

Stroke and Sleep Disorders



What is a sleep disorder?

Getting a good night's sleep is an important part of stroke recovery, yet sleep problems are common among stroke survivors. When sleep problems go on for a long time, they are considered **sleep disorders**.

If sleepiness is interfering with your daily routines or activities, you may have a sleep disorder. There are a number of different kinds of sleep disorders, those associated with stroke include:

- **Sleep-related breathing disorders** or abnormal breathing patterns while asleep
- **Insomnia** or difficulty falling and/or staying asleep
- **Hypersomnia** or excessive sleepiness during the day
- A "circadian" or **sleep-wake schedule mismatch** (both problems of insomnia during the night and sleepiness during the day)
- **Parasomnia** or movement disorders occasionally with violent behaviors
- **Restless leg syndrome** or periodic movements of the legs during sleep and/or unpleasant sensations in the legs usually at night

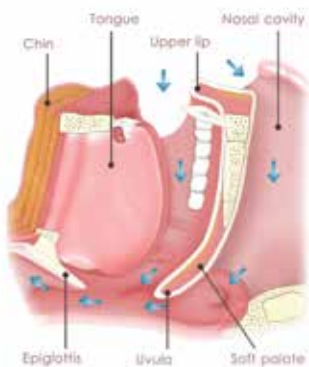


What is sleep apnea?

Sleep apnea is a type of sleep-related breathing disorder. If you are sleeping and you stop breathing for 10 seconds or more, then you may have sleep apnea. People with sleep apnea may stop breathing hundreds of times a night without even being aware of it. It is estimated up to 80% of sleep apnea patients are undiagnosed.

The most common type of sleep apnea is **obstructive sleep apnea (OSA)**. OSA happens when your airway is blocked by soft tissues of the upper airway relaxing. Those tissues then collapse and block the airway stopping the air from getting into the lungs. Most people with sleep apnea do not have breathing problems during the day.

Sleep apnea is most common in middle age men between the ages of 35 and 70. More than half of sleep apnea patients are also overweight. More than half of the people who have stroke also suffer from sleep apnea.



Open airway
during sleep



Sleep apnea present
with obstruction

What are the symptoms of sleep apnea?

- Loud snoring
- Insomnia
- Disrupted sleep (occasionally due to gasping and/or nightmares)
- Excessive daytime sleepiness
- Morning headaches
- Short attention spans
- Memory loss

How is sleep apnea related to stroke?

Sleep apnea can be an after effect of stroke, but can also be the cause of a first time or recurrent stroke. The condition causes low oxygen levels and high blood pressure, both of which can increase the risk of a future stroke.

How is sleep apnea diagnosed?

Often sleep apnea symptoms are recognized by a spouse or another person who observes (and is often disturbed by) the sleeper's snoring. It is important when possible to have the patient's sleep partner or family member describe the snoring or breathing practices to the patient's healthcare team. Once sleep apnea is suspected, a referral can be made to a sleep specialist who can perform a sleep study to determine if you have sleep apnea.

How is sleep apnea treated?

The most common treatment for sleep apnea is **Continuous Positive Airway Pressure (CPAP)**. With this type of treatment, a

bedside device gently delivers pressurized air through a small mask or nasal pillow system.

This pressure acts like an “air splint” to keep your upper airways

open and help prevent apneas. In severe cases, if a CPAP cannot be tolerated, surgical alternatives are available.



For mild cases of sleep apnea, the following lifestyle changes may also be helpful:

- Weight loss
- Avoidance of alcohol
- Avoidance of sleeping or sedating medications

Good sleep hygiene helps to maintain regular wake and sleep cycles. Good sleep hygiene includes:

- Avoid napping during the day
- Avoid stimulants such as caffeine and alcohol too close to bedtime
- Exercise can promote good sleep
- Avoid large meals before bedtime
- Get adequate amounts of natural light during the day
- Establish a regular and relaxing bedtime routine
- Make your bedroom quiet, dark, restful, and a little bit cool

National Stroke Association's mission is to reduce the incidence and impact of stroke by developing compelling education and programs focused on prevention, treatment, rehabilitation, and support for all impacted by stroke.

CALL 9-1-1 IMMEDIATELY IF YOU SEE ONE OR MORE SIGNS OF A STROKE.

Remember to think **FAST**:



FACE Ask the person to smile. Does one side of the face droop?



ARMS Ask the person to raise both arms. Does one arm drift downward?



SPEECH Ask the person to repeat a simple phrase. Is their speech slurred or strange?



TIME If you observe any of these signs, **call 9-1-1 immediately**



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1-800-STROKES
(787-6537)

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