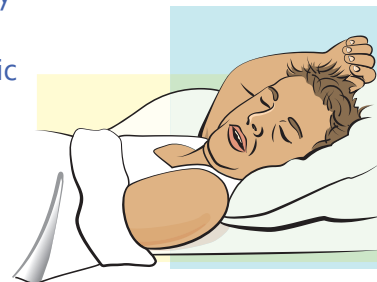


Healthy Sleep In Adults

Sleep is a reversible state of decreased responsiveness and activity defined by changes in a person's brain wave activity. Sleep is actually a very active process that involves a number of physiologic changes in organs of the body. Research has shown that sleep is needed for many important functions, including formation of memories, release of important hormones such as those for growth and appetite, and muscle repair, but the main purpose of sleep is currently unknown.



There are 2 basic types of sleep: non rapid eye movement (non-REM) sleep and rapid eye movement (REM) sleep. You cycle through non-REM and REM sleep several times throughout the night and both types are important. During REM sleep, you have vivid dreaming that you may or may not remember.

Why is sleep important?

Getting enough sleep is vital for your mental and physical health, safety, and quality of life. It is estimated that more than 25% of the U.S. population has insufficient sleep. Adequate sleep duration and quality help us concentrate, learn, react quickly, make decisions, create memories, and function optimally. Reducing your sleep time by even just 1 hour can negatively affect your thought process and reaction time the following day. Insufficient sleep can be associated with several medical conditions, including depression, diabetes, heart disease, stroke, high blood pressure and kidney disease. It can make these and other chronic illnesses worse. Not getting enough sleep also can make it harder to fight off infections. Obesity has been associated with the lack of sleep. People who do not get enough sleep are more likely to feel hungry and eat more fatty and sugary foods. Sleep deficiency is also associated with an increased risk of injury and accidents, including motor vehicle accidents, which could result in death.

How much sleep is enough?

Individual sleep needs are varied. Most adults need about 7-9 hours of sleep each day while teenagers need 8-10 hours. When you wake up spontaneously feeling refreshed and able to function well, you likely have had enough sleep. A very few healthy people appear to need less than 6 hours of sleep (called "short sleepers") and this sleep trait has been associated with a genetic predisposition. They are able to function well and have no symptoms of daytime sleepiness despite less hours of sleep. Most people cannot expect to get by well with so little sleep. You may be sleep deficient if you have a high likelihood of falling asleep in several of the following situations:

- Sitting and reading, sitting inactive in public place, sitting and talking to someone, or sitting quietly after lunch

- Watching TV
- Riding in a car for an hour without stopping or while stopped for a few minutes in traffic in a car
- Lying down to rest in the afternoon

What about driving while sleepy?

Drowsy driving is increasingly recognized as a serious problem. More than 1 out of every 3 people have fallen asleep at the wheel at some time. It has been reported that 1 out of every 6 traffic accidents that result in death are due to drowsy driving. Getting less than 6 hours of sleep triples your risk (gives you 3 times higher chance) of a motor vehicle accident. Drowsy driving also enhances the effects of alcohol, making drinking alcohol before driving even more dangerous. Warning signs that suggest that you are too sleepy to drive include difficulty focusing, heavy eyelids, blinking frequently, losing track of time, missing traffic signs or exits, daydreaming, yawning frequently, nodding your head, drifting your vehicle, and feeling restless or irritable.

People at the greatest risk of drowsy driving include younger adults, men, shift workers, commercial drivers, and people who travel frequently and work long hours. Having an untreated sleep disorder, such as sleep apnea, also places you at risk for falling asleep while driving.

Here are ways you can prevent drowsy driving:

- Make sure you get adequate sleep time and quality,
- Wake up at the same time everyday.
- Get treatment if you have a sleep disorder like sleep apnea,
- Avoid drinking alcohol or taking sedating medications before driving,
- Schedule regular breaks (about every 2 hours or every 100 miles) for long trips,
- Travel with someone who can trade off driving.

If you are feeling sleepy while driving, you should pull over, find some place safe to rest, and get some sleep before driving again. Stopping somewhere to get a full night's rest is best. You can try taking a brief nap (15-20 minutes) but long naps can lead to grogginess that can still result in impaired driving.

Why am I sleepy during the day?

Feeling sleepy during the day can be due to many causes. Insufficient sleep is a very common cause. Sleep disorders that contribute to daytime sleepiness include sleep apnea, narcolepsy, and idiopathic hypersomnia. For more information about sleep disorders, please see ATS Patient Information Series pieces "Sleep Apnea" and 'Insomnia' at www.thoracic.org/patients. Many medical conditions (such as hypothyroidism, certain vitamin deficiencies, depression, and anxiety) can make you feel tired or negatively affect your sleep. Certain medications (such as some painkillers, antidepressants, anti-anxiety medications, and medications used to treat colds and allergies) can also cause you to be tired during the day. Having a variable schedule from rotating shift work or traveling multiple time zones can contribute to sleepiness as well. Think about what things may play a role in your daytime sleepiness and talk to your healthcare provider.

What can I do to get better sleep?

Following these good sleep hygiene tips can help improve your sleep quality. Good sleep hygiene includes the following:

- Allow yourself enough time to sleep (at least 7-8 consecutive hours).
- Go to bed and wake up the same time every day (regardless if it is the weekend or a weekday).
- Make sure your bedroom is quiet, dark, relaxing, and not too hot or too cold. Minimize environmental factors that can disrupt your sleep like noise, pets and allergens.
- Have a comfortable bed, pillow, and sheets.
- Go to bed only when you are tired. If you do not fall asleep within 20-30 minutes, get up and do something relaxing outside of the bedroom and return to bed when you feel tired.
- Use your bed for only for sleep or intimacy and not for other activities, such as watching TV, reading, or listening to music.
- Avoid electronics (TV, computers, smartphones, video games) and bright light at least 60 minutes before bedtime.
- Avoid naps at least 6 hours before bedtime.
- Avoid large meals before bedtime, but if you are hungry, a small snack can help. Avoid foods that may upset your stomach close to bedtime, such as fatty, spicy, or fried foods.
- Avoid drinking too many fluids close to bedtime so that you can decrease the urge to urinate throughout the night.
- Avoid nicotine and alcohol in the evening. Alcohol may help you feel drowsy but it can disrupt your sleep, cause nightmares/vivid dreams, and cause you to sleep less deeply and less continuously throughout the night. Smoking and alcohol may also cause snoring and worsen sleep apnea.
- Avoid caffeine (coffee, soft drinks, tea, chocolate, energy drinks) in the afternoon and evening as the effects of caffeine can last for up to 8 hours or more.
- Exercise at least 30 minutes during the day most days of the week, but avoid vigorous exercise 2-3 hours before going to bed.

- Have a relaxing bedtime routine (i.e., a set of relaxing activities you do every night in the same sequence).
- Consider removing pets from the bedroom while you sleep if you have pets and your sleep is disrupted.
- Avoid medications that can disrupt your sleep if possible. Talk to your healthcare provider if you suspect your medications are disrupting your ability to sleep.

What if I have a problem sleeping?

You may be referred for a sleep study or to see a sleep specialist who is trained to evaluate people for sleep disorders. Keep a sleep diary for a couple of weeks, noting when you get into and out of bed each day, when you sleep including naps, and if you have any caffeine, alcohol, or nicotine throughout the day. This will help you look at your sleep pattern and what may affect it. You can share this diary with your healthcare provider. Your healthcare provider will want to know what medications you take, including any over-the-counter medications, herbals, and supplements. Other medical conditions that can cause sleepiness need to be evaluated and may require further evaluation. If you have/are diagnosed with a sleep disorder, it is important to get treatment, because sleep disorders are generally long lasting and may cause or exacerbate other health problems, such as diabetes and high blood pressure.

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Rx Action Steps

- ✓ Get 7-9 hours of sleep each day or enough sleep that you wake up feeling refreshed.
- ✓ Follow good sleep hygiene.
- ✓ Talk to your healthcare provider if you think you have a sleep problem.
- ✓ Never drive or operate heavy machinery if you are sleepy.

Healthcare Provider's Contact Number:

Resources:

Centers for Disease Control and Prevention

<http://www.cdc.gov/sleep/>

National Heart, Lung, and Blood Institute

<http://www.nhlbi.nih.gov/health/health-topics/topics/sdd>

National Sleep Foundation

<http://sleepfoundation.org>

<http://drowsydriving.org>

Sleep education—American Academy of Sleep Medicine

www.sleepeducation.com/

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