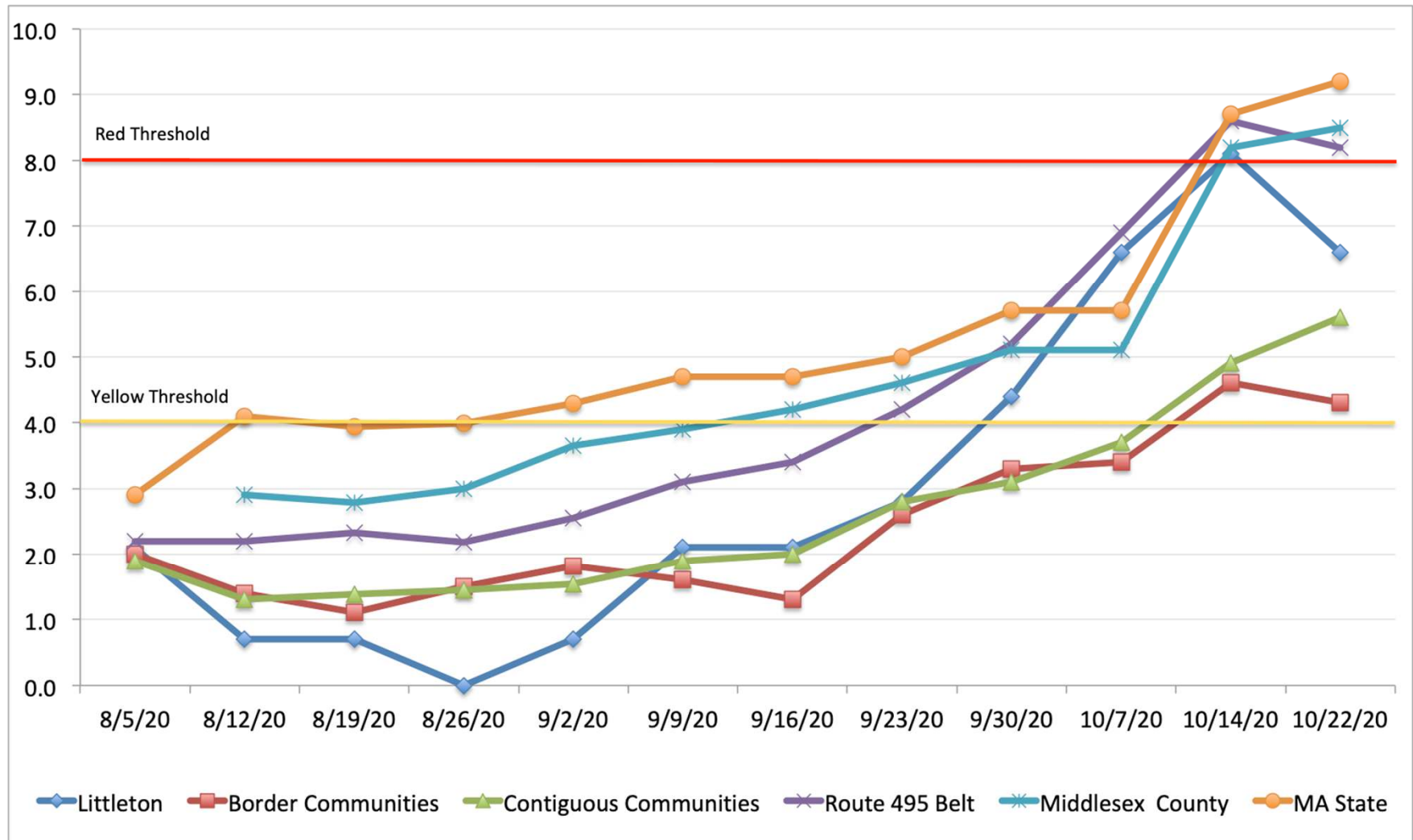
# Average Daily Cases

	Average Daily Cases per 100,000 (past 14 days)	Trend (2 weeks)	DESE Threshold
Littleton	6.6	Stable (0.0)	Yellow
Border Communities	4.3	Higher (+0.9)	Yellow
Continuous Communities	5.6	Higher (+1.9)	Yellow
Route 495 Community Belt	8.2	Higher (+1.2)	Red
Middlesex County	8.5	Higher (+3.4)	Red
MA State	9.2	Higher (+3.5)	Red

Data from October 22, 2020 MA weekly DPH report



# Trend: Average Daily Cases per 100,000





# Test Positivity

- Data sources:
  - Weekly COVID-19 Public Health Report:  
<https://www.mass.gov/info-details/covid-19-response-reporting>
  - Population data from UMass Donahue Institute (2019)
- Calculations
  - % Positive Tests = (Number positive tests / Total tests)
  - This includes people who are tested more than 1 time, such as surveillance testing for colleges, healthcare workers, and businesses
- Compare to <3% positive test for suppression, as recommended by Harvard Global Health Institute<sup>1</sup>
  - Recommend <1% for maintenance

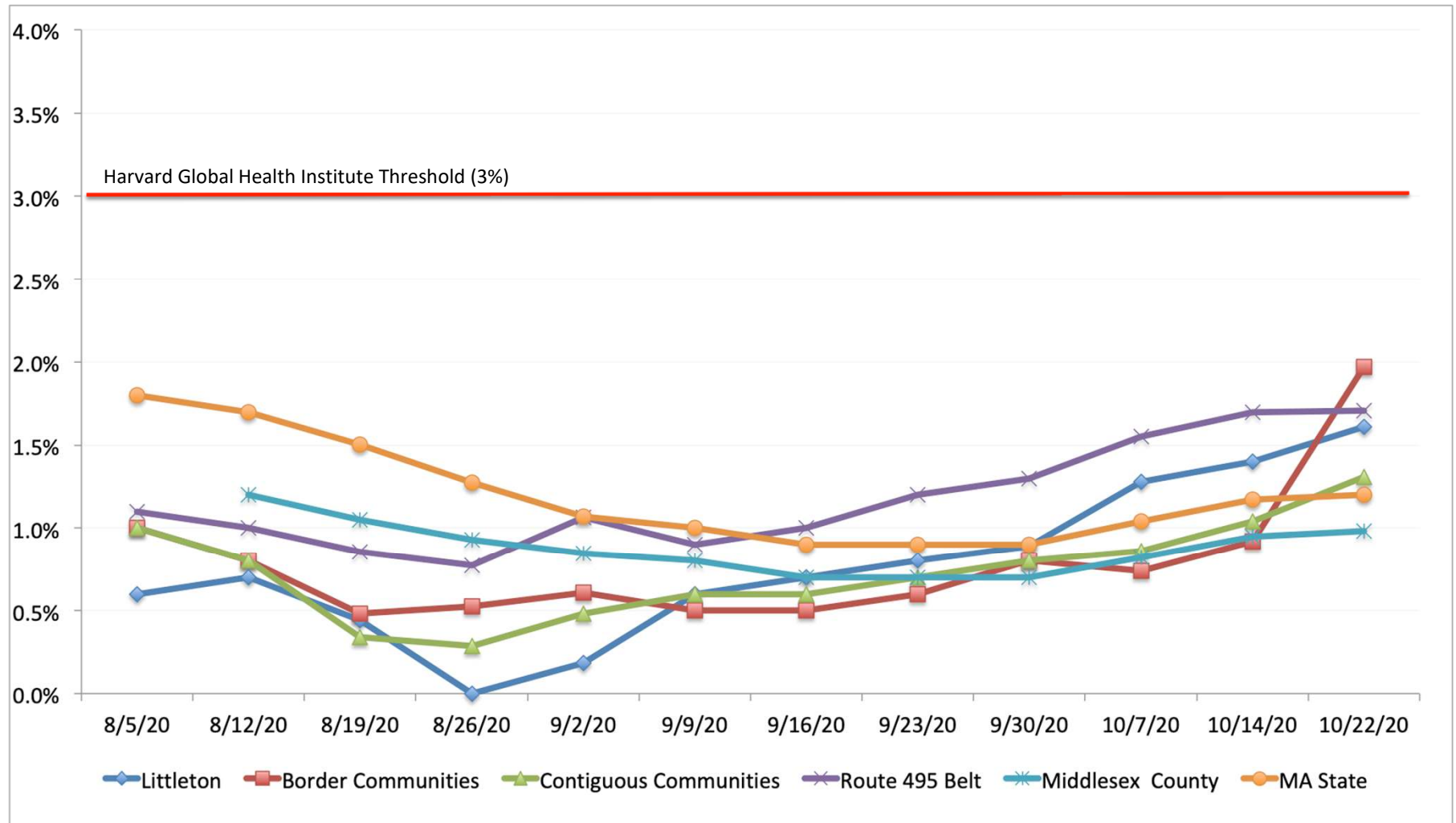
<sup>1</sup>[https://globalepidemics.org/wp-content/uploads/2020/06/key\\_metrics\\_and\\_indicators\\_v4.pdf](https://globalepidemics.org/wp-content/uploads/2020/06/key_metrics_and_indicators_v4.pdf)

# Percent Positivity

	Total Molecular Tests (last 14 days)	Percent Positivity	Trend (2 weeks)	3% Positivity Threshold
Littleton	744	1.61%	Higher (+0.33%)	<3%
Border Communities	6,721	0.97%	Higher (+0.22%)	<3%
Continuous Communities	15,874	1.31%	Higher (+0.45%)	<3%
Route 495 Community Belt	52,682	1.71%	Stable (+0.45%)	<3%
Middlesex County	236,656	0.98%	Stable (+0.16%)	<3%
MA State	885,959	2.31%	Higher (+1.27%)	<3%

Data from October 22, 2020 MA weekly DPH report

# Trend: Test Positivity



# Heath Metrics Summary

- Data as of October 22, 2020 report
- Average Daily Case Rates for our local area range from 4.3 to 6.6 per 100k
  - Littleton is **yellow**
    - 9 cases in the last 14 days
    - Average daily cases per 100k population = 6.6
    - Percent testing positivity in last 14 days = 1.61%
    - Rates stabilized, but test positivity continues to trend higher
  - Border and Surrounding Communities are **yellow**
    - Rates (4.3 – 5.6) and testing (0.97 – 1.31%) are trending higher
- 495 Belt is **red**
  - Rates (8.2) are higher, test positivity (1.71%) is stable
- Middlesex County is **red**
  - Rate (8.5) is higher, test positivity (0.98%) is stable
- MA State is **red**
  - Rate (9.2) and test positivity (2.31%) are trending higher