Outbreak Breakdown
May 1, 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

AdvaMed Letter to USTR Requesting Tariff Relief: On Thursday, AdvaMed submitted a letter to the United States Trade Representative (USTR) requesting additional tariff exclusions for more than 80 medical product types and components needed for healthcare providers and patients in the diagnosis, containment, and treatment of COVID-19. These items include infection control apparel, needles and syringes, ventilator components, dialysis machines, and diagnostic testing supplies. AdvaMed's press release on the USTR letter can be read here.

White House Blueprint for Testing Plans & Rapid Response Programs: Earlier this week, the White House released a testing blueprint and a testing overview outlining plans for partnerships between federal, state, local, and tribal governments; the private sector; and professional associations to meet the country's needs for diagnostic testing.

Privacy: Ongoing efforts to develop technologies and plans for pandemic monitoring and contact tracing have attracted attention from consumer privacy advocates and policymakers. As one indication of this rising interest, U.S. Senate Commerce Committee Chairman Roger Wicker (R-Miss.) announced pending introduction of a bill that would impose new privacy regulations on entities handling sensitive information in connection with COVID-19.

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

Something Completely Different

Rats! Eating Your Car, Enjoying A Tickle

Headlines

Tulane Outbreak Daily
Johns Hopkins Daily COVID-19 Situation Reports

Three Potential Futures for COVID-19 | STAT News, May 1
Find A Vaccine. Next: Produce 300 Million Vials of It. | New York Times, May 1
Labs Across U.S. Join Federal Initiative to Study Coronavirus Genome | New York Times, April 30
Tests in Recovered Patients Found False Positives, Not Reinfections, Experts Say | Korea Herald, April 29
Why the Coronavirus is So Confusing | The Atlantic, April 29
Tests in Recovered Patients Found False Positives, Not Reinfections, Experts Say | Korea Herald, April 29

[A Scramble for Virus Apps That Do No Harm](#) | New York Times, April 29
[Ex-Officials Call For $46 Billion For Tracing, Isolating In Next Coronavirus Package](#) | NPR, April 27
[U.S. Deaths Soared in Early Weeks of Pandemic, Far Exceeding Number Attributed to COVID-19](#) |
Washington Post, April 27
[Germany Moves to Decentralized Contact Tracing](#) | TechCrunch, April 27
[America's Coronavirus Testing is Increasing. It's Still Not Enough](#) | Vox, April 24
[The First Modern Pandemic: The Scientific Advances We Need to Stop COVID-19](#) | Gates Notes, April 23

Model of the Week

[COVID-19 Projections](#): This model (added earlier this week to CDC's [list](#) of forecasts) uses machine learning techniques to make COVID-19 projections for infections and deaths for all 50 US states and 40 countries around the world. The model is based on a traditional SEIR epidemiologic model and uses machine learning techniques to minimize the error between the projected outputs and actual results. Unlike other models that show a neat curve, this model better reflects reality, with undulating curves over time and increasingly wide error bars to reflect the increasing uncertainty as the model projects further and further into the future. It's the only model (that we're aware of) that factors in individual state reopening plans rather than assuming the country will reopen as a whole. See [this STAT News article](#) from yesterday, April 30, for more on this particular model.

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](#)
[Helio COVID-19 Resource Center](#)

ICYMI + Notes

Seroprevalence Studies: There have now been results reported from 30+ seroprevalence studies in various communities and countries. This [database](#) is tracking those studies and provides links to the source of results for each (whether it be a press release, pre-print, or published article). Taken individually, each study is limited by its study design, methods, sensitivity/specificity of test(s) used, and lack of formal peer review (and many likely share some of the flaws that plagued the now-infamous Santa Clara study). However, when examined as a whole, the body of evidence for COVID-19 seroprevalence begins to confirm some of the assumptions that have been made to this point: that more people have had COVID-19 than we know about, and that the true number of infections is likely within the range of 10-20x the number of confirmed cases.

Remdesivir Trial Results: In a flurry of activity Wednesday, preliminary results from several trials examining the use of remdesivir in patients with COVID-19 were publicly announced.
-Gilead Sciences [announced](#) (via press release) partial results from a trial comparing the efficacy of 5-day and 10-day treatment courses of remdesivir. Their trial found similar recovery times between the two groups; however, they did not provide any more information on patient outcomes and did not utilize a control group. Their results have not been peer-reviewed nor published.

-The US National Institute of Allergy and Infectious Diseases (NIAID) announced (also via press release) that their RCT involving 1000+ patients found that patients in the remdesivir group had a shorter time to recovery than those in the placebo group (median of 11 days compared to 15 days). It also indicated that remdesivir could have an impact on mortality, but the results just missed the mark of being statistically significant. Again – the results have not been peer-reviewed nor published.
-Also on Wednesday, an RCT investigating remdesivir in China was published in The Lancet. The researchers did not find statistically significant differences in clinical improvement or mortality between the groups receiving remdesivir versus a placebo.
Stay tuned for the release of more details and formal manuscripts of the Gilead and NIAID studies. For now – results seem to be mixed, but promising enough to warrant further study. As a result, FDA announced this afternoon that it will permit emergency use of remdesivir.

Airborne Transmission?: This week, Chinese scientists reported identifying genetic markers of SARS-CoV-2 in airborne droplets gathered from the air of two hospitals in Wuhan. This adds to the growing evidence that COVID-19 can spread through the air, and is one of the first studies examining airborne spread in real-world settings. It's unknown whether the virus isolated in their samples was infectious or not. See also this overview and commentary on the potential for airborne transmission.