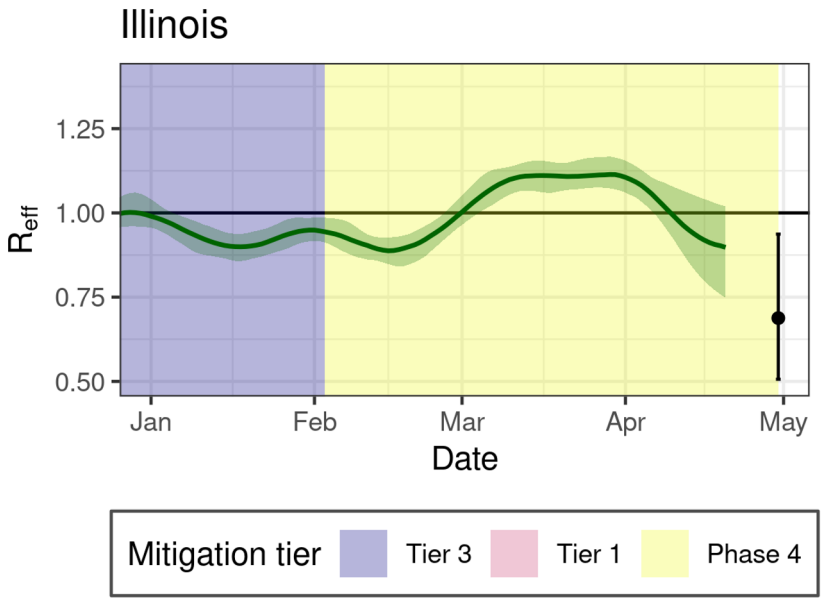
THE UNIVERSITY OF CHICAGO

- **R_{eff} fell between March 26 and April 20, indicating a slowdown in epidemic growth.**
- **Vaccination explains 30–72% of the reduction in R_{eff} since its most recent peak, showing that behavioral changes, seasonal variation, and other factors play significant roles in reducing transmission.** This estimate accounts for uncertainty in vaccine effectiveness, the infection fatality ratio, the allocation of vaccines to susceptible individuals, and the increased transmissibility of B.1.1.7.
- **We estimate that 47–64% of the population is immune through either infection or vaccination.**
- **More transmissible variants are likely to continue spreading which could change R_{eff}, the fraction immune, and herd immunity thresholds.**

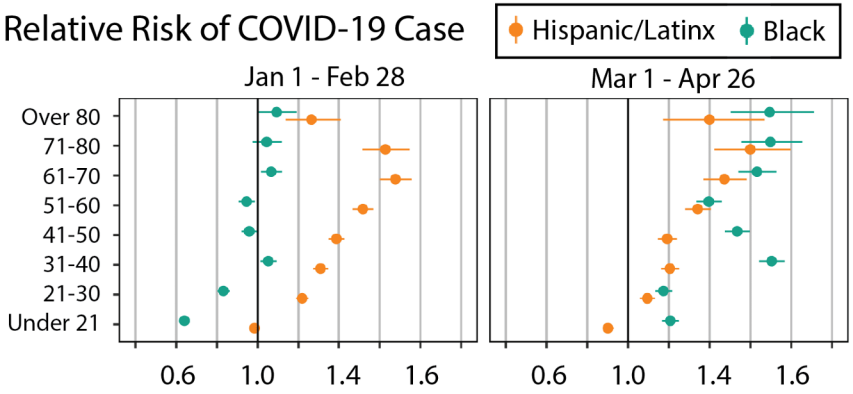


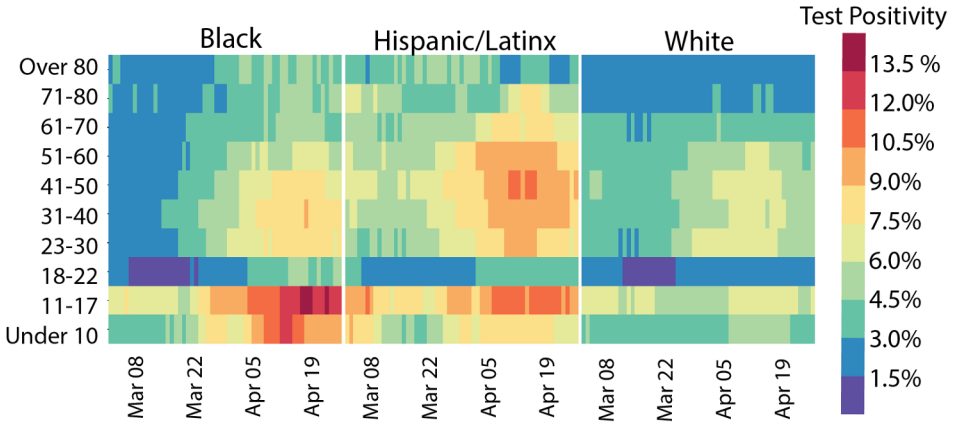
Green line shows R_{eff} estimated from CLI. Point with errorbars shows most recent R_{eff} estimate from full transmission model fitted to census hospitalizations and deaths.

April 30, 2021

Northwestern University

- Compared to Jan-Feb, **disparities** in per capita case rates have **persisted for Hispanic/Latinx** people and **worsened for Black** people since March 1.
- **Testing increased for Black people age 23-60** in April, rising to the rates seen for White people 23-30 and Over 80.
  - More testing was followed by **increased TPR**, suggesting **under-testing relative to exposure** in this demographic.
- Despite high case burdens, **Hispanic/Latinx** people are still **tested at the lowest rates.**
  - In April, **TPR** rose **above 9%** for Hispanic/Latinx adults ages 23-70.
- Pediatric testing reached a new peak, but **Black and Hispanic/Latinx children** are **tested at roughly half the rate** of White children.
  - Access to **pediatric testing remains variable** - almost 30% of 14-17 year olds tested since March 1 were from Region 9.





April 30, 2021