



COVID-19

research update

Tuesday, June 16, 2020

Self-testing for COVID-19

[A study of the effectiveness of patient-collected COVID-19 testing](#) (JAMA, June 12) found that lower nasal swabs minimize the risk of healthcare worker-exposure to COVID-19, reduce use of personal protective equipment (PPE) and expand testing capability and access. Results show that the observed patient-collected nasal swabs had a sensitivity of 100% and a specificity of 95%, with only one patient's COVID-19 test showing different results between self-collection and physician-collection. These findings suggest that patient-collected nasal swabs represent a viable alternative to the current clinical standard collection method of healthcare worker-collected throat swabs, with possible use for home- or work-based testing of asymptomatic patients. As testing becomes more widely available across Ohio, more front-line healthcare workers will be exposed to COVID-19. To protect healthcare workers, preserve personal protective equipment, and expand testing capabilities even further, public health professionals and policymakers could consider using patient-collected nasal swab testing for COVID-19.

A [study comparing self-collected swabs for COVID-19 to ones collected by healthcare workers](#) (NEJM, June 3) found that that there is clinical usefulness in patients collecting their own swabs in testing for COVID-19. Swab sampling by patients can reduce the use of PPE, provide a more comfortable patient experience, and expose less frontline healthcare workers to COVID-19. Many hospital systems came dangerously close to shortages of PPE during the rise and peak of COVID-19 cases in the United States. Going forward, public health officials and state policymakers could explore the possibility of self-swabbing for patients with suspected COVID-19 to preserve PPE resources and ensure fewer frontline workers fall ill with COVID-19.

Asymptomatic passengers from the Diamond Princess cruise ship

A [study of asymptomatic passengers aboard the Diamond Princess cruise ship during the COVID-19 outbreak](#) (NEJM, June 12) found that 58% of the 712 infected individuals were asymptomatic at the time of testing (410 people). Subsequent clinical observation of 96 passengers who eventually tested positive for COVID-19 from the Diamond Princess found that signs and symptoms of COVID-19 developed a median of 4 days after their first positive PCR test. A similar observation of 32 passengers who tested PCR negative while aboard the cruise ship found that 8 of these individuals had a positive PCR test in the 3 days after arriving at the hospital, yet all remained asymptomatic. Additionally,

the risk of being pre-symptomatic, asymptomatic, and an overall delayed resolution of infection increased with increasing age. The majority of asymptomatic patients remained asymptomatic throughout the duration of their infection with COVID-19. Individuals who are infected with COVID-19 but asymptomatic present a significant challenge in mitigating the spread of the disease. Public health professionals should ensure that as testing capacity continues to increase in Ohio, individuals who are high risk, going back to work and have been potentially exposed to COVID-19 should be tested for the disease, whether or not they show symptoms.

Physical distancing and population mobility

A [study of Google mobility data to determine social distancing in the United Kingdom during the COVID-19 pandemic](#) (The Lancet, June 14) found that as the lockdown began, retail stores, recreational areas and transit saw the largest decline in movement. Workplaces initially saw a negligible change in population mobility, but now are seeing the slowest return to typical mobility. Parks have seen increased activity since the beginning of the COVID-19 pandemic. The analysis of mobility data can shed light on differences in adherence to social and physical distancing suggestions by area and over time. Public health professionals and policymakers can use mobility data, when paired with COVID-19 testing data, to craft more localized strategies and recommendations to mitigate community spread of COVID-19 that may be more palatable for the general public.

New CDC Guidance

The CDC released new guidance documents for the following topics:

- [Testing Guidelines for Nursing Homes](#)
- [Interim Guidance for Homeless Services Providers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#)
- [Agriculture Workers and Employers](#)