

SAFE RESIDENCY

SLEEP ALERTNESS AND FATIGUE EDUCATION IN RESIDENCY

American Academy of Sleep Medicine

Recognize The Warning Signs of Sleepiness

1. Falling asleep in conferences or on rounds
2. Feeling restless and irritable with staff, colleagues, family, and friends
3. Having to check your work repeatedly
4. Having difficulty focusing on the care of your patients
5. Feeling like you really just don't care

Napping

Pros: Temporarily improve alertness

Types: Preventative (pre-call); Operational (on the job)

Length: Short naps: no longer than 30 minutes to avoid the grogginess ("sleep inertia") that occurs when you're awakened from deep sleep

Long naps: 2 hours (range 30 to 180 minutes)

Timing: If possible, take advantage of circadian "windows of opportunity" (2-5 am and 2-5 pm); but if not, nap whenever you can!

Cons: Sleep inertia; allow adequate recovery time (15-30 minutes)

Bottom line: Naps take the edge off, but *do not replace*, adequate sleep

Healthy Sleep Habits

1. Go to bed and get up at about the same time every day
2. Develop a pre-sleep routine
3. Use relaxation to help you fall asleep
4. Protect your sleep time; enlist your family and friends!
5. Sleeping environment:
 - a. Cooler temperature
 - b. Dark (eye shades, room darkening shades)
 - c. Quiet (unplug phone, turn off pager, use ear plugs, white noise machine)
6. Avoid going to bed hungry, but no heavy meals within 3 hours of sleep
7. Get regular exercise but avoid heavy exercise within 3 hours of sleep

Drugs

1. **Melatonin:** Little data in residents
2. **Hypnotics:** May be helpful in *specific* situations (eg, persistent insomnia)
3. **AVOID:** Using stimulants (methylphenidate, dextroamphetamine, modafinil) to stay awake
4. **AVOID:** Using alcohol to help you fall asleep; it induces sleep onset but disrupts sleep later on
5. **Caffeine:**
 1. *Strategic* consumption is key
 2. Effects within 15 – 30 minutes; half-life 3 to 7 hours
 3. Use for temporary relief of sleepiness
 4. **Cons:**
 - a. Disrupts subsequent sleep (more arousals)
 - b. Tolerance may develop
 - c. Diuretic effects

Alertness & Night Float Strategies

1. Protect your sleep & nap before work
2. Consider “splitting” sleep into two 4 hour periods
3. Have as much exposure to bright light as possible when you need to be alert
4. Avoid light exposure in the morning after night shift
5. Know your own vulnerability to sleep loss and learn what works for you

Recognize Signs of DWD (Driving While Drowsy)

1. Trouble focusing on the road
2. Difficulty keeping your eyes open
3. Nodding
5. Yawning repeatedly
6. Drifting from your lane, missing signs or exits
7. Not remembering driving the last few miles
8. Closing your eyes at stoplights

Risk Factors for Drowsy Driving

1. Taking any sedating medications
2. Drinking even small amounts of alcohol
3. Having a sleep disorder (sleep apnea)
4. Driving long distances without breaks
5. Driving alone or on a boring road

Drive Smart; Drive Safe

1. AVOID driving if drowsy
2. If you are really sleepy, get a ride home, take a taxi, or use public transportation
3. Take a 20 minute nap and/or drink a cup of coffee before going home post-call
4. Stop driving if you notice the warning signs of sleepiness
5. Pull off the road at a safe place, take a short nap

Drowsy Driving: What Does Not Work

1. Turning up the radio
2. Opening the car window
3. Chewing gum
4. Blowing cold air (water) on your face
5. Slapping (pinching) yourself hard
6. Promising yourself a reward for staying awake

It takes only a 4 second lapse in attention to have a drowsy driving crash

In Summary...

1. **Fatigue is an impairment like alcohol or drugs.**
2. **Drowsiness, sleepiness, and fatigue cannot be eliminated in residency, but can be managed.**
3. **Recognition of sleepiness and fatigue and use of alertness management strategies are simple ways to help combat sleepiness in residency.**
4. **When sleepiness interferes with your performance or health, talk to your supervisors and program director.**