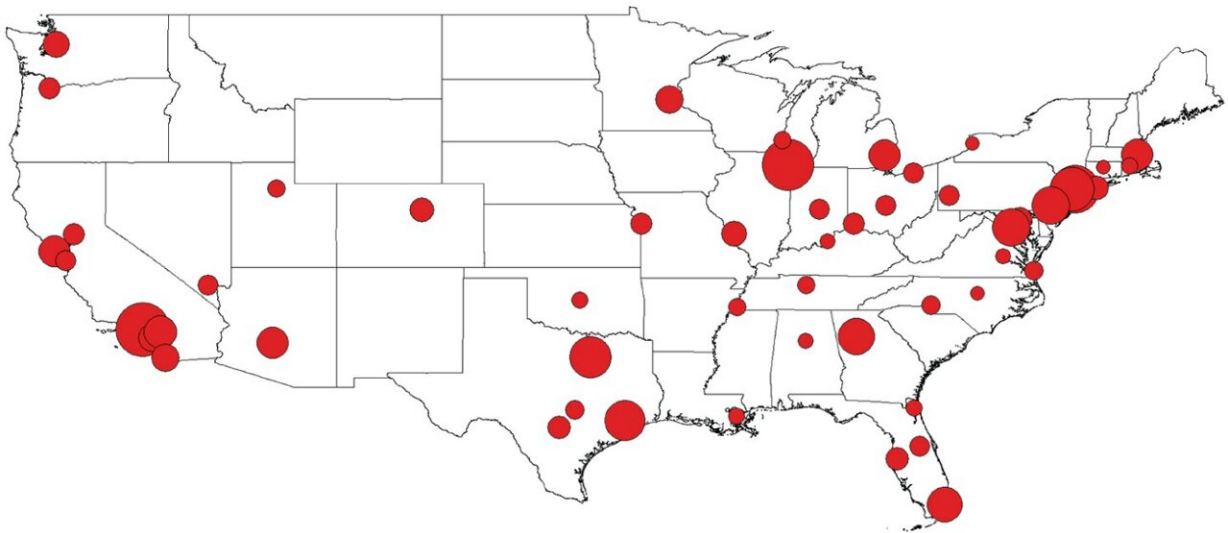


# New study shows heat waves increase risk of preterm, early-term birth

May 27 2024, by Rob Spahr

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Metropolitan statistical areas included in the study. Circles are proportional to sample size. Credit: *JAMA Network Open* (2024). DOI: 10.1001/jamanetworkopen.2024.12055

The increased frequency and intensity of heat waves due to climate change puts women at a higher risk of experiencing preterm and early-term labor—jeopardizing the health and well-being of their babies.

These are the results of a new multi-institutional study [published](#) Friday, May 24, in *JAMA Network Open*.

An analysis of 53 million births that occurred in the 50 most populous U.S. [metropolitan areas](#) during the 25-year period 1993–2017, showed the rates of preterm and early-term births increased when local temperatures were abnormally hot for more than four consecutive days.

The study—led by researchers from Emory University, University of Nevada Reno, Yale University, University of Utah and the National Center for Atmospheric Research—is the largest to date investigating the association between [extreme heat](#) and perinatal health.

Preterm and early-term births—gestation of less than 37 weeks and less than 39 weeks, respectively—are leading causes of infant mortality and longer-term health issues, such as respiratory, cognitive, and behavioral outcomes. Even modest increases in cases of these conditions can have large public health implications.

"We are forecasting a very warm summer this year and because of [climate change](#) we will experience more [heat waves](#) in the future.

"Our study shows that this increase in temperature could mean worse outcomes for the babies, because babies born prematurely can have health issues and additional health care costs," said the study's senior author Howard Chang, Ph.D., professor of biostatistics and bioinformatics at Emory University's Rollins School of Public Health.

**More information:** Lyndsey A. Darrow et al, Preterm and Early-Term Delivery After Heat Waves in 50 US Metropolitan Areas, *JAMA Network Open* (2024). [DOI: 10.1001/jamanetworkopen.2024.12055](https://doi.org/10.1001/jamanetworkopen.2024.12055)

Provided by Emory University

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