

Preparation for Night Shift

Advice for medical students who may have a set of one, or a few nights of night shift during training

On-the-spot management

INFORMATION FOR HEALTH PROFESSIONALS



Sleep Health
Primary Care
Resources

You are about to have what may be your first taste of night shift. That can be an exciting, terrifying, or tiring thought!

Here are some of the things we know about night shift:

- It can be quite challenging to stay awake at the times when your body is used to sleeping.
- There are some health and safety risks associated with night shift.
- You will likely experience some degree of sleep disruption around the time of your night shift.
- Everybody responds to sleep disruption differently. In addition, we are not always good at knowing when, or how much, we are impaired.
- Risks around night shifts are often related to how long you are awake, sleep disruption or reduced sleep duration, and the need to function when your circadian rhythm is at its lowest point.
- Impairment after being awake for 17 hours is similar to impairment at a blood alcohol level of 0.05% (the legal limit for driving in NZ and Australia). Impairment after 24 hours awake is similar to a blood alcohol level of 0.10% (well over the legal limit).¹

However, there are some things you can do to help protect your safety and wellbeing when working night shifts.

1-2 weeks before

The following strategies might help with getting the best sleep you can in the 1-2 weeks before starting night shift:

- **Have a regular sleep pattern** – try to go to bed at around the same time every evening and get up at around the same time every morning.
- **Spend enough time in bed** – most adults need between 7-9 hours sleep every night.
- **Bed is for sleeping, not entertainment** – screen use and other distractions in bed can interfere with your sleep. Your mind needs to be in the habit of knowing that if you are in bed, you are there to sleep.
- **Wind down and relax before going to bed** – find a relaxation technique that works for you and do this to wind down before bed (e.g., breathing exercises, mindfulness meditation). Avoid using your computer or other electronic screens within one hour of bedtime.
- **Make sure your bedroom is dark, quiet, calm, and comfortable.**
- **Alcohol, caffeine and cigarettes** – to be avoided in the afternoon/evening. Alcohol may help you to get off to sleep but will disrupt your sleep during the night. Caffeine (tea, coffee, cola drinks) and the nicotine in cigarettes/vapes are stimulants that can keep you awake.

Sleep advice from the Sleep Health Foundation - www.sleephealthfoundation.org.au

If you are in paid employment outside your medical school commitments and have some flexibility with your work shifts, it might help to plan extracurricular work rosters (or time off) around your medical school night shift so that you are able to nap/rest before your night shift and can have a good recovery day (with sleep) the day after your night shift. You may also need to modify your extracurricular activities so you can prioritise resting before/recovering after night shift.

The night before

Try to get a good night's sleep the night before your night shift. Keeping to your usual bedtime may help to ensure you get a sufficient, good quality sleep (rather than trying to 'stay up late' and sleep in to shift your sleep pattern).

The day of your night shift

Prepare your household ahead of time, explaining that you will be trying to get uninterrupted sleep during the day when you return from night shift. Organise what you can to make this happen, including ensuring social events are not organised at times when you need to prioritise recovery sleep, for example.

Plan ahead for a cool, dark, quiet environment for sleep when you return from night shift. Do you need the air conditioner/fan on, earplugs, an eye mask, blackout curtains, or a sign on the front door?

- **Waking and breakfast** – If you are only doing one or two night shifts in a row, keep the timing of waking and breakfast the same time.
- **Sleeping before night shift** – If you can, attempt an afternoon sleep before your first night shift. This will reduce the amount of time you've been awake prior to your first overnight shift (and avoid being awake for 24 hours by the end of your first night shift), therefore reducing your sleep drive. Sleep drive (or sleep pressure) is the homeostatic pressure for sleep that builds up the longer you have been awake.² It can be useful to

plan a sleep for around 2-3pm when we usually feel most sleepy in the afternoon. Don't worry if you struggle to have an afternoon sleep, not everyone is able to sleep during the day. It might take some time to work out the best routine for you.

If you haven't slept before night shift (or even if you do) it's important to be aware of how you are feeling and performing during a shift. Let colleagues or supervisors know if you feel sleepy or this is impacting your ability to do your job safely and effectively.

- **Awaken at least 30-60 minutes before leaving for your nightshift** – It can take this long for the groggy feeling of sleep inertia (where your function and decision-making may be impaired) to dissipate. Sleep inertia is a transitional state of lowered arousal occurring immediately after awakening from sleep and producing a temporary decrement in subsequent performance.³
- **Exercise** – The benefits of exercise are well known. If you are able to exercise whilst still prioritising sleep, this is a good idea. Some people also find exercise makes them feel more alert and energised.
- **Evening meal** – Have dinner before your night shift in case you don't get a chance to eat as planned.

During your night shift

Caffeine might be useful with promoting alertness but try and have it earlier in the shift rather than later as it can impact your ability to sleep after your shift. Caffeine can have a long half-life for some people. Low doses of caffeine more often may be more beneficial than a large dose at once.

Seeking higher intensity light exposure, particularly in the first half of the night shift, can also enhance alertness during the night shift where it is not disruptive to patient care.⁴

Plan some snacks to take with you on your night shift. It is better to have smaller meals/snacks that are easy and nutritious to eat whilst you are awake overnight. We often crave sugary high calorie foods when we are sleep deprived and it is useful to try to avoid this urge particularly on the first night and eat healthier foods just as you would during a day shift.

What if I haven't slept well before night shift, or feel sleepy?

If you are feeling sleepy, let someone know. Everyone has different experiences of sleepiness related to shift work, and it is important to talk about feeling sleepy, particularly if it is impacting your attention and focus. There may be a nap room you can use once you have let the team know you are having a nap and have handed over any responsibilities/tasks. If you do nap, limit the nap duration to 15-30 minutes and make sure you give yourself a few minutes to wake up properly to ensure that sleep inertia (grogginess) doesn't impair your decision making and concentration upon waking.

When your night shift ends

- **Have a safe plan in place for getting to and from your shift** – Avoid driving/biking home after a night shift if possible. For example, could you be dropped off and collected by family/friends or safely use public transport or taxi/Uber? Aim to not be driving yourself or riding a bike as you will be sleep deprived when your shift finishes and may not be aware of the impaired judgement and increased risk of accidents/errors we all have after staying awake overnight. If you can't avoid driving home, check if there is somewhere in the hospital where you can safely have a nap before you drive to reduce the risk of fatigue-related accidents.
- **Avoid early morning sunlight** – Try to avoid sunlight exposure first thing in the morning (it is very alerting) by wearing sunglasses as this may

help you get to sleep more easily when you get home. **Note:** if you do need to drive, exposure to sunlight may be important for maintaining alertness and visibility during the commute so blocking light while driving is not recommended. Light avoidance can occur when safely at home.

- **Routines** – Have breakfast as usual to keep your regular sleep-wake-eat routines. This will also reduce the chance of hunger waking you from sleep.
- **Sleep during the day** – Your body may struggle to sleep after a night shift. You may require an hour or two to 'wind down' from being awake and from any excitement. This is quite common and is also made more challenging because the morning is usually when our body is biologically primed to be alert. Avoid activities that promote wakefulness such as spending time on your phone or computer. If you have a calming bedtime routine, this would be a good routine to repeat at this time (e.g., dim light with closed curtains, warm shower, into sleepwear, quiet reading then into bed in your cool, dark, quiet room). Make sure your phone is set on 'Do not disturb' mode.

You may only get a few hours of sleep after your night shift. Once you wake, try to get your usual routine back on track by having dinner at the usual time and winding down for your evening bedtime when it is time (if you don't have another night shift).

If you are required to attend another night shift, make sure you get as much sleep as you can before your shift – it is ok if that happens in two or three daytime sleep episodes before the next night shift.

Recovery after night shift can differ from person to person, and sometimes you can feel more fatigued on your first day off than you did on your last night shift. It may take 2-4 days to feel fully recovered from night shift, depending on how many shifts you do in a row, and on your ability to sleep between shifts.^{5,6}

Some people have a lot of difficulty with night shifts. If these are part of your future work and you struggle with them, further assessment and advice can be obtained from your hospital occupational health team or your GP.

If you already have a sleep disorder diagnosis, persistent sleep difficulties, or a condition affected by sleep irregularity or sleep deprivation, we recommend you have a chat to your GP, sleep physician, or psychiatrist about making the transition to shift work.

References:

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