

Poverty and Crowding Linked to Higher Rates of COVID-19 in Pregnancy

Prior to the rollout of the vaccine, pregnant Black and Latino people were most affected by COVID-19.

May 12, 2022 By Laura Schmidt

A new study led by researchers at Children’s Hospital of Philadelphia and published in *Obstetrics and Gynecology* could help explain why Black and Latino people saw high rates of COVID infection during [pregnancy](#) in the pre-vaccination era of the pandemic.

[The study](#) found an association between higher rates of SARS-CoV-2 during pregnancy and crowding at home and [poverty](#).

“Addressing the structural racism that has led to persistently different living conditions by race and ethnicity in the United States and investing in residential communities, will be key to advancing health equity,” Heather H. Burris, MD, MPH, an attending neonatologist with the Division of Neonatology at Children’s Hospital of Philadelphia and first author of the study, [said in a news release](#).

Previous studies have demonstrated that Latino and Black individuals are 2.8 times more likely to be admitted to a hospital and twice as likely to die of COVID-19 compared with white individuals. Similar results have been reported among pregnant Black and Latino patients. In fact, CHOP reported that the SARS-CoV-2 positivity rate was five times higher in pregnant Black and Latino patients in a hospital-based cohort in Philadelphia.

The study analyzed a cohort of 5,991 pregnant people who gave birth between April and December 2020 in two hospitals in Philadelphia. Researchers tested serum samples for antibodies to SARS-CoV-2, the presence of which would determine current or prior infection. Patients self-reported race and ethnicity, while researchers assessed patients residences and neighborhoods for crowding, racial segregation and community deprivation as measured by the proportion of residents with incomes below the federal poverty line and without a high school degree as well as the proportion of residents lacking [medical insurance](#).

Researchers discovered that 9.4% of all patients in the cohort tested positive for antibodies but higher rates were seen among Latino (19.3%) and Black (14%) patients compared with Asian (3.2%) and white (2.7%).

Researchers found that crowding and deprivation were both associated with positivity for SARS-CoV-2, but segregation was not. Statistical analysis also showed that crowded housing might explain 6.7% of the Latino-white disparity and neighborhood deprivation could explain 10.2% of the Black-white disparity.

The study authors hypothesize that close quarters and the sharing of ambient air, lack of ventilation and inability to quarantine allow the virus to spread more easily. They also emphasize the need for structural changes to better support health equality that will lead to safer and better outcomes for pregnant patients.

To learn more about COVID-19 and pregnancy, [click here](#).

© 2026 Smart + Strong All Rights Reserved.

<http://beta.docker.realhealthmag.com/article/multiple-sclerosis-rates-nearly-equal-in-black-white-people>