



COVID-19 research update

April 9, 2020

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.

Study finds link between air pollution, COVID-19 death rate

[A study](#) (Harvard, April 5) investigating the link between air quality and COVID-19 found that long-term exposure to air pollution increases the risk of COVID-19 deaths in the United States. According to the study, a small increase in long-term exposure to fine particulate matter in the air leads to a large increase in the COVID-19 death rate. HPIO's [2019 Health Value Dashboard](#) shows that Ohio ranks 46 out of the 50 states and D.C. in outdoor air quality (average exposure of the general public to particulate matter of 2.5 microns or less in size) for 2015-2017.

Analysis of COVID-19 hospitalizations illuminates disparities

The latest edition of the Morbidity and Mortality Weekly Report includes [a report](#) (CDC, April 8) on the demographics of COVID-19 hospital patients admitted in March. Findings suggest that older adults have elevated rates of COVID-19-associated hospitalization and the majority of persons hospitalized with COVID-19 have underlying medical conditions. The data suggests that males may be disproportionately affected by COVID-19 and that black populations might also be disproportionately affected by COVID-19.

Mitigating COVID-19 spread in correctional facilities

[An article](#) (JAMA, April 7) discussing COVID-19 transmission in correctional facilities found that the challenges of minimizing the virus include the inability to physically distance inmates, shared facilities and restricted access to soap and hand sanitizers. Prisoners in any given facility come from a variety of locations, increasing the chance of introducing the virus. Also, a higher than average proportion of incarcerated individuals have underlying illnesses that increase the risk of severe cases of COVID-19. The report contains several recommendations for minimizing spread, including preparing dedicated

incarcerated individuals have access to sufficient soap and hand sanitizer at no charge and releasing those held for nonpayment of fees and fines or inability to post bail and releasing prisoners who are near the end of their sentences for nonviolent crimes. All staff, visitors and contractors should also be screened for symptoms upon entry into facilities.

Wastewater testing may provide COVID-19 early warning

Researchers have begun testing wastewater for traces of SARS-CoV-2, a technique that may serve as an early-warning system of a COVID-19 outbreak or supplement clinical testing in areas where it is limited, according to a [new study](#) (medRxiv, April 7). Researchers tested wastewater collected at a major urban treatment facility in Massachusetts and found the presence of SARS-CoV-2 --the virus that causes the COVID--19 disease--at high levels. According to [news coverage](#), researchers estimated that at least 2,300 people were infected with COVID-19 in the area around the treatment facility, when there were only 446 cases officially reported.