

Do You Have Hypnic Jerks?

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STORY AT-A-GLANCE

- › Up to 70% of people experience hypnic jerks, or muscle contraction that occurs during the transition from wakefulness to sleep, particularly at the moment your body is drifting off to sleep
- › While typically not harmful, hypnic jerks may interfere with sleep or lead to anxiety about when the next one will occur
- › Hypnic jerks occur more often if you're sleep deprived, and remedying sleep deprivation will often make them disappear

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Have you ever drifted off to sleep only to be jolted awake a short time later by a strong jerking sensation? If so, you're not alone. Up to 70% of people experience this involuntary movement, known as a hypnic jerk, hypnagogic jerk, myoclonic or myoclonus jerk or sleep start, at some point or another.¹ For some, the sensation is accompanied by a dream or feeling of falling, and your brain may even have you imagining that you're stepping off a cliff or sidewalk.

Most often, hypnic jerks occur during the transition from wakefulness to sleep, particularly at the moment your body is drifting off to sleep. It's been suggested that the movement may be the result of your brain misfiring or failing to settle down properly, causing the disruption when you're in the lightest stage of sleep.²

For many people, hypnic jerks occur only sporadically and go mostly unnoticed. You may even fall right back to sleep following one without any memory of it in the morning.

In some cases, however, hypnic jerks can occur nightly, jarring people out of a peaceful sleep. The shocking sensation, in turn, can cause feelings of anxiety or fear before falling asleep, contributing to sleeping problems. Worrying about hypnic jerks before falling asleep may even increase the likelihood that you'll experience one that night.³

Sleep Deprivation, Caffeine and Other Triggers for Hypnic Jerks

Sometimes hypnic jerks occur randomly, but there are some factors that seem to make them more likely. Sleep deprivation is among them. Sleep behavior expert James Wilson explained to Time:

"The complexity of going to sleep and waking up is incredible, and sometimes – particularly when we are sleep deprived – our brain doesn't shut down normally, which means we get this sort of jerking movement when we're in a light sleep ...

*Normally when we go to sleep, about half an hour later we go into a deep stage of sleep during which we wouldn't get these hypnic jerks ... If someone is sleep deprived, as they go through the process of falling asleep, the brain will get stuck at the same point in time."*⁴

Further, according to the National Institute of Neurological Disorders and Stroke, "some forms appear to be stimulus-sensitive,"⁵ meaning that what you do before bed could act as a trigger. Consuming too much caffeine or engaging in vigorous physical activity in the evening may contribute to hypnic jerks, as can emotional stress. Another theory posits that hypnic jerks may be designed to protect you.

When you nod off to sleep, your muscles relax, which your brain may interpret as your body falling. In order to stop you from falling, your muscles suddenly contract in a hypnic jerk.⁶ Writing in the Journal of Neurosciences in Rural Practice, researchers explained:

"One ... [hypothesis states] that these jerks are a natural step in the transition from alertness to sleep made via the reticular activating system, where some of the nerves of the hands and legs misfire. Yet another theory states that it is a basic protective reflex. Complete relaxation of the muscles is interpreted by the brain as falling and in order to prevent this the brain orders the muscle to twitch."⁷

Hypnic jerks have also been associated with medical conditions like parkinsonism⁸ and the use of antidepressants. In one case study, a 45-year-old woman began suffering from hypnic jerks after taking the antidepressant drug Escitalopram.⁹ The episodes resolved when she stopped taking the medication and researchers noted "this is a rare, but unique side effect that clinical psychiatrists need to be cognizant of."

Are Hypnic Jerks Dangerous?

Most hypnic jerks involve a brief but strong contraction of the body, which may cause you to suddenly wake up, but is not dangerous. In some cases, you may not wake up at all. Hypnic jerks may also occur along with a "visual sleep start," such as the sensation of bright light, or an "auditory sleep start," including a loud snapping noise inside your head.

Hallucination or vivid dreaming may also occur at the same time, and sometimes people cry out in their sleep at the same time the hypnic jerk occurs.

In most cases, it's nothing to worry about, but if they occur frequently or are severe, they may interfere with your sleep. Experiencing frequent hypnic jerks can also lead to anxiety about them occurring, which can also interfere with sleep. Michelle Drerup, a behavioral sleep medicine specialist at the Cleveland Clinic's Sleep Disorders Center in Ohio, told Live Science:

"More often than not, hypnic jerks are completely normal and nothing to be concerned about. However, if the jerks themselves, or the anxiety you

*experience about having them, are significantly disrupting your sleep, you should talk to a sleep specialist about your concerns."*¹⁰

Is Sleep Deprivation Causing Your Hypnic Jerks?

Sleep deprivation is a leading contributor to hypnic jerks. "Usually if we can help people address their sleep deprivation, the instances decrease or disappear altogether," Wilson said.¹¹ Data from the U.S. Centers for Disease Control and Prevention (CDC) suggests 35% of U.S. adults are not getting the recommended seven hours of sleep each night.¹²

When you consider that some people probably need closer to eight hours to be optimally healthy, that percentage jumps even higher. If you're tired during the day, there's a good chance you fall into the "sleep deprived" category – but it isn't always this obvious. The late Nathaniel Kleitman, Ph.D., professor emeritus in physiology at the University of Chicago, came up with one of the simplest tests to determine if you're sleep deprived.

Here's how it works – In the early afternoon, grab a spoon and head off to your darkened bedroom to take a nap. Place a metal tray on the floor beside your bed, and hold the spoon over the tray as you attempt to fall asleep. Be sure to check the time as well. Next, when you inevitably fall asleep and the spoon crashes down onto the tray, waking you up, immediately check the time again and note how much time has passed.

If you fell asleep within five minutes, it means you're severely sleep deprived, according to Kleitman. If it took you 10 minutes to fall asleep, this is still a sign that you could use more [sleep](#). If, however, you managed to stay awake for 15 minutes or more before falling asleep, you're probably well rested.¹³ If you don't happen to have a spoon and metal tray handy, you can still take this test by setting an alarm for 15 minutes to see if you fall asleep before it goes off.

Remedying Sleep Deprivation May Lessen Hypnic Jerks

Proper sleep hygiene is one of the best remedies for [sleep deprivation](#). This includes going to sleep and waking at roughly the same time each day while also cutting back on

excess caffeine or [alcohol](#) in the afternoon and evening.

Perhaps the most important natural "trick" of all for [improving your sleep](#) is to make sure you're getting proper exposure to bright light during the day and no exposure to blue light at night. In the morning, bright, blue-light-rich sunlight signals to your body that it's time to wake up. At night, as the sun sets, darkness should signal to your body that it's time to sleep.

To help your circadian system reset itself, get at least 10 to 15 minutes of natural light first thing in the morning. This will send a strong message to your internal clock that day has arrived, making it less likely to be confused by weaker light signals later on. Then, around solar noon, get another "dose" of at least 30 minutes' worth of sunlight.

A full hour or more would be even better. If your schedule is such that you have to get up and arrive at work before sunrise, aim to get at least that half-hour of bright sunlight sometime during the day.

In the evening when the sun begins to set, put on amber-colored glasses that block blue light. You can also dim your lights and turn off electronic devices to reduce your exposure to light that may stifle your [melatonin production](#). Better still, swap out [LEDs](#) for incandescent or low-voltage incandescent halogen lights. After sundown, you can also shift to a low-wattage bulb with yellow, orange or red light if you need illumination.

A salt lamp illuminated by a 5-watt bulb is an ideal solution that will not interfere with your melatonin production. Candle light also works well. If you've already optimized your light exposure and are still struggling with sleep deprivation, see my [33 healthy sleep secrets](#) for a more comprehensive list of strategies for a better night's rest.

Try Relaxation Techniques Before Bed

If you're not sleep deprived but are still being frequently woken by, or are anxious over, hypnic jerks, trying various relaxation tools before bed may help. Among them:

Emotional Freedom Techniques (EFT)	Breathing exercises	Guided imagery
Progressive muscle relaxation	Self-hypnosis	Rhythmic movement
Meditation	Yoga	Tai chi
Massage therapy	Biofeedback-assistance relaxation	Autogenic training, in which you focus on physical sensations in your body

Listening to calming music, taking a warm bath before bed or using **essential oils**, such as **lavender**, can also calm your body and mind when it's time to fall asleep. By tending to your sleep hygiene and state of relaxation before bed, you can improve your sleep quality and overall health while also lowering the likelihood of hypnic jerks.

If they persist, and tend to occur at the same time each night, try asking your partner to give you a nudge a few minutes before the jerk typically occurs. Slight changes, like altering your sleeping position, may be enough to stop the hypnic jerk from occurring¹⁴ — for that night anyway.

Sources and References

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- ¹⁰ [Live Science November 21, 2017](#)
- ¹² [U.S. CDC February 18, 2016 \(Archived\)](#)
- ¹³ [Independent October 25, 2016](#)