

Scientific Symposium
The Health Effects of Shift Work

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The Prevalence of Shift Work in Canada

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Potential Health Effects of Shift Work

- Workplace injury
- Cardiovascular disease
- Cancer, particularly breast
- Reproductive effects
- Others...

Why are the Patterns of Shift Work Important?

- Target populations for Research
 - Identify populations based on demographic and shift schedule characteristics
- Target populations for Prevention
 - Identify large groups with specific shift or other characteristics

Statistics Canada Survey of Labour and Income Dynamics (SLID)

- Annual representative survey of the Canadian population, started in 1993
- 2 panels of 15,000 households each, surveyed annually for 6 years with a new panel introduced every 3 years
- Sampling weights are assigned to each respondent to allow extrapolation from the respondents to the full population

Methods

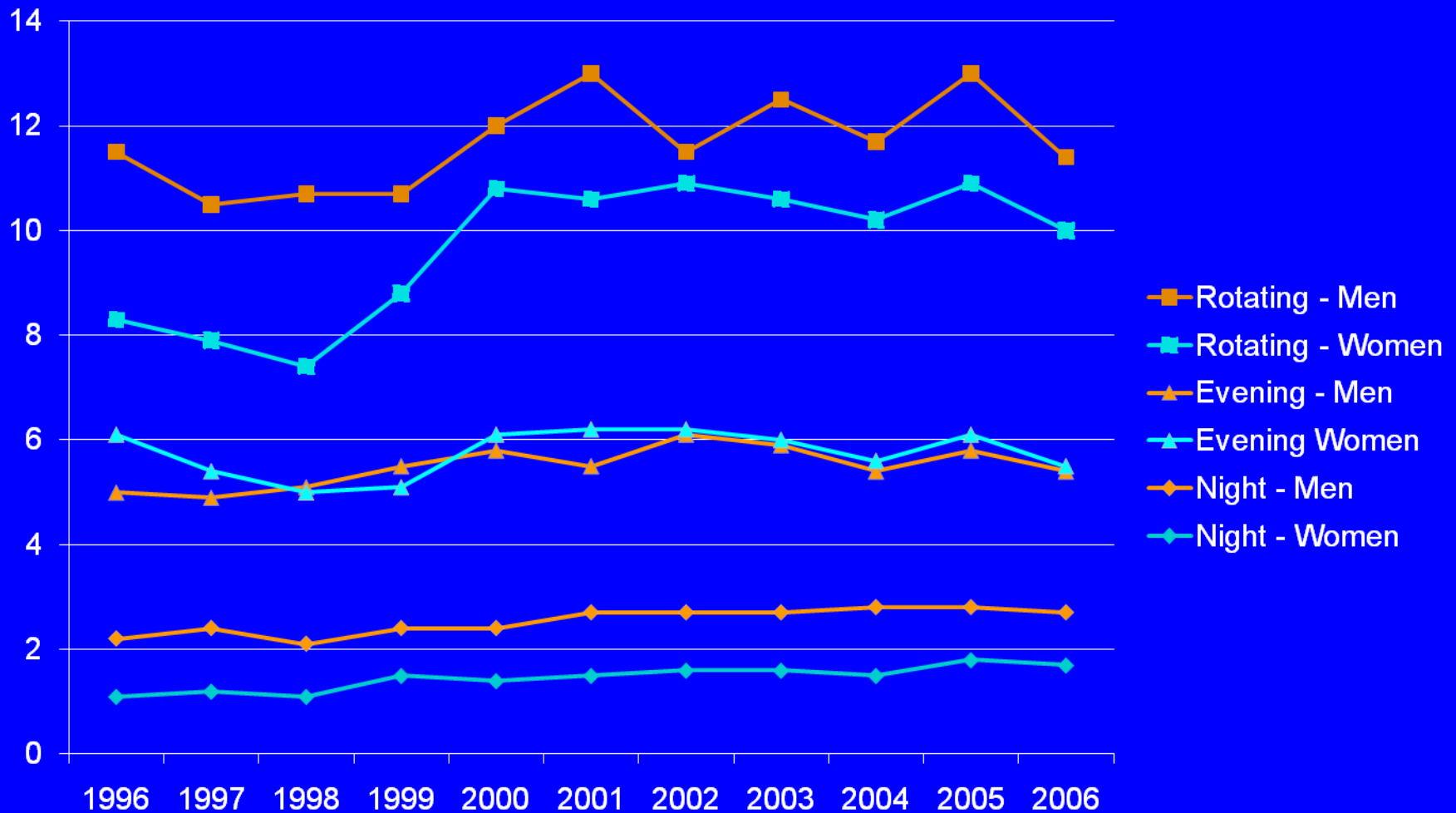
- 2006 SLID used to examine patterns of shift work by sex, age, industry (15 categories) & occupation (25 categories)
- Trends examined using data from 1996 through 2006
- Responses from participants who were working and between 16 and 69 years old were used
- Extrapolated estimates for the full population are presented

Shift Work in Canada: 2006

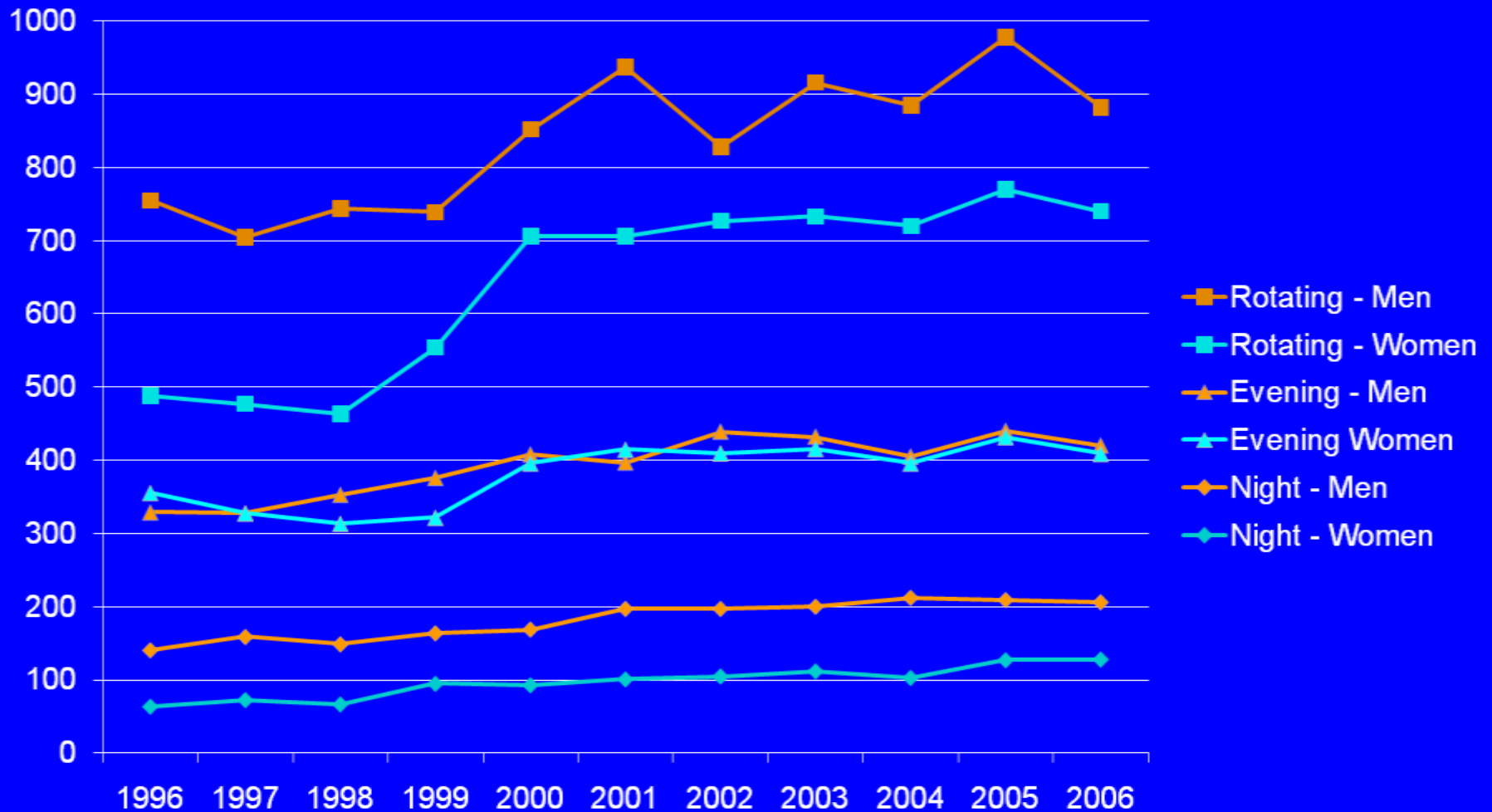
	Men	Women
Daytime schedule	65.6%	66.0%
Rotating shift	11.4%	10.0%
Irregular schedule	10.3%	11.8%
Evening schedule	5.4%	5.5%
Night or graveyard shift	2.7%	1.7%
On call	2.0%	2.4%
Split shift	0.8%	1.0%
Other	1.7%	1.5%

- Survey of Labour and Income Dynamics (SLID), Statistics Canada, 2006.

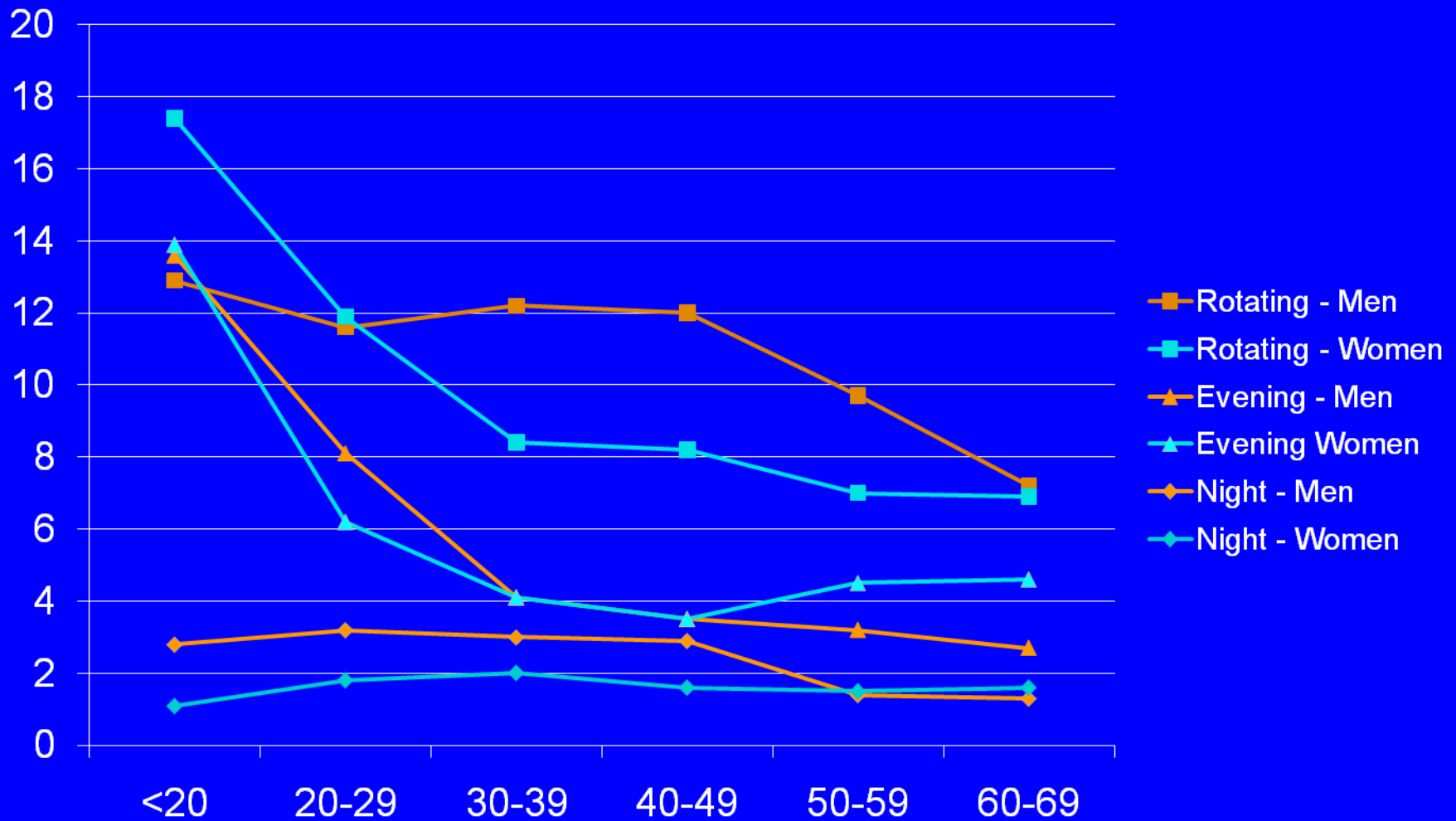
Percent of Labour Force Working Rotating/evenings/night Shifts by Year & Gender



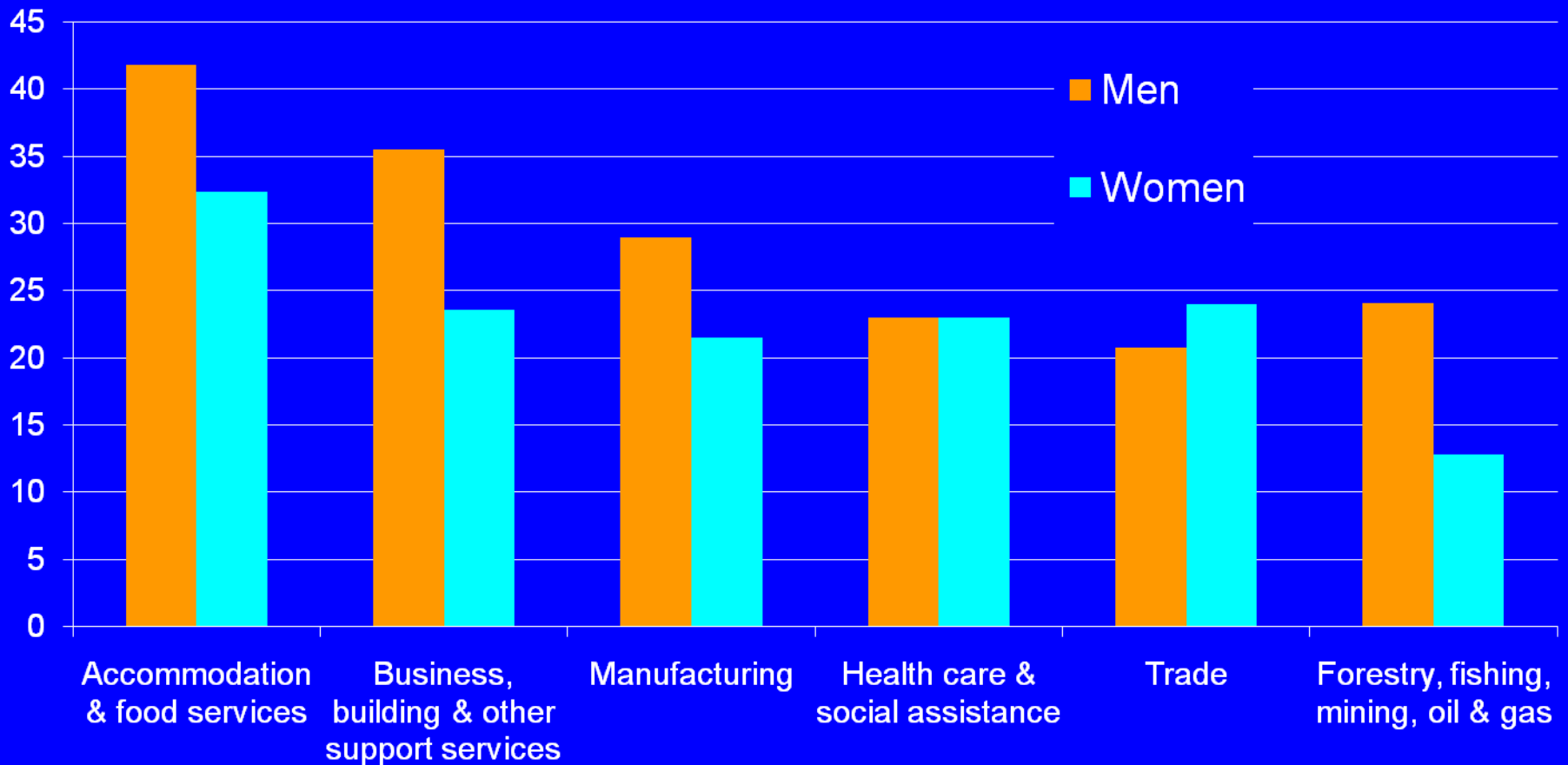
Size of Labour Force (1000's) Working Rotating/evening/Night Shifts by Year & Gender



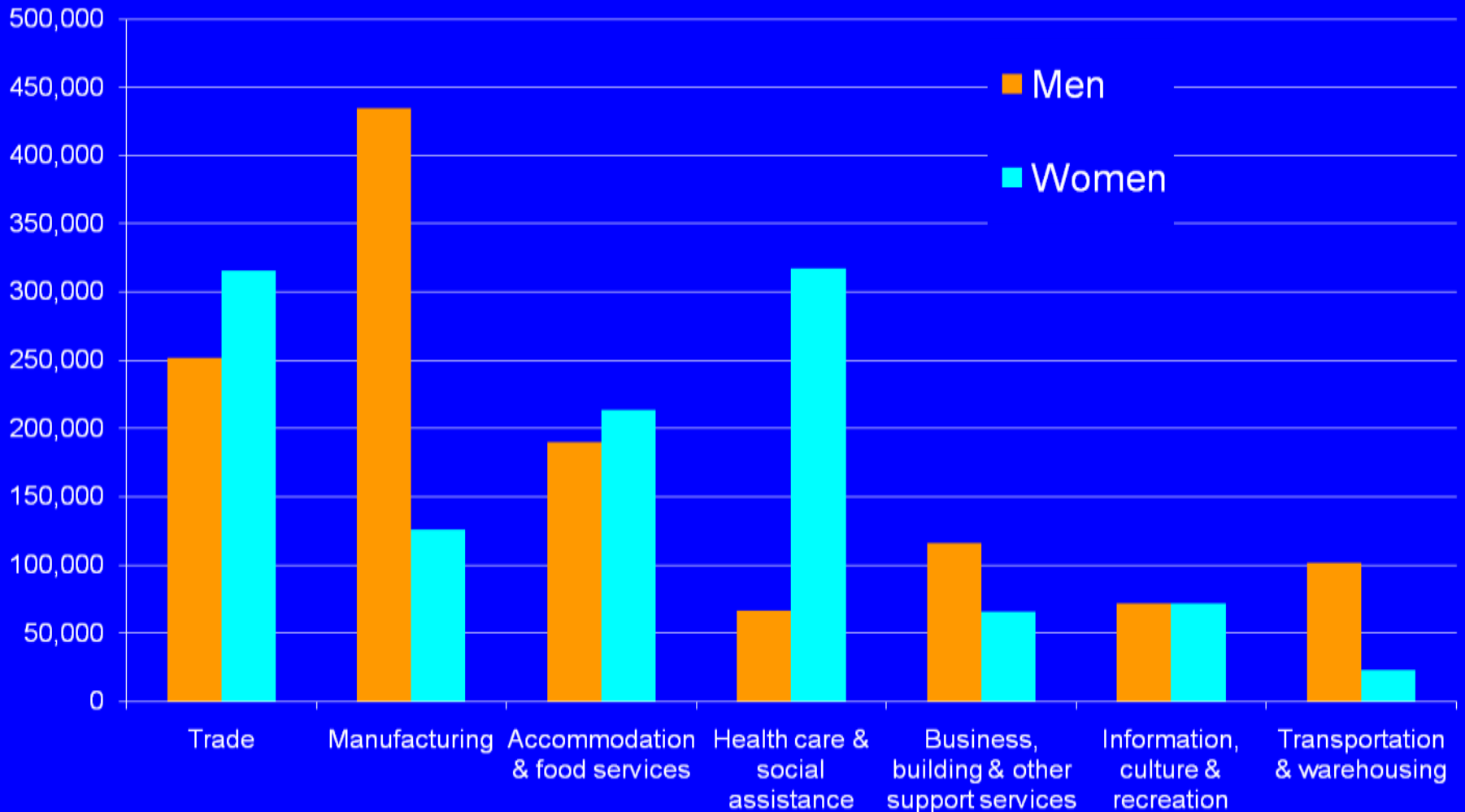
Percentage of Labour Force Working Evening/Night Shifts by Age Group & Gender



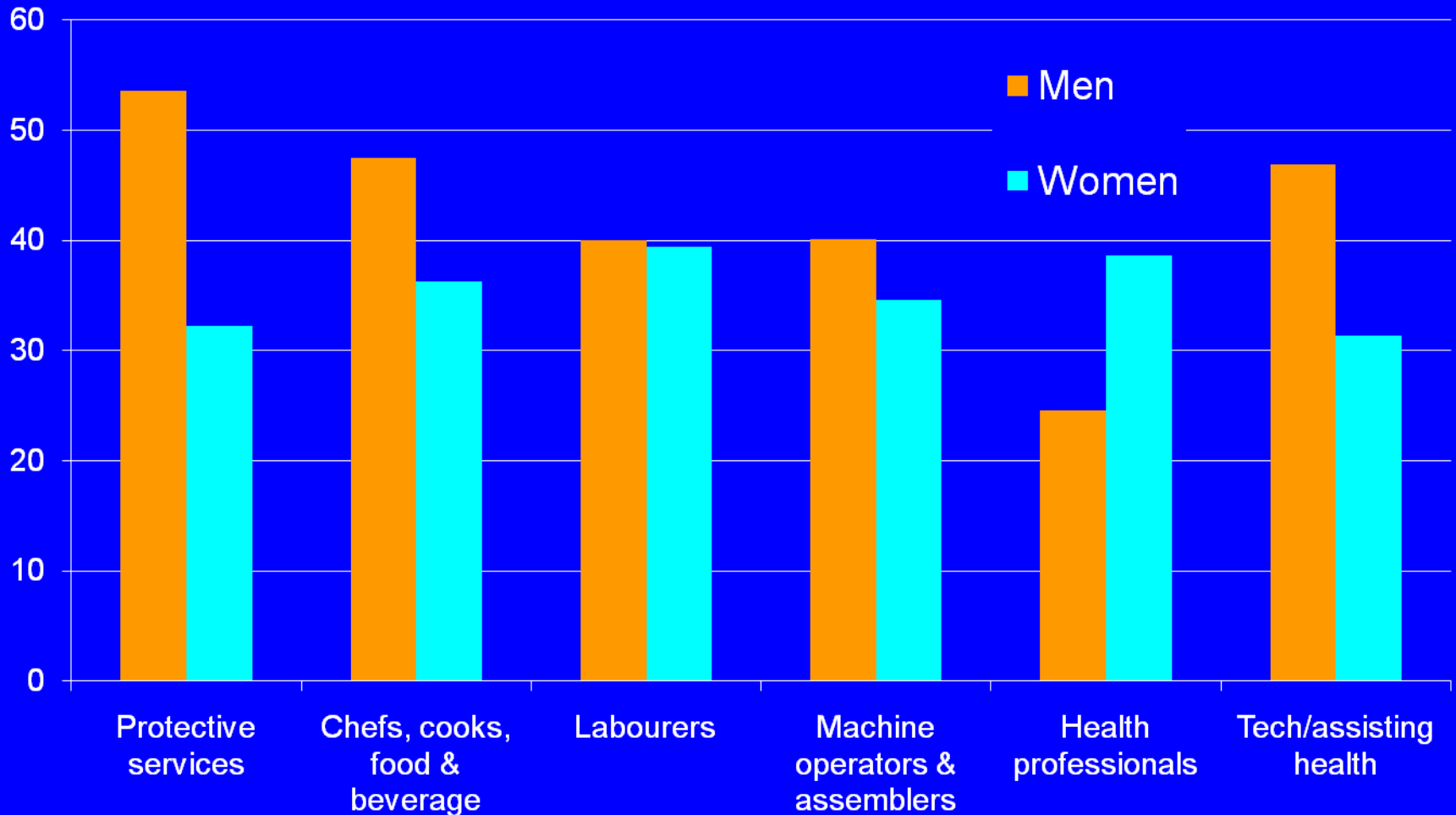
Industries with the Highest Percent of Rotating/night/evening Shift Workers



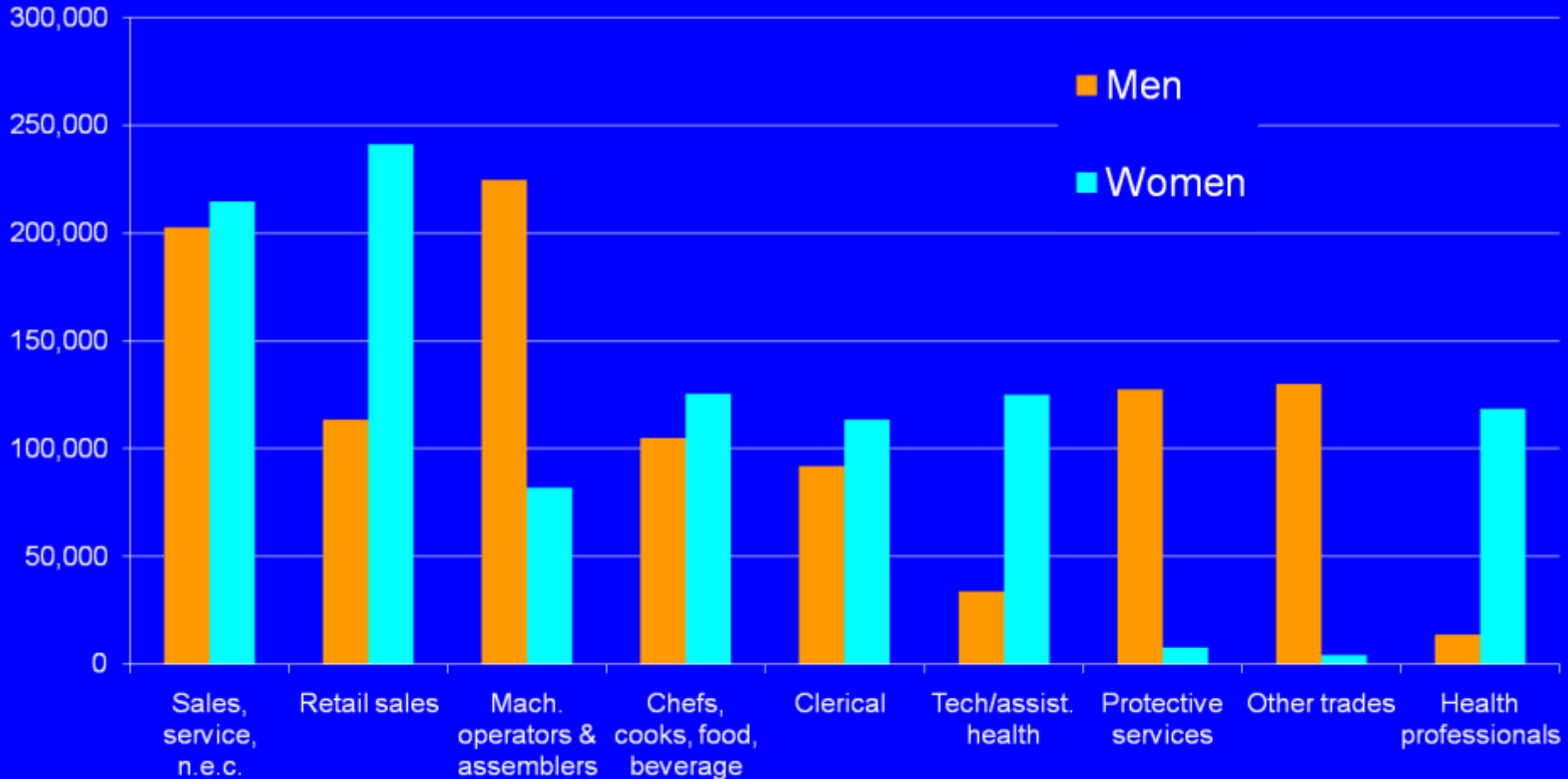
Industries with the Highest Numbers of Rotating/night/evening Shift Workers



Occupations with the Highest Percent of Rotating/night/evening Shift Workers



Occupations with the Highest Numbers of Rotating/night/evening Shift Workers





Strengths

- Relatively large population based study allowed examination of detailed shift work patterns

Limitations

- Classification of shift work based on answer to a single question with only 8 categories
- Life-time work history not available
- Limited power to examine rare occupations or shifts by multiple variables

Some Conclusions

- Shift Workers are employed in a diverse range of both occupations and industries
- Women and men differ significantly in their shift work patterns
- Developing a better understanding of the patterns of shift work should assist in targeting both research/surveillance and prevention-related efforts