







## YOUR NIGHT SHIFT SURVIVAL GUIDE

For professionals in healthcare, emergency services, transportation, and manufacturing

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## **About Us**

We started a sleep company out of Harvard to help others after witnessing the impact of sleep deprivation on our loved ones who tirelessly work as shift workers - nurses, doctors, hotel employees, and airport crew.

We believe sleep is the bedrock of wellness, underpinning our entire well-being, including nutrition, exercise, and mindfulness. Without quality sleep, overall health suffers.

Night shift workers face challenges beyond fatigue, impacting overall well-being. This guide is our way of reaching out, offering a helping hand, and sharing the knowledge and tools we've gathered through our expertise in sleep science and technology.

Our goal is to empower you with actionable strategies that not only improve your sleep but also enhance your overall quality of life. This is our way of saying, "We see you, we appreciate you, and we're here to support you" — one shift at a time.

— Morgan, Catherine, and Maria www.neruhealth.com

# PART 1. OPTIMIZE YOUR SLEEP



### 1. SLEEP BANKING

Before starting your night shift week, consider engaging in sleep banking. This involves involves sleeping extra hours before the first night shift to reduce sleep debt and enhance cognitive function during work hours.

### **Example of Sleep Banking:**

Let's consider a nurse named Alex who is scheduled to work night shifts next week, starting on Monday. To prepare, Alex decides to bank sleep starting the Wednesday before the night shifts begin.

 Wednesday to Sunday (before night shifts): Alex normally sleeps from 11 PM to 7 AM, getting 8 hours of sleep. Starting Wednesday, Alex goes to bed at 9 PM and wakes up at 7 AM, increasing sleep duration to 10 hours. This adds an extra 2 hours of sleep per night.

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## PART 1. OPTIMIZE YOUR SLEEP

## 1. SLEEP BANKING (CONTINUED)

- Monday to Friday (during night shifts): Despite the demanding night shift schedule, Alex tries to maintain as much sleep as possible, aiming for at least 6 hours during the day. Although this is less than usual, the sleep banked beforehand helps mitigate the effects of this temporary sleep restriction.
- Saturday and Sunday (after night shifts): After completing the night shifts, Alex gradually returns to the normal sleep schedule by adjusting bedtime later each night until reaching the usual bedtime of 11 PM.

Patterson, P. D., Ghen, J. D., Antoon, S. F., Martin-Gill, C., Guyette, F., Weiss, P. M., Turner, R. L., & Buysse, D. J. (2019). Does evidence support "banking/extending sleep" by shift workers to mitigate fatigue, and/or to improve health, safety, or performance? A systematic review. Sleep health.

### 2. STRATEGIC NAPPING

Napping between 1 AM and 4 AM, with naps lasting between 20 to 30 minutes, has been shown to improve alertness and performance while minimizing sleep inertia, which is the groggy feeling experienced after waking up from sleep.

A short nap during the first half of the night shift appears to be particularly beneficial, as it can significantly improve speed of response on tasks towards the end of the shift compared with not napping at all.

Purnell, M., Feyer, A., & Herbison, G. (2002). The impact of a nap opportunity during the night shift on the performance and alertness of 12-h shift workers. Journal of Sleep Research.

# PART 2. DIET AND HYDRATION



### 3. SMALLER, WELL-BALANCED MEALS

Eat smaller meals spread out over the shift to help maintain steady blood sugar levels, and have a constant energy supply throughout the night. Smaller meals are easier to digest, helping to avoid indigestion, heartburn, and other gastrointestinal discomforts caused by large meals.

Focus on **foods high in protein and fiber** and low in sugar and refined carbs. Include fruits, vegetables, lean proteins, and whole grains.

Aim to eat your main meal before the shift starts, to fuel your body for the hours ahead. Then, have small snacks or mini-meals throughout the shift. Avoid heavy meals close to the end of your shift to prevent difficulties falling asleep once you get home.

Brum, M. C. B., Filho, F. F. D., Schnorr, C. C., Bottega, G. B., & Rodrigues, T. C. (2015). Shift work and its association with metabolic disorders.

# PART 2. DIET AND HYDRATION



#### 4. HYDRATION AND CAFFEINE TIMING

While needs vary, aim for at least 8 glasses (about 2 liters) of water throughout the shift. Keeping hydrated can help combat the symptoms of dehydration, such as tiredness, headache, and reduced concentration, which are particularly detrimental to night shift workers.

Caffeine can be a useful tool for staying awake and alert, but its timing is crucial. Consuming caffeine at the start of the shift can help ward off sleepiness without affecting your ability to sleep after the shift. Avoid caffeine at least 6 hours before planning to sleep, as it can significantly disrupt sleep quality.

Consider hydrating, non-caffeinated beverages like herbal teas or flavored water to stay hydrated without impacting your sleep cycle.

Brum, M. C. B., Filho, F. F. D., Schnorr, C. C., Bottega, G. B., & Rodrigues, T. C. (2015). Shift work and its association with metabolic disorders.

## **PART 3. LIGHT EXPOSURE**

#### 1. KEEP YOUR WORKPLACE BRIGHT

Use **bright light** during the **early part of your shift (e.g., between midnight and 4 AM)** to delay your body's internal clock and make you feel more awake during your shift. LED lights that emit bright white or blue-tinged light can be effective, as well as light therapy lamps.

#### 2. LIMIT LIGHT NEAR END OF SHIFT

If you're working a night shift again and you need to sleep during the day, limit your light exposure near the end of your shift and on your commute home to facilitate better sleep. Transition to a dimly-lit environment near the end of your night shift and wear sunglasses on your way home to limit your exposure to sunlight and keep your circadian rhythm in nighttime mode.

Try going to sleep as soon as you get home. **Use blackout curtains or eye masks** to help mimic nighttime conditions and improve sleep quality.

**Consistency is key.** Expose yourself to bright light at similar times during each night shift and avoid bright light in the morning at consistent times.

Yoon, I., Jeong, D., Kwon, K.-B., Kang, S.-B., & Song, B.-G. (2002). Bright light exposure at night and light attenuation in the morning improve adaptation of night shift workers. Sleep, 25(3), 351-356.

# PART 4. TRANSITIONING AFTER A NIGHT SHIFT

Some night shift workers prefer to maintain their nocturnal routine, finding a rhythm that suits their lifestyle and work demands.

Others, however, may seek a transition back to daytime hours, craving the normalcy and health benefits associated with living in sync with the natural daylight cycle. Here are strategies to effectively navigate this transition.

## 1. GRADUALLY ADJUST YOUR SLEEP SCHEDULE

Right after your last night shift, sleep for a short time (e.g. 4.5 hours) to take the edge off your immediate sleepiness, then go to sleep close to your regular daytime sleep schedule.

- Example: If your last night shift ends at 8 AM and you want to transition back to sleeping from 11 PM to 7 AM:
  - Sleep from 9 AM to 1:30 PM: Sleep a shorter time to reduce your sleep debt, keeping you from becoming too sleep-deprived during the day.
  - Stay awake 1:30 PM to 9:30 PM: Stay active and expose yourself to natural light during the day. Engage in light activities, socialize, or do mild exercise to help stay awake. This helps adjust your body's internal clock towards a daytime schedule.

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# PART 4. TRANSITIONING AFTER A NIGHT SHIFT

## 1. GRADUALLY ADJUST YOUR SLEEP SCHEDULE (CONTINUED)

- Go to bed at 9:30 PM, Wake up at 7 AM: Go to bed much earlier than you usually would during your day shift period to reduce your sleep debt, aiming to wake up at your desired wake-up time.
- Next Day: Sleep at your regular daytime sleep schedule of 11 PM, with a wake-up time of 7 AM.
- If you find yourself excessively sleepy in the late afternoon, consider a short nap of about 20 minutes around 3 PM to 4 PM, but avoid longer naps that could interfere with your nighttime sleep, and avoid taking naps close to your sleeping time.
- Even if you go to sleep at different times, try to wake up at the same time consistently.

### 2. MORE LIGHT EXPOSURE IN THE DAY

Seek bright light during the morning and daytime, and avoid bright light in the evening hours as it influences your circadian rhythm.

- Example: If your last night shift ends at 8 AM and you want to transition back to sleeping from 11 PM to 7 AM:
  - After waking up at 1:30 PM, spend plenty of time in daylight. Around 7 PM, reduce exposure to bright and blue light by dimming electronic screens and using soft lighting.

Stampi, C. (1992). The role of short naps in the polyphasic sleep strategies of helicopter pilots. In Sleep Research (Vol. 21, p. 62). Brooks, A., & Lack, L. (2006). A brief afternoon nap following nocturnal sleep restriction: Which nap duration is most recuperative? Sleep, 29(6), 831-840.



### TRY OUR SLEEP COACHING PROGRAM

We know that sleep is unique for everyone, from life and work constraints that shape your day, to your unique biology and circadian rhythms.

We're dedicated to creating solutions that recognize and cater to your individual health needs. Whether it's optimizing your sleep schedule, understanding how to eat and exercise in harmony with your night shift, or finding moments for mindfulness amidst a hectic routine, we're here to guide you.

Sign up for a **14-Day Free Trial** of our **Sleep Coaching Program** today and receive personalized coaching, actionable advice, and the support you need to achieve restorative sleep. Visit our website:

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