

Sleep-Wake Problems

What can cause sleep-wake problems?

Sleep disturbances, or problems with sleep, are very common after a concussion. More than half of patients report sleep problems after a concussion. Sleep problems are very common if there is pain related to the injury.

Sleep problems can often be related to other symptoms such as headache and mood. For example, if someone experiences headaches following their concussion, they may have trouble getting good sleep. At the same time, if they are not sleeping well, it could make their headache symptoms worse.

A lack of good sleep can affect how you think, do your daily activities, and how you deal with others. It can also affect how well you remember, focus, and learn.

Common sleep problems after a concussion

Insomnia: trouble falling or staying asleep, and/or issues getting restful sleep.

Sleep apnea: breathing problems during sleep, such as snoring or breathing that stops and starts asleep during the daytime

Narcolepsy: a lot of daytime sleepiness or suddenly falling

Post-traumatic hypersomnia: need for more than usual amounts of sleep

Circadian rhythm sleep disorders: trouble falling asleep at night and trouble staying awake in the daytime

TIP: If you think you might be having a sleep problem, use a sleep diary for 1 to 2 weeks to find out how much time you spend sleeping, as well as what things might impact your sleep.

How will my sleep problems be diagnosed?

Your primary healthcare provider should regularly check for sleep-related problems, and may ask you about the following:

- Medical conditions; like diabetes or thyroid disorder
- Medications you are taking
- Mental health conditions; like anxiety or depression
- Your sleep and wake habits; or “sleep hygiene”
- Your exercise and activity routines
- Your menstrual cycle (if applicable)



What treatments can help?

Treatments might be different depending on the type of sleep problem you have. If you have insomnia your primary healthcare provider may recommend cognitive behavioral therapy (CBT). This type of therapy can help you change how you think and behave.

Your primary healthcare provider may also suggest the following therapies:



Melatonin, zinc, or magnesium supplements before bedtime



Acupuncture



Mindfulness-based stress therapy



Blue light therapy

If your primary healthcare provider prescribes a sleep medication, it is very important that you do not drive or drink alcohol when you take it. It is also a good idea to make sure you do not have to be somewhere early the next day as you might be tired in the morning.

Your primary healthcare provider should also give you information in both verbal and written formats about sleep-wake problems following concussion.



What can I do to improve my sleep?

It is important to have good sleep habits in order to feel rested during the day. Good sleep habits are also known as “sleep hygiene”. As a first step to improving your sleep, your healthcare provider will suggest that you follow the sleep hygiene program below:

1. Healthy Habits

- Go to bed and wake up at the same time every day
- Have a bedtime routine like a warm bath and/or light massage before bed

In the first few days after the concussion, sleep is important to help you get better so do not limit your naps. Talk to your primary healthcare provider or go to the emergency department if you have trouble waking up.

After the first few days avoid naps if you can. Or, if you are very sleepy, try to take only one nap per day before 3:00pm, and keep it shorter than 30 minutes. Try to sleep in a bed.

2. Diet, Exercise, and Lifestyle

- Get some natural (outside) light during the day.
- Avoid sugar and caffeine 4 to 6 hours before bed.
- Avoid alcohol, cannabis, and other drugs that have not been prescribed by your healthcare provider.
- Avoid heavy meals late in the evening
- Consider a bedtime snack that contains protein
- Eat foods high in magnesium, iron, and B vitamins; these nutrients help the body produce melatonin, which promotes sleep
- If your primary healthcare provider says you can start to exercise, and you feel able to do so, try to have 30 to 60 minutes of exercise per day.
 - Your healthcare provider can help you develop a gradual return to exercise plan. You may not be able to do 30 to 60 minutes of exercise all at once, and it can change day to day.
 - If your symptoms start to get worse while you are exercising, you should stop exercising and report this to your healthcare provider.
 - Avoid exercising too close to bedtime
- Try to reduce stress and consider practicing stress reduction techniques such as mindfulness

What can I do to improve my sleep?

3. The Sleeping Space

- Keep your sleeping space dark, cool, and comfortable at night
- Try to keep this space clean, tidy, and quiet (you can try using neutral or natural sounds to help blockout sounds that might wake you)
- Use your bed and bedroom only for sleeping, if possible. Try to read, watch TV, use the computer, and play games in another room
- Keep your bedroom free of computers, tablets, and cell phones. If this is not possible, turn them off or put them in “sleep” mode
- Avoid using a digital clock with numbers that light up. If this cannot be avoided, turn it away from the bed and avoid looking at it during the night

Additional resources

Below is a list of resources you may find helpful to learn more about sleep as well as tools that may help you manage your sleep symptoms

Sleep Issues After Concussion (webpage)

<https://sunnybrook.ca/content/?page=bsp-concussion-sleep-tips>

Sleep Diary (pamphlet)

<https://www.thensf.org/nsf-sleep-diary>

Re-Creating at Time and Place for Sleep (PDF)

<https://concussionsontario.org/sites/default/files/2023-03/appendix-7-8.pdf>