

# Study Shows Link Between Chemicals & Breast Cancer in Female Workers



Unsafe workplace conditions can not only result in injuries but also illnesses. For example, a [recently published study](#) on female workers in Ontario shows a tie between exposure to hazardous chemicals and breast cancer.

The [six-year study](#), conducted by a team of researchers from Canada, the US and the UK, examined the occupational histories of 1,006 women from Ontario's Essex and Kent counties who had breast cancer and 1,146 who didn't. The women in the study worked in auto parts plants, casinos, food canning factories, farms and metalworking plants. The researchers made adjustments for smoking, weight, alcohol use and other lifestyle and reproductive factors.

*The results:* Women employed in the automotive plastics industry were almost **five times** as likely to develop breast cancer (pre-menopause) as women in the control group. These workers may handle an array of carcinogenic and endocrine-disrupting chemicals, including bisphenol A (BPA), solvents, heavy metals and flame retardants.

Although the study focused on women employed in plastics factories, the implications are broader. After all, workers in similar and other kinds of plants around the world are exposed to many of the same chemicals.

This research supports similar conclusions in other studies on

breast cancer and chemicals:

- A [French study](#) in 2011 found elevated cancer risks among women who worked in plastics, rubber and textile manufacturing.
- A [study from Mexico](#) in 2010 found that the presence of metabolites of phthalates' softening agents for plastics that have endocrine-disrupting properties' in urine was 'positively associated' with breast cancer.
- A [2007 paper](#) from US researchers identified 216 chemicals that have been associated with mammary gland tumors in animals.

[Shift work](#) has also been tied to increased cancer risks.

An [in-depth article](#) by the Center for Public Integrity looked at the study and the conditions under which these women worked.

It notes that for more than three decades, workers, most of them women, complained about dreadful conditions in many of Windsor's plastic automotive parts factories, including pungent fumes and dust that caused nosebleeds, headaches, nausea and dizziness.

Workers say that conditions in some of the plants have improved. For example, hot plastic would be removed from the molding machines and dumped on the floor, where it could lie for up to an hour. Some companies have altered this process, now requiring this muck to be put into covered barrels.

Others have relocated grinding machines that generate huge quantities of dust to isolated areas to reduce worker exposure. But workers say that a lack of local ventilation is still typical at many facilities.

The Canadian plastics workers interviewed by the Center say they have little faith in their country's system of workplace regulation. They claim factory inspections are haphazard and

chemical standards in many cases are weak.

The Canadian Plastics Industry Association didn't respond to the Center's requests for comment nor did the president of the Canadian Automotive Parts Manufacturers' Association.