

# Link between kidney dysfunction and premature births

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Credit: Robina Weermeijer/Unsplash

Women with prepregnancy kidney dysfunction are at increased risk of preterm (premature) birth and other complications, especially women with chronic kidney disease, found new research published in *CMAJ* (*Canadian Medical Association Journal*).

Preterm [birth](#) before 37 weeks' gestation occurs in 6% to 11% of viable

pregnancies and is the leading cause of infant death.

"The timely recognition of prepregnancy [kidney](#) dysfunction has several potential benefits, including informed counseling about the risk of adverse perinatal outcomes, closer monitoring of mother and fetus in pregnancy and potential use of acetylsalicylic acid to prevent preeclampsia," writes Dr. Ziv Harel, St. Michael's Hospital, Toronto, Ontario, with coauthors.

In a large study of almost 56,000 pregnancies in Ontario, Canada, there was a 9% rate of [preterm birth](#) before 37 weeks' gestation in women with kidney dysfunction compared with 7% in women with normal kidney function. The mean maternal age was 30.7 years, 26% were non-White, and 46% were pregnant with their first child. The risk of severe preterm birth at or before 32 weeks was about doubled in women with kidney dysfunction. Of all the preterm births, 57% (2255) were initiated by the health care provider and the remaining 43% (1701) were spontaneous.

The conclusions from previous research on this topic have been inconsistent, and the sample sizes of studies have often been small.

The authors suggest that measuring some women's serum creatinine before pregnancy may provide clinicians a novel way to assess the risk of preterm birth.

"Given that measurement of serum creatinine is a readily available and inexpensive blood test, there may be a role for screening potentially high-risk [women](#) for kidney dysfunction either before conception or in the first half of pregnancy," they conclude.

**More information:** Ziv Harel et al. Prepregnancy renal function and risk of preterm birth and related outcomes, *Canadian Medical*

*Association Journal* (2020). [DOI: 10.1503/cmaj.200089](https://doi.org/10.1503/cmaj.200089)

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