

[sleep](#)

## **Sleep Deprivation: Symptoms, Causes, and Effects**

**The damaging effects of not getting enough sleep can creep up on you, eventually taking a serious toll on your mental, physical, and emotional health. Here's how to spot the signs and address the problem.**



### **Are you sleep deprived?**

Most of us know what it feels like the day after a night of little or no sleep. You're not yourself—you feel drowsy, sluggish, irritable, and low on energy. Your mind seems groggy,

you may struggle to focus, make sloppy mistakes, and need coffee after coffee just to make it through the day until you're able to crawl back into bed at night.

While coping with the occasional night of disturbed sleep can be unpleasant, if you're regularly missing out on a restorative night's rest, you could be seriously damaging your health and quality of life. As well as negatively impacting your mood, energy, and performance at work or school, sleep deprivation can also affect your immune system, heart and brain health, sex drive, and ability to handle stress. It can add inches to your waist, increase your risk of accidents, and lead to serious long-term health problems such as diabetes, hypertension, heart disease, stroke, anxiety, and depression.

If you've been sleep deprived for a while, it can even seem *normal* to spend your days feeling tired and out of sorts. But while you may think that you're able to get by on less sleep without suffering any consequences, the truth is that getting sufficient sleep is *essential* to your physical and mental health.

Whatever your circumstances, though, recognizing the symptoms, causes, and effects of sleep deprivation is the first step to addressing the problem and ensuring you get sufficient sleep to recharge your body and mind, protect your well-being, and function at your best.

## How much sleep is enough?

While sleep needs can vary from one person to another, most of us as adults need **seven to nine hours of sleep** each night (children and teens even more, older adults sometimes a little less). If you're not regularly getting that many, you could well be sleep deprived—even if you're not aware of the subtle effects it's having on your mood, personality, and performance, or the long-term toll it could be taking on your overall health.

[\[Read: How Much Sleep Do You Need?\]](#)

When it comes to sleep, it's not just the *number* of hours that's important—it's also the *quality* of those hours as well. Even if you spend enough time in bed, if you struggle to wake up in the morning or feel drowsy during the day, that could be a sign that you're not getting the quality of sleep you need.

Disruptions from noise, light, or physical pain, for example, can prevent you from spending enough time in the [different stages of sleep](#)—particularly the rejuvenating deep sleep and REM sleep stages—diminishing the quality of your rest and contributing to the symptoms of sleep deprivation.

## Signs and symptoms of sleep deprivation

You may be sleep deprived if you:

- Feel tired, irritable, and fatigued during the day; yawn frequently.
- Have difficulty focusing or [remembering things](#).
- Feel less interested in sex.
- Find it difficult to get out of bed in the morning, need an alarm clock to wake up on time, or repeatedly hit the snooze button.
- Feel lethargic or drowsy in the afternoon.
- Find it difficult to stay awake in lectures, meetings, warm rooms, while driving or commuting, or after a heavy meal.
- Have to take a nap during the day.
- Fall asleep on the couch in the evening.
- Are asleep within five minutes of going to bed.
- Need to sleep late on weekends.
- Have experienced mood changes, including feeling [depressed](#), anxious, stressed, paranoid, or [suicidal](#).

## The effects of sleep deprivation

While it may seem like losing sleep isn't such a big deal, sleep deprivation has a wide range of negative effects that go way beyond daytime drowsiness. Over time, the effects of sleep deprivation can mount up, taking a toll on many different aspects of your body and mind.

The effects include:

**Changes in energy.** Feeling fatigued, lethargic, and lacking motivation in your work, school, and home life. You may crave sugar, caffeine, or naps throughout the day.

**Mental health problems.** Sleep deprivation can cause moodiness and irritability, increase your [risk of depression](#) and anxiety, and affect your ability to cope with [stress](#) or manage difficult emotions. In extreme cases, sleep deprivation can even cause hallucinations and delirium.

**Weakened immune system.** You may be more prone to frequent colds, infections, or respiratory diseases.

**Impaired brain activity**, including learning, concentration, and [memory problems](#). Lack of sleep can reduce creativity and problem-solving skills, and affect your judgment, coordination, and reaction times. In fact, sleep deprivation can impair your motor skills just as much as being drunk, increasing your risk for accidents.

**Impacting the cardiovascular system.** Missing out on sleep can trigger harmful inflammation and raise your [blood pressure](#) and blood sugar levels, increasing your risk for heart disease.

**Relationship problems.** Increased moodiness and [anger issues](#) can trigger arguments, while sleep deprivation can also decrease your sex drive, even reduce the production of hormones and cause problems with fertility.

**Changes in appearance**, including premature skin aging and weight gain.

**Increased risk of serious health problems** including stroke, diabetes, heart disease, [Alzheimer's disease](#), and certain cancers.

## How sleep deprivation can add to your waistline

Ever noticed how when you're short on sleep you crave [sugary foods](#) that give you a quick energy boost? There's a good reason for that. Sleep deprivation has a direct link to overeating and weight gain.

There are two hormones in your body that regulate normal feelings of hunger and fullness. Ghrelin stimulates appetite, while leptin sends signals to the brain when you are full.

However, when you don't get the sleep you need, your ghrelin levels go up, stimulating your appetite so you want more food than normal. At the same time, your leptin levels go down, meaning you don't feel satisfied and want to keep eating. So, the more sleep you lose, the more food your body will crave.

## Causes

There are many reasons why you may not be sleeping well at night, ranging from your daytime habits and sleep environment to interruptions to your normal routine due to stress, travel, or illness, for example. By pinpointing the cause of your sleep deprivation, you can

start to take steps to address the problem and get the rest that your body and mind needs.

Some of the most common causes of sleep deprivation include:

**Unregulated stress and worry.** We live in [turbulent times](#) and many of us are stressed about work, [finances](#), and our own or our loved ones' health and welfare. During the day, you likely have other things to distract you, so it's often not until you lay down to sleep at night that you're finally alone with your anxious thoughts. Nothing can sabotage a good night's sleep easier than worrying about things that have happened in the past or might happen in the future.

**Shift work** can disrupt your [circadian rhythms](#) or 24-hour sleep-wake cycle, causing you to feel groggy and tired. If you regularly work nights, early mornings, or rotating shifts, you may be getting lower quality sleep than if you worked a normal daytime shift.

**Poor daytime habits or sleep environment.** The source of insufficient or low-quality sleep at night can often stem from your behavior during the day. Too much caffeine, little or no exercise, viewing screens right before bed, or simply having a bedroom that's too warm, bright, or noisy can all contribute to a poor night's rest.

**A sleep disorder**, such as [sleep apnea](#), [narcolepsy](#), or [restless legs syndrome](#), can impact your ability to get enough quality sleep at night and cause sleep deprivation.

[\[Read: Sleep Disorders and Problems\]](#)

**Substance use.** While [drinking alcohol](#) may help you to fall asleep faster, it can also interrupt your sleep by making snoring worse, disrupting the restorative REM-sleep phase, and waking you up earlier than normal. [Using stimulants](#), such as cocaine or amphetamines, can also disrupt your sleep and keep you awake at night.

**Medical issues.** There may be a [medical cause to your sleep problems](#), such as physical pain, heartburn, thyroid disease, or a mental health issue such as depression, anxiety, or bipolar disorder. Older adults with [dementia](#) often experience fragmented sleep, while recent cases of [long-haul COVID](#) have also been linked to poor sleep. Side-effects of certain medications can also cause sleep problems.

**Caregiving duties.** Whether you're looking after an aging parent or a [colicky new born](#), providing care for a loved one during the night can disturb both the quantity and quality of your own sleep.

## Using a sleep diary to track your symptoms and sleeping patterns

Using a sleep diary to record your sleep patterns and daytime habits can help pinpoint the cause of your sleep deprivation. Try one of the many popular sleep apps available for your smartphone, [download or print HelpGuide's sleep diary \(PDF\)](#), or make a note of details such as:

- The time you went to bed and woke up.
- The amount you slept and how refreshed you felt in the morning.
- How much exercise you did during the day.
- What you did if you woke up and were unable to go back to sleep.
- What food and drinks you consumed before bed.
- Your feelings and mood at bedtime (stressed, anxious, sad, for example).
- Any drugs or medications you used.

After keeping the diary for a week or so, you may be able to link certain behaviors or moods to a disruption in your sleep.

## Addressing or preventing sleep deprivation

If you regularly wake up unrefreshed and are tired during the day, it's time to take action to get the sleep you need. It can be tempting to simply pop a pill when you're desperate to get some rest. But there's much you can do to improve the quantity and quality of your sleep, without having to rely on medication.

While [sleeping pills or sleep aids](#) can be useful for short-term use, they're not a cure and don't address the underlying causes of your sleep problem—and over time may even make your symptoms worse. Instead, there are a number of lifestyle and behavioral changes you can make to [address sleep deprivation](#) and get your sleep schedule back on track.

**Calm your anxious mind at night.** Avoid screens, work, and stressful conversations in the hour before bed. Instead, develop a relaxing bedtime routine that enables you to wind down and calm your mind. Try taking a warm bath, listening to soft music or an audiobook, reading by a dim light, or [practicing a relaxation technique](#) such as deep breathing, [meditation](#), or progressive muscle relaxation.

[\[Listen: Bedtime Meditation for Sleep\]](#)

**Postpone worrying.** If you lie awake at night anxiously fretting, make a brief note of your worries on paper and allow yourself to [postpone worrying](#) until the following day. When you're refreshed after a good night's sleep, you'll be in a much better place to deal with the problem.

**Manage stress.** Whatever you're stressed about, you can [learn how to manage stress](#) in a healthy way to ease tension and anxiety and improve how well you sleep at night.

**Get regular exercise.** Not only is [regular exercise](#) an excellent stress-reliever, it can also help improve your mood and ease the symptoms of many sleep disorders. Aim for at least 30 minutes of activity on most days—but don't exercise too close to bedtime or you may find it harder to fall asleep.

**Maintain a regular sleep schedule.** By going to bed and getting up at the same time every day, including weekends, you'll support your biological clock.

**Reduce the impact of shift work.** You can help to [regulate your sleep-wake cycle](#) by using bright lights to increase your light exposure while working and then limiting your light exposure when you're back home and it's time to sleep. Use blackout shades or heavy curtains to keep your bedroom dark during the day.

**Watch what you eat and drink.** Eating lots of [sugary foods](#) and drinking alcohol and caffeine during the day can disrupt your sleep at night. Having a heavy meal close to bedtime can make it harder to fall asleep and drinking lots of fluids can wake you up in the night.

**Improve your sleep environment.** The more comfortable you are at night, the better you'll sleep. Keep your bedroom dark, quiet, and cool, and reserve your bed for just sleeping and sex—no screens, work, or any stressful activities.

**Get caregiving support.** If you're a family caregiver, skimping on sleep will cause you to [quickly burn out](#) and compromise both your own health and that of the person you're caring for. Seek support from others to help ease the caregiving burden so you can get the rest you need.

**Seek professional help if you suspect a medical cause** for your sleep deprivation. Talk to your doctor to address any chronic physical or mental health problems that may be disturbing your sleep or to make changes to any prescription medications that could be triggering the problem.

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[Effects of acute sleep deprivation on state anxiety levels](#) - Systematic review suggesting sleep deprivation induces a state of increased anxiety. (PubMed)

[Consequences of Insufficient Sleep](#) - Articles and videos on the consequences of sleep deprivation and chronic lack of sleep, including its impact on driving, judgment, and disease risk. (Harvard Healthy Sleep)