

All About Sleep

Sleepiness and sleep deprivation seem to be epidemic today. There are many reasons for sleep deprivation: work, chores, babies, worry, parties or late night television are just a few.

Whatever the reason for sleep loss, research has shown that it takes a toll on us both mentally and physically. While we sleep, our bodies secrete hormones that affect our mood, energy, memory, and concentration. Testing has shown that with a driving simulator or a hand-eye coordination task, sleep deprived people may perform just as badly as intoxicated people. In addition, recent research has shown that chronic lack of sleep can also be a cause of high blood pressure and can contribute to problems with diabetes.



Each year, there are over 40 million people in North America who suffer from sleeping disorders. An additional 20 million have occasional sleeping problems. In this article you will learn about the most common sleeping problems, their causes, and how to get a good nights sleep.

Common Sleep Problems and Causes

Cannot Fall Asleep - Cannot Stay Asleep

Most people experience short term insomnia at some time. Insomnia includes having trouble falling asleep, having trouble getting back to sleep, and waking up too early. Insomnia is more common in females, people with a history of depression, and in people older than 60. Temporary insomnia can be caused by:

- Hearing a noise
- A stressful event like the loss of a job or a death in the family or even catastrophic world events
- Certain medications could keep you awake, particularly those that treat colds and allergies, heart disease, high blood pressure, and pain
- Bad habits that sabotage our sleep including drinking alcohol and eating too close to bedtime

Short-term insomnia lasts only a few days and is usually not a cause for concern. For example, with jet lag or even seasonal time changes, your internal body clock will readjust itself within several days. Insomnia is considered chronic when it lasts most nights for a few weeks or more. This longer-term condition deserves professional attention. If you are unsure whether you have chronic insomnia, experts suggest looking at it like you would a headache. If it goes on day after day, and nothing you do seems to help, you should see a health care professional, particularly if you cannot find a cause.

Sometimes insomnia is caused by an underlying illness that needs treatment, such as:

- Thyroid disorders
- Anxiety
- Depression
- Arthritis
- Asthma
- Restless leg syndrome

Sleepy During the Day

Feeling tired every now and then during the day is normal. But it is not normal for sleepiness to interfere with your routine activities. For example, you shouldn't be dozing off while reading the newspaper, during business meetings, or while sitting at a red light. Slowed thinking, trouble paying attention, heavy eyelids, and feeling irritable are other warning signs.

If you're feeling sleepy frequently during the day, you might simply need to make more time to sleep. Experts say that most adults need at least eight hours of sleep every night to be well rested, but this varies from person to person. The bottom line is that you should sleep for the number of hours it takes for you to feel rested, refreshed, and fully alert the next day. If you've had a good sleep, you shouldn't feel drowsy during the day. Naps can be good, but the American

Academy of Sleep Medicine recommends napping before 3 p.m. and for no longer than an hour so that it doesn't interfere with falling asleep at night.

If you are sleeping an adequate amount and you still feel drowsy going about your day to day routine, or if adjusting your sleeping habits hasn't helped, then you should talk with your health care provider. Overwhelming daytime sleepiness could be due to a number of sleep disorders. For example, people with narcolepsy experience excessive sleepiness even after a full night's sleep.

Snoring

Snoring is noisy breathing during sleep that occurs when relaxed structures in the throat vibrate and make noise. Most snoring is harmless, though it can be a nuisance that interferes with the sleep of others. Some snoring can be stopped with lifestyle changes such as:

- losing weight
- cutting down on smoking and alcohol
- changing sleeping positions. This generally means keeping snorers off their backs and on their sides as a way to keep the airway more open during sleep.

There are over the counter nasal strips that are placed over the nose to widen the space in the nose and make breathing easier. Read labels carefully because these strips are only intended to treat snoring. The labels point out certain symptoms that require a doctor's care.

The trick is figuring out the cause of snoring. It could be related to allergies or structural abnormalities such as nasal polyps or enlarged adenoids, which are lymphoid tissue behind the nose. If your snoring is loud and frequent and you also have excessive daytime sleepiness, you could have sleep apnea. People with sleep apnea tend to also be overweight, and it's more common among men than women.

When a person with sleep apnea tries to breathe in air, it creates suction that collapses the windpipe and blocks the flow of air. Blood oxygen levels fall and the brain awakens the person, who then snorts or gasps for air and then resumes snoring. This cycle is typically repeated many times during the night. It results in frequent awakenings that prevent people from reaching the deepest stages of sleep, which leaves them sleepy during the day.

How to get a good night's sleep

First is it helpful to understand the stages of sleep. We usually pass through five stages of sleep.

- **Stage 1:** Light sleep. We drift in and out and can be awakened easily. Our eyes move slowly and muscle activity slows.
- **Stage 2:** Our eye movements stop and our brain waves become slower with occasional bursts of rapid waves called sleep spindles.
- **Stage 3:** Deep sleep. Extremely slow brain waves called delta waves appear, interspersed with smaller, faster waves.
- **Stage 4:** Deep sleep. The brain produces mostly delta waves. There are no eye movements and no muscle activity.
- **Stage 5:** REM sleep. Breathing becomes more rapid, irregular, and shallow. Eyes jerk rapidly, limb muscles become temporarily paralyzed. Dreams almost always happen in this stage, but may occur in other sleep stages as well.

Each cycle takes about two hours. Then the cycle starts over again with stage 1. As the cycles repeat, deep sleep periods get shorter and periods of REM sleep lengthen. Adults spend half of their sleep time in stage 2, 20 percent of the time in REM sleep, and 30 percent in the other stages. Infants start out spending about half of their sleep time in REM sleep.

It may seem obvious, but we often seem to miss the basic fact that these stages take time; so one of the first things you can do to help yourself is to give yourself enough time to actually sleep. Many people count the time they get in to bed

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until they get up as their "8 hours". But if you spend 20 minutes reading and another 20 minutes watching television, and then have to figure another 10 to 15 minutes to get to sleep, you just cut 1 hour out of your sleep time.

Here are some additional **tips to help you sleep**:

- Keep a regular sleep-wake cycle. Try to go to bed and wake up at the same time every day.
- Avoid caffeine, alcohol, and nicotine in the four to six hours before bedtime.
- Don't exercise within two hours of bedtime. Exercising five or six hours before bedtime may help you sleep more soundly.
- Don't eat large meals within two hours of bedtime.
- Don't nap later than 3 p.m.
- Sleep in a dark, quiet room with a comfortable temperature.
- If you can't fall asleep within 20 minutes, do a quiet activity somewhere else and return to bed when you're sleepy.
- Wind down in the 30 minutes before bedtime with a relaxing pre sleep ritual such as a warm bath, soft music, or reading.

If consistently applying these tips doesn't work, see your health care professional and discuss your sleep problems. It is important to make sure that your sleep problems are not caused by a serious physical illness. You should also review the medications you are taking to make sure that they are not causing your sleep problems. Last, but not least, there are medications that can help you sleep that are safe when prescribed by a physician and taken as directed.

Source: National Institutes of Health