

Work environment – **General information**

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Shiftwork >

This information bulletin has been produced for workers on nightshift. Understanding the difference shiftwork makes to the way the body functions can help adjust to a different pattern of life.

With companies increasingly edging towards 24-hour business operation, a large number of employees are now involved in work outside daytime hours.

Shiftworkers should encourage their family and friends to read this bulletin. It will help them understand the difference shiftwork can make to their life.

Why is shiftwork different from day work?

The basic problem with shiftwork is having to work at times the body is designed to be resting. People are day oriented. This means all our body functions are geared to be active in the daytime and to sleep at night.

Body functions vary through a 24-hour cycle. This variation is called the 'Circadian Rhythm' (body clock). We depend on external cues such as light and dark, and the timing of meals for the body clock to work normally. Two important functions of the body clock are daily changes in temperature and production of digestive juices.

Body Temperature cycle

Body temperature rises during daytime ready for increased activity. At night body temperature falls, which helps us slow down and feel sleepy.

Digestion Cycle

Digestive juices are produced before the usual daily meal times. The activity of the digestive system is reduced at night.

After 2 or 3 nightshifts, the body starts to adjust, but the body clock goes back to normal after 1 to 2 days off. The body clock never changes permanently to a different sleep/wake cycle, even in permanent night workers.

In some people, different body functions adjust at different rates, and this can become a problem if working too many consecutive nightshifts.

Work performance

On nightshift, workers will be working when their body does not function as well as it does in the daytime. However, the employer depends on work being done equally well at night as it is in the daytime.

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Fatigue and sleepiness on the job are the major problems. Some jobs may also have a safety element that requires mental alertness. Injuries happen more frequently when people are fatigued.

It is important for health, alertness and work performance to take rest breaks when due, they should **never** be traded off for overtime. Workers who work long hours without a break can become 'dangerously drowsy'.

When the work undertaken is inactive or desk bound the following hints may help:

- don't dim the lights;
- talk to others on the same shift regularly. It may help to keep all workers more alert;
- standing up, doing stretches and back arches or walking around for a minute or two can provide relief from stiffness and fatigue, caused by sitting in the same position for extended periods;
- splashing face and hands with water, can also assist when feeling tired.

Life at home

Just as the body follows a rhythm, so does the social and family life. Once again the shiftworker is out of step. When they are awake everyone else is sleeping; when they are at work everyone else has free time. Children may only see their shiftworking parent for short periods.

There may be weekends when all the family is not together because of shiftwork. To help reduce difficulties with domestic and social arrangements:

- talk with family members ahead of time about problems which result from shiftwork and look for solutions;
- buy a large monthly planner. Fill in the roster and sleeping schedules. This makes it easier to organise activities together;
- adjust to the household routine where possible. Give the opportunity for children or partner to make suggestions about how to fit in to their activities;
- take preschool children to a play group on the mornings before sleeping, or arrange with friends with small children to swap child minding duties on sleeping days;
- take over some household duties on days off. One of the advantages of shiftwork is being home during the day;
- during school holidays, plan days out with the family.

Social life

Normal social interaction with family and friends is so important people may cut down on their sleep time so they can take part in customary social activities. This can affect work performance.

- plan to make the most of the time off. Let friends know the 'free' time;
- see if there are others on shiftwork who will join in with daytime sport or other activity.

Hints for health and fitness

Good health and physical fitness will assist shiftworkers to cope with the changes in lifestyle and working patterns.

- make sure that a healthy eating pattern is maintained. Availability of good food is crucial to assist workers to cope successfully with shiftwork. Take the time at home to prepare food packs and fruit to eat at work during breaks. This will help those who overdose on chocolate bars and soft drinks, just because it was the only food around at the time.

- make an effort to increase physical activity during leisure time. Physical exercise can improve a person's ability to survive shiftwork. Join a gym, take a walk, go for a swim or go bike riding, on days off;
- cut down on smoking, or preferably give it up altogether;
- if on regular medication (eg insulin for diabetes), or have a chronic recurring illness such as asthma, see a doctor for advice before beginning shiftwork.

Hints for eating

The activity of the digestive system is reduced at night. A heavy meal eaten at night takes a long time to digest. Indigestion, heartburn and constipation may occur. Extra food eaten at night may be stored as fat rather than used up to provide energy.

When to eat

Try having two meals at the regular times, and a light meal in the middle of the nightshift. Consider having the largest meal of the day **after** the day-sleep.

Take a meal at or before 1.00 am. The effects of a meal may be to decrease alertness in the second part of the nightshift, so it is better to eat before becoming fatigued.

What to eat

Light meals, high in carbohydrates, based on rice, pasta or bread are easy to digest. Have fresh fruit and milk products as snacks.

Avoid meals heavy in calories or with a high fat content because they take longer to digest and can make people feel drowsy.

Avoid spicy and fried foods. Limit the amount of coffee towards the end of the shift, as coffee can keep you awake when you are trying to go to sleep at home.

How to eat

Eat in a dining room if one is available, not at the workstation. Try to eat with fellow workers.

Hints for sleeping

To avoid a build up of fatigue shiftworkers must get as close to an average amount of sleep as possible.

Make sure ahead of time that conditions for day-sleep are as favourable as possible, *for example*

- curtains with block-out backing or blinds will reduce the light level;
- sleeping in cool conditions helps in getting to and staying asleep. An air conditioner may help;
- control the noise. Heavy curtains and sound insulation on the doors and windows may reduce noise levels. Earplugs may help;
- an answering machine for the phone may help, so that sleep time is undisturbed;
- ask family members to use headphones for the TV and stereo while sleeping;
- let relatives know about work schedules and sleep times so they won't cause disturbance unnecessarily;
- let close neighbours know the shiftworker's sleep schedules, in the daytime so they can avoid mowing or noisy car repairs;

- try relaxing between work and bed. Some shiftworkers prefer to go straight to bed while others find it better to read or watch television first;
- take a shower before going to bed; and
- don't eat or drink too much prior to sleeping and avoid drinking coffee in the last few hours prior to sleeping.

Who can help?

There are difficulties adjusting to shiftwork, discuss the problems with:

- fellow workers or union representative.
- supervisor or manager.
- occupational health nurse or doctor.
- staff counsellor or employee advisory service.

NT WorkSafe >

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