Outbreak Breakdown
May 15, 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

FEMA Meeting to Develop Pandemic Response: FEMA will hold a public meeting next Thursday, May 21, to develop a 5-year voluntary agreement under the Defense Production Act to maximize the effectiveness of the distribution of health and medical resources nationwide during a pandemic. AdvaMed is preparing comments and will represent the industry in the meeting.

Congress Takes an Interest in Contact Tracing Privacy: AdvaMed is reviewing recent legislative proposals from leading Republicans and Democrats that would impose privacy-focused constraints on the use of data collected by digital tools in pandemic response efforts, including contact tracing.

MedTech Responds: Comprehensive information on AdvaMed's COVID-19 response and resources is available here.

Something Completely Different

Is the pandemic getting you down? We suggest comfort in a real-life Lord of the Flies that turned out much better than the fictional version, and catharsis in demolishing a coronavirus piñata.

Headlines

Tulane Outbreak Daily
Johns Hopkins Daily COVID-19 Situation Reports

Fears Grow Over New Outbreaks as More States Lift Restrictions on Bars, Beauty Shops, and Other Businesses | May 15, 2020
Why the Coronavirus Hits Kids and Adults So Differently | The Atlantic, May 15
Sweden Stayed Open. A Deadly Month Shows the Risks. | New York Times, May 15
The Numerical Language of COVID-19: A Primer | Wall Street Journal, May 15
Talking Can Generate Coronavirus Droplets That Linger Up to 14 Minutes | New York Times, May 14
A Guide to State Coronavirus Reopenings and Lockdowns | Wall Street Journal, May 14
How Virginia Juked Its COVID-19 Data | The Atlantic, May 13
Amid the Coronavirus Crisis, a Regimen for Reentry | New Yorker, May 13
Old Vaccine Gets New Look in Tests for Coronavirus Protection | Wall Street Journal, May 13
Fueled by the COVID-19 Pandemic, Remote Heart Monitoring Could Become Tech's Next Big Target | STAT News, May 13
As States Rush to Reopen, Scientists Fear a Coronavirus Comeback| New York Times, May 11
Wuhan Reports New COVID-19 Cases – the City's 1st in More than a Month| NPR, May 11

[Unreleased White House Report Shows Coronavirus Rates Spiking in Heartland Communities](#) | NBC News, May 11
[Bill Gates Has Regrets](#) | Wall Street Journal, May 11
[U.S. Falling Short on Needed Contact Tracers, Experts Say](#) | Wall Street Journal, May 10
[Doctors Keep Discovering New Ways the Coronavirus Attacks the Body](#) | Washington Post, May 10
[WHO Readies Coronavirus App for Checking Symptoms, Possibly Contact Tracing](#) | New York Times, May 8
[If 80% of Americans Wore Masks, COVID-19 Infections Would Plummet, New Study Says](#) | Vanity Fair, May 8
['Finally, A Virus Got Me.' Scientist Who Fought Ebola and HIV Reflects on Facing Death from COVID-19](#) | Science, May 8
[The Disappointing Truth About Antibody Testing](#) | The Verge, May 7

Model of the Week

We have compiled [this informal guide](#) to prominent COVID-19 pandemic modeling and data visualization initiatives and are updating it from time to time. Model of the Week coverage is based on apparent media and policy relevance, as well as what we deem of interest, not on an independent assessment of the accuracy or credibility of the models discussed.

Model of the Week - University of Massachusetts Ensemble Model: Many of the COVID-19 case and death forecasts made by prominent COVID-19 models have started to converge, with the gap between the most pessimistic and most optimistic models beginning to close. A team of experts at University of Massachusetts Amherst developed an [ensemble model](#) that merges eight of the leading models. This approach is less sensitive to the uncertainty and ongoing methodology changes in each individual model. It currently projects a cumulative death toll of 110,000 through June 6. The ensemble model is now displayed alongside the individual models on CDC's national forecast [page](#).

Runner Up - NextStrain Genomic Epidemiology Tool: Our modeling/data visualization [resource](#) includes the NextStrain [dashboard for SARS-CoV-2](#), which shows the phylogeny of SARS-CoV-2 based on thousands of genome samples from across the world. At this point in the pandemic, enough U.S. samples have been analyzed to draw some conclusions about how SARS-CoV-2 established itself and spread throughout the U.S. One of the creators of NextStrain wrote an [informal piece](#) this week highlighting some of those conclusions. His summary is also described in [this Mercury News article](#).

Want to see what goes into building a model? Today's Washington Post includes a [simulation exercise](#) to show, at a high level, what is involved in building an epidemiologic model.

ICYMI

Senate HELP Hearing: The Senate held a hearing this week to hear from four Administration officials at the forefront of pandemic response: NIH's Fauci, CDC's Redfield, FDA's Hahn, and HHS' Giroir. The hearing video and witness testimony can be found [here](#).

CDC Guidelines: Following earlier media coverage of a detailed but unreleased draft CDC guidance on reopening, on Thursday the agency released a set of one-page reopening guidances focused on [schools](#), [workplaces](#), [camps](#), [child care programs](#), [mass transit systems](#), and [bars and restaurants](#). These guidances do not refer to the potential use of diagnostic testing.

Tracking the Tracers: The MIT Tech Review launched a [Covid Tracing Tracker](#) tallying contract tracing apps deployed in numerous countries. The [tracker chart](#) includes brief notes on each app, indicates the underlying technology, and measures each app on several metrics pertaining to transparency and privacy.

Social Distancing and COVID-19 Spread: A [study](#) published yesterday in Health Affairs examined the effectiveness of social distancing policies in curbing the spread of COVID-19. The authors reported that government-imposed measures effectively slowed the daily growth rate, and that without those measures, the spread could have been 35 times greater. This [Washington Post article](#) provides a summary and some additional commentary on the implications of the study results.

CDC Morbidity and Mortality Weekly Report (MMWR) Excess Mortality Report: This week's edition of MMWR includes a [preliminary estimate](#) of excess all-cause mortality during the COVID-19 outbreak in New York City. Excess mortality analyses are one window into deaths attributable to COVID-19 specifically, as well as to the pandemic generally, that may be missed in initial official tallies.

Kidney Injury in COVID-19 Patients: A [study](#) of 5,449 patients treated in New York revealed that over a third (36%) of patients developed acute kidney injury (AKI) during their hospitalization. Of those patients with AKI, 14.3% required dialytic support (~5% of all patients). Most of the patients who developed AKI were on ventilators. High rates of AKI in hospitalized COVID-19 patients have been noted elsewhere in the world, and this study contributes to the growing evidence that AKI occurs frequently in COVID-19 patients. It remains to be seen whether COVID-19 survivors with AKI will require long-term renal care.

McKinsey Report on Contact Tracing: Late last week, McKinsey published an [article](#) on the practical applications of contact tracing for COVID-19.

Research Roundup

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