

# Outbreak Breakdown

April 24, 2020

*This weekly report is provided as an informal information resource for certain AdvaMed member work groups. Content is provided by staff and is not to be construed as conveying AdvaMed viewpoints or endorsement. AdvaMed's COVID-19 response is led by [Chris White](#), AdvaMed COVID Action Team Leader, COO & General Counsel. Newsletter contacts: [Andy Fish](#), Chief Strategy Officer and [Kristina Shultz](#), Manager, Strategy & Policy.*

## AdvaMed Update

**Payment Protection Program and Health Care Enhancement Act:** Today, President Trump signed into law a \$484 billion COVID-19 spending bill to replenish the Payment Protection Program (PPP) and provide funding for a number of other initiatives. The bill includes \$310 billion to replenish the PPP, \$60 billion for a separate small-business emergency loan and grant program, and \$100 billion for [various initiatives under the Department of Health and Human Services](#). Of that \$100 billion, \$75 billion is for hospitals and health-care providers, and \$25 billion will go toward tests and testing, contact tracing, surveillance, epidemiology, and related purposes. The bill now heads to the President for his signature.

**MedTech Responds:** For comprehensive information on AdvaMed's COVID-19 response and resources, please visit <https://medtechresponds.com>.

## Something Completely Different

Carl Sagan's [Baloney Detection Kit](#)

## Headlines

[Tulane Outbreak Daily](#)

[Johns Hopkins Daily COVID-19 Situation Reports](#)

[The Results of Coronavirus 'Serosurveys' Are Starting to be Released. Here's How to Kick Their Tires](#) |

STAT News, April 24

[Buildings Closed by Coronavirus Face Another Risk: Legionnaires' Disease](#) | Reuters, April 24

[Hidden Outbreaks Spread Through U.S. Cities Far Earlier Than Americans Knew, Estimates Say](#) | New

York Times, April 23

[How to build and deploy testing systems at unprecedented scale](#) | The Economist, April 23

[As Virus Advances, Doctors Rethink Rush to Ventilate](#) | Reuters, April 23

[What Is Contact Tracing? Here's How It Could Be Used to Help Fight Coronavirus](#) | Time, April 22

[COVID-19 Arrived in Seattle. Where it Went From There Stunned the Scientists](#) | New York Times, April

22

[What Happens If U.S. Reopens Too Fast? Documents Show Federal Coronavirus Projections](#) | NPR, April

21

[It's Not Too Late to Go on Offense Against the Coronavirus](#) | The New Yorker, April 20

[Coronavirus: Learning How to Dance](#) | Medium, April 20

[Everything We Know About Coronavirus Immunity and Antibodies — and Plenty We Still Don't](#) | STAT News, April 20

[Why It's So Hard to See into the Future of COVID-19](#) | Vox, April 18

[Influenza COVID-19 Model Uses Flawed Methods and Shouldn't Guide U.S. Policies, Critics Say](#) | STAT News, April 17

### **Model of the Week**

[R<sub>t</sub> Live](#) tracks the effective reproduction rate of SARS-CoV-2 in each state, allowing users to estimate how many secondary infections are likely to occur from a single infection in a specific area.

We have compiled [this informal guide](#) to prominent COVID-19 pandemic modeling initiatives and are updating it from time to time.

### **Research Roundup**

[Emory University Weekly COVID-19 Literature Round-Up](#)  
[Prevent Epidemics Weekly Science Review](#)

[COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China](#) | Emerging Infectious Diseases July 2020 (early release)

[Developing a National Strategy for Serology \(Antibody Testing\) in the United States](#) | Johns Hopkins Center for Health Security, April 22

[Immunity Certificates: If We Must Have Them, We Must Do It Right](#) | Harvard Center for Ethics, April 20  
[Public Health Principles for a Phased Reopening During COVID-19: Guidance for Governors](#) | Johns Hopkins Center for Health Security, April 17

### ***Observations***

- On Thursday, New York Governor Andrew Cuomo [announced](#) the preliminary results of a serosurvey conducted in New York state that found that 13.9% of the study sample tested positive for coronavirus antibodies. In New York City, 21% tested positive. Details about the study methodology and serological test used are very limited, so a full analysis is not yet possible, but the initial report indicates that cases are being significantly undercounted and, in New York City, may be about 12x higher than reported – a number that is in line with expert assumptions that cases are likely 10-20x higher than reported.
- The authors of the preprint [studies](#) conducting widespread serology testing in Santa Clara and Los Angeles Counties in California are reportedly working on an appendix to address recent [criticisms](#) of their study methodology. Many have criticized the study authors for using less-than-ideal sampling, testing, and statistical analysis methods that may have distorted the results and grossly overestimated the seroprevalence of COVID-19.
- A [JAMA study](#) reporting on the clinical characteristics and outcomes of 5700 COVID-19 patients in New York City has garnered a lot of media attention for reporting 88.1% mortality for patients who required mechanical ventilation. However – their study methods likely overestimated the true mortality rate for mechanical ventilation. At the endpoint of the study, the vast majority of patients

(831 out of 1151) on mechanical ventilation were still in the hospital with no recorded outcome. The exclusion of these patients from the denominator for the mortality calculation led to an artificially high mortality rate, since it's unlikely that all those 831 patients eventually died. The true mortality rate for mechanical ventilation is likely lower.

- Swedish researchers [retracted](#) a [report](#) released on Monday, April 20 that estimated high levels of exposure to SARS-CoV-2 in Stockholm and estimated that certain parts of the country could achieve herd immunity by May. The researchers attributed the swift retraction to an error in the analysis and plan to republish.