

## Outbreak Breakdown

November 13, 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. Newsletter Editors: [Andy Fish](#), Chief Strategy Officer and [Kristina Shultz](#), Manager, Strategy & Policy. Inquiries about AdvaMed's COVID-19 response can be directed to [Chris White](#), AdvaMed COVID Action Team Leader, COO & General Counsel.*

### AdvaMed Resources:

[COVID-19 Diagnostic Supply Registry](#)

[PPE Sourcing Program](#)

[MedTech Responds](#)

### Something Completely Different

The famed Neolithic ice man [Otzi](#) now has a companion in the [Lady of Bietikow](#), but even these ancient [corporeal relics](#) are predated by the [world's oldest mummies](#) and possibly by some of the [bog bodies](#) as well.

### Pandemic Snapshot

**Global:** Current Cases: [52,927,600](#) Deaths: [1,295,800](#)

- Cases are surging across most of the Northern Hemisphere. France is now reporting the second highest daily incidence of over 50,000 cases per day (the U.S. is still #1).
- Some European countries that recently imposed strict lockdowns to slow transmission, including Belgium, the Netherlands, the Czech Republic, Slovakia, and Slovenia, are seeing declines in new cases.
- Shanghai, China reported a [locally acquired case](#) this week after several months of no local infections.

**United States:** Current Cases: [10,637,400](#) Deaths: [242,800](#)

- Cases continue to rise dramatically across virtually every state in the U.S. This past week, cases rose by more than 40% over the previous week and are now averaging 130,000 new cases per day. Testing only rose 13% this week over last, indicating that the surge in new cases is due to increased transmission, not increased testing.
- Deaths rose 23% this week over last and are now averaging over 1,000 per day.
- Hospitalizations are rising almost as quickly as they did in late March and rose in all but four states this past week. Read more about the rise in hospitalizations [here](#). In North Dakota, Governor Doug Burgum announced that due to serious health care staffing shortages, COVID-positive nurses [will be allowed](#) to continue working.
- States and cities across the country are announcing new restrictions intended to curb viral spread. Today, new restrictions, including limitations on in-home gatherings, are in place in [New York and New Jersey](#). Yesterday, [Chicago](#) issued a stay-at-home advisory that will remain in place for 30 days. Earlier this week, the governor of [Utah](#) declared a state of emergency and statewide mask mandate.
- See a more detailed analysis of this week's numbers in this [COVID Tracking Project update](#).

## News & Insights

**Pfizer/BioNTech Vaccine:** On Monday, [Pfizer and BioNTech](#) announced that a preliminary analysis of clinical trial data for their SARS-CoV-2 vaccine candidate showed the vaccine could be [90% effective](#) at preventing COVID-19. While the results are very encouraging, Pfizer and BioNTech did not share [key details](#) on how the vaccine performed in certain subgroups (e.g. children or the elderly); whether it prevented asymptomatic infections; or whether it was effective in preventing severe COVID-19 illness. This information will be vital in determining how and where this vaccine may be impactful. Additional data is still needed to better understand the vaccine's safety and efficacy. Pfizer is expected to seek emergency use authorization in the next few weeks.

**Resurgence in Long-Term Care Facilities:** Long-term care facilities are experiencing an alarming third surge of cases. 24,000 new cases were identified just this past week, and deaths are beginning to climb. In October, 8.4% of residents with COVID-19 died (based on available evidence from states). This case fatality rate, while lower than earlier in the pandemic, is still much higher than in the general population. The COVID Tracking Project is tracking COVID-19 in long-term care facilities and has built a [database](#) that is searchable by state and facility. They also produce a weekly summary on cases and deaths in long-term care facilities – see this week's update [here](#).

**CDC Mask Guidance:** This week, CDC released a [scientific brief](#) that recognizes that cloth face masks protect the wearer as well as people around them. Previously, CDC only emphasized the value of masks as “source control” – e.g., reducing the volume of droplets expelled into the air that could infect others. In the brief, CDC outlined the experimental and epidemiological evidence supporting cloth face masks as effective filtration devices for personal protection. CDC also included results of an analysis that showed that increasing universal masking by 15% could prevent the need for lockdowns and reduce associated losses of up to \$1 trillion. CDC has not yet updated its [guidance](#) on mask-wearing by the general public to reflect the shift in stance.

**Big Data & Superspreading Locations:** Researchers from Stanford and Northwestern Universities [published a study](#) this week that [combined cellphone data and infectious disease modeling](#) to estimate where the virus is most easily transmitted and which control measures may be most effective. The study's model predicted that venues such as restaurants, gyms, and religious establishments contributed disproportionately to driving up infection rates this past spring (which is in agreement with many epidemiological analyses) but that the level of risk varied by neighborhood. The researchers observed many of the disparities that have been noted throughout this pandemic: people in lower-income neighborhoods were more mobile than those in higher-income neighborhoods, likely as a result of more low-income people holding essential jobs that must be performed in-person, and shopped for groceries more frequently and in smaller, more crowded stores.

The study's model predicted that targeted interventions intended to reduce the number of person-hours spent in such risk high-occupancy settings would likely result in a more significant decrease in new infections than less-targeted interventions. The model predicted that setting an occupancy limit of 20%

of maximum capacity for the public spaces assessed in the study could cut new infections by more than 80%. A [commentary](#) written by Marc Lipsitch and Kevin Ma of Harvard T.H. Chan School of Public Health was published alongside the study.

**Eli Lilly Monoclonal Antibody:** The FDA [issued an emergency use authorization](#) (EUA) for bamlanivimab, a monoclonal antibody treatment developed by Eli Lilly as a treatment for COVID-19. This is the first EUA issued for an antibody treatment for COVID-19. The treatment was authorized for use in patients with mild-to-moderate COVID-19 who are not hospitalized and at high risk for severe COVID-19 illness. The EUA specified that bamlanivimab should not be used in patients receiving supplemental oxygen as it could increase the risk of worse clinical outcomes.

[‘Prone’ COVID Patients Seems to Save Lives. But How Many?](#) | Wired, November 12

[These Researchers Tested Positive. But the Virus Wasn’t the Cause.](#) | New York Times, November 12

[‘We’re Being Left Behind’: Rural Hospitals Can’t Afford Ultra-Cold Freezers to Store the Leading COVID-19 Vaccine](#) | STAT News, November 11

[Moderna Closes In On Release of COVID-19 Vaccine Data](#) | Reuters, November 11

[One in Five COVID-19 Patients Are Diagnosed With a Mental Illness Within Three Months](#) | Technology Review, November 11

[We Helped a New York Sewage Plant Check Poop for the Coronavirus](#) | The Verge, November 10

[The Worst Day of the Pandemic Since May](#) | The Atlantic, November 10

[The Children Never Had the Coronavirus. So Why Did They Have Antibodies?](#) | New York Times, November 10

[The Story of mRNA: How a Once-Dismissed Idea Became a Leading Technology in the COVID Vaccine Race](#) | STAT News, November 10

[In New COVID-19 Surge, Testing and Data Woes Challenge U.S. Response](#) | Wall Street Journal, November 10

[New Type of Test May Better Discern Immunity to the Coronavirus](#) | New York Times, November 10

[A COVID Tracing App Misses the Mark](#) | The Verge, November 7

[CDC Report: Officials Knew Coronavirus Test Was Flawed but Released it Anyway](#) | NPR, November 6

## 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](#)