

# Hispanics bear brunt of exposure to workplace hazards: study

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(HealthDay)—Exposure to metals and pesticides at work could increase

risk of heart disease, researchers say.

Hispanic workers in the United States may be especially vulnerable because of [language barriers](#) and lower levels of education, the study authors noted.

"Exposure to metals and pesticides is common worldwide, and this study highlights the need to better understand the risks that these exposures cause, and to limit exposure in the workplace, thus promoting cardiac health," wrote Karin Broberg in an editorial accompanying the study. Both were published online Dec. 11 in the journal *Heart*.

Broberg is a geneticist and toxicologist at the Karolinska Institute in Solna, Sweden.

The study was led by Maria Argos, an associate professor at the University of Illinois School of Public Health, in Chicago. Her team looked at more than 7,400 Hispanic workers, ages 18 to 74, in Chicago, Miami, New York City and San Diego.

Just over 6 percent of the workers had some form of heart disease. The most common was [coronary heart disease](#) (more than 4 percent) and the least common was a heart rhythm disorder called [atrial fibrillation](#) (less than 1 percent).

Workplace exposure to metals or pesticides was associated with an increased risk of coronary heart disease and atrial fibrillation, but not heart failure or cerebrovascular disease, the researchers said.

After taking into account other factors, the researchers concluded that exposure to pesticides was associated with a nearly sixfold higher risk of atrial fibrillation, while exposure to metals was associated with a nearly fourfold higher risk.

Pesticide exposure was also associated with more than double the risk of coronary heart disease, Argos and her colleagues said.

As many as 9 percent of the workers were exposed to chemicals and metals in the workplace.

Among workers who had been in their current jobs for an average of 10 years, the association between metal exposure and the risk of atrial fibrillation was nearly five times greater, suggesting that long-term [exposure](#) might be more harmful, the researchers noted.

The study can't prove these exposures increase the odds of heart disease, since only an association was observed.

Still, "Hispanic/Latino workers may be disproportionately exposed to cardiotoxic agents compared with other racial/[ethnic groups](#) and uniquely vulnerable to workplace hazards because of language barriers, low educational attainment and [limited resources](#)," Argos and her colleagues wrote.

"A lack of culturally appropriate job safety training, coupled with fears surrounding job security and [immigration status](#) could make Hispanic/Latinos engaged in hazardous jobs even more susceptible to occupational illnesses," they added.

**More information:** The U.S. Centers for Disease Control and Prevention has more on [heart disease risk factors](#).

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