COVID-19 research update

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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.*

Screening for fever not sufficient for COVID-19 identification

It has been widely communicated that one of the primary symptoms of COVID-19 is a fever. However, new data adds important context.

A new study (Annals of Internal Medicine, March 10, 2020) of COVID-19 patients in Wuhan, China found that patients did not develop a fever for a median of 5.7 days after being infected. That finding can inform public education about social distancing, self-isolation and quarantine, as well as contact tracing conducted by local health departments. In addition, the 5.7-day median incubation period for fever onset indicates that using temperature checks as a screening measure may miss many cases.

Another study (New England Journal of Medicine, Feb. 28, 2020) of COVID-19 patients in mainland China found that only 43.8% of patients had a fever upon hospital admission. The study also found that current smokers were more likely to have severe disease than non-smokers. This is relevant given Ohio's relatively high adult smoking rate.

Work continues on finding therapeutic drugs

Efforts to identify a drug or drug combination that can treat COVID-19 have gained a lot of attention, but no drug has yet to be proven effective.

Nearly 70 drugs and experimental compounds may be effective in treating the coronavirus, a **team of researchers reported** (bioRxiv, March 22, 2020) this week. Some of the medications are already used to treat other diseases, and repurposing them to treat COVID-19, the illness caused by the coronavirus, may be faster than trying to invent a new antiviral from scratch, the scientists said.

A **review of early efforts** (Open Forum Infectious Diseases, March 23, 2020) to identify medications to treat COVID-19 concluded that evidence of effectiveness has been elusive.

Considerations for hospitals, other health providers

Several new studies provide guidance for hospitals and other healthcare providers treating patients with COVID-19.

A study (bioRxiv, March 22, 2020) of collected aerosol samples in various areas of hospitals in Wuhan, China found that there are several steps hospitals can take to prevent transmission and protect healthcare workers, including ventilation, frequent

sanitization of all surfaces and careful removal of personal protective equipment apparel. In addition, the study supports the use of masks and social distancing for the public.

Another study (JAMA Insights, March 11, 2020) highlights how hospitals should prepare for caring for critically ill patients with COVID-19 in areas with access to mechanical ventilation. The study calls for more research that includes clear measurements of severity of critical illness and use of sufficiently common outcome measures to combine data and validly compare observations across regions.

A study (JAMA, March 23, 2020) of the high case fatality rate in Italy offers insight for how COVID-19 data should be reported by healthcare providers in the United States so that it can better be interpreted and analyzed. The study found that Italy's high fatality rate can be attributed to the country's older age distribution, the definition officials are using for defining COVID-19 related deaths and the country's approach to testing.

The study found that transparency and consistency in reporting testing policies and definitions of terms is important for comparing results across geographies.