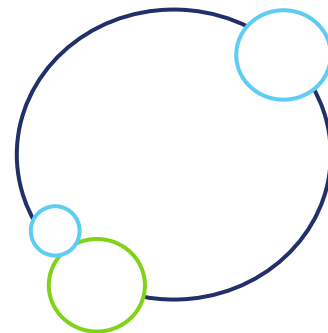


RECOGNIZING & MANAGING FATIGUE

Department of Academic Affairs, Maimonides Medical Center



5 STEPS TO RECOGNIZE FATIGUE:

- 1 Know the warning signs of fatigue
- 2 Know what you look like when you are healthy, well, and rested. Being familiar with this baseline helps you to recognize any changes
- 3 Consider all possible contributing factors, not just # of hours slept
- 4 Reflect on your sleep and diet patterns to make more active choices
- 5 Ask a professional, or other support, for help differentiating between fatigue and other issues

WHAT IS FATIGUE?

It's more than just feeling sleepy. While sleepiness can be a sign of fatigue, fatigue does not only occur as the result of sleep deprivation. There are many other important factors that can contribute to overall fatigue.

Fatigue is considered a syndrome, that can be acute or chronic, and involves feeling very tired (physically and/or emotionally), weary, or sleepy as the result of:

- Circadian rhythm disruption
- Too little sleep, or fragmented sleep
- Excessive workload
- Work tasks that are mentally or physically taxing
- Long periods of stress or anxiety

Some additional environmental factors that can increase risk for fatigue include:

- Shift work (which leads to disruptions in melatonin and cortisol)
- Boring or repetitive tasks
- Poor lighting
- Poor air circulation
- Uncomfortable temperatures
- Excessive noise

Fatigue can also be caused by some medical conditions (including primary sleep disorders, thyroid disease, or mental health conditions), diet, and other lifestyle factors.

Be on the lookout for some of these issues that can both affect AND be affected by fatigue:

- | | |
|--------------|-------------------------------|
| ✓ Depression | ✓ Seasonal Affective Disorder |
| ✓ Stress | ✓ Compassion fatigue |
| ✓ Burnout | ✓ Medical Issues |



“Sleep is a necessity, not a luxury.”

Dr. Safwan Badir, President of the American Academy for Sleep

HOW DOES FATIGUE AFFECT US?

Fatigue affects our overall ability to function, significantly and negatively impacting our thinking, emotions, behaviors, and physiology. Getting familiar with how fatigue manifests is a critical step in being able to recognize it in the moment.

Fatigue will look different in everyone, depending on contributing factors and other individual differences. It may even look different in the same person across time and situations.



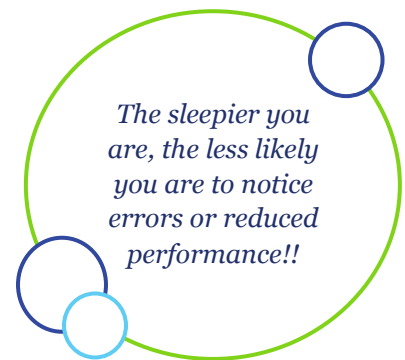
Which of these signs have you noticed in yourself?

THINKING

- Poorer attention, focus, and short-term memory
- Decreased vigilance
- Impaired information processing & decision making
- Poorer problem solving skills
- Decreased ability to communicate effectively

EMOTIONS

- Increased anxiety, depression, or irritability
- Feeling disengaged or apathetic
- Increased emotionality (experiencing feelings as being stronger or more intense than usual)
- Lower ability to cope with emotions
- Decreased empathy for patients

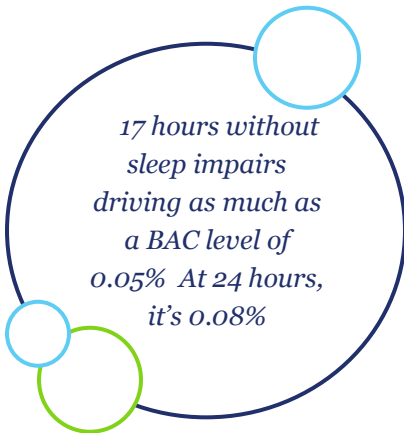


BEHAVIORS

- More “micro-sleeps” or nodding off for a few seconds at a time (this often goes unnoticed by the person experiencing it!)
- Increased tolerance for risk
- Increased medical errors
- Lower motivation for learning
- Sleep latency (the time it takes to fall asleep) shortens
- Repeated yawning and/or falling asleep in meetings

PHYSIOLOGY

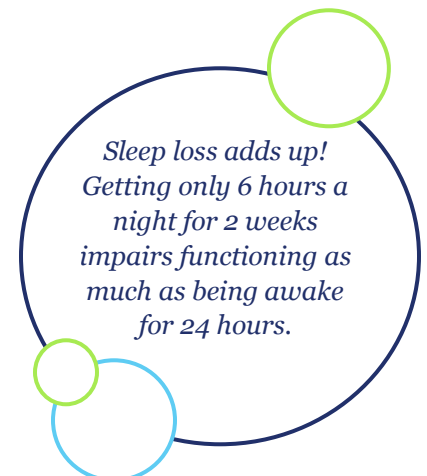
- Slowed reflexes and reaction time (plus general loss of ability to do things quickly)
- Decreased motor coordination
- Headaches, dizziness, sore or aching muscles
- Increased sympathetic activity
- Blunted arousal
- Reduced immune system functioning (over time)



And remember, you should never drive if experiencing:

- Frequent “micro-sleeps” during shift
- Noticeably decreased motor coordination or reaction time
- Increased forgetting, repeatedly needing check your work
- Feeling very disengaged or apathetic

If you are concerned about colleagues who are exhibiting these signs, please help us to create a culture of safety, wellness, and accountability by saying something (to your colleague, or to a supervisor).



MANAGING FATIGUE: PREVENTIVE STRATEGIES

Remember, fatigue becomes increasingly hard to combat or manage as it reaches more extreme levels. Don't wait until you are too fatigued to function before trying some of these strategies!

1. Know Yourself.

Learn about how fatigue tends to affect you and identify your contributing factors.

2. Improve your Sleep Quality

Most people need 7-9 hours of sleep, especially after a period of sleep loss (24 hour call). Sometimes we can't get as much sleep as we need, but we can make sure the sleep we do get is of good quality. Follow these tips to establish healthier sleep habits:

Over 24 hours, shift workers sleep 1-2 less hours than non-shift workers.

SLEEP HYGIENE CHECKLIST

- ✓ **Comfortable Environment:** Make sure your bedroom is quiet, dark, relaxing, and at a comfortable temperature (*studies show a cooler temperature is helpful*).
- ✓ **Exercise.** Exercise is helpful, but be sure to work out earlier in your day.
- ✓ **Snack Smart.** While it's not a good idea to eat a large meal just before bed, many foods actually help to induce sleep! Aim for whole grains and foods rich in calcium, melatonin, magnesium, and the amino acid tryptophan (like cherries, bananas, kiwis, nuts, lean protein, or dairy)
- ✓ **No Bright Lights.** Remove electronic devices from the bedroom and avoid ALL SCREENS for at least 30 minutes before sleep. Their blue light suppresses melatonin secretion.
- ✓ **Create a Routine.** This helps cue your body/mind to start winding down. Try a hot shower or bath, non-caffeinated tea, reading, or a mindfulness activity.

3. Aim for sunshine (or bright light exposure) every day.

Sun exposure is critical to maintaining healthy circadian rhythms and maintaining our metabolic processes. Try to get some sun every day, or expose yourself to other bright light sources.



THE NIGHT SHIFT DILEMMA:

Sun exposure during the day hinders acclimation to the night shift schedule. It's actually better to try avoiding sunlight during the day. Try these strategies:

- ✓ Expose yourself to short, bright light sessions when you first wake up using a light box or light simulator
- ✓ Wear dark sunglasses while outside when on nights
- ✓ Make sure your sleeping environment is as dark as possible
- ✓ Stop drinking caffeine during the last 30 minutes of your shift
- ✓ Take 0.5 mg of melatonin several hours before you plan to sleep

4. Pay attention to your diet

While diet can contribute to fatigue and overall energy, fatigue often leads to poorer or less thoughtful decisions about food choices. Diet can also affect sleep quality, further adding to fatigue risk factors.

- Though alcohol can seem to help with sleep, it actually interferes with slow wave delta sleep and REM cycles, ultimately leading to less restful sleep
- Know that foods high in sugar, unhealthy fats, and simple carbohydrates tend to decrease overall energy
- Stay hydrated! Dehydration contributes significantly to fatigue and often goes unnoticed as a contributing factor.

5. Monitor physical health, mental health, and stress levels regularly.

These factors can positively or negatively impact fatigue, staying as well as possible in all areas can help to create a buffer against some fatigue risk factors. Be sure to check in with yourself regularly, as all of these factors are fluid and can shift from day to day.

MANAGING FATIGUE: ACUTE STRATEGIES

Keep in mind that as one becomes more fatigued, at chronic or more acute levels, it becomes harder to recognize signs of fatigue – including errors and decreased performance. This is true of everyone. We also know that residents are far more likely to experience fatigue than attending physicians.

Building in self-checks and using some of these strategies can help you to be honest with yourself about your level of fatigue (and functioning) and also mitigate some fatigue effects.

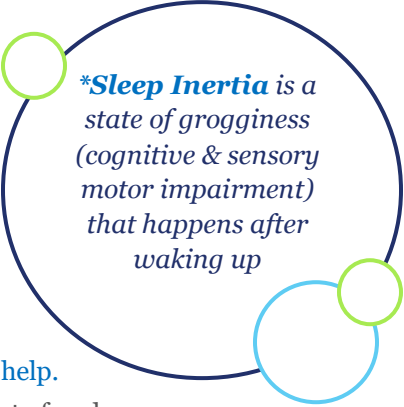
1. Move Around

As often as you can, aim to stand up, walk around, or stretch to increase blood flow and energy. You can also try to incorporate some light exercise if possible or expose yourself to bright light.

2. Nap Smart (on shift and beforehand)

Learn how to maximize the benefits of napping. Try to keep these nap facts in mind:

- ✓ **Pre-Nap.** Take a 1-2 hour nap prior to a prolonged period of sleep loss (like a 24 hour call)
- ✓ **Keep a Schedule.** Naps are most therapeutic every 2-3 hours for 15-30 minutes each. *If you're only able to take one nap while on shift, aim to nap earlier vs. later in your shift.*
- ✓ **Don't Wait Until Fatigue Sets In!** Naps work best the earlier they are in a period of sleep deprivation, so aim to nap before you start feeling fatigued.
- ✓ **Avoid Sleep Inertia*** Limit on-shift naps to 30 minutes maximum, And try to wake up, stand up, and expose yourself to bright light immediately after awaking from a nap to minimize sleep inertia effects.
- ✓ **Don't Fight your Circadian Rhythms.** Instead, try to work with them by napping between 2-5 AM or PM



***Sleep Inertia** is a state of grogginess (cognitive & sensory motor impairment) that happens after waking up

3. Caffeinate Carefully

- ✓ Minimize social use of caffeine to maintain its effects.
- ✓ Remember that caffeine does not kick in for about 15-30 minutes.
****This means that drinking caffeine right before/while driving may not help.**
- ✓ Benefits typically last 3-5 hours, so caffeine is NOT reasonable a substitute for sleep

4. Have a Snack and Hydrate

Aim for a snack with healthy proteins or complex carbohydrates, and ideally one with both! Hydrate with non-sugary drinks.

5. Talk to a Supportive Person in Your Program

If you're feeling too fatigued to work safely, or if burnout, stress, or other mental health issues are impacting your work, the absolute best thing you can do is speak with your **Program Director** or **Chief Residents**. While we recognize that there may be some stigma associated with acknowledging fatigue (or other issues) and needing to take a break, we also know that avoiding patient contact when fatigued is truly the most responsible choice. **You will NEVER be reprimanded for seeking help.**

NOT SURE WHO TO TALK TO?

Everyone has preferences for who they feel most comfortable with, but be sure to consider all your options and keep in mind that different people are probably better supports for different issues. Are you looking for information, a listening ear, or concrete help with a specific task? Remember, these resources are always available to you:

ACADEMIC AFFAIRS SUPPORTS:

- Robin Gitman, VP of Academic Affairs, 917-319-2209
- Erica Hutchison, Psychologist, 347-996-6090

DEPARTMENTAL SUPPORTS:

- Program Directors
- Chief residents

CIR UNION REPRESENTATIVES:

- Jed Tyrpak: jtyrpak@cirseiu.org
- Sara Holden: sholden@cirseiu.org

CONFIDENTIAL EMPLOYEE ASSISTANCE PROGRAM HOTLINE:

- 1-800-386-7055

FATIGUE AWARENESS & MANAGEMENT at MAIMONIDES MEDICAL CENTER

We are committed to improving individual resident wellness, reducing the potential for medical errors, and creating supportive, thriving culture of training. We know that preventing fatigue is one important contributing factor to achieving these goals, which is why, as an institution, we emphasize the importance of:

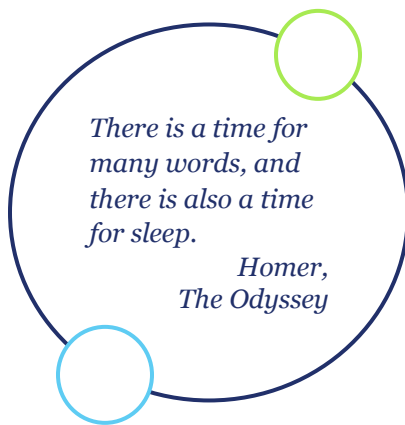
- Honest reporting of duty hours
- Limitations on work hours and call duty
- Resident and faculty education on fatigue, burnout, and mental health
- Decreasing stigma about acknowledging fatigue and getting support –for fatigue and other stress, burnout, and mental health issues



WE ARE ALSO COMMITTED TO PROVIDING THESE ADDITIONAL RESOURCES:

- ✓ Call rooms for napping during and after shifts
- ✓ Free and confidential Counseling and Support Services through the Department of Academic Affairs
- ✓ Carfare* (up to \$15 dollars) to your home *if you are experiencing fatigue and feel you are unable to get home safely*, in accordance with the ACGME policy for managing fatigue and the CIR collective bargaining agreement

** We are proud to provide this service to our trainees and are committed to helping residents and fellows. We also know that fatigue is often related to other underlying contributing factors and want to support our trainees in addressing these issues as well. If a resident or fellow is too fatigued to travel home 2 or more times in a 3 month period, there may be a need for additional support or strategic planning. In this case, that resident will be referred to Dr. Erica Hutchison, Academic Affairs Psychologist, for a free and confidential fatigue assessment in order to identify specific contributing factors and develop a plan for more effective fatigue management and overall health/wellbeing.*



HOW TO OBTAIN CAR FARE:

- Step 1:** Determine that you are fatigued and unable to travel safely
- Step 2:** Consider a short nap to mitigate fatigue and allow for safe travel.
- Step 3:** If unable to safely decrease fatigue, follow the protocol for obtaining carfare in your specific department.