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BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Using saliva to detect covid-19. Results are mixed. Standard testing for SARS-CoV-2 is carried out by nasopharyngeal or oropharyngeal (NP/OP) swabs. The problem with these tests is that the sensitivity is not spectacular, which means that some people who have negative tests may actually have the virus. Additionally, NP/OP swabs require healthcare providers to administer the test, potentially exposing them to the virus and consuming PPE. Given this context, a new paper in the *Annals of Internal Medicine* looked to determine the detection rate of SARS-CoV-2 using a self-administered kit for *saliva* collection. The researchers prospectively enrolled asymptomatic individuals at high-risk for contracting SARS-CoV-2, as well as those with mild symptoms consistent with covid-19. All participants were tested with *both* the saliva kit and an NP/OP swab for comparison.

Of 1,939 individuals with both saliva and NP/OP samples, SARS-CoV-2 was detected among 70 people. The results are sobering. Only 49 percent of those who tested positive had the test confirmed by *both* the saliva sample and the NP/OP sample. Saliva samples more often showed a negative result when the patient had confirmed SARS-CoV-2 by NP/OP sample.

What does this mean? NP/OP swabs detect more patients with covid-19 compared to a self-administered saliva sampling kit. This suggests that, at this time, at least some saliva kits are not ready for primetime mass screening in the United States among asymptomatic or mildly symptomatic individuals. This study also revealed that 20 percent of the 70 individuals with SARS-CoV-2 infection were apparently *missed* by the current gold standard NP/OP samples. However, both methods used genetic material-based tests (PCR) and thus neither test determines whether positive individuals are contagious. Some tests using saliva which test for active viral "antigens" may prove useful in detecting contagious people. In sum, we are still in need of a highly sensitive and specific test for SARS-CoV-2, especially ones that can be self-administered.

—Joshua Niforatos, MD

POLICY BRIEFING

Call for collaboration in vaccine development. Holding Food and Drug Administration (FDA) Commissioner Dr. Stephen Hahn to his promise not to rush coronavirus vaccine development, the leadership of the American Medical Association (AMA) has sent a letter requesting transparency in regards to the review process, safety measures, and efficacy data. Citing rising misinformation across social media platforms, the letter identifies a national trend of vaccine hesitancy as antithetical to successful mitigation of the pandemic. Further arguing that an opaque development process will only embolden claims aimed at sowing mistrust and lack of adoption, the AMA tasks the FDA with sharing information so that the medical community may become informed educators. Beyond sharing this data, the AMA asks for a collaboration to develop an education plan to properly inform the public and ensure adequate adoption of any finalized vaccine. *Various*

—Joshua Lesko, MD