

SEX-DIFFERENCES IN CARPAL TUNNEL SYNDROME RISK AMONG ONTARIO WORKERS

Key Insights

- The risk of carpal tunnel syndrome (CTS) differs by occupation and sex:
 - Male and female workers** employed in welding, packaging, and certain processing and fabricating occupations had a higher risk of CTS.
 - Males** employed in mining, construction, and as nursing aides and orderlies had higher risks.
 - Females** employed in janitorial and cleaning occupations, wood machining, and textile processing had higher risks.
- Occupations with higher risk of CTS often involve highly repetitive and forceful hand movements in awkward wrist postures.

Our study identified



3,224 cases
among female workers



2,992 cases
among male workers

Select occupations among both male and female workers with an increased risk of CTS compared to all other workers in the ODSS



Packaging

Females	Males
↑ 106%	↑ 82%



Motor Vehicle Fabricating and Assembling

Females	Males
↑ 114%	↑ 143%



Welding and Flame Cutting

Females	Males
↑ 83%	↑ 65%



Slaughtering and Meat Cutting, Canning, Curing and Packing

Females	Males
↑ 128%	↑ 95%



Labouring and Other Elemental Work in Food, Beverage, and Related Processing

Females	Males
↑ 88%	↑ 42%

This fact sheet summarizes the risk of carpal tunnel syndrome (CTS) among a large cohort of Ontario, Canada workers, known as the Occupational Disease Surveillance System (ODSS). This analysis included approximately 800,000 eligible workers. Cases were identified based on CTS surgeries in physician billing records from 2002-2020. Workers in each occupational group were compared to all other workers in the ODSS.

[View the publication:](#)

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More information about the ODSS can be found at www.occupationalcancer.ca/project/occupational-disease-surveillance-system-odss/. The Occupational Cancer Research Centre is funded by the Ontario Ministry of Labour, Immigration, Training and Skills Development (MLITSD), the Ontario Ministry of Health (MOH), and Ontario Health (OH). The views expressed herein do not necessarily represent those of the MLITSD, MOH, or OH.