

# Pre-eclampsia increases risk of end stage kidney disease, study finds

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Women with pre-eclampsia during pregnancy have a five-fold increased risk of end stage kidney disease (ESKD) later in life compared to women who don't develop pre-eclampsia during pregnancy. Credit: rawpixel, Pixabay

Women with pre-eclampsia during pregnancy have a five-fold increased risk of end stage kidney disease (ESKD) later in life compared to women who don't develop pre-eclampsia during pregnancy, according to a new study published this week in *PLoS Medicine* by Ali Khashan of University College Cork, Ireland, and colleagues at the Karolinska Institute, Sweden and Liverpool University, UK.

As the prevalence of kidney disease has risen over recent years, it has become clear that more [women](#) have pre-dialysis kidney disease than men. Reproductive history, including the development of pre-eclampsia during [pregnancy](#), has been hypothesized to play a role. In the new study, researchers analyzed data from the Swedish Medical Birth Register on 1,366,441 healthy women with 2,665,320 singleton [live births](#) in Sweden between 1982 and 2012.

The data revealed that women who had pre-eclampsia in at least one pregnancy were nearly

five times more likely to have ESKD than women who had never had pre-eclampsia (hazard ratio 4.96; 95%CI 3.89-6.32). The incidence rate of ESKD per 100,000 person-years was 1.85 (95%CI 1.66-2.05) among women with no history of pre-eclampsia and 12.35 (95%CI 9.61-15.88) among women with a history of pre-eclampsia. Moreover, the association was independent of other factors including maternal age and education, and diagnoses of renal disease or [cardiovascular disease](#) before pregnancy.

The new paper "shows that pre-eclampsia is a sex-specific, [independent risk factor](#) for the subsequent development of ESKD," the authors say. "However, it should be noted that the overall ESKD risk remains small. Whether screening or preventative strategies will reduce the risk of ESKD in women with adverse pregnancy outcomes is worthy of further investigation."

**More information:** Khashan AS, Evans M, Kublickas M, McCarthy FP, Kenny LC, Stenvinkel P, et al. (2019) Preeclampsia and risk of end stage kidney disease: A Swedish nationwide cohort study. *PLoS Med* 16(7): e1002875. [doi.org/10.1371/journal.pmed.1002875](https://doi.org/10.1371/journal.pmed.1002875)

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