

June 2020 ~ Resource #360624

Strategies for Surviving Fatigue and Shift Work

About one in five people work non-traditional hours (e.g., evening shift, overnight), the highest proportion of which are in healthcare settings.^{2,3} This is in addition to individuals who may be called upon to work longer or rotating shifts in certain circumstances such as staffing shortages or crisis scenarios.^{8,15} About a quarter of these individuals will complain of problems such as fatigue or sleepiness during work and insomnia.^{1,2,7} These may be symptoms of shift work sleep disorder, or shift work disorder.^{1,3} Fatigue and sleepiness can increase the risk for poor concentration, errors, and other problems.^{3,4,7,15} The chart below lists strategies to help prevent or alleviate fatigue or other symptoms of shift work disorder.

Non-Pharmacologic Strategies^{3,4,7,9,14,15}

To go to sleep...

- Optimize sleep hygiene, such as by:
 - keeping your bedroom cool, dark, and quiet. Use aids such as eye masks, earplugs, or white noise, if necessary.
 - avoiding alcohol, caffeine, nicotine, or heavy meals before bed. (Keep in mind that caffeine can stay in your body for several hours, and should not be consumed within four to six hours of bedtime. Find more below in the *Pharmacologic Strategies* section.)
 - engaging in a calming activity (e.g., meditating, reading, relaxation breathing) before bedtime.
 - avoiding use of electronics before bed.
- Avoid disturbances. Ask family and friends to let you sleep and turn off the ringer on your phone.
- Wear sunglasses on the drive home to minimize exposure to light. It's best to avoid exposure to bright light for 90 minutes before sleep.
- Stick with your workday sleep routine on non-workdays as much as possible.

To stay awake...

- Take a nap before working overnight hours, for about 90 minutes, if possible.
- Keep your work area brightly lit, especially at the beginning of a shift. Also, keep your work area relatively cool.
- Eat three meals each day, at regular times.
- Avoid processed foods and sugar, and lean toward plenty of fruits, vegetables, and cereals.
- Use caffeine if needed. (Keep in mind that caffeine can stay in your body for several hours, and should not be consumed within four to six hours of bedtime. Find more below in *Pharmacologic Strategies* section.)
- Perform repetitive or tedious tasks toward the beginning of your shift when you are most alert.
- Try not to be by yourself, work with others to stay engaged.
- Avoid sitting still for too long.
- Take a short nap on your scheduled break. Or, do something physical, such as taking a walk or exercising.

More...

Pharmacologic Strategies	
Drug	Comments
<i>To stay awake...</i>	
Caffeine	<ul style="list-style-type: none"> • May reduce nighttime sleepiness when combined with a pre-shift nap.^{1,8} May also improve psychomotor performance.⁹ • Limit intake to ~400 mg/day (about four 8 oz [240 mL] cups of coffee) to minimize side effects such as tachyarrhythmias.¹⁰ • Avoid caffeine within at least four hours of desired bedtime.^{7,15}
Armodafinil <i>(Nuvigil-U.S. only)</i> Modafinil <i>(Provigil-U.S., Alertec-Canada)</i>	<ul style="list-style-type: none"> • May modestly improve nighttime alertness, reduce nighttime sleepiness, and improve psychomotor performance.^{1,9} • FDA- and Health Canada-approved for shift work disorder.^{5,6,8,13} Both are Schedule IV controlled substances in the U.S.^{5,6} • Dose is armodafinil 150 mg or modafinil 200 mg orally one hour prior to start of shift.^{5,6,13} • Side effects include headaches, nausea, daytime insomnia, increased blood pressure, and allergic and skin reactions.^{1,5,6,8} • Effectiveness of hormonal contraceptives may be reduced with the use of armodafinil or modafinil, and for up to a month after discontinuation.^{5,6,13} • Armodafinil is longer acting than modafinil.^{5,6,8} • Long-term use appears to be well tolerated.^{11,12} Re-evaluate periodically for long-term usefulness.¹³
Methylphenidate <i>(Ritalin, etc)</i>	<ul style="list-style-type: none"> • Not well studied for shift work disorder.⁸ • Schedule II controlled substance in the U.S. Consider abuse potential.⁸
<i>To go to sleep...</i>	
Hypnotics	<ul style="list-style-type: none"> • Might increase daytime sleep duration and quality.⁹ • Consider the possibility of carryover effects such as sedation during work hours.^{8,9} • Suggest a shorter-acting agent if falling asleep is the problem or a longer-acting agent if staying asleep is the problem. Use our chart, <i>Comparison of Insomnia Treatments</i>, to select an agent. (U.S. subscribers; Canadian subscribers)
Melatonin	<ul style="list-style-type: none"> • May add about 25 minutes to daytime sleep duration.¹ Seems to improve daytime sleep quality and duration.^{9,10} • Suggest 3 mg before bed.⁸ Note that the effect does not appear to be dose dependent.^{1,9}

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

More . . .

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Cite this document as follows: Clinical Resource, *Strategies for Surviving Fatigue and Shift Work*. Pharmacist's Letter/Prescriber's Letter. June 2020.

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