# The Quest for Better Sleep

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egardless of the stage in your training or career you are in, you will most certainly have experienced the sleep-disrupting effects of switching between day and night shifts. Shift work sleep disorder, a circadian rhythm disturbance resulting in insomnia or excessive sleepiness, can affect

up to one-fifth of shift workers. In our efforts to ensure that patients have the proper access to medical care at all times, shift work has regrettably also been associated with numerous health consequences for health care workers. Shift workers have an increased risk of obesity, hypertension, and type 2 diabetes, as well as an increased risk of cardiovascular disease, stroke, and even certain types of cancer. In the short term, shift work can also lead to impaired neurocognitive abilities, increasing the risk of motor vehicle accidents on the way home from a shift. Although many emergency departments seek to ameliorate some of these effects with specific shift progression or the hiring of nocturnists, most still require at least some switching between your sleep/wake cycles. While you may not have control over your schedule, thankfully there are a few things that you can do to promote good sleep and good health.

Improved sleep quality can reduce the harmful health consequences associated with sleep deprivation.



## Light

The light/dark cycle is a strong circadian regulator. Light triggers the pathways that ultimately lead to the suppression of melatonin, signaling to your internal clock that it is daytime and time to rise. Therefore, light exposure in the workplace, especially bright light for even brief periods of time (eg 15 minutes), can improve your alertness and performance. And conversely, during the daytime, light avoidance such as wearing dark glasses, installing blackout curtains, or using a sleep mask has been shown to enhance sleep.

### Sleep Hygiene

Sleep quality is essential. Improved sleep quality can reduce the harmful health consequences associated with sleep deprivation.

Start by designing your bedroom environment to be conducive to quality sleep. Your bedroom should be dark, quiet, and cool. Easy solutions are to invest in fans or air conditioners. Avoid alcohol, nicotine, and caffeine as you near bedtime. While some use alcohol to get to sleep, alcohol actually decreases the proportion of REM sleep and leads to greater sleep fragmentation.

#### **Anchor Sleep**

Anchor sleep is a period of at least 4 hours during which one sleeps on both work and nonwork days. This allows some sleep to always overlap and therefore, your circadian rhythm can be stabilized and minimally disrupted. While napping does not fully negate fatigue, napping before a night shift is a form of anchor sleep and can positively impact performance. If you are able, strategic napping during a shift can increase alertness and reduce fatigue as well. Additionally, a quick nap before driving home after an overnight shift can increase alertness and avoid potential motor vehicle accidents.

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#### References

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