

Outbreak Breakdown

July 31, 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 & Resources

Diagnostic Testing Registry: AdvaMed's National Testing Registry released its [second public report](#) this week, revealing that shipments of COVID-19 molecular diagnostic tests reached one million per day last week. See AdvaMed's press release [here](#). AdvaMed CEO Scott Whitaker published an op-ed on the registry in Wednesday's [Morning Consult](#).

AdvaMed Resources:

[PPE Sourcing Program](#)

[MedTech Responds](#)

Something Completely Different

Come to count the [sheep](#), visit [Middle Earth](#), or take refuge in an [almost COVID-free country](#), but scratch Eel McPherson off your list: Whangārei's favorite [shortfin eel](#) has given its longtime keeper [the slip\(pery\)](#) after 35 years as a [model](#) pet.

Pandemic Snapshot

Global: Current Cases: [17,299,200](#) Deaths: [673,924](#)

United States: Current Cases: [4,502,500](#) Deaths: [152,431](#)

- New cases seem to have passed a peak, with fewer new cases reported this week than last.
- Hospitalizations appear to be flat, but concern remains that new reporting requirements have made publicly available hospitalization data [incomplete and unreliable](#).
- Deaths from COVID-19 are still rising and are up 16% this week over last.
- A [federal report](#) dated July 26 found that there are now 21 states in the "red zone," with more than 100 new cases per 100,000 population: Alabama, Arizona, Arkansas, California, Florida, Georgia, Idaho, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, Tennessee, Texas, Utah and Wisconsin (Missouri, North Dakota, and Wisconsin are new to the list of "red zone" states since the previous report issued on July 14). Vermont is the only state listed in the "green" zone. The findings of the report were distributed to states by the White House Coronavirus Task Force.

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

[AdvaMed COVID-19 Modeling & Data Visualization Resources](#)

News & Insights

SARS-CoV-2 Viral Levels Higher in Young Children Than Adults: A new [study](#) published Thursday in JAMA found that children with COVID-19 have similar levels of virus in their upper respiratory tracts as adults. More notably, researchers found that children under the age of 5 may host [10 to 100 times](#) the amount of virus in their upper respiratory tracts as adults. The tests used in this study detected viral nucleic acid, not live infectious virus, so the findings don't necessarily mean that young children are able to more easily transmit SARS-CoV-2 than older children or adults (although studies of [other pediatric respiratory viruses](#) suggest that is plausible). Further research is needed to more fully understand the role of children in the spread of SARS-CoV-2.

College Outlook: Attention is turning to the impending start of the school year and college plans are [running the gamut](#). With thousands of COVID-19 cases attributed to college campuses and tuition bills coming due, questions loom regarding [responsibilities and accountability](#). Testing [protocols](#) and state testing [mandates](#) are figuring heavily in return to school plans.

Report on Long-Term Health Effects of COVID-19: The US CDC COVID-19 Response Team and researchers from across the U.S. published an analysis of the long-term health effects of COVID-19 in patients who did not require hospitalization in the [latest Morbidity and Mortality Weekly Report](#). 35% of the 270 patients (interviewed 2-3 weeks after their positive COVID test result) reported that they had not returned to their usual state of health. The proportion of patients who had not yet fully recovered increased with age (from 26% of patients aged 18-34 to 47% of patients aged 50 year and older) and number of underlying health conditions (from 28% of patients with zero or one underlying condition to 57% of patients with 3 or more underlying health conditions).

NIH Director on T-Cell Immunity: NIH Director Francis Collins published a [blog post](#) this week on the role of T cells in SARS-CoV-2 immunity. The post highlights [recent findings](#) that some people newly infected with SARS-CoV-2 may receive some immune protection from memory T cells generated during prior infections with other human coronaviruses.

SARS-CoV-2 Origins: [Research published earlier this week](#) traced the evolutionary origins of SARS-CoV-2 and determined that the closest ancestor of SARS-CoV-2 emerged 40-70 years ago in bats and has been poised to make the jump to humans for quite some time. It's still unknown how and when SARS-CoV-2 crossed to humans, but the researchers emphasized the need for [further surveillance](#) of emerging infectious diseases and more sampling of wild bat populations to quickly identify new viruses and prevent future pandemics.

Report on How to "Reset" U.S. Response: The Johns Hopkins Center for Health Security published a [new report](#) outlining policy steps that should be taken at the federal, state, and local levels to adjust the national response to COVID-19 to bring the U.S. epidemic under control.

[We Thought It Was Just a Respiratory Virus](#) | UCSF Magazine, Summer 2020

[A Second Wave of Coronavirus? Scientists Say the World Is Still Deep in the First.](#) | Washington Post, July 31

[Coronavirus Bounces Back Where It Had Been Knocked Out](#) | Axios, July 30

[We Need to Talk About Ventilation](#) | The Atlantic, July 30

['A Huge Experiment': How the World Made So Much Progress on a COVID-19 Vaccine So Fast](#) | STAT News, July 30

[Young People Are Infecting Older Family Members in Shared Homes](#) | Washington Post, July 29

[An Immune Protein Could Prevent Severe COVID-19—If It Is Given at the Right Time](#) | Scientific American, July 28

[Hygiene Theater Is a Huge Waste of Time](#) | The Atlantic, July 27

[Summer Road Trippers Are Creating New COVID-19 Hot Spots, per New Research](#) | Forbes, July 27

[Masks May Reduce Viral Dose, Some Experts Say](#) | New York Times, July 27

[COVID-19 Infections Leave an Impact on the Heart, Raising Concerns About Lasting Damage](#) | STAT News, July 27

[Suffering From COVID for Months—and Battling Murky Test Results Too](#) | Wall Street Journal, July 27

[As COVID-19 Surges, Researchers Amass Lung Scans to Build AI Systems for Patient Care](#) | STAT News, July 27

[Your Coronavirus Antibodies Are Disappearing. Should You Care?](#) | New York Times, July 26

[These Elite Contact Tracers Show the World How to Beat Covid-19](#) | Bloomberg, July 25

[Researchers Trained Dogs to Sniff Out COVID-19 Infections in Just a Few Days](#) | CBS News, July 24

More News

[MIT Technology Review Coronavirus Coverage](#)

[Tulane Outbreak Daily](#)

[Prevent Epidemics Weekly Science Review](#)

[Helio COVID-19 Resource Center](#)

[Johns Hopkins Novel Coronavirus Research Compendium](#)