

OPTIMIZING SLEEP IN AN OPERATIONAL ENVIRONMENT: A GUIDE FOR SERVICE MEMBERS

During deployment, service members are often required to be alert and functional for irregular or long periods of time under demanding circumstances. However, more than half of deployed service members suffer from chronic sleep restriction. Service members who do not get sufficient sleep report higher

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rates of accidents and errors that affect their missions. Sleep is a tool that you can utilize to maximize your physical performance. While deployed, your ability to manage your sleep may be more limited. However, you should work with the factors under your control and get back to better sleep habits when able.

■ Remember the SLANT acronym when selecting a sleep location.

- » **Surface:** Select a soft surface
- » **Light:** Limit light exposure in your sleep environment with shades and eye masks
- » **Air Quality:** Avoid exposure to air contaminants that pollute sleep environment
- » **Noise:** Consider using white noise machines and limit exposure to loud noises
- » **Temperature:** Obtain air conditioning or heating to keep the ambient temperature between 65–67°F

■ Upon waking, get at least 15–60 minutes of bright light.

Use natural sunlight or any bright or blue-enriched light source (e.g., light box, bright indoor lights) to signal to your biological clock that it's time to start the day.

■ Exercise closer to wake-time to signal daytime and improve sleep quality.

Avoid intense exercise close to bedtime and when you are sick.

■ Take naps and consider “banking” your sleep.

Even short naps (< 20 minutes) can improve alertness, performance, and memory. Taking caffeine immediately prior to a short nap can help boost performance and decrease grogginess. Longer naps (> 60 minutes) or extending sleep can make up for lost sleep or prepare you for anticipated sleep loss with a difficult shift. Naps are best 7–9 hours before bed.

■ Use caffeine judiciously.

Caffeine is the most commonly used stimulant drug. It can help keep you awake when tired, but those effects remain for hours

and can interfere with your ability to fall asleep. Under continuous operations, taking up to 200mg of caffeine every 6 hours can help maintain performance. Limit caffeine within 6 hours of your desired bedtime. Also, caffeine may become less effective if used frequently, which means you may require more caffeine for the same effect.

- **Limit alcohol before bed.** It may be sedating at first, but it disrupts your sleep quality.
- **Keep a regular sleep and wake time schedule.** This will help keep your sleep and circadian systems in sync and minimize physiological “jet-lag.” Doing this on your days off is helpful.
- **Create a regular bedtime routine consisting of quiet activities.** This can include taking a warm shower, reading, and brushing your teeth. Ending the night with a relaxing activity will help get your mind and body ready for sleep.
- **Limit alerting activities close to bedtime.** Light (including mobile device and TV screens), caffeine, exercise, and work should be limited. Also, avoid eating processed or sugary foods prior to bedtime.
- **Use caution when operating a vehicle at the end of a nighttime shift.** If you are feeling sleepy, pull over and take a nap. Opening the windows or playing loud music will not help reduce the risk of crashing.

Additional resources:

Glickman Lab

<https://medschool.usuhs.edu/psy/research/glickman-lab>

Walter Reed Army Institute of Research

https://www.wrair.army.mil/sites/default/files/2020-04/COVID-19_Leader_Sleep_Checklist_WRAIR.pdf