BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Eye swabs: a new possibility for testing?

Anyone who has been tested for covid-19 knows the brain tickling discomfort of the nasopharyngeal (NP) swab. Recent <u>reports</u> from China on the use of rectal swabs for coronavirus detection did not reduce anyone's anxiety about being tested. Now, a new possibility exists however, in the form of conjunctival swabs. The conjunctiva is the white area between the eyeball and the eyelid.

A study from Italy examined the efficacy of conjunctival swabs in lieu of the more invasive swabs. Published in <u>JAMA Ophthalmology</u>, the paper outlines how researchers obtained conjunctival swabs from 91 confirmed covid-19 patients in a single intensive care unit (ICU) during the early phase of pandemic. A total of 17 swabs were obtained from healthy volunteers to assess for applicability of the test. In order to obtain the specimen, the swab was placed near the tear duct for five seconds and then rubbed across the lower eyelid for five more seconds. The swabs were then tested for SARS-CoV-2 using a rRT-PCR analysis, similar to the way NP swabs are evaluated.

At time of testing, only 64 percent of the ICU patients had positive NP swabs, whereas the virus was detectable in the conjunctiva of 57 percent of the known positive patients. Interestingly, the viral load (i.e. the quantity of viral genetic material) varied between eyes; 71 percent of subjects had different quantities of viral genetic material in each eye. In 60 percent of the positive patients, the virus was detectable in both eyes. In a subset of patients it was found that NP swab and conjunctival swab had agreement of 61 percent if performed within two days of each other. Interestingly in 17 patients whose NP swabs were negative, 10 had positive eye swabs.

The main conclusion is that SARS-CoV-2 can be detected on the surface of the eye, and testing the conjunctiva is a feasible alternative in some cases. While this research studied adults, this option may be preferable for some young children. (For anyone who has ever worked in pediatrics, obtaining a throat swab from an unwilling child can be extremely uncomfortable for everyone involved). While the sensitivity of the eye-based test was modest, it did diagnose some individuals in which the NP swabs failed. That said, the study addressed whether the eye contained evidence of viral genetic material but did not assess whether that virus was infectious. It's a stretch to say that this offers proof that eye protection is warranted for all covid-19 patients and those hoping to avoid infection, but at the very least, it makes sense to continue protecting our eyes in high-risk environments (such as patient care) until we know more. And we certainly should avoid touching our faces.

—Christopher Sampson, MD, FACEP

POLICY BRIEFING

Narrow majority means new limitations for stimulus check eligibility.

After passing the US House of Representatives along party lines, The American Rescue Plan, President Biden's \$1.9 trillion stimulus package heads to the Senate, where a slimmer Democratic majority has forced compromise on a key promise. Some moderate Democrats balked at the breadth of individuals eligible to receive the \$1400 stimulus check. With every member of the caucus needed to pass the bill, changes had to be made. In the House version,

checks began decreasing for individuals making more than \$75,000, and those making \$100,000 or more were deemed ineligible; for couples the phase out began at \$100,000 for couples and capped at \$200,000.

The Senate's alternative removes an estimated 17 million individuals from the pool of people eligible to receive stimulus funds, with the lower limit still at \$75,000, and terminating at \$80,000; similarly, the limits for couples would be \$150,000 and \$160,000, respectively. In addition, the bill provides for \$400 per week in federal unemployment support through mid-August.

All of this is provisional. Members from both sides of the aisles have hinted, or outright announced, plans to offer amendments that will undoubtedly delay the process, possibly leading to major changes. *CBSNews*.

—Brief19 Policy Team

Warp Speed at a cost.

In a blockbuster story, *STAT* <u>alleges</u> that the Trump administration reallocated \$10 billion meant for the <u>Provider Relief Fund</u> in order to keep Operation Warp Speed, the administration's vaccine development program, moving forward. Citing four former administration officials familiar with the event, the US Department of Health and Human Services (HHS) had broad authority to spend the funds disbursed by Congress, but any transfer between accounts required ten days of advance notice before the move occurred. To sidestep this, officials directly spent money from the Provider Relief Fund for Operation Warp Speed development, thus avoiding an official transfer.

What remains unclear is how this move affected the total remaining funds in the Provider Relief Fund, and to which entities disbursements were made. A Government Accountability Office (GAO) report in December found \$33.4 billion left over, and in February a Health Resources and Services Administration (HRSA) spokesperson told *STAT* that \$24 billion was available, without any publicly disclosed payments announced in the interim. *Various*.

—Brief19 Policy Team