

Exposure to pyrethroid insecticides linked to mortality

December 31 2019



(HealthDay)—Environmental exposure to pyrethroid insecticides is

associated with an increased risk for all-cause and cardiovascular disease mortality, according to a study published online Dec. 30 in *JAMA Internal Medicine*.

Wei Bao, M.D., Ph.D., from the University of Iowa in Iowa City, and colleagues examined the correlation of pyrethroid exposure with all-cause and cause-specific mortality using data from 2,116 adults aged 20 years and older who participated in the U.S. National Health and Nutrition Examination Survey conducted from 1999 to 2002.

The researchers found that 246 deaths occurred during a median of 14.4 years, including 41 deaths associated with [cardiovascular disease](#) and 52 associated with cancer. During the follow-up period, participants with higher urinary 3-phenoxybenzoic acid levels were at elevated risk for death, with death occurring in 8.5, 10.2, and 11.9 percent of participants across increasing tertiles of urinary 3-phenoxybenzoic acid levels. Among participants in the highest tertile versus the lowest tertile of urinary 3-phenoxybenzoic acid levels, the hazard ratios for all-cause mortality, cardiovascular disease mortality, and cancer mortality were 1.56 (95 percent confidence interval, 1.08 to 2.26), 3.00 (95 percent confidence interval, 1.02 to 8.80), and 0.91 (95 percent confidence interval, 0.31 to 2.72), respectively, after adjustment.

"Environmental exposure to [pyrethroid insecticides](#) was significantly associated with an [increased risk](#) of all-cause mortality in the U.S. general adult population," the authors write. "The observed association is likely associated with pyrethroid-induced adverse effects on the cardiovascular system."

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)
[Editorial \(subscription or payment may be required\)](#)

Copyright © 2019 [HealthDay](#). All rights reserved.

Citation: Exposure to pyrethroid insecticides linked to mortality (2019, December 31) retrieved 11 May 2024 from <https://medicalxpress.com/news/2019-12-exposure-pyrethroid-insecticides-linked-mortality.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.