

COVID-19 Projections Show New Emerging Risk for Virus Resurgence in Mid-Atlantic, Midwest Counties

Philadelphia, Pa. – July 1, 2020 – New [COVID-19 case projections released today](#) by PolicyLab at Children's Hospital of Philadelphia (CHOP) paint a sobering picture for much of the United States over the next four weeks—forecasting significant continued virus resurgence in known hotspots such as Houston and Miami and rising risk once again in communities across the Mid-Atlantic and Midwest.

The model, which provides four-week COVID-19 case projections across more than 500 counties, is once again showing increasing risk for virus resurgence in many communities that have been quiet for some time. This includes cities along the I-95 corridor, such as Baltimore and Wilmington, Del., many metropolitan areas in Ohio and several rural counties in Colorado. The data also show concerning upward trends in areas that neighbor states with widespread community transmission such as New Mexico, which is starting to see the first signs of the spreading Southwest epidemic threaten its communities. The researchers suggest that increased travel as communities reopen, combined with lack of vigilance and adherence to masking recommendations, is creating this renewed risk to former areas of concern.

At the same time, the model projects that counties throughout Arizona, Texas, and Florida will not be able to quickly flatten the spike in cases they have experienced in recent weeks, despite new masking recommendations and restrictions on bars and restaurants. The forecasts continue to demonstrate widespread community transmission, assuming no additional mitigation efforts are instituted, in these large outbreak areas through late July—further threatening availability of ICU beds and health care resources. For example, while the forecast for Maricopa County, Ariz., improved slightly from last week, the modeling data shows this county could still experience as many as 7,600 cases a day by July 25.

“We need to admit that we are losing the battle nationally to contain this dangerous virus as it engulfs more communities across the country, including those in the Northeast and Midwest that worked so hard to reduce cases and get back to a relatively normal way of life,” said David Rubin, MD, MSCE, director of PolicyLab at CHOP and a professor of Pediatrics at the University of Pennsylvania's Perelman School of Medicine. “During a heavy travel season, the absence of a strong national response, including a nationwide masking mandate, will continue to threaten the viability of our economy and the ability of our schools to reopen in the fall, while depleting and surpassing available health care resources to care for the sick. What's even more worrisome is that we'll soon add July Fourth travel to this challenging situation—vacationers will be visiting locations that even during the Memorial Day holiday had relatively low disease activity—but are quite the opposite now.”

For additional comments from lead investigators Dr. Rubin, Dr. Gregory Tasian, and Dr. Jing Huang on their updated forecasts and findings, read this blog post: <https://policylab.chop.edu/blog/covid-19-outlook-pivotal-moment-us-fight-against-coronavirus>

Background

Researchers at PolicyLab at CHOP and the University of Pennsylvania developed the model, known as COVID-Lab: Mapping COVID-19 in Your Community, which tracks and projects COVID-19 transmission across 519 U.S. counties with active outbreaks, representing 71% of the U.S. population and 88% of all identified

coronavirus cases. The researchers built their model to observe how social distancing, population density, daily temperatures, and humidity affect the number and spread of COVID-19 infections over time across a county, accounting for test positivity rates and population characteristics such as age, insurance status, crowding within homes and diabetes prevalence. COVID-Lab's projections forecast the number of coronavirus cases communities could experience over the next four weeks based on a three-day average of their current social distancing practices, defined by the change in travel to non-essential businesses as compared to pre-epidemic. A scientific review of the team's model and findings is available as a pre-print article ahead of peer review on [medRxiv](#). The data are publicly available in the form of [interactive maps and graphs](#).

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About PolicyLab at Children's Hospital of Philadelphia: PolicyLab at Children's Hospital of Philadelphia (CHOP) is dedicated to achieving optimal child health and well-being by informing program and policy changes through interdisciplinary research. Founded in 2008, PolicyLab is a Center of Emphasis within the CHOP Research Institute, one of the largest pediatric research institutes in the country. With more than 30 highly regarded faculty and 60 passionate staff who bring expertise from myriad of fields covering health, research and health policy, our work focuses on improving public systems, improving health care delivery and improving child health outcomes. For more information, visit <http://www.policylab.chop.edu>.