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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Does tuberculosis vaccination protect against SARS-CoV-2?

A research letter in *JAMA* describes a [study](#) from Israel in which individuals who had received vaccinations against tuberculosis (which is only partially effective in preventing TB), were protected against SARS-CoV-2 infection. The vaccine, known as BCG, was given routinely in Israel prior from 1955 to 1982. After that, its use was no longer recommended. Because vaccination rates are approximately 90 percent in Israel, and only immigrants to the nation from certain nations born after 1982 would be expected to have BCG-positive status, a reasonable “crossover design” was used; the authors compared SARS-CoV-2 infection rates amongst individuals who were highly likely to have received the BCG vaccine against TB (3064 patients born between 1979 and 1981) to those amongst individuals who were thought to be unlikely to have been vaccinated (2869 patients born from 1983 to 1985). Symptomatic patients were tested. There was no difference in the number of infections in those who were likely to have received the TB vaccine and those who were unlikely to have done so (11.7 percent versus 10.4 percent, respectively; this difference did not reach “statistical significance”). The study was done because the BCG vaccine has been shown to impart some degree of protection against infections other than TB, including some acute lower respiratory infections. However, as researchers have found repeatedly during the covid-19 pandemic, theory and reality are different.

–Jeremy Samuel Faust, MD, MS

Getting back in the game.

Experts are weighing in on when it might be safe for individuals recovering from SARS-CoV-2 to resume exercise and sports. A new [Viewpoint](#) in *JAMA* recommends two weeks of rest (no exercise) even for completely asymptomatic persons. For patients with symptoms who did not require hospitalization, two weeks of rest after symptom resolution is advised. The authors note that SARS-CoV-2 can cause myocarditis, which is inflammation of the heart muscle. Patients found to have abnormally high blood levels of a cardiac protein known as troponin warrant a substantial evaluation for that particular complication.

–Jeremy Samuel Faust, MD, MS

Briefing from the editor: This is not the flu.

In a [Viewpoint](#) appearing in *JAMA Internal Medicine*, Carlos del Rio (Emory University) and I argue that the method by which seasonal influenza deaths are estimated render them inappropriate for comparisons with covid-19. The CDC uses complicated algorithms to generate their yearly flu death estimates, which range from 24,000 to 60,000 annually. Meanwhile, covid-19 deaths are being counted directly and in just over two months have caused over 80,000 deaths in the United States. What hospitals are seeing today does not comport with numbers that make flu and covid-19 appear remotely similar. Comparing raw counts to raw counts is more appropriate. In so doing, we reveal that covid-19 killed on average around 20 times more Americans in a week in late April than seasonal influenza killed during the peak week of the last seven seasons (range 9.5 to 44.1-fold increase). While adult influenza is not required for reporting to health officials, as covid-19 currently is, we feel that raw influenza counts may still overstate the case, as many of the death certificates where influenza appears also contain other causes of death which may have been the proximate cause.

–Jeremy Samuel Faust, MD, MS

POLICY BRIEFING

Relief showdown.

The House Democrats plan to vote on their newest proposed relief package today. In anticipation, the White House [issued](#) a response to the legislation yesterday. The White House currently opposes the legislation for reasons including its proposed \$25 billion in relief to the United States Postal Service, support for mail-in voting, and inclusion of undocumented immigrants who pay taxes in a new round of stimulus checks. Instead, the administration is advocating for legislation that focuses on tax cuts for businesses and liability protection for businesses that choose to re-open. *White House.*

Wisconsin court decision leads to packed bars

For the last several weeks, *Brief19* has been [tracking](#) a lawsuit in Wisconsin that challenged the legal standing of the governor's stay at home order. Yesterday, the state's Supreme Court ruled the order invalid and wrote that any valid order would require approval by the legislature. In [response](#), some bars immediately opened and were packed full. Some local governments took action into their own hands, issuing local ordinances that in effect continued the previous state stay at home order. There are two things to watch as a result of this decision. First, what effect will it have on infection rates within the state? That is an answer we can expect to see in two to three weeks. Second, will people in other states bring similar legal challenges to stay at home orders? As many states are currently in the process of reopening, that question may be moot for now. However, with an expected second spike in cases coming later this year, there will likely be a new round of restrictions, raising the prospect of further legal battles. *CNBC.*

Rapid SARS-CoV-2 test used by White House may miss half of cases

Throughout this pandemic, the Food and Drug Administration has issued a number of emergency use authorizations. One issue with EUAs is that products are not subject to the same testing as under normal approval processes, so accuracy is not guaranteed. A pre-print [published](#) yesterday found that a rapid SARS-CoV-2 test that was approved under EUA failed to diagnose 48% of confirmed SARS-CoV-2 infections. That means for every two patients with the virus, approximately one would test negative. Perhaps the bigger issue with this finding is that this rapid test is the test being used by the White House to test employees and visitors. If these findings are confirmed, that would constitute a huge risk of virus transmission within the White House, especially since masking only became protocol within the last week after two staffers tested positive. This study is a pre-print which means the submission has not gone through the peer review process and has not been accepted for publication yet. *CNBC.*

–Kimi Chernoby, MD, JD

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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.