

New COVID-19 Projections Warn of Accelerating Epidemic in Arizona, Texas and Florida & Show Stabilization in Some Hotspots

Philadelphia, Pa. – June 24, 2020 – Updated [county-level COVID-19 projections released today](#) by PolicyLab at Children's Hospital of Philadelphia (CHOP) forecast a deteriorating situation in communities across Arizona, Texas, and Florida over the next four weeks even as several other previously identified hotspots—including areas in North Carolina, California and Oregon—are projected to flatten their curve.

The new modeling data project areas such as Houston, Phoenix and Miami will be unable to contain their exponentially growing case counts as July approaches if they maintain current social distancing practices, which the researchers measure as changes in travel to non-essential businesses. Phoenix, for example, is forecasted to reach 5,000 cases a day by July 2—a number that far surpasses daily case counts at the height of the epidemic in Queens, N.Y., this April. The researchers also found concerning risk for resurgence in Montgomery, Ala., Little Rock, Ark., Tulsa, Okla., Las Vegas, and communities across South Carolina, which all have forecasts that look similar to those of Arizona, Texas and Florida from just a few weeks ago.

At the same time, this week's updated projections showed improving four-week forecasts for areas in the South and West that the researchers had [raised concerns about in recent weeks](#), including New Orleans and Portland, Ore., and communities across Indiana and North Carolina. It is unclear how much of this stabilization in risk for resurgence is related to masking policies or increased personal vigilance in distancing and hygiene practices as people have observed what is happening in other areas of the country. From their week-to-week analyses, however, the researchers do suspect that statewide masking ordinances passed in Virginia and California are helping to mitigate widespread community transmission across those states.

"We've reached a point in communities throughout Arizona, Texas and Florida where the epidemic is accelerating at an alarming pace and may quickly overwhelm local health care systems—signaling a need to pause reopening plans," 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. "For those other areas of rising concern in our model that have forecasts similar to those of Arizona just a few weeks ago, we would encourage local leaders to view our projections as an early warning system and enact swift response measures to prevent further widespread community transmission."

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-ringing-alarm-bell-epicenters-waving-caution-flag-hotspots>

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 513 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>.