6 October 2020

BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

The USS Roosevelt covid-19 outbreak.

Outbreaks of SARS-CoV-2 on cruise ships and similar vessels have yielded important information as to the transmission dynamics of the virus that caused covid-19. In *JAMA Network Open*, a new research letter describes the outbreak of SARS-CoV-2 on the Nimitz Class nuclear powered aircraft carrier the USS Theodore Roosevelt. The virus began to spread on board in late March 2020. Of the 4,085 sailors aboard the ship, 18 percent tested positive for SARS-CoV-2 by April 15, 2020. Most of these sailors (80 percent) developed symptoms during the study period. However, the study period only extended a few days after the last identified cases during isolation so it is unknown if some of these patients may have been presymptomatic and developed symptoms after the conclusion of the study period. Cough and cold-like symptoms were the most common in this group and only 1.3 percent developed a fever. Six sailors were hospitalized, and one sailor died. The very mild courses of covid-19 in this population is undoubtedly due to the very select nature of sailors – young (median age ~22 years old), fit individuals, and without a large frequency of chronic conditions.

This study, like those of other cruise ships, underscores two other crucial points; the heightened risk of transmission of the virus in small spaces where physical distancing is essentially impossible and masks are not used universally, as well as the role of asymptomatic/pre-symptomatic transmission. *—Lauren Westafer DO, MPH*

POLICY BRIEFING

Vaccine update: White House turns on its own Food and Drug Administration.

The Food and Drug Administration has squandered enormous credibility throughout the covid-19 pandemic. The main source of its perceived dysfunction has been several emergency use authorizations granted during the national emergency. These authorizations have included the use of hydroxychloroquine (later revoked), permitting unvetted coronavirus antibody tests to be marketed and sold (later revoked), and other unwise moves including what many experts consider to be unwise actions related to permitting the emergency use of convalescent plasma without ample evidence and while downplaying substantial known risks.

Now the White House is moving to block the FDA's attempt to maintain control of the vaccine approval process. A strict guideline proposed by the FDA and sent to the White House has been "deep sixed"—meaning the administration is killing and burying it.

This leaves two major options that might prevent the White House from all but forcing the FDA to approve a vaccine before adequate safety and efficacy data are known. The FDA might be able to get its guideline approved by outside experts (an "end around"); alternatively, the biotechnology companies may heed messages like those in an open letter written by Dr. Zeke Emanuel (signed by 60 others, myself included), requesting that companies police themselves and not release premature data. *The New York Times.* *—Jeremy Samuel Faust MD MS*