

16 June 2020

BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Symptom-free patients from the Diamond Princess Cruise studied. From the early days of the SARS-CoV-2 outbreak and the eventual pandemic that followed, the role of symptom-free spread has been a source of confusion among the public and disagreement among experts. Is symptom-free spread rare or common? Early studies [suggested](#) that the contribution of “asymptomatic” transmission of the virus from one person to the next was low, perhaps under 10 percent of new cases. [Later](#) studies reported far higher numbers. Why was symptom-free contagion so poorly understood early on? Part of the explanation may owe to limited testing capacity and inadequacies in what experts call “contact tracing.” Contact tracing is the practice of tracking down anyone who came into contact with an infected person and instructing those individuals to quarantine for a period of time and/or be tested for the virus. Usually, contact tracers are told to try to find anyone who may have interacted with an infected patient in the two days prior to when symptoms began or two days before a positive viral test was obtained among symptom-free persons. (Two days is the timeframe that the World Health Organization, for example, instructs contact tracers to consider.) The problem that the novel coronavirus poses for virus hunters, it appears, is that it may be contagious by infected persons who do not have symptoms—regardless of whether they will later develop them—for far longer than two days, and longer than most respiratory viruses that cause serious short-term serious illness. This means that the usual approach to contact tracing, while important, may be insufficient to stop the spread of the virus. Enter the Diamond Princess Cruise outbreak. Many experts have seen that outbreak as an opportunity to study many aspects of the SARS-CoV-2, because it was a “closed system” in which all passengers and patients were closely followed for weeks. A [new report](#) in *The New England Journal of Medicine* describes the number of infected persons who were free of symptoms at the time of testing and how many of them went on to experience covid-19 symptoms. Of the 3,711 passengers and crew, nearly all were tested and 712 infections were diagnosed as infected. At the time of a positive test, 58 percent had no symptoms, far higher than contemporaneous reports from China and elsewhere. Of those, 96 people were removed from the ship and taken to a hospital in Japan where they were monitored closely. Among that group, 11 people eventually developed symptoms, which changed their designation from “asymptomatic” (never developed symptoms) to “presymptomatic” (eventually developed symptoms). Presymptomatic persons took an average of 4 days from the first positive test until any symptoms appeared. Additionally, some of the cabinmates of the SARS-CoV-2 positive asymptomatic passengers and crew who had tested negative while on the ship (despite rooming with a positive person) were also transferred to the hospital, isolated, and tracked. Of 32 such individuals, eight later tested positive in the hospital, suggesting that asymptomatic spread was not uncommon. The fact that these 32 people were not initially positive for the virus suggests that the longer they spent with an infected person, the more likely their infection became. This may be because of repeated exposure or because asymptomatic persons became more contagious later in their course of infection. Other interesting findings reported in the study include the observation that presymptomatic disease (as opposed to asymptomatic infection) was more common in older patients. Also, around half of all patients tested negative (twice) by 8 days after the positive test; 90% tested negative by 15 days. Older age was associated with a slower resolution of infection.

–Jeremy Samuel Faust MD MS

POLICY BRIEFING

FDA revoked emergency authorization for hydroxychloroquine.

Citing the emerging scientific data indicating that hydroxychloroquine and chloroquine are not effective in treating covid-19 in hospitalized patients, the Food and Drug Administration on Monday announced that it would [revoke](#) the Emergency Use Authorization that had previously been granted to the medications. In the statement, the FDA wrote that it no longer felt that the medications met the legal criteria necessary for issuing an EUA. Hydroxychloroquine and chloroquine had both been [touted](#) by the Trump administration, and by the President himself, as a treatment for the disease caused by the novel coronavirus. Trump was said to have been taking hydroxychloroquine at one point this Spring. Former director of the Biomedical Advanced Research Development Agency Rick Bright has [contended](#) publicly that his hesitations in promoting the drugs and reluctance to add them to the Strategic National Stockpile directly lead to his ouster from his position. The FDA noted in the announcement that they regularly review medications and devices that have been granted EUA status as additional science becomes available. Previously, EUA designations have been revoked for multiple diagnostic tests designed to detect SARS-CoV-2, the virus that causes covid-19. *Various.*

–Jordan M. Warchol, MD, MPH

Tribal epidemiologists unable to retrieve data from public health entities.

The Centers for Disease Control and Prevention (CDC) is [withholding](#) tribal SARS-CoV-2 epidemiological data from tribal epidemiologists, potentially widening the already disparate resource gap American Indians have experienced during the covid-19 pandemic and contributing to worse outcomes. This policy makes contact tracing more difficult both on reservations and beyond. The Urban Indian Health Institute, which tracks American Indians living in US cities, is also adversely affected by this lack of data sharing. Under the Affordable Care Act, such tribal epidemiological centers are considered to have the same level of authority as state health departments and federal agencies, including ones like the CDC. The Trump administration, however, has de-emphasized federal collaboration relating to the coronavirus response, instead placing the onus on state and local officials. Such collaborations have included the obtaining and distributing of medical supplies. Many of these local and state agencies have not worked extensively with tribal counterparts in the past, which has meant confusion and a steep learning curve during a period when time and efficiency are crucial. For example, patient data privacy policies need to be ironed out. Working with established long-standing federal partners, such as the CDC, would have presented fewer logistical problems such as these, potentially allowing data-driven responses to become available sooner in the early covid-19 crisis. *Politico.*

–Aida Haddad, MDiv

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Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health policy, and public policy.