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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Healthcare worker infections in a large Wuhan hospital.

A new study in JAMA Network Open [describes healthcare workers](#) in a hospital in Wuhan, China who became infected with SARS-CoV-2 during the initial outbreak there. The data come from a single hospital with more than 7000 beds and the study was a retrospective analysis of the detected cases. Among the workers, 1.1 percent (110 people) were diagnosed and hospitalized with the virus. Out of those 110, one worker eventually died (0.9 percent). Notably, only 15.5 percent of the healthcare workers served in hospital wards that were specifically designated for covid-19 patients. Nurses were most affected (45.8 percent of cases), followed by healthcare assistants (31.9 percent), and physicians (22.3 percent). While it is difficult to determine how accurate the reporting may have been, 63.6 percent of the subjects were determined by investigators to have been exposed to the virus in the general wards and 12.7 percent outside the hospital. A conclusion could not be reached in 17.3 percent of the cases. 36 percent of the infected workers reported transmitting SARS-CoV-2 to friends or family outside the hospital. In addition, the authors screened 335 randomly selected asymptomatic healthcare workers for SARS-CoV-2; among those, fewer than 1% tested positive. This comes in contrast to other studies of asymptomatic persons at high risk of exposure to healthcare settings (including at homeless shelters and maternity wards in the United States) in which a far higher rate of symptom-free disease has been detected via universal screening protocols. The overall proportion of healthcare workers hospitalized with covid-19 at this large Wuhan hospital was higher than infection rates seen in the general population, which may be explained by frequent and high-risk exposures. Unfortunately, little information can be gleaned regarding exposure source as described in the study. The authors do not clearly describe how exposures were determined or vetted. In addition, given what we have learned about the relatively high number of pre-symptomatic or asymptomatic SARS-CoV-2 patients, tracing movements back many days, or more, can prove difficult. On another note, the hospital's decontamination process and PPE protocols were remarkably thorough and included UV and chlorine air disinfection.

–Lauren Westafer, DO MPH

How reliable are clinical findings in diagnosing Covid-19?

In a prospective observational study [published in *The Annals of Emergency Medicine*](#), 391 adult patients suspected to have covid-19 and were tested for SARS-CoV-2 at an emergency department in France. The subjects were assessed in order to determine whether certain clinical findings are indicative of covid-19. Clinicians documented symptoms and rated each patient as either low, moderate, or high suspicion for covid-19. Of the 273 patients studied, 57.6 percent were found to be positive for SARS-CoV-2. Of those, nearly 24 percent experienced gastrointestinal symptoms. However, the most powerful indicator of active disease was loss of smell, known as anosmia. The “likelihood ratio” for anosmia and covid-19 was 7.6, which is considered substantial by clinicians (i.e. the presence of this finding truly makes the diagnosis of covid-19 much more likely). On the other hand, the lack of anosmia does not appear to mean that the virus can be ruled out. In addition, ultrasound showing fluid in both lungs was another feature seen to increase the

likelihood of covid-19 being present. However, because the fraction of patients in the study was so high, these findings might not be as useful to clinicians trying to use this knowledge to assess patient populations in which the disease is less common. *–Lauren Westafer, DO MPH*

POLICY BRIEFING

Provider relief fund clarifications.

The Department of Health and Human Services (HHS) has issued new guidance about who qualifies for support from the Provider Relief Fund. The Provider Relief Fund was established to offset costs incurred by hospitals related to treatment of covid-19 or loss of services due to decreases in care related to the shutdown (which includes a ban on elective care, in many areas). With this allocation, HHS has created an online [portal](#) for applications and [updated](#) their guidelines. Specifically, providers must have received funds from the first round to be eligible for additional funds from the general pool. The reimbursement formula has also changed, with providers now receiving either the net losses from March and April or 2 percent of 2018 net patient revenue, whichever is less. However, if funding from the first round was at least 2 percent of revenue from patients annually, additional funds will not be distributed. According to HHS, funds will not be a first-come, first-served basis, but processed in batches every week. The goal is to notify applicants within ten days of submission. *The Department of Health and Human Services.* *–Joshua Lesko, MD*

Illinois legislators eject colleague for refusing to wear a mask.

Many legislative bodies, including Congress, have deferred reconvening in person until the threat of transmitting coronavirus can be abated. But the Illinois General Assembly gathered on Wednesday for the first day of a special pandemic session, meeting in a huge arena to allow for more social distancing. One of the body's first steps was to introduce a new rule requiring all legislators to wear masks. The measure [passed](#) with bipartisan support, but one Republican not only voted against the measure, but also refused to comply once the rule was adopted. The representative, Rep. Darren Bailey, who has sued Illinois's Democratic governor, J.B. Pritzker, over his stay-at-home executive order and called unemployment the "second pandemic," said the mask order was "just another Democrat bullying tactic" and that he did not believe it was about protecting people's health. Ultimately his colleagues on both sides of the aisle voted to remove him from the floor. This episode is just one more illustration of an emerging partisan fight over the utility of mask-wearing in public. *Washington Post.* *–Kimi Chernoby, MD, JD*

Kimi Chernoby, MD, JD, Policy Section Editor. Joshua Niforatos, MD Research Section Editor.

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Twitter: [@brief_19](#)

submissions@brief19.com

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.