Outbreak Breakdown
June 19, 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 Notes

Senate HELP Hearing: We reported last week on U.S. Senate HELP Committee Chairman Lamar Alexander (R-Tenn.)'s release of a white paper for public comment, entitled *Preparing for the Next Pandemic*. Now the committee has scheduled a hearing on Tuesday, June 23rd, entitled "COVID-19: Lessons Learned to Prepare for the Next Pandemic."

House E&C Hearing: The House E&C Committee also will hold a hearing on Tuesday, June 23 entitled "Oversight of the Trump Administration's Response to the COVID-19 Pandemic."

PPE Sourcing: As reported previously, AdvaMed has established a PPE Sourcing Program to assist member companies with securing PPE supplies.

MedTech Responds: Comprehensive information on AdvaMed's COVID-19 response and resources is available here. A list of upcoming meetings and webinars that may be of interest to AdvaMed members is available here.

Something Completely Different

Remember the quaint distant past about 7 months ago when the big disaster on the world stage was Australian wildfires? Neither did we until this we saw this wholesome dose of platypodian rescue, and it reminded us that the platypus is a genetic Swiss Army knife of both reptilian and mammalian heritage with some hints of bird in the mix: no stomachs; retractable webbing; reptilian-style venom; an electro-receptive bill; a cloaca; and females without nipples that lactate through abdominal pores for egg-born young. No wonder it confounded zoologists 200 years ago.

Headlines

Tulane Outbreak Daily
Johns Hopkins Daily COVID-19 Situation Reports

Vice President Mike Pence's June 16th op-ed in the Wall Street Journal, There Isn't a Coronavirus 'Second Wave', received significant attention in follow up media coverage and commentary.

Florida Reports Record High Daily Covid-19 Cases | June 19
What Minnesota's Protests are Revealing About COVID-19 Spread | WIRED, June 18
How Likely Are Kids to Get COVID-19? Scientists See a 'Huge Puzzle' Without Easy Answers | STAT News, June 18

As States Reopen, Do They Have the Workforce They Need to Stop Coronavirus Outbreaks? | NPR, June 18
Covid-19 Is Bad. But It May Not Be the 'Big One' | Wired, June 18
Some Parts of the U.S. Are 'on the Cusp of Losing Control' of Coronavirus, Dr. Scott Gottlieb Says | CNBC, June 18
The Ultimate COVID-19 Mystery – Why Does it Spare Some and Kill Others? | Washington Post, June 17
England's 'World Beating' System to Track the Virus Is Anything But | New York Times, June 17
'When Am I Coming Home?': A Tough Month Inside a Virus Recovery Unit | New York Times, June 17
Amid Confusion About Reopening, an Expert Explains How to Assess COVID-19 Risk | NPR, June 17
Flushing the Toilet May Fling Coronavirus Aerosols All Over | New York Times, June 16
Public and Private Sectors Clash on Contact Tracing | Reason, June 16
A Woman and 15 of Her Friends Have the Coronavirus After One Night Out | Buzzfeed, June 16
Record Spike in New Coronavirus Cases Reported in Six U.S. States as Reopening Accelerates | Reuters, June 16
A Warning From South Korea: The 'Fantasy' of Returning to Normal Life | Financial Times, June 16
Beijing Shuts Schools to Stem Virus as Cases Spread Beyond City | Bloomberg, June 16
How Deadly Is the Coronavirus? Scientists Are Close to an Answer | Nature, June 16
We Have the Technology to Stop a Second Wave | Bloomberg, June 15
To Understand Who's Dying of COVID-19, Look to Social Factors Like Race More Than Preexisting Diseases | STAT News, June 15
The Pandemic Claims New Victims: Prestigious Medical Journals | New York Times, June 14
The Media Said Trump Didn't Have a COVID Testing Strategy. the Media Was Wrong. | National Review, June 14
Spate Of New Research Supports Wearing Masks To Control Coronavirus Spread | Washington Post, June 13
Coronavirus 2nd Wave? Nope, the U.S. Is Still Stuck in the 1st One | NPR, June 12

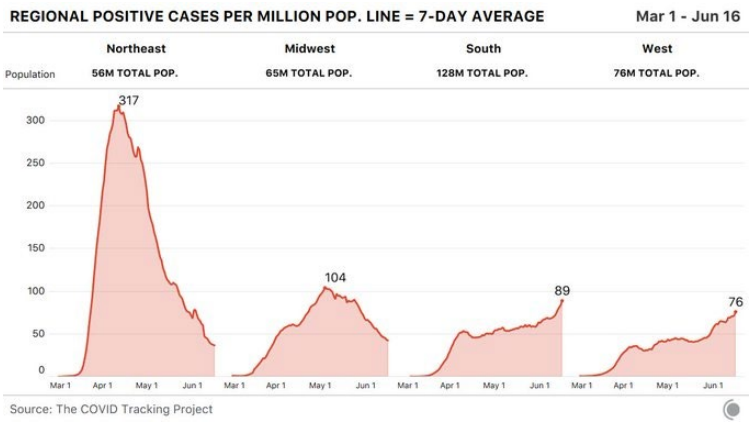
Pandemic Outlook

Global: As of June 19, there are 8.4 million cases and over 450,000 deaths worldwide. The pandemic continues to grow globally, with eighty-one countries reporting a growth in new cases over the past two weeks. This week, daily new cases reached all-time highs, largely driven by accelerating epidemics in the Americas, South Asia, and Africa. Brazil still reports the world's highest daily incidence of cases, reporting over 30,000 new cases per day (on average). The U.S. reports the second-most new cases per day (~20,000-25,000 new cases per day), and India reports the third-most new cases per day (~10,000 new cases per day). World Health Organization Director General Tedros Adhanom Ghebreyesus warned in a virtual press briefing today that "the world is in a new and dangerous phase."

Countries that have successfully reduced their caseloads to very low levels are facing new outbreaks, demonstrating the constant risk of resurgences and need for continued vigilance and preventative measures until a vaccine is found. After 24 days of no new cases, New Zealand now has three positive cases – all people who recently traveled to the country from elsewhere in the world. In China, an outbreak of 130+ cases in Beijing (after 55 days of no community transmission) has prompted Chinese officials to resume many lockdown measures and restrict travel to and from the city. The outbreak has been traced to a large market, but the actual source of the virus remains unknown.

United States: As of June 19, the U.S. has nearly 2.2 million cases of COVID-19 and has had over 118,000 deaths. The country adds about 20,000 new cases per day – a number which has held steady over the

past few weeks and appears to be starting to climb again. When the U.S. is divided into four geographic quadrants, the data looks very different from one region to the next:



Cases in the Northeast have dropped significantly since its peak in early-mid April. The Midwest also has gradually declining cases. In the South and West, however, cases continue to climb. In some states and cities, new cases and hospitalizations are rapidly accelerating. This week, Arizona, Florida, and Texas reported their highest-ever new daily cases. Many states are also reporting increasing hospitalizations, indicating that the increase in new cases is not solely due to increased testing.

COVID Exit Strategy continues to track individual states' progress towards meeting CDC's recommended reopening criteria.

ICYMI

COVID-19 Modeling & Data Visualization Guide: We have compiled this informal guide to prominent COVID-19 pandemic modeling and data visualization initiatives and are updating it from time to time.

CDC Guidelines for Going Out: Earlier this week, CDC updated its website to include guidance intended help the general public understand and mitigate the risks of resuming social activities. The guidelines includes specific recommendations for running errands, using public transportation, attending medical appointments, visiting parks and other recreational facilities, and general personal and social activities (dining out, hosting gatherings, using gyms, etc.).

We Have Contact: The CDC updated its Contact Tracing web page this week with several new materials, while digital contact tracing continues to get a mixed reception among the states that are focused on hiring traditional contact tracers, and Canada announced an initiative to roll out a contact tracing app nationwide. Among the CDC's new materials: a so-called COVIDTracer, a spreadsheet-based algorithm that recommends one of three different contact tracing/monitoring strategies for a local jurisdiction depending on a number of user entered variables. The CDC also notes in a new overview of contact tracing that the agency is providing assistance through over 300 CDC assignees embedded in state and local health departments and is hiring an additional 665 public health professionals to supplement state and local work forces. CDC's sample training plans provide some insight into what's like being a contact tracer.

Animal-to-Human Transmission: Officials in the Netherlands have warned that additional research on animal-to-human transmission of SARS-CoV-2 is needed after several people working on a Dutch fur farm are suspected to have been infected by minks. The minks likely caught the virus from their human handlers in mid-April, with many of them showing some symptoms, and then passed it back to previously uninfected handlers. SARS-CoV-2 infections have been reported in other animals, but this is the first known case of the virus cycling from humans to animals and back again.

Updated CDC Testing Guidance: Late last week, CDC issued an updated SARS-CoV-2 testing guidance. The new guidance combines existing information with new recommendations to provide a single source of testing information. The document addresses both diagnostic and serological testing and provides information on testing symptomatic and asymptomatic individuals. The guidance also includes recommendations for high-risk populations, such as long-term care and prison facilities, and critical infrastructure workplace settings.

Research Roundup

Prevent Epidemics Weekly Science Review
Helio COVID-19 Resource Center

Antibodies: A study published Thursday in Nature Medicine found that neutralizing SARS-CoV-2 antibodies – the antibodies needed to prevent a second infection – may only last a couple months. Researchers compared people who had asymptomatic infections with those who were symptomatic. They reported than within eight weeks, 81% of asymptomatic individuals saw a reduction in neutralizing antibodies (40% saw antibodies fall below the minimum detectable level during that time). 62% of individuals with symptomatic infections experienced a reduction in neutralizing antibodies (13% saw antibodies fall below the minimum detectable level). The study had a very small sample size, so results should be interpreted with caution, but the findings add to growing concern that immunity may not be long-lasting and countries considering "immunity passports" should reconsider until more is known about SARS-CoV-2 immunity.

Dexamethasone: This week, researchers in the United Kingdom shared preliminary findings indicating that dexamethasone, a steroid, could be effective at reducing COVID-19 mortality – especially in the most severe cases. The trial is a part of the UK's RECOVERY trial which is investigating a range of potential treatments for COVID-19. In the dexamethasone arm of the trial, patients who received dexamethasone reduced mortality by 34% in patients on mechanical ventilation and 20% in patients receiving oxygen compared to a control group receiving usual care. The researchers findings were announced through a press release – full details are yet to be released and go through the peer review process. Some prominent scientists urged caution in interpreting these results until these findings are validated and confirmed through additional trials.

COVID-19 in Kids: A study published in Nature Medicine this week found that children (ages 19 and under) are half as susceptible to developing a COVID-19 infection as adults, suggesting that interventions targeting kids may not be very effective in reducing overall SARS-CoV-2 transmission. Of those who do get sick, most are asymptomatic or have mild "subclinical" symptoms. Researchers reported that in their study, 21% of children age 10-19 developed clinical symptoms. The percentage of people who developed symptoms increased with age – 69% of adults over the age of 70 developed clinical symptoms. The effect of COVID-19 on children is still not well understood, and while this study

provides additional evidence supporting the idea that children are less likely to be infected, it is still unclear what role children play in transmitting the virus to others.