



Lung Health Basics: Sleep

Lung health and sleep are linked in complex ways. People with lung disease often have trouble sleeping. Symptoms of lung diseases like chronic obstructive pulmonary disease (COPD) or asthma can cause sleep problems. In turn, poor sleep can cause lung disease symptoms to worsen. Sleep is critical to overall health, so take the first step to sleeping better: learn these sleep terms, and find out about treatments that can help with sleep apnea.

Sleep health refers to consistently getting enough sleep that is of good quality to wake up feeling rested and alert, at the appropriate time for sleep. Maintaining sleep health promotes physical and mental well-being.

Sleep deficiency occurs if you experience one or more of the following:

- Not getting enough sleep.
- Sleeping at inconsistent times.
- Not sleeping well or getting the different types of sleep the body needs, such as deep sleep, which is when the body repairs itself.
- Having a sleep disorder that prevents getting enough sleep or causes poor quality sleep.



Sleep Terms

- Sleep health
- Sleep deficiency
- Insomnia
- Obstructive sleep apnea



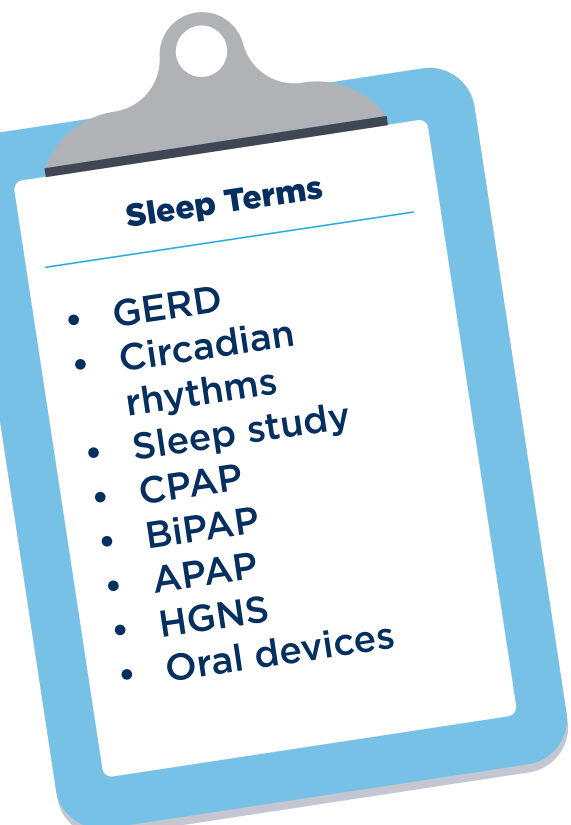
Healthy breathing



Obstructive sleep apnea

Insomnia is a common sleep disorder. With insomnia, a person may have trouble falling asleep, staying asleep, or getting good quality sleep, leading to impairments in daytime functioning. It may get in the way of your daily activities, and make a person feel sleepy during the day.

Obstructive sleep apnea happens when the upper airway becomes blocked many times while you sleep, which reduces or completely stops airflow into the lungs. This is the most common type of sleep apnea.



Sleep Terms

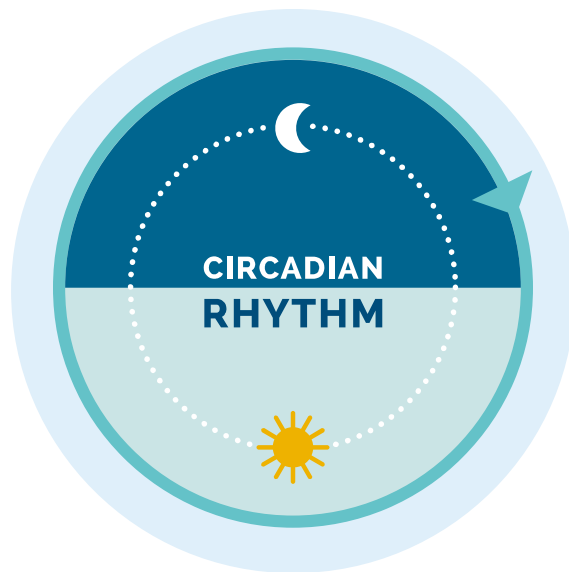
- GERD
- Circadian rhythms
- Sleep study
- CPAP
- BiPAP
- APAP
- HGNS
- Oral devices

Gastroesophageal reflux disease (GERD) happens when a muscle called a sphincter at the end of your esophagus does not close properly. This allows stomach contents to leak back, or reflux, into the esophagus and irritate it. Some people with obstructive sleep apnea also have GERD, which can disrupt sleep.

Circadian rhythms

are 24-hour cycles of the body's internal clock that control the activity of cells and organs and influence behavior.

A **sleep study** is a test that measures different body functions while you sleep, such as breathing, heart rate, and brain activity. It may be done at home, in a hospital, or in a sleep study clinic.



An illustration of a woman with long brown hair lying in bed, wearing a CPAP mask. A tube connects the mask to a CPAP machine on a bedside table. The background is a light blue cloud-like shape.

A **continuous positive airway pressure (CPAP)** machine uses mild air pressure to keep the airway between your nose and your throat open while you sleep. A healthcare provider may prescribe it for sleep-related breathing disorders like sleep apnea.

Bilevel positive airway pressure (BiPAP)

machines are like CPAP machines, but they deliver different pressure based on whether you are inhaling or exhaling.

Automatic positive airway pressure (APAP)

automatically adjusts the air pressure a person receives during sleep.

Hypoglossal nerve stimulation (HGNS) is a sleep apnea treatment that uses electrical pulses that activate the hypoglossal nerve to keep the airway between the nose and throat open.

Oral devices are worn in your mouth while you sleep. They hold your jaw or tongue in a position that helps keep your airway open.

For more information about sleep health and research, visit www.nhlbi.nih.gov/sleep

