

COVID-19 Update & Vaccine

1/20/2021



Testing

of Total PCR tests to date (1/20) = 23,033

Total positive = 1056

Stop the Spread (next report in February):

Number of STS tests: 5,462

Total positive tests: 84

Test positivity rate: 1.5%

It should be noted that this includes only Stop the Spread asymptomatic tests, and not those who are exposed/asymptomatic who go through NCH portico. We also know that many people may have been symptomatic and/or exposed and sought out STS testing rather than coming to NCH, so as not to reveal that they have been exposed or due to other reasons.

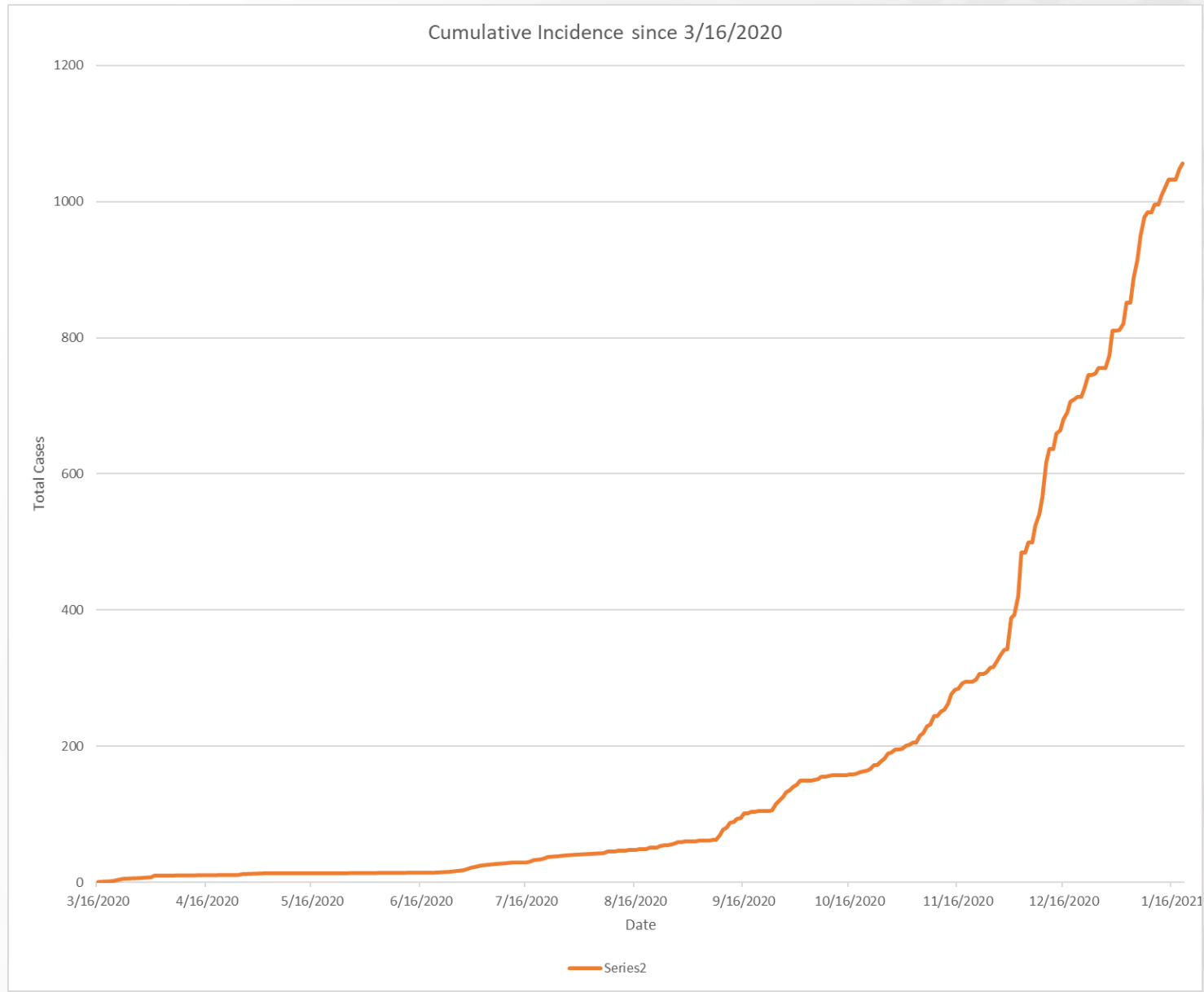
Overview

- There was significant spread caused by a lack of adherence to COVID mitigation measures and household spread.
- We had 60 cases in the last 7 days
 - 109 on 1/13
 - 113 on 1/6
- Crude death rate: 0.38% (4 in 1056)
 - Barnstable County CDR: 4.04% (303 in 7499)
 - Suffolk County CDR: 2.26% (1490 out 66,066)
 - MA State CDR: 2.97% (13,469 out of 454,102)

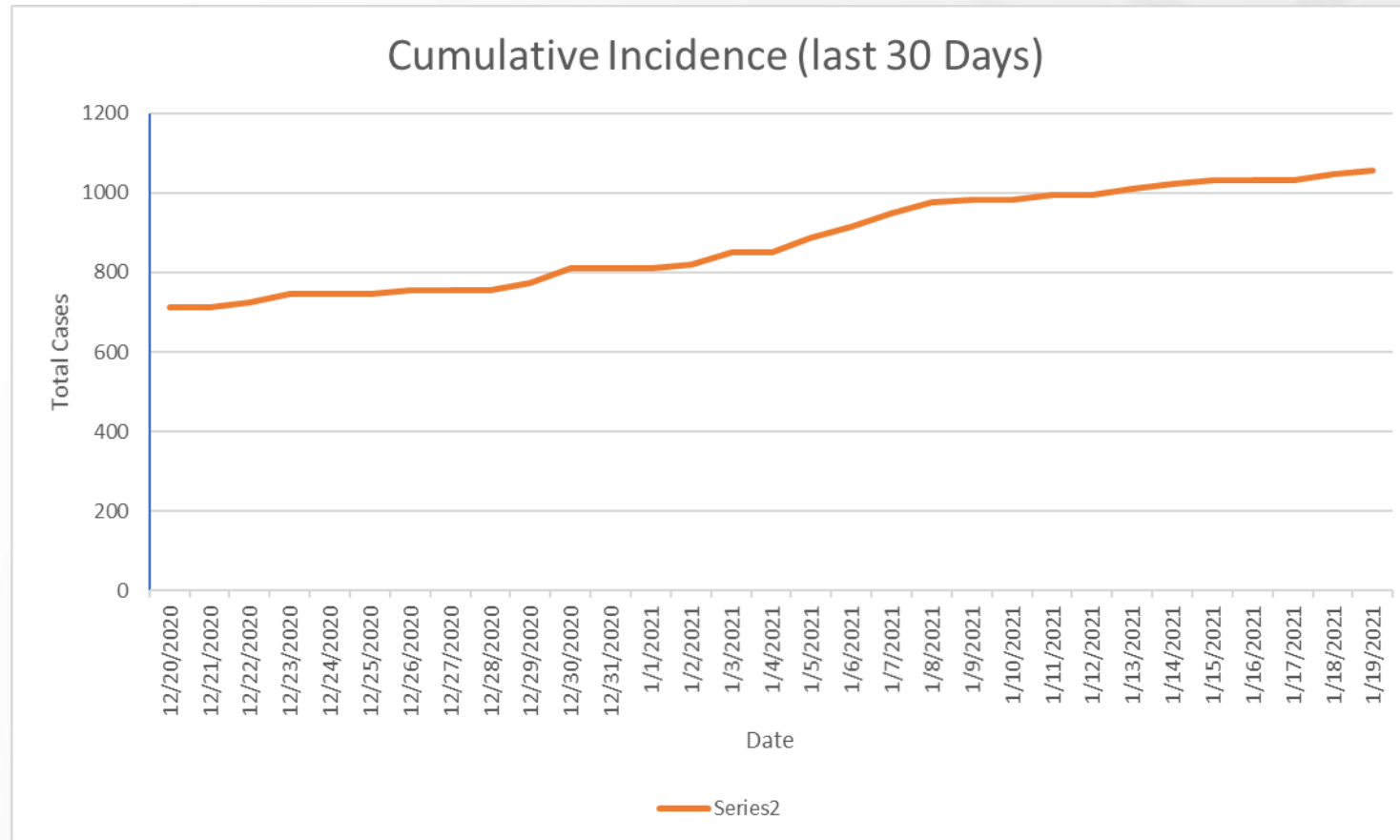
Metrics (continued)

- **COVID-19 positive test rate** – Want to keep this number below 10%. Currently at 7.4% of 7 day average
- **Number of individuals who died from COVID-19** – Keep below 5% of cases.
- **Number of patients with COVID-19 in hospitals** – Keep below 10 here
- **Healthcare system readiness** – Qualitative response. Field hospitals in Worcester and Lowell are deployed.
- **Testing capacity** – Qualitative. Ability to keep up with demand. Currently, “Good”
- **Contact tracing capabilities** – Qualitative. Ability to keep up with demand. Currently “Up to date”
- **Sewer Predictive Incidence** –Qualitative evaluation of a Quantitative graph. Shows a spike with 25 cases per day

Metrics (continued)

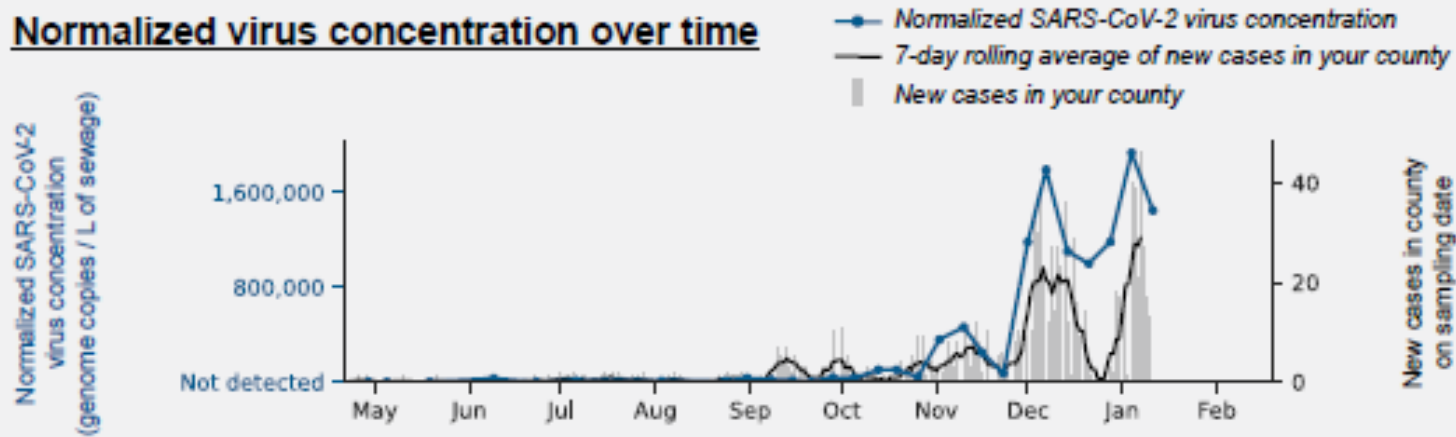


Metrics (continued)



Metrics (Sewage)

Normalized virus concentration over time



Population Estimate: 23,454 people

Formula: $\frac{1,290,000\text{gal/day}}{55\text{gal/day/person}}$

This week's report has not come back due to short week. Expected tomorrow or Friday

Biobot COVID19 incidence estimate*

* using Biobot's current analysis model v2.0, which reflects active R&D and will change over time with developing research

25 new cases / day
(0.13% incidence rate)

Using a reported flow rate of 1.29 MGD

For more information, read the whitepaper:

<https://doi.org/10.1101/2020.06.15.20117747>

This incidence estimate represents the projected average of **confirmed new clinical cases (per day)** that will be reported in your community 7 days from the sampling date. This estimate reflects active R&D.

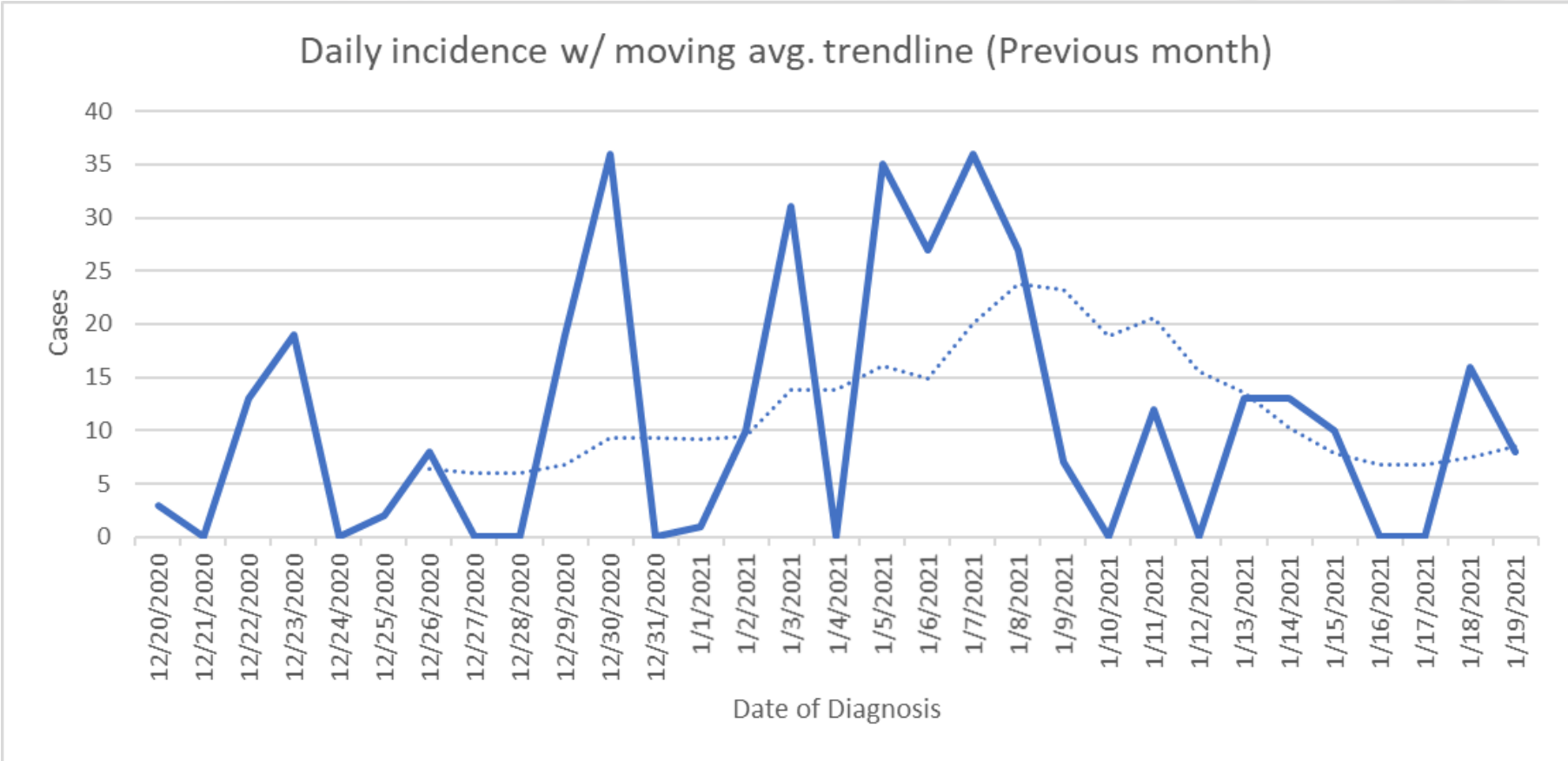
This number is derived from Biobot's latest proprietary case model, leveraging thousands of samples analyzed for Covid-19. For context, USAFacts reports – **new cases** on this sampling date and an average of – **cases per day** for the past 7 days in **Nantucket County, MA**.

Visit our website for more details behind the process:

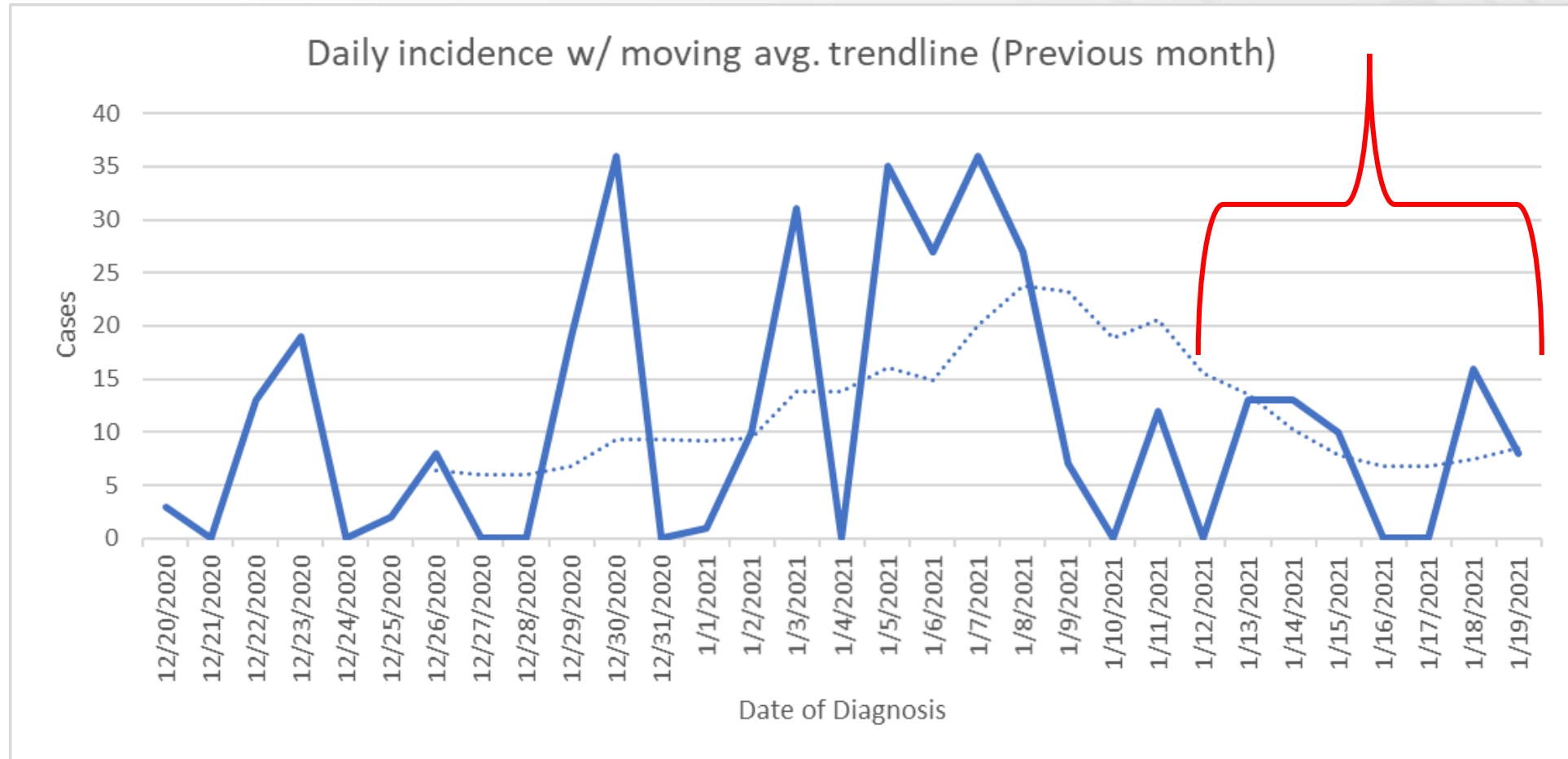
<https://www.biobot.io/case-estimates>

<https://www.biobot.io/updated-model>

Flatten The Curve



R_0 Visualized



7-day $R_0 \sim 0.8$

R_0 Visualized

Massachusetts ▾

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Current R_t

0.93

Cases

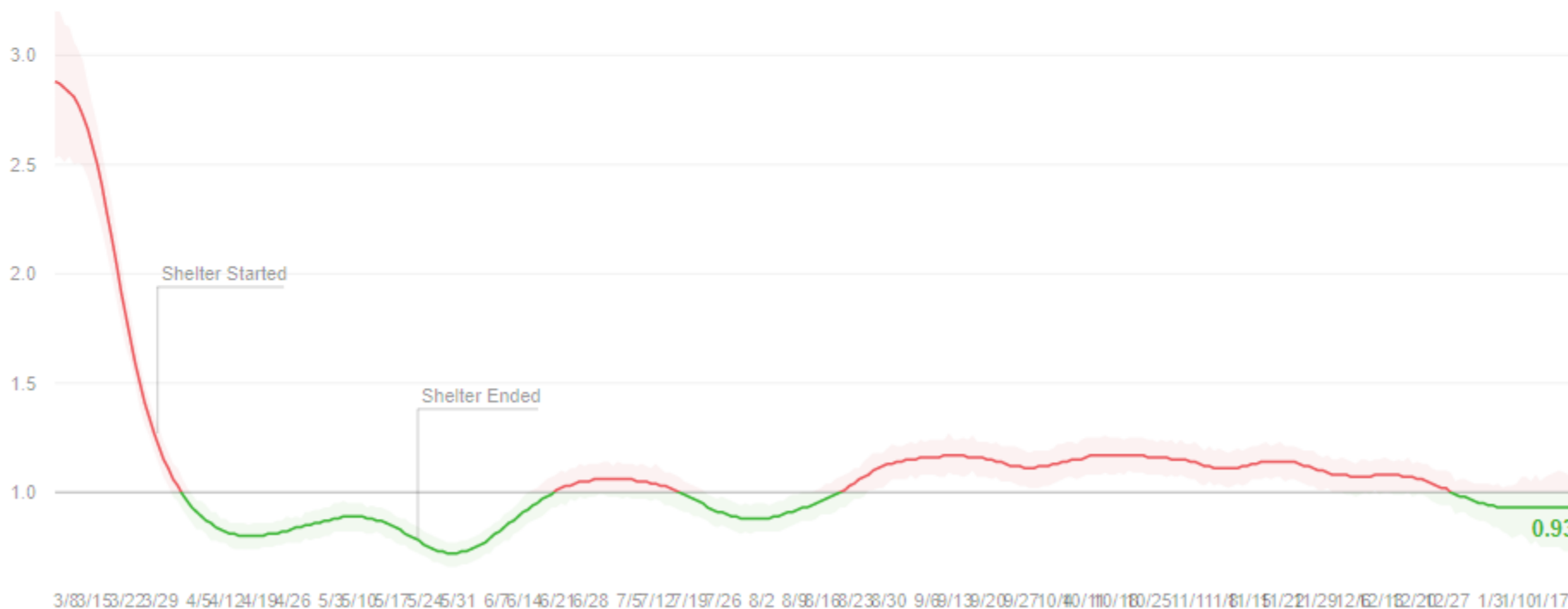
484,275

Tests

12,454,116

Effective Reproduction Rate · R_t

R_t is the average number of people who become infected by an infectious person. If it's above 1.0, COVID-19 will spread quickly. If it's below 1.0, infections will slow. [Learn More](#).



Vaccine Plan

When can I get a **COVID-19** vaccine in MA?



PHASE ONE

In order of priority

- Clinical and non-clinical healthcare workers doing direct and COVID-facing care
- Long term care facilities, rest homes and assisted living facilities
- Police, Fire and Emergency Medical Services
- Congregate care settings (including corrections and shelters)
- Home-based healthcare workers
- Healthcare workers doing non-COVID-facing care



PHASE TWO

In order of priority

- Individuals with 2+ comorbidities (high risk for COVID-19 complications)
- Early education, K-12, transit, grocery, utility, food and agriculture, sanitation, public works and public health workers
- Adults 65+
- Individuals with one comorbidity



PHASE THREE

Vaccine available to general public

December - February

Estimated timeframes

February - April

April - June

For more information on vaccine distribution visit [Mass.gov/COVIDvaccine](https://www.mass.gov/COVIDvaccine)



Vaccine Plan

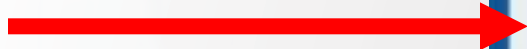


PHASE ONE

In order of priority

- Clinical and non-clinical healthcare workers doing direct and COVID-facing care
- Long term care facilities, rest homes and assisted living facilities
- First responders (EMS, Fire, Police)
- Congregate care settings (including corrections and shelters)
- Home-based healthcare workers
- Healthcare workers doing non-COVID-facing care

We are Here



December - February

Estimated timeframes

Vaccine Plan

- Currently in Phase I
 - OIH vaccinations completed first round of doses 1/5/21
 - First Responders began first round 1/11/21
 - Congregate care settings (ie. Sherburne commons main building) begins ~1/25/21
 - Phase I should be completed by Mid to Late February
 - Signup survey for Phase I available on town website
- Phase II
 - Begins late February to early April
 - Signup surveys are available later this week
 - Sign up for Patient Gateway

Vaccine Plan

- For more information Call 508-325-4151. This information will be updated periodically as we learn more.
- The Town Website has signup surveys available now for phase II
- Mass.gov provides statewide vaccination information

Vaccine Plan

- Visit the Town vaccine page at this QR code scannable with any smartphone or tablet.



