

Shift Work and Your Health

About 30% of Canadian workers work shifts other than a regular daytime shift. Health care workers, hotel and restaurant workers, firefighters, truck drivers and many others provide services on a 24 hour basis. As shift work has become more widespread in our society, it has become more important than ever to understand the impact of shift work on the health and safety of workers.

The body's natural rhythms

Humans are naturally active during the day and sleep at night. Our bodies have a cycle of about 25 hours. This cycle controls many body functions including:

- ❖ temperature
- ❖ digestion
- ❖ blood pressure
- ❖ pulse
- ❖ release of hormones
- ❖ repair and maintenance

Our body takes clues from your environment. These clues include light and dark, and sleeping and eating. This helps to keep your body's rhythm in balance with the 24-hour rotation of the earth. When you change your daily activities from day to night, your body's natural rhythms are disrupted. In fact, our bodies can never truly adapt to night work because of the length of time that we would need to adapt.

The effects of shift work

Some of the effects of shift work occur quickly, but others develop gradually over decades.

Sleep Problems - People need to sleep. Shift work affects how much sleep and the kind of sleep that you get. Sleep during the day is not as deep or refreshing as night sleep. The shift worker's time to sleep happens at a time when the body naturally gears up for activity. When you do not sleep enough, you may feel tired, irritable and lack energy.

“It is a lonely life both on and off the job. You work alone, and when you have a day off, your friends are all at work.”

Sleep loss can affect your ability to concentrate, increase the errors you make, and cause you to be less productive.

Digestive Problems - Shift work can cause problems with digestion including ulcers, stomach and bowel problems, and a decrease in appetite.

Diabetes - Shift work can put you at risk for developing diabetes. It can also contribute to high blood sugar and obesity.

Mental Health - Shift workers are more likely to suffer from depression than other workers.

Reproductive Health - Some studies have shown that shift work may contribute to irregular or painful menstrual periods. It can also increase your risk of problems during pregnancy and may cause a baby to be born too soon or too small.

Cancer - Long term exposure to shift work may increase your risk to develop certain types of cancer such as breast, prostate, and colorectal.

Heart Disease - Shift work may play a role in heart disease. Some studies have shown higher cholesterol levels and higher blood pressure among shift workers than among day workers. Both contribute to heart disease.

Safety Concerns - Shift workers, especially those working at night, face a higher risk of workplace accidents or injury than regular day workers.

Social and family problems - Shift work causes problems with a worker's life outside work. Participation in social activities and family life is difficult since these activities are often when you are at work. Lack of contact with family and friends can result in feelings of loneliness and isolation.

What can the employer do?

Improving the design of shift schedules can reduce the effects of shift work. There is no perfect shift schedule. But schedules can be improved in these ways:

- ✓ avoid a permanent night shift
- ✓ provide workers with the opportunity to have some control over which shifts they work, when they start work, or when their day off occurs
- ✓ limit the number of night shifts worked in a row
- ✓ avoid an early start for the morning shift
- ✓ avoid quick shift changes
- ✓ reduce long work shifts and overtime
- ✓ give as many weekends off as possible with at least two days off in a row
- ✓ keep schedules regular & give workers notice of schedules well ahead of time
- ✓ give enough rest breaks

Employers should try to meet the individual needs of workers. They can provide:

- ✓ flexible time for child care needs or long travel time to work
- ✓ time off for special family or community events
- ✓ education for workers to help them cope with shift work
- ✓ alternative work for workers who cannot work shift work
- ✓ ensure workers on all shifts have access to education and staff meetings
- ✓ be attentive to signs of significant fatigue

Employers can also help by providing a work environment for shift workers with:

- ✓ bright lighting to help workers feel alert
- ✓ proper ventilation
- ✓ clean rest and meal areas
- ✓ time for interaction with coworkers
- ✓ healthy food options available at all hours
- ✓ caffeine sources available for strategic use by employees
- ✓ onsite exercise facilities
- ✓ space for short (20 - 45 minute) naps

What can the Joint Health and Safety Committee do?

- ✓ Identify fatigue as a workplace hazard and safety risk, both to workers and clients
- ✓ develop a Fatigue Risk Management Strategy

- ✓ work to create a safe work culture where employees are encouraged and feel supported to report problems with fatigue
- ✓ ensure fatigue is considered as part of incident report investigations

When the workday is lengthened (10 or 12 hour shifts) or workers work many shifts in a row, employers should evaluate workers' exposure to hazards such as chemicals, noise and repetitive work to make sure acceptable levels are not exceeded.

What can you do?

If you have a medical condition like diabetes, heart disease, or mental health problems you should ask your doctor's advice before becoming a shift worker. If you require prescription medication to control certain health conditions, the disruption of your body's natural rhythms during shift work can interfere with medical treatment of some diseases. Check with your doctor or pharmacist about your medication.

If you work shifts, you can improve your sleep by a regular bedtime. Make sure to:

- have time to relax
- avoid caffeine close to the end of shift
- avoid smoking, alcohol and sleeping pills
- lower the bedroom temperature
- make the bedroom dark
- eliminate noise

Eat high protein meals before work. Avoid high protein, high fat and greasy foods for six hours before bedtime. Maintain social contact. You and your friends or family will have to make a special effort to spend time together. Participate in a regular exercise program.

If you have a workplace health and safety committee, ask them to review this fact sheet. They can make recommendations to reduce the effects of shift work and improve shift schedules for you and your coworkers.

For more information, contact:

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