

# RISK OF LEUKEMIA AMONG ONTARIO WORKERS

## Key Insights

- Females and males employed in **motor transportation operating** and **metal product fabricating** had a higher risk of leukemia compared to other workers. This is consistent with known cancer-causing agents in these environments.
- Higher risks were also observed among female workers in **sales**, as well as male workers in **mining, metal machining, protective services, and mechanical repairing**.
- Differences in leukemia risk between female and male workers may be due to variations in work-related exposures, such as benzene, formaldehyde, and ionizing radiation, and non-occupational factors.

Our study identified



**1,810 cases**  
among female workers



**5,464 cases**  
among male workers

## Select occupations with a higher risk of leukemia in comparison to other occupations

### Higher Risk Among Female Workers



↑ **29%**  
Metal Product  
Fabricating and  
Assembling



↑ **21%**  
Motor Transport  
Operating



↑ **17%**  
Commodity Sales

### Higher Risk Among Male Workers



↑ **28%**  
Mining and Quarrying



↑ **23%**  
Metal Machining



↑ **17%**  
Protective Services



↑ **14%**  
Motor Transport  
Operating



↑ **10%**  
Mechanics and  
Repairers (Excluding  
Electrical)



↑ **10%**  
Metal Product  
Fabricating and  
Assembling



This fact sheet summarizes the risk of leukemia among workers in the Occupational Disease Surveillance System (ODSS) based on diagnoses identified in the Ontario Cancer Registry (OCR) from 1983 to 2019. Workers in each occupation group are compared to all other workers in the ODSS. This study also explored risks among the four major types of leukemia, including acute myeloid leukemia (AML), chronic myeloid leukemia (CML), acute lymphoblastic leukemia (ALL), and chronic lymphocytic leukemia (CLL). These findings, and additional details related to this study, can be found in our recent publication.



View the publication: [mdpi.com/1660-4601/21/8/981](https://mdpi.com/1660-4601/21/8/981)