

SLEEP READINESS: Tools to Optimize Sleep and Manage Operational Fatigue

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Presentation Overview



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SLEEP AND PERFORMANCE

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Sleep and Total Force Fitness

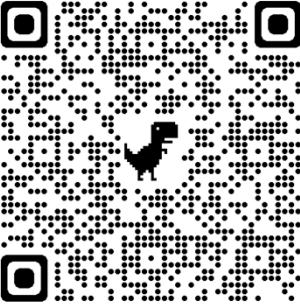



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**LEADER
GUIDE**

**THE IMPACT OF
SLEEP ON TOTAL
FORCE FITNESS**









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**SLEEP AND
PERFORMANCE**



**SLEEP
HABITS**





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Sleep Habits Checklist

Sleep Hygiene Self-Check

Sleep is critical for your health, performance, and well-being. Sleep strategies aren't one-size-fits-all, though, so it's important to find what works best for you when it comes to getting the sleep you need to be energized and productive each day. Check out these sleep hygiene tips to see if they might work for you. To learn more about the science behind these tips, read HPRC's article on [sleep readiness](#).

1. I make sleep a priority by choosing it over work, social events, or watching "just one more" TV show when appropriate.
 I already do this. This will not work for me at this time. I want to try this strategy.
2. I know how much sleep I personally need to optimize my health and performance by doing a sleep self-study, and how different lengths of sleep impact my energy and focus (most adults need 7-9 hours each night).
 I already do this. This will not work for me at this time. I want to try this strategy.
3. I have a consistent wake-up time for most days of the week.
 I already do this. This will not work for me at this time. I want to try this strategy.
4. I get early morning and regular exposure to sunlight (or artificial bright light when sunlight isn't possible) that helps me set my body clock and be ready for sleep at night.
 I already do this. This will not work for me at this time. I want to try this strategy.
5. I have a regular exercise routine that helps me be physically tired at the end of the day.
 I already do this. This will not work for me at this time. I want to try this strategy.
6. I avoid naps close to bedtime.
 I already do this. This will not work for me at this time. I want to try this strategy.
7. I avoid stimulating or energizing physical or mental activities at least one hour before bedtime. (It's normal to have an energy boost one hour before bedtime).
 I already do this. This will not work for me at this time. I want to try this strategy.
8. I turn off devices at least one hour before bedtime and dim the lights.
 I already do this. This will not work for me at this time. I want to try this strategy.
9. I stop consuming caffeine at least 6 hours before I go to bed.
 I already do this. This will not work for me at this time. I want to try this strategy.



Sleep Habits Checklist

1. I make sleep a priority by choosing it over work, social events, or watching "just one more" TV show when appropriate.

I already do this. This will not work for me at this time. I want to try this strategy.

2. I know how much sleep I personally need to optimize my health and performance by doing a sleep self-study, and how different lengths of sleep impact my energy and focus (most adults need 7-9 hours each night).

I already do this. This will not work for me at this time. I want to try this strategy.



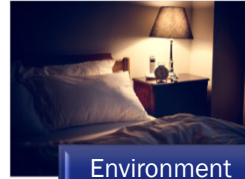
Sleep Habits Checklist



Daily Habits



Sleep nutrition



Environment



Bedtime Habits



Professional Help

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Daily Habits

3. I have a consistent wake-up time for most days of the week.



I already do this.



This will not work for me at this time.



I want to try this strategy.

4. I get early morning and regular exposure to sunlight (or artificial bright light when sunlight isn't possible) that helps me set my body clock and be ready for sleep at night.



I already do this.



This will not work for me at this time.



I want to try this strategy.

5. I have a regular exercise routine that helps me be physically tired at the end of the day.



I already do this.



This will not work for me at this time.



I want to try this strategy.

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I already do this.



This will not work for me at this time.



I want to try this strategy.

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5. I have a regular exercise routine that helps me be physically tired at the end of the day.



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I want to try this strategy.



6. I avoid naps close to bedtime.



I already do this.



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7. I avoid stimulating or energizing physical or mental activities at least one hour before bedtime. (It's normal to have an energy boost one hour before bedtime.)



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8. I turn off devices at least one hour before bedtime and dim the lights.



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I want to try this strategy.



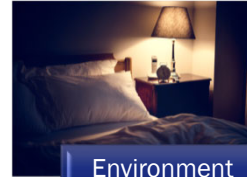
Sleep Habits Checklist



Daily Habits



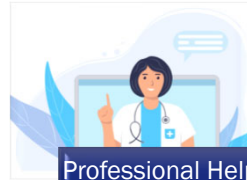
Sleep nutrition



Environment



Bedtime Habits



Professional Help

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Sleep nutrition

9. I stop consuming **caffeine** at least 6 hours before I go to bed.



I already do this.



This will not work for me at this time.



I want to try this strategy.

10. I avoid drinking alcohol before bed because it disrupts the quality of my sleep.



I already do this.



This will not work for me at this time.



I want to try this strategy.

11. I don't go to bed hungry. And I **avoid large meals** close to bedtime. I also clear my bladder and avoid drinking lots of liquids before bed.



I already do this.



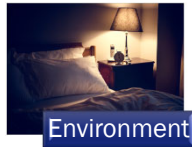
This will not work for me at this time.



I want to try this strategy.

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Sleep Habits Checklist



12. I keep my bedroom quiet, dark, comfortable, and cool (65°F is optimal for some).



I already do this.



This will not work for me at this time.



I want to try this strategy.

13. I only use the bed for sleep and sex. I don't watch TV, go on the computer, or do work in my bedroom close to bedtime.



I already do this.



This will not work for me at this time.



I want to try this strategy.

14. I put the bedroom clock where I can't see it to avoid checking it throughout the night.



I already do this.



This will not work for me at this time.



I want to try this strategy.

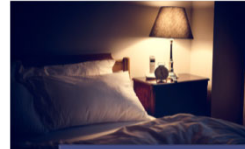
Sleep Habits Checklist



Daily Habits



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Bedtime Habits



Professional Help



Bedtime Habits

15. I have a “going to bed” ritual and consistent bedtime to signal to my body that it’s time to get ready for sleep.



I already do this.



This will not work for me at this time.



I want to try this strategy.

16. I have a regular **gratitude practice** that can boost my length and quality of sleep.



I already do this.



This will not work for me at this time.



I want to try this strategy.

17. I have a **relaxation response activity**—such as **mindfulness**, **progressive muscle relaxation**, or **deep breathing**—that I practice regularly.



I already do this.



This will not work for me at this time.



I want to try this strategy.

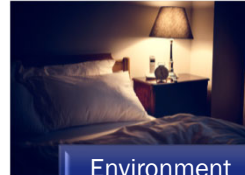
Sleep Habits Checklist



Daily Habits



Sleep nutrition



Environment



Bedtime Habits



Professional Help

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Professional Help

20. I talked with my doctor or a sleep specialist to explore **cognitive behavioral therapy for insomnia (CBT-I)** and other strategies to help me get better sleep.



I already do this.



This will not work for me at this time.



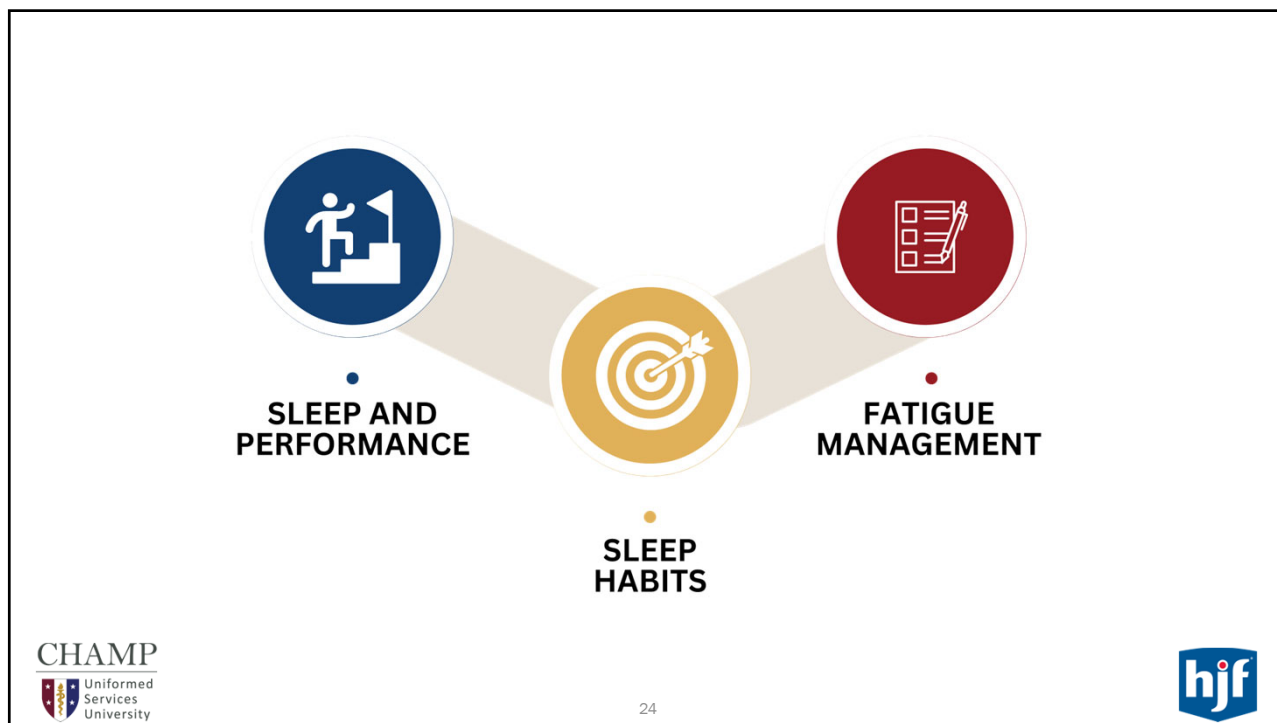
I want to try this strategy.

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Operational Fatigue Management

FATIGUE MANAGEMENT STRATEGIES FOR SHIFT WORK & SUSTAINED OPERATIONS

DURING REGULAR DAYTIME OPERATIONS:

- Learn how much sleep you need to sustain your optimal health and performance.
- Develop good sleep habits.
- Maintain a consistent sleep schedule to help you get 7-9 hours of sleep.
- Learn the different ways you can use strategic napping to optimize your performance.

UP TO 2 WEEKS PRIOR:

- Sleep longer or nap to bank sleep hours to help offset the impacts of sleep deprivation.
- The more hours you bank, the better.

1 DAY BEFORE:

- Sleep as long as you can in the morning.
- Nap and exercise (the order doesn't matter) as close to the start of your shift or mission as possible.

DURING SHIFT WORK & SUSTAINED OPERATIONS:

- Nap! Try coffee-first naps or "responsive" (coffee naps) to meet your alertness.
- Consume up to 200 mg of caffeine every 4 hours as needed.
- Expose yourself to sunlight.
- Perform a short bout of high-intensity exercise.

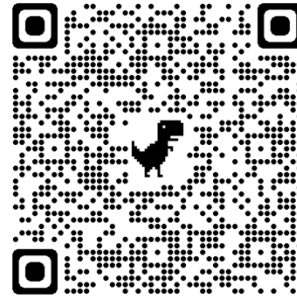
AFTER AND BETWEEN SHIFTS OR SUSTAINED OPERATIONS:

- Time your last dose of caffeine so you can finish your shift (or get home) safely but still get to sleep quickly.
- Sleep as soon as possible and for as long as you can after your shift.
- Optimize your sleep environment: temperature, light, and noise so that you can get good sleep.
- Full naps: move easily with mindfulness, deep breathing or progressive muscle relaxation techniques.
- Nap as needed.

BACK ON DAYTIME OPERATIONS:

- Maintain good sleep-hygiene habits.
- Continue to try and get the required 7-9 hours of sleep.
- View sunlight as soon as you're out in the morning to help reset your internal clock for a consistent sleep-wake schedule.
- Play off sleep debt through strategic napping.

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Operational Fatigue Management

Fatigue management strategies for shift work and sustained operations

Adequate sleep during regular daytime operations is the foundation of an effective fatigue management plan. Check out what you need to support your sleep readiness:

- Learn how much sleep you need to sustain your optimal health and performance.
- Develop good sleep habits.
- Maintain a consistent sleep schedule to help you get 7-9 hours of sleep.
- Learn the different ways you can use strategic napping to optimize your performance.

Up to 2 weeks prior to shift work or sustained operations, bank sleep hours to help offset the impact of sleep deprivation. The more hours you bank, the better. Check off which strategy works for you:

- Sleep longer during the night
- Nap

Write down specific steps and times you plan to bank sleep:

Get as much sleep as you can one day before shift work or sustained operations. Check the strategies that work for you:

- Delay PT until the afternoon.
- Sleep as long as you can in the morning.
- Nap as close to the start of your shift or mission as possible.

List what steps you need to take. For example, open with your partner about your schedule:

After being awake for 18 hours, your performance will degrade. Here are some strategies you can use to manage fatigue during shift work and sustained operations:

- Nap! Try coffee-first naps or "responsive" (coffee naps) to meet your alertness.
- Get exposure to natural sunlight.
- Perform a short bout of high-intensity exercise.
- Consume up to 200 mg of caffeine every 4 hours as needed, but don't exceed 600 mg of caffeine in 24 hours.

Plan out your shift work schedule and apply these tips as you can. Be as specific as possible. When might you nap? What type of caffeine might you consume? Where and when will you exercise and expose yourself to natural sunlight?

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Preparation Phase



Adequate sleep during regular daytime operations is the foundation of an effective fatigue management plan. Check out what you need to support your sleep readiness:

- Learn how much sleep you need to sustain your optimal health and performance.
- Develop good sleep habits.
- Maintain a consistent sleep schedule to help you get 7–9 hours of sleep.
- Learn the different ways you can use strategic napping to optimize your performance.



Sleep Vacation



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Preparation Phase



Adequate sleep during regular daytime operations is the foundation of an effective fatigue management plan. Check out what you need to support your sleep readiness:

- Learn how much sleep you need to sustain your optimal health and performance.
- Develop good sleep habits.
- Maintain a consistent sleep schedule to help you get 7–9 hours of sleep.
- Learn the different ways you can use strategic napping to optimize your performance.



Strategic Napping



Short naps



Nappuccinos



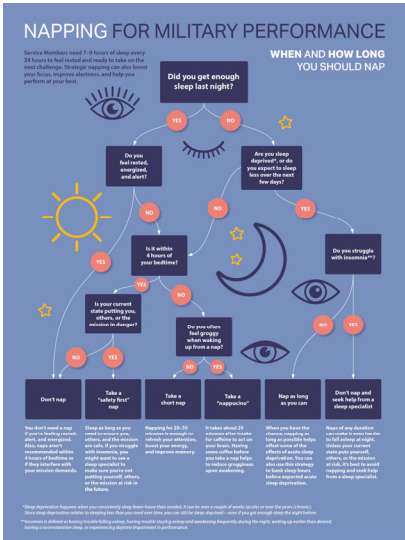
Safety-first naps



Long naps



Napping Tool



Preparation Phase



Up to 2 weeks prior to shift work or sustained operations, bank sleep hours to help offset the impact of sleep deprivation. The more hours you bank, the better. Check off which strategy works for you:

- Sleep longer during the night
- Nap



Sleep Deprivation & Debt

Living Expenses = \$10



Income = \$9



Sleep Needs = 8 hours



Actual Sleep = 6 hours



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How to Deal with Sleep Debt

Sleep Needs = 8 hours



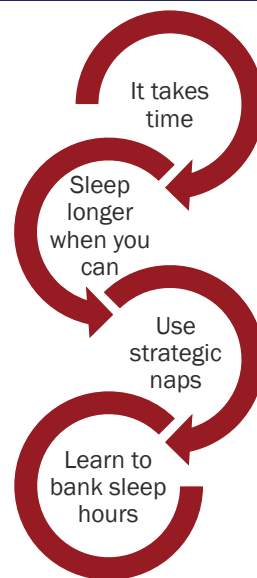
Actual Sleep = 8 hours



Sleep Needs = 8 hours



Actual Sleep = 8+ hours



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Preparation Phase



Get as much sleep as you can one day before shift work or sustained operations. Check the strategies that work for you:

- Delay PT until the afternoon.
- Sleep as long as you can in the morning.
- Nap as close to the start of your shift or mission as possible.

Execution Phase



After being awake for 18 hours, your performance will degrade. Here are some strategies you can use to manage fatigue during shift work and sustained operations:

- Nap! Try **safety-first naps** or “**nappuccinos**” (coffee naps) to reset your alertness.
- Get exposure to natural sunlight.
- Perform a short bout of high-intensity exercise.
- Consume up to 200 mg of caffeine every 4 hours as needed, but don't exceed 600 mg of caffeine in 24 hours.

Caffeine

CAFFEINE & PERFORMANCE

If needed, you can use caffeine to boost your mental & physical performance in certain situations. If you're going to use it, here's how.*

USE UP TO 200 MG AS FOLLOWS

- ENDURANCE PERFORMANCE** 30-60 MINUTES before activity (more than 60 minutes of continuous activity)
- MENTAL PERFORMANCE** 15-30 MINUTES before task
- RESTRICTED SLEEP** (less than 6 hours of sleep in 24 hours) **1 DOSE ON AWAKING** Re-dose every 3-4 hours only as needed
- NIGHT SHIFTS WITH DAYTIME SLEEP** 30-60 MINUTES before start of shift. Re-dose every 3-4 hours only if needed.
- SUSTAINED OPERATIONS** (no sleep in 24 hours) **1ST DOSE AT MIDNIGHT** Re-dose every 3-4 hours only as needed. Use during daytime hours only if needed.

HOW MUCH IS 200 MG OF CAFFEINE?
(SERVING SIZE - AVERAGE AMOUNT OF CAFFEINE IN ONE SERVING)

- BREWED COFFEE** (8 FL OZ/1 CUP - 95 MG)
- INSTANT COFFEE** (1 TSP - 31 MG)
- ESPRESSO** (1 FL OZ/ONE "SHOT" - 63 MG)
- BREWED GREEN TEA** (8 FL OZ/1 CUP - 28 MG)
- BREWED BLACK TEA** (8 FL OZ/1 CUP - 47 MG)
- COLA** (12 FL OZ/1 CAN - 33 MG)
- CITRUS-FLAVORED SODA** (12 FL OZ/1 CAN - 53 MG)
- ENERGY DRINKS** (16 FL OZ/1 CAN - 160 MG)

Other sources/names of caffeine:

- Cacao
- Caffeine anhydrous
- Coffee
- Green coffee bean
- Guarana
- Kola nut
- Methylxanthine
- Tea
- Trimethylxanthine
- Xanthine
- Yerba maté



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Caffeine

CAFFEINE USE OVER 24 HOURS:

- Up to 400 mg is safe for everyday use
- Don't exceed 600 mg on days when performance is critical
- Don't exceed 800 mg for sustained operations



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OPERATION SUPPLEMENT SAFETY | OPSS.ORG



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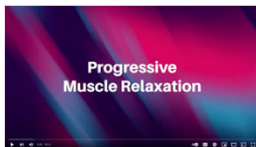
Recovery Phase



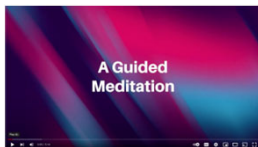
After your shift or sustained operations, catch up on lost sleep as soon as possible:

- Time your last dose of caffeine so you can finish your shift (or get home) safely but still get to sleep quickly.
- Sleep as soon as possible and for as long as you can after your shift.
- Optimize your sleep environment—temperature, light, and noise—as best you can for good sleep.
- Fall asleep more easily with mindfulness, deep breathing, or progressive muscle relaxation techniques.
- Pay off sleep debt through strategic napping.

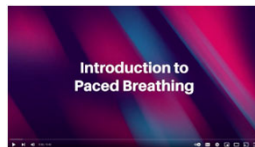
Relax the body and quiet the mind



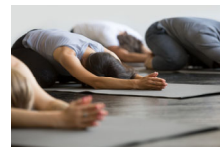
Progressive
Muscle Relaxation



A Guided
Meditation



Introduction to
Paced Breathing



Recovery Phase



After your shift or sustained operations, catch up on lost sleep as soon as possible:

- Time your last dose of caffeine so you can finish your shift (or get home) safely but still get to sleep quickly.
- Sleep as soon as possible and for as long as you can after your shift.
- Optimize your sleep environment—temperature, light, and noise—as best you can for good sleep.
- Fall asleep more easily with mindfulness, deep breathing, or progressive muscle relaxation techniques.
- Pay off sleep debt through strategic napping.

Recovery Phase



If you're on a shift-work schedule for a few days or weeks, a consistent sleep schedule can improve your overall performance:

- Consider your social and family commitments. Find the best time to get uninterrupted sleep.
- Adjust the temperature and reduce light and noise to create an optimal sleep environment.
- Strive for 7–9 hours of sleep in a single stretch. If this isn't possible, meet your daily sleep requirements with two shorter periods of sleep.
- Keep a consistent daily schedule. Try to sleep and eat at the same time every day.

Recovery Phase



Back on daytime operations:

- Get exposure to sunlight as soon as you're up in the morning to help reset your internal clock to a consistent sleep-wake schedule.
- Maintain healthy sleep habits.
- Continue to get the required 7–9 hours of sleep daily.
- Use strategic napping to pay off sleep debt if needed.



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