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# Sleep and Parkinson's Disease





Many people with Parkinson's disease (PD) have trouble with sleep: difficulty falling or staying asleep, acting out dreams, and others.

Sleep problems can be from Parkinson's disease itself, the symptoms of PD, or medications used to treat it. Sleep changes also can come with other medical conditions, getting older, or habits that affect sleep.

Good sleep is important to doing and feeling your best. Sleep problems can temporarily worsen Parkinson's motor and non-motor symptoms, such as fatigue, or mood or thinking changes. And when you're tired, you may feel less motivated to exercise, socialize, or engage in other activities that support overall health and well-being.

This guide, written by Rachel Dolhun, MD, a movement disorder specialist, describes common sleep problems in Parkinson's, discusses treatment options, and offers tips to maximize your sleep.



## Common Sleep Changes in Parkinson's

Many people with Parkinson's experience sleep changes. Like all PD symptoms, how they happen and to what degree differs from person to person. Here, we describe the most common sleep problems in people with PD.

#### INSOMNIA

#### Difficulty falling or staying asleep

Parkinson's motor or non-motor symptoms can interfere with getting to sleep or getting a good night's sleep. Some symptoms make it hard to fall asleep; others wake you up during the night or earlier than you'd like in the morning. Some PD medications, such as amantadine immediate release or selegiline, also can affect sleep if taken too close to bedtime. For some people, neither symptoms nor medications are the cause — they simply have insomnia.

**Treatment:** Treatment is directed at the cause, if there is one. Adjusting or adding Parkinson's medication may help. And evaluating and improving sleep habits may help, too. (See page 5 for more information and tips on sleep habits.) Sometimes, medications for sleep are prescribed.

#### REM SLEEP BEHAVIOR DISORDER (RBD) Acting out dreams

RBD happens when the normal suppression of muscle activity during dreaming is impaired. People with RBD may kick, punch, yell, get out of bed, and do other activities while dreaming (and without realizing it). This can affect their and their bed partner's safety. RBD is diagnosed with an overnight sleep study (polysomnogram).

In some people, RBD happens during the course of PD. For others, it happens years or decades before Parkinson's disease is diagnosed. Studies, such as The Michael J. Fox Foundation's Parkinson's Progression Markers Initiative (PPMI), are following people with RBD to understand who gets PD and why in order to diagnose Parkinson's earlier and ultimately, prevent it. Learn more and join PPMI. **Treatment:** When RBD poses safety issues or interferes with a bed partner's sleep, you may consider medications and other strategies. The most common treatments for RBD include the supplement melatonin and the prescription medication clonazepam. Strategies to enhance safety may include putting a mattress or padding on the floor next to the bed, removing certain objects (such as nightstand lamps) from the bedroom, and even temporarily sleeping apart from a bed partner.

#### DAYTIME SLEEPINESS/HYPERSOMNIA Excessive tiredness during the day

People with this symptom may fall asleep easily during the day (while watching television or sitting quietly, for example) or may nap regularly without significant benefit. Daytime sleepiness can be part of Parkinson's or its non-motor symptoms, such as fatigue or mood changes. Certain PD medications, such as dopamine agonists, as well as trouble sleeping at night (for whatever reason), also can contribute.

**Treatment:** Therapy is directed at the cause of sleepiness, if known. You may need to adjust Parkinson's medications, treat other symptoms or improve sleep habits. (See page 5 for tips.) In some situations, stimulant-type medications may be prescribed to promote wakefulness.



#### **RESTLESS LEGS SYNDROME (RLS)**

An uncomfortable sensation in the legs, particularly when sitting or relaxing in the evening, which improves with movement of the legs, standing or walking around

Because it happens in the evening, RLS can interfere with falling asleep. RLS can be part of Parkinson's, a side effect of PD medications, or a separate medical condition, such as low iron.

**Treatment:** Treatment may include adjustment of PD medications (many of which are FDA-approved for restless legs syndrome, even outside of PD), prescription of another medication for RLS, or iron supplements (if levels are low).

#### **OBSTRUCTIVE SLEEP APNEA (OSA)**

Sleep interrupted by breathing pauses; often associated with loud snoring

While a person typically isn't aware of the altered breathing patterns in OSA, their bed partner may notice. And someone with OSA may have excessive daytime sleepiness or fatigue, morning headaches, and even memory or thinking changes. OSA is diagnosed with an overnight sleep study.

**Treatment:** OSA most commonly is treated with a nighttime mask or oral device to keep the airway open. In overweight individuals, weight loss also may help.



Parkinson's Progression Markers Initiative

Through MJFF's Parkinson's Progression Markers Initiative (PPMI) study, researchers are learning about sleep changes and Parkinson's to develop better tests and treatments.

PPMI gathers data and samples over time from volunteers around the world — both with and without Parkinson's — to increase understanding of symptoms and progression; find measurements in the earliest stages (even before motor symptoms); and advance treatments to slow, stop or prevent disease.

Whether you have Parkinson's or care about someone who does, you can help.

Find out how and join PPMI, the study that could change everything.



## Parkinson's Symptoms That May Impact Sleep

#### **MOTOR SYMPTOMS**

Stiffness, slowness and tremor can cause discomfort, leading to difficulty falling or staying asleep

**Treatment:** Parkinson's medication adjustments — such as adding a dose before bedtime; taking an extra dose if needed when you wake up; or switching to a longer-acting medicine overnight — may help. Regular exercise (not too close to bedtime) can help symptoms, general mobility and sleep. Some find using satin sheets or wearing silk pajamas make it easier to move around in bed.

#### **MOOD CHANGES**

### Depression or anxiety, common PD non-motor symptoms, can affect sleep

Worry might make it difficult to fall asleep or wake a person up in the middle of the night. Depression can cause early-morning awakening, before you feel fully rested.

**Treatment:** Treatment options may include medications and/or talk therapy, or counseling. Other strategies, such as meditation or mindfulness to build relaxation and regular exercise to boost mood, also may help.

#### NIGHTTIME URINATION (NOCTURIA) Waking up to urinate throughout the night may

#### disturb sleep

Some people wake up multiple times during the night to use the restroom. This symptom may be from Parkinson's, medications (diuretics for blood pressure, for example), too much fluid close to bedtime, or, in men, an enlarged prostate.

**Treatment:** Review your medications with your doctor and limit fluids in the afternoon and evening (making sure you drink enough otherwise to ease or prevent constipation or low blood pressure). A bedside urinal or commode might lessen trips to the bathroom (and the potential for falls) as well. When significant, doctors sometimes prescribe medication to limit nighttime urination. A consultation with a urinary specialist, a urologist, also may be helpful to evaluate for other potential contributing conditions.





## *Tips for Better Sleep*

If you have trouble sleeping, look at your sleep habits and patterns. This can potentially point to ways you can improve sleep. Some tips to consider:



#### **KEEP A SLEEP LOG**

For a few weeks, record what times you go to bed, wake up, and get out of bed as well as how many times you wake up at night and why. Keep track of how much caffeine you drink and when as well as when you nap and exercise. This information will help you and your doctor have a productive conversation about your sleep.



#### WATCH FLUID INTAKE

Don't drink too much close to bedtime, especially if you wake up throughout the night to use the restroom.



#### USE THE BEDROOM ONLY FOR SLEEP AND INTIMACY

Don't watch television, read, or use your smartphone or other devices in bed. When you use your bed only for sleep, your body and mind more automatically know what to do when you get into bed.



#### **CREATE A BEDTIME ROUTINE**

About an hour before bed, start to prepare for sleep. Turn off the television, computer, smartphone and other devices. (Their light can be stimulating.) Take a warm bath, drink a cup of decaffeinated tea, or read something for fun. Get in the habit of winding down and preparing for sleep.



#### **MAINTAIN A REGULAR SCHEDULE**

Go to sleep and get up at around the same time every day, even on the weekends.



#### **LIMIT NAPS**

Sleeping too much during the day, especially late in the day, may prevent you from sleeping well at night. If you need to nap, try to do so for short periods (no more than 30 minutes) not too late in the day (not after 2 or 3 p.m.).



#### AVOID LATE-DAY CAFFEINE, ALCOHOL AND EXERCISE

Drinking caffeinated coffee, tea or soda too late in the day can keep you awake at night. And while alcohol may help you fall asleep easily, it may interrupt your sleep later in the night. Regular exercise may improve sleep in general, but working out too close to bedtime might make it harder to fall asleep.



## *Frequently Asked Questions*

#### **DOES MELATONIN HELP SLEEP?**

Melatonin is a hormone made by the brain that helps control the sleep cycle. Levels are typically low during the day and higher at night. Melatonin is available over the counter and many people use it to help with sleep or for REM sleep behavior disorder (RBD). Talk with your doctor about your sleep problems (making sure you first address any contributing factors, such as PD symptoms or medications) and ask whether this supplement might help and what the best dose is for you.

## IS IT SAFE FOR PEOPLE WITH PARKINSON'S TO TAKE SLEEP MEDICATIONS?

It's always a good idea to be careful about adding sleep medications, especially if you are taking other drugs that can make you sleepy. Some sleep medications can temporarily worsen balance or cause confusion, so they should be used carefully. The first step in evaluating sleep problems is finding the underlying cause (if there is one), such as depression, motor symptoms or RBD, to guide the best therapy. If no cause is found or treatment is not successful, doctors may prescribe sleep medications to help you fall and stay asleep.

#### **DOES DEEP BRAIN STIMULATION HELP SLEEP?**

Deep brain stimulation (DBS) is a surgical procedure to ease Parkinson's motor symptoms. It's not typically as helpful for non-motor symptoms, such as sleep. But because DBS might improve nighttime motor symptoms and decrease the need for PD medications that have side effects like insomnia, some people notice better sleep.

#### **CAN I NAP DURING THE DAY?**

Some people who experience fatigue or significant daytime sleepiness find that napping, particularly in the afternoon, can be energizing. If this is the case, aim for a 10- to 30-minute nap in the early afternoon (no later than 2 or 3 p.m.). Longer naps later in the day can interfere with your ability to fall asleep.

The information in this guide was accurate at the time of publication in April 2021. For the latest on sleep and Parkinson's, visit michaeljfox.org.

The medical information contained in this guide is for general information purposes only. The Michael J. Fox Foundation for Parkinson's Research has a policy of refraining from advocating, endorsing or promoting any drug therapy, course of treatment, or specific company or institution. It is crucial that care and treatment decisions related to Parkinson's disease and any other medical condition be made in consultation with a physician or other qualified medical professional.

## He doesn't have Parkinson's. But he can help end it.

Join the study that could change everything.



Parkinson's Progression Markers Initiative Science has shown a link between REM Sleep Behavior Disorder and Parkinson's. The Parkinson's Progression Markers Initiative (PPMI) is on a mission to understand who's at risk. Take a short survey today to join the challenge.

Participate today.