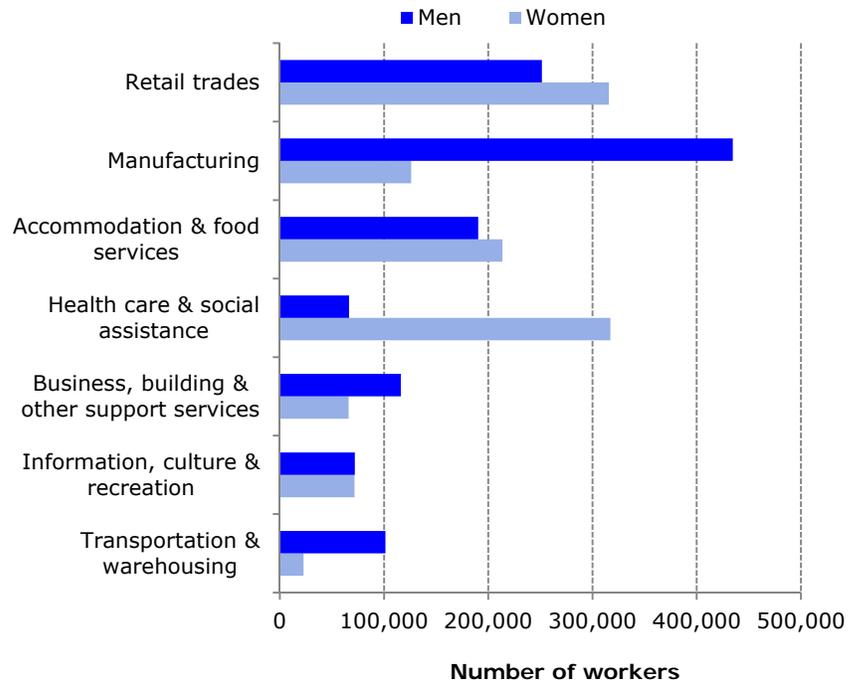


Shift work in Canadian industries – a probable cancer risk factor

Night-time shift work has been classified as 'probably carcinogenic to humans' by the International Agency for Research on Cancer (IARC).¹ Work at night may cause breast cancer in women² and could potentially cause other cancers such as prostate³ and endometrium.⁴ Shift work is also suspected to cause cardiovascular disease,⁵ pregnancy complications,⁶ and injuries.⁷ The negative health effects of shift work are thought to be related to circadian rhythm disruption, working conditions, fatigue, behavioural changes (e.g., smoking, diet), or stress.⁸

In 2006, approximately 11% of employed Canadians worked rotating shifts, while 6% worked regular evenings and 2% worked regular night shifts. Patterns of shift work varied among industries and between men and women. The sectors with the largest number of shift workers (rotating, evening or nights) were the retail trades, manufacturing, accommodation and food services, and health care and social assistance. These four sectors had over 20% of their workforce working shifts. There were many more men in manufacturing and women in healthcare and social assistance, primarily due to the number of men and women employed in those two sectors, respectively.

Industries with the highest number of shift workers in Canada



Source: Canadian Survey of Labour and Income Dynamics, 2006. Demers PA et al. 2001. See <http://www.iwh.on.ca/shift-work-symposium/demers>.

- Night shift work is suspected to cause negative health outcomes, including cancer.
- Industrial sectors in Canada with the largest number of shift workers are the retail trades, manufacturing, hospitality and health care.
- Understanding the patterns of shift work helps us direct research and prevention efforts.

Understanding the distribution of shift workers across industries and the types of shifts that they work helps us to design research studies, predict health impacts and target prevention efforts, with the ultimate goal of mitigating the adverse health effects of shift work.

In 2010, the Occupational Cancer Research Centre and the Institute for Work & Health co-hosted a scientific symposium on the health effects of shift work that brought together the research, employer, labour and workers' compensation communities. A second symposium, focused on interventions to reduce the impact of shift work, is planned for the fall of 2011.

For more information, see:

- Occupational Cancer Research Centre (OCRC) at <http://occupationalcancer.ca>.
- Summary report, issue briefing and presentations from the Scientific Symposium on the Health Effects of Shift Work (Toronto, April 12, 2010) at <http://www.iwh.on.ca/shift-work-symposium>.

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Note: Shift work is generally described as a work schedule that is consistently outside of, or rotates from, standard daytime work hours.

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