August 2020

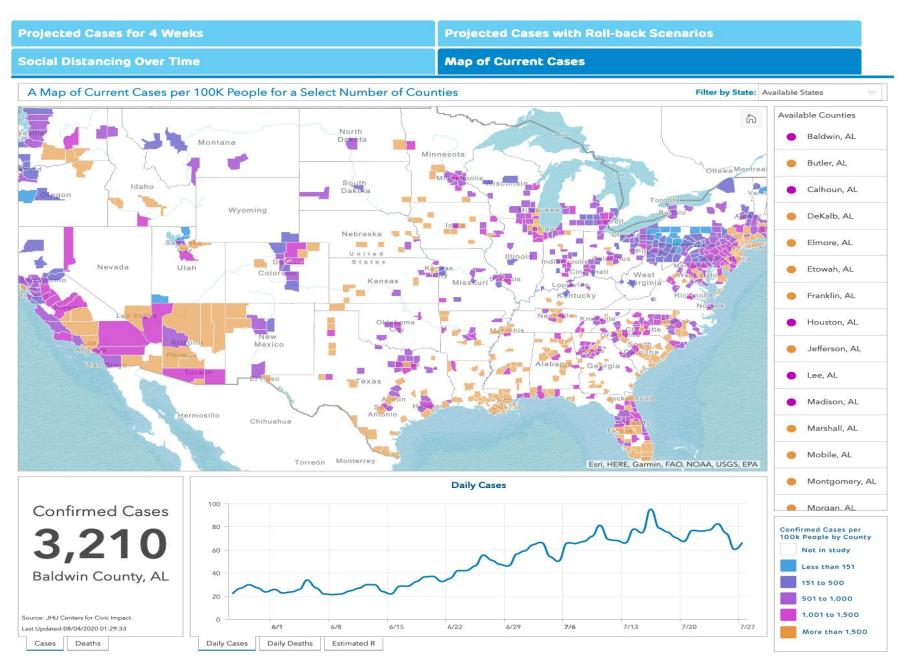
PLACE MATTERS: INFORMING LOCAL RESPONSES TO THE COVID-19 EPIDEMIC

- David Rubin MD MSCE
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COVID-LAB: MAPPING COVID-19 IN YOUR COMMUNITY





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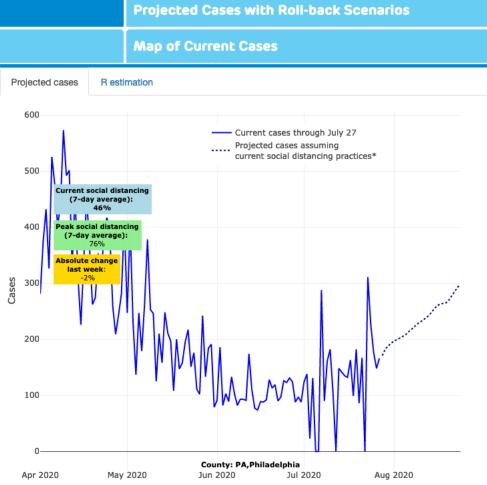
COVID-LAB: MAPPING COVID-19 IN YOUR COMMUNITY

Projected Cases for 4 Weeks Social Distancing Over Time Projected cases See projections by county: 600 PA.Philadelphia -500 The instantaneous reproduction number (R) is estimated using the daily incidence of new cases, 46% while including effects of social distancing, population . 400 density, testing capacity, and combined temperature

and humidity lagged over the prior 14 days. Each county's effects are standardized by population demographics. In prediction models, the future R is estimated from an autoregressive linear mixed effects model that includes county-level population density, 3-day average of social distancing, and lagged nonlinear averaged historical temperatures effects over the prior 14 days. Future cases are estimated from predicted values of R.

*We measure social distancing as the percentage change in travel to non-essential businesses, as compared to normal activity before the pandemic. We calculate travel to non-essential businesses using cellphone GPS data from Unacast.

These projections were updated on July 29.









QUESTIONS AND COMMENTS?



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