AAMC Novel Coronavirus Update
April 8, 2020

This is the last issue that will be disseminated broadly — if you would like to opt-in to receive future updates, add your name, email, and institution to this survey.

To help filter through the large volume of news about the novel coronavirus, Ross McKinney Jr., MD, AAMC chief scientific officer, with assistance from his team in the Scientific Affairs unit at the AAMC, has initiated a new, science-focused newsletter. This limited-run newsletter will be issued every Monday, Wednesday, and Friday during these weeks of the initial phase of the coronavirus crisis.

Contact AAMC Senior Science Policy Specialist Amanda Field, PhD, with any other questions or requests.

To access the latest AAMC updates and resources on COVID-19, visit aamc.org/coronavirus.

Please share/forward this newsletter freely.

Today's Numbers

- World: 1,452,378 cases (83,615 deaths)
  - 1.6 times the number of cases and 1.9 times the number of deaths over the past week
- United States: 401,166 (12,936)
  - 2.1 times the number of cases and 3.2 times the number of deaths over the past week
- U.S. Hotspots:
  - New York: 140,386 (5,489)
  - New Jersey: 44,416 (1,232)
  - Michigan: 18,970 (845)
  - California: 17,625 (452)
  - Louisiana: 16,284 (582)

For the most up-to-date data, refer to the Johns Hopkins COVID-19 Map.

[Editor’s comment: Like many of you, we’re glued to the Hopkins COVID-19 map. Here’s the story of how it came about, and more on Lauren Gardner and Ensheng Dong, the team who put it together.]

The Institute for Health Metrics and Evaluation at the University of Washington Medicine is projecting hospital resource use in the United States based on COVID-19 deaths. It now predicts a national peak resource use date of April 11, advanced from the previous
prediction of April 15, though its projections show that this timing can vary greatly by state.

**Lead News**

At a time where air pollution standards are under attack by advocates for coal and for lowering automotive emission standards, there is evidence that air pollution increases COVID-19 mortality.

**Treatment News**

The world’s largest clinical trial of a coronavirus treatment, which involves “injecting antibody-rich plasma from patients who have recovered from the virus into those who are still infected,” is taking place across 40 hospitals in Canada with 1,000 coronavirus patients. The trial leadership acknowledges that the treatment only has a small chance at success.

**Clinical News**

Preliminary U.S. data from the Centers for Disease Control and Prevention (CDC) agrees with global observations that serious illness is much less likely in children.

COVID-19 was slow to reach rural America, but it turns out that lack of urban density is not adequate protection.

JAMA: The COVID-19 Pandemic in the US: A Clinical Update

While the discussion about droplet versus airborne spread of the virus that causes COVID-19, SARS-CoV-2, continues, the World Health Organization has weighed the evidence and favors droplets as the predominant mode of contagion.

**Policy News**

The Department of Health and Human Services (HHS) released a final rule on how the agency will apply the Privacy Rule (under HIPAA) to facilitate the use and disclosure of protected health information by business associates for certain public health and health oversight activities during the COVID-19 public health emergency.

The Trump administration has stated its intention to use funds from the $100 billion allocated for hospitals in the CARES Act (the third and most recent stimulus package) to pay hospitals for treatment of uninsured COVID-19 patients. The AAMC urges the administration “to use tools already at its disposal to ensure that every single individual has access to affordable and comprehensive coverage” rather than divert resources intended to support the hospitals and physicians on the front lines of this crisis.

As COVID-19 spreads, ethicists at academic medical institutions are updating guidance around the allocation of scarce medical resources in the event they have to ration care.
Coronavirus and Health Equity

Anthony Fauci, MD, director of the National Institutes of Health (NIH) National Institute of Allergy and Infectious Diseases, explained in a White House press briefing that “existing health disparities have made the outbreak worse for the African American community,” and Surgeon General Jerome Adams, MD, confirmed Dr. Fauci’s remarks separately. Data continues to show that the coronavirus pandemic is hitting racial and ethnic minority populations harder, including undocumented immigrants and native, incarcerated, and homeless populations. Disparities have been identified in Louisiana, Kansas City, and Pennsylvania, and the “Baltimore city council introduced a bill requiring the city’s commissioner to report patients’ races and zip codes” to address these disparities. [Editor’s comment: These inequities are not due to increased susceptibility based on race. Rather, inequitable systems and structures have created minority communities that have fewer economic resources/agility and increased comorbidities and health disparities, all of which increase population vulnerability to the coronavirus.]

Modern Healthcare: Long-standing Racial and Income Disparities Seen Creeping into COVID-19 Care

While the CDC recommends that everyone cover their faces with a cloth mask in public spaces, some black men are wary of doing so because they “fear that they could be mistaken for individuals involved in gang activity or otherwise treated with suspicion while they try to observe best practices in public.” [Editor’s comment: It is essential to engage communities when developing public health and health care policy.]

As homeless people are unable to comply with the CDC’s recommendations to “stay home,” cases of COVID-19 are likely to surge in their population, as they have in Boston.

Research News

One of the challenges to a fast-moving epidemic is disseminating information. This article in JAMA describes the baseline characteristics of people admitted to intensive care units (ICUs) in Italy because the outcomes were still not clear — 920 of the 1581 subjects with disposition data were still in the ICU at the time of the manuscript submission.

The repurposing of existing drugs for COVID-19 has the advantage of known pharmacologic profiles, including dosing characteristics and side effect frequencies. [Editor’s comment: On the other hand, sometimes it means you’re trying to hammer a nail with a screwdriver. High throughput screeners can identify potential antiviral drugs from among existing drug libraries, but there may or may not be a good match.]

Testing News

Sample pooling, in which a specific disease is tested for from a large number of patients within a population regardless of what they are seeking care for, enables the ability to find infections of low prevalence in a community and so might be useful for screening large populations at lower cost. This may not be as useful now, but once COVID-19 comes under better control, it might be a way to monitor populations for the reintroduction of virus, so we could know more quickly when the virus is circulating in a community.

Respiratory coronaviruses are routinely found in stool samples from infected individuals,
and wastewater monitoring has long been used to identify when poliovirus is circulating in a community. Researchers have proposed looking at wastewater for evidence of SARS-CoV-2 circulation.

Science: Unprecedented Nationwide Blood Studies Seek to Track U.S. Coronavirus Spread

Other COVID-19 News

A report from the HHS, which was based on interviews with administrators from 324 hospitals and health systems between March 23 and March 27, found that “many hospitals lacked enough thermometers to monitor the temperatures of its own staff and a sufficient number of masks to protect their workers while caring for infected patients.” The article also noted that some hospitals reported being days away from running out of masks and other supplies.

COVID-19 claimed another well-known artist, musician John Prine.

New York Times: Bad News Wrapped in Protein: Inside the Coronavirus Genome

STAT: After 9/11, We Gave Up Privacy for Security. Will We Make the Same Trade-off after Covid-19?

For questions, contact Amanda Field, PhD, AAMC senior science policy specialist.

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