COVID-19 research update

hpio — health policy institute of ohio

The Health Policy Institute of Ohio is collecting the latest research so that Ohio policymakers and other stakeholders can make informed decisions on the rapidly evolving COVID-19 pandemic. HPIO has also created a [Coronavirus (COVID-19) resource page](#) to serve as a "one-stop-shop" for links to the Ohio Department of Health, Centers for Disease Control and Prevention and other sources of frequently updated, reputable information.

Presymptomatic transmission and ease of transmission

New research underscores some of the challenges with slowing the spread of COVID-19.

A [study of COVID-19 cases in Singapore](#) (CDC, April 1) found that people infected with the coronavirus can spread the disease one to three days before they develop symptoms. Given this information, public health officials conducting contact tracing should strongly consider including a period before symptom onset to account for the possibility of presymptomatic transmission. The study also emphasizes the need for social distancing to prevent further spread of the disease.

[New research](#) (JAMA, March 26) found that coughing and sneezing can propel pathogens as far as 23 to 27 feet through the air. While the study was not specific to COVID-19 cases, the finding means recommendations for social distance separations of 6 feet may underestimate the distance, timescale and persistence over which the COVID-19 virus can travel. For this reason, it is important that health care workers wear appropriate personal protective equipment while caring for patients who may be infected, even if they are farther than 6 feet away. This may also offer support for potential recommendations for all people to wear masks when out in public.

Underlying health conditions and risk for severe COVID-19

A [preliminary review of U.S. COVID-19 data](#) (CDC, March 31) found that people with underlying health conditions (i.e., diabetes, chronic lung disease and cardiovascular disease) appear to be at higher risk for severe COVID-19-associated disease than persons without these conditions. As described in the [2019 Health Value Dashboard](#) and the [2019 State Health Assessment](#), Ohio has relatively high rates of chronic diseases that may increase the severity of COVID-19 complications. Ohio ranks in the bottom quartile, for example, for adult smoking, adult obesity and

cardiovascular disease mortality.

Strategies for increasing contact tracing

New articles shed light on how the United States can better slow the spread of coronavirus and treat those infected with the virus.

[New analysis of the infectiousness of the coronavirus](#) (Science, March 31) finds that traditional manual contact tracing procedures are not fast enough to effectively stop the spread of the virus. To improve infection control, the researchers propose a system for instant digital contact tracing through a mobile phone app. This app keeps a temporary record of proximity events between individuals and can immediately alert recent close contacts of diagnosed cases and prompt them to self-isolate. The model predicts that this approach could reduce transmission enough to suppress the COVID-19 epidemic. The authors report that similar apps have been deployed in China and South Korea, and that this approach allows countries to target interventions only to those at risk, without need for lock-downs.

Another [article examines the potential role of community health workers](#) (World Economic Forum, March 31) in responding to the COVID-19 pandemic. People who are unemployed can be trained as community health workers and then could be deployed to address COVID-19 outbreaks, particularly to assist with preventing, detecting and responding to the disease in the community. For example, community health workers could support contact tracing, symptom reporting and monitoring of contacts of COVID-19 patients to ensure access to testing and treatment for people who develop signs and symptoms. An example of this work can be found in the [deployment of community health workers in Liberia](#).

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