



# HAZARD ALERT

**New study:  
Work-  
place  
chemical  
exposures  
and in-  
creased  
breast  
cancer  
risk**

Young women working in the automotive plastics and food packing industry are *five times more likely to have breast cancer* than their peers working in other industries.<sup>1</sup>

This is the key finding of a groundbreaking new study about breast cancer published in Environmental Health. This six-year Canadian study involved more than 1,000 women with breast cancer and a control group from the same communities in Ontario.

Researchers found that women who worked for 10 years in the automotive, agricultural, plastics, canning, and the casino, bar and racetrack sectors had elevated breast cancer risk. The highest risk factors —nearly 5 times higher than in the control—were for pre-menopausal women working in the automotive plastics and food-canning sectors.

These workers have higher-than-normal exposure to and body burden of carcinogenic and endocrine disrupting chemicals, which are chemicals that act like estrogens and other hormones. Exposure to complex mixtures of these chemicals may cause worse health effects than the sum of chemicals' individual effects.<sup>2</sup>

Let's say this again: these industries have more likely exposure to chemicals that act like estrogens and other hormones. And pre-menopausal women who work in these industries, according to this study, are five times more likely to have breast cancer.

## What does this study mean for USW members?

This study is the first of its kind to correlate breast cancer among premenopausal women and workplace exposure to carcinogens and endocrine disrupting chemicals that. These chemicals include styrene, acrylonitrile, vinyl chloride, phthalates, BPA, brominated flame retardants, heavy metals, some solvents, and complex chemical mixtures.

The implications of this study are broad and affect USW members across the US and Canada who work with many of the same chemicals in industries including plastics manufacturing and food canning, metalworking, rubber, oil refining, coated paper manufacturing, the chemical industry, and others.

As union members we can:

1. Educate our members about the health hazards of chemicals;
2. Use our collective voice to win health and safety improvements in our workplaces, such as substituting less hazardous chemicals or using engineering and design controls to prevent worker exposures to harmful chemicals; and
3. Tell our elected representatives that we support reforming outdated chemical laws.

Contact the USW Health, Safety & Environment Department for more information.



5 Gateway Center  
Pittsburgh, PA 15222  
[safety@usw.org](mailto:safety@usw.org)  
(412) 562-2581



<sup>1</sup> Brophy et al.: [Breast cancer risk in relation to occupations with exposure to carcinogens and endocrine disruptors: a Canadian case-control study](#). Environmental Health 2012 11:87.

<sup>2</sup> Dematteo et al. [Chemical exposures of women workers in the plastics industry with particular reference to breast cancer and reproductive hazards](#). New Solutions 2012 22(4): 427-448.