

Shift Work and Health

We live in a 24/7 world. From around-the-clock patient care in hospitals to overnight services in hotels and restaurants, there's work to be done from sundown to sunrise and for more than a quarter of Canada's employees that means working shifts.

Shift work – essentially anything other than a regular daytime work schedule – is a reality for 26 per cent of full-time workers aged 19-64, according to Statistics Canada. About two-thirds of protective service workers (police officers, firefighters, security guards etc.), 45 per cent of health workers, 40 per cent of sales and service workers, and 42 per cent of primary industry workers (farm workers, miners, forestry workers, etc.) are engaged in shift work.

Shift work is a social and economic necessity and the effects of it on our health and wellbeing cannot be ignored.

- People who work night shifts are likely to have shorter sleep duration and/or poorer sleep quality than regular day workers.
- The research points to the fact that, long-term night shift workers probably have an elevated risk of breast cancer, and a potentially elevated risk of colorectal cancer. An expert working group recently concluded that “shift work that involves circadian disruption is probably carcinogenic to humans.”
- Elevated risks of gastrointestinal disorders, mental health problems (including depression) and preterm delivery during pregnancy are indicated among shift workers.
- Shift workers, particularly those working nights, face a higher risk of getting hurt on the job than regular day workers. The risk is particularly high in the second hour of a night shift.
- The association between shift work and heart disease is inconsistent. Although previous studies found a link between the two, a more recent systematic review found only limited evidence.

As for ways to reduce these health risks among shift workers, the research on such strategies is scant. However, based on what is available, promising approaches include restricting the number of evening or night shifts in a row to three, limiting weekend work, moving from backward to forward shift rotations, and using a participatory approach to the design of shift schedules. More research on ways to mitigate the harmful effects of shift work on health is needed.

Shift Work at the Individual level – some ideas to consider...

- Learn about sleep patterns and recognise *your* sleep patterns. Explore ideas that will help you get to sleep and stay asleep
<http://healthysleep.med.harvard.edu/healthy/science/what/sleep-patterns-rem-nrem>
- Develop a routine for sleeping and stick with the routine. Inform family and friends of your sleep routine so you are not disturbed
- Develop regular bedtime hours and wear appropriate comfortable clothes to sleep
- Wear sunglasses on the drive home, turn off phones, do not answer the door bell, reduce the sound of traffic and children playing – wear ear plugs, install sound proofing or have a constant soft noise running in the background (air conditioner, fan etc.)
- Control the temperature in the bedroom and find what is comfortable for you to sleep
- Keep regular eating patterns as much as possible (e.g. still eat with family at dinner time just alter the amount of food)

- Time meals carefully. Employees who work afternoons should eat the main meal in the middle of the day. Night shift employees should eat lightly throughout the shift and have a moderate breakfast
- Avoid eating greasy foods while working nights. Snack on nuts, crackers, fruit, and vegetables during the shift rather than sweets and pop. Avoid caffeine and tobacco too close to bedtime.
- Be sure to remain physically active. Time your physical activity for *after* your sleep period or during your shift, not just before going to bed. Take time to relax before going to bed
- If possible, avoid using medications to sleep: the drowsiness often continues long after the sleep period
- If you have trouble waking up, go outside – fresh air and sunshine help you to wake up
- Talk with co-workers to share ideas about coping with different schedules and work demands

Shiftwork at the Organizational level: Employees are most productive when well rested!

- Encourage employees to be involved in the input of work scheduling and support flexible hours. Allow flexibility for shift changes (between employees).
- Rotate shifts forward/ clockwise (e.g. days to evenings to nights)
- Consider having access to child care as an available option
- Early morning shifts are associated with less sleep and more tiredness. Try to avoid starting shifts as early as 5 or 6 am.
- Develop shifts that allow for use of public transportation
- Inform employees of their schedule well in advance, so they can plan social time with family and friends
- Keep work schedules as simple and predictable as possible
- Reduce the number of night shifts per person. The more consecutive nights worked, the more rest time should be allowed before the next rotation occurs.
- Allow for a rest period of at least 24 hours after each set of night shifts.
- Provide places for rest if possible.
- Provide bright lighting for night-time workers.
- Offer an Employee Assistance Program (EAP) to help workers cope with work and home life demands.
- Host a shiftwork /sleep hygiene education session so employees and their families can understand the challenges and develop solutions.

Information adapted from....

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- Shapiro, C., Heselgrave, R., Beyers, J., & Picard, L. (1997). *Working the shift - a self-health guide*. Chris Ward and associates.

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