

Links between parental exposure to pesticides, childhood cancer explored

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Maternal or paternal exposure to pesticides does not appear to be

associated with increased risks for childhood cancer, according to a study published online July 6 in *Environmental Research*.

Marios Rossides, M.D., Ph.D., from the Karolinska Institutet in Stockholm, and colleagues examined the association between maternal and paternal exposure to [pesticides](#) and [childhood cancer](#) in a Swedish register case-control study from 1960 to 2015. A total of 17,313 individuals with cancer aged younger than 20 years were identified and matched in a 1:25 ratio with controls on birth year and sex. Exposure to any herbicides, insecticides, and fungicides was examined for 9,653 and 172,194 mothers and 12,521 and 274,434 fathers of cases and controls, respectively.

The researchers found that with maternal occupational exposure to pesticides, the associated odds ratio was 1.42 (95 percent confidence interval, 0.78 to 2.57; 12 exposed cases) for lymphoma and 1.30 (95 percent confidence interval, 0.88 to 1.93; 27 exposed cases) for other [solid tumors](#). There was no association observed between [maternal exposure](#) and leukemia or central nervous system tumors or for paternal exposure with any of the cancers examined, apart from a potential association between pesticide exposure and [myeloid leukemia](#) (odds ratio, 1.15; 95 percent confidence interval, 0.73 to 1.79; 22 exposed cases).

"Although these associations should be interpreted with caution as they were based on few exposed cases, they suggest that some risks of childhood cancer exist even in settings where the use of pesticides is low," the authors write.

One author disclosed financial ties to Teva Pharmaceuticals.

More information: [Abstract/Full Text](#)

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