

Geographic variability seen in county-level preterm birth rates

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Considerable geographic variability is seen in county-level preterm birth

rates, according to a study published online Dec. 8 in *JAMA Network Open*.

Sadiya S. Khan, M.D., from the Northwestern University Feinberg School of Medicine in Chicago, and colleagues estimated age-standardized preterm birth rates by U.S. county from 2007 to 2019 in a serial cross-sectional study using data from the National Center for Health Statistics for all live births between 2007 and 2019.

Data were included from 51,044,482 live births in 2,383 counties between 2007 and 2019. The researchers found that the national age-standardized preterm birth rate was 12.6 per 100 live births in 2007. Among counties, there was significant variation seen in preterm birth rates, with an absolute difference of 6.4 between the 90th and 10th percentiles.

In 2007, the gap between the highest and lowest counties for preterm births was 20.7 per 100 [live births](#). At the national level, there was no significant change observed in preterm birth rates between 2007 and 2019, while increases occurred in 15.4 percent of counties. Across all maternal age groups, the absolute and relative geographic inequalities were similar.

Higher preterm birth rates were seen in association with a higher quartile of the Social Vulnerability Index (quartile 4 versus 1 risk ratio, 1.34), which persisted across the study period. For early preterm birth rates, similar patterns were seen.

"Policymakers, researchers, and clinicians may use these county-level prevalence and trend estimates to inform the development and evaluation of interventions to reduce place-based disparities in [preterm birth](#)," the authors write.

More information: Sadiya S. Khan et al, US County–Level Variation in Preterm Birth Rates, 2007-2019, *JAMA Network Open* (2023). [DOI: 10.1001/jamanetworkopen.2023.46864](https://doi.org/10.1001/jamanetworkopen.2023.46864)

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