CONDITION

Sleep apnea

Sleep apnea causes breathing to repeatedly stop or become too shallow during sleep.

WHAT IT IS
Repeated pauses or reductions in breathing during sleep

BODY SYSTEM
Breathing, brain, heart and circulation

MAIN SYMPTOMS
Loud snoring, gasping, unrefreshing sleep, daytime sleepiness

WHAT CAUSES IT
Blocked airway or disrupted brain breathing signals

HOW IT IS DIAGNOSED
Overnight sleep study or home sleep apnea test

MAIN TREATMENT
Airway pressure therapy and cause-specific care

CAN IT BE CURED?
Sometimes - when a reversible cause is removed

IS IT AN EMERGENCY?
Sometimes - severe breathing trouble or blue lips

LONG-TERM OUTLOOK
Usually manageable, but often needs ongoing treatment

Overview

Sleep apnea is a condition in which breathing repeatedly stops or becomes too shallow during sleep. These episodes may last several seconds or longer and can happen many times through the night.

Each episode can briefly lower the amount of oxygen in your blood or cause your brain to wake you enough to restart normal breathing. You may not remember waking, but the repeated interruptions can prevent deep, restful sleep.

There are two main types. Obstructive sleep apnea happens when the throat becomes narrowed or blocked during sleep. It is the most common type. Central sleep apnea happens when the brain does not consistently send the signals needed to breathe. Some people have features of both types.

Sleep apnea matters because it can affect alertness, concentration, mood, and quality of life. When it is not treated, it is also linked with road and workplace accidents, high blood pressure, heart and blood vessel problems, and other health concerns.

Snoring alone does not confirm sleep apnea. Some people with sleep apnea do not snore, especially those with central sleep apnea.

Symptoms

Symptoms may be noticed by you, a partner, or someone else who sees you sleeping. Common nighttime signs include:

During the day, you may feel unusually sleepy, even after spending enough time in bed. Other possible symptoms include morning headaches, poor concentration, irritability, low mood, or reduced interest in sex.

Not everyone experiences obvious sleepiness. Some people mainly report fatigue, insomnia, or difficulty staying asleep. Symptoms may also be mistaken for stress, aging, or a busy schedule.

In children, sleep apnea can cause snoring, restless sleep, mouth breathing, bed-wetting, learning difficulties, or changes in behavior. Some children appear overactive rather than sleepy.

- Loud or frequent snoring
- Pauses in breathing
- Choking, snorting, or gasping
- Restless sleep or repeated waking
- Waking with a dry mouth or needing to urinate often

Causes and risk factors

Obstructive sleep apnea develops when muscles and soft tissues in the throat relax during sleep, allowing the airway to narrow or close. Factors that can make this more likely include:

Sleep apnea can occur at any body size. Anatomy, muscle control, hormones, and other factors all contribute, so weight is not the only cause.

Central sleep apnea has a different cause. Breathing pauses because the brain's breathing control system does not send a steady signal to the breathing muscles. It can be associated with heart failure, stroke, high altitude, certain neurological conditions, or medicines such as

opioids like oxycodone or morphine . Sometimes no clear cause is found.

Risk factors make sleep apnea more likely but do not prove that you have it. A sleep test is needed to confirm the condition.

- Larger tonsils, a small lower jaw, or other airway anatomy
- Higher body weight, particularly around the neck
- Increasing age
- A family history of sleep apnea
- Alcohol, smoking, or medicines that relax breathing and throat muscles
- Nasal blockage or congestion
- Hormonal conditions such as an underactive thyroid

Diagnosis

A healthcare professional will ask about your sleep, snoring, breathing pauses, daytime alertness, medicines, and other health conditions. Information from someone who has observed you sleeping can be useful.

A sleep study confirms the diagnosis and measures its severity. It records breathing, oxygen levels, heart rate, and other signals while you sleep. The results show how often breathing stops or becomes too shallow and whether the pattern is obstructive, central, or mixed.

Polysomnography is a detailed overnight study, usually performed in a sleep center. It can record brain activity, eye movements, muscle activity, airflow, breathing effort, oxygen, and heart rhythm.

A home sleep apnea test records fewer signals. It may be suitable for some adults with a strong likelihood of uncomplicated obstructive sleep apnea. It is not appropriate for every person and may miss sleep apnea. An in-center study may still be needed if a home result is negative or unclear, or if central sleep apnea or another sleep disorder is suspected.

Phone apps, watches, and oxygen monitors may identify possible changes, but they cannot confirm or rule out sleep apnea on their own.

Treatment and management

Treatment is based on the type and severity of sleep apnea, your symptoms, your health, and what you can use consistently.

Positive airway pressure , or PAP, is a common treatment. A bedside machine sends air through a mask to help keep the airway open. Continuous positive airway pressure, known as CPAP, provides steady pressure. Other machines adjust the pressure automatically or provide different pressures while breathing in and out.

Mask fit, air leaks, dryness, and discomfort can often be improved by changing the mask, adjusting humidification, or reviewing machine settings with the sleep service. Regular use is important because PAP controls sleep apnea only while it is being worn.

A custom-made oral appliance may help some adults with obstructive sleep apnea. It fits in the mouth and moves the lower jaw forward to create more room in the throat. Follow-up testing is usually needed to check that it is working.

Other management options may include:

Treatment for central sleep apnea focuses on its cause when one can be identified. Options may include reviewing medicines, treating heart or neurological conditions, PAP therapy, oxygen, or an implanted breathing-stimulation device. The right approach depends on the breathing pattern and underlying health.

Do not stop opioids, sedatives, or heart medicines suddenly. Any change should be planned with the clinician who prescribes them.

- Sleeping on your side if apnea mainly occurs on your back
- Weight-management support when weight contributes
- Reducing alcohol, especially near bedtime
- Treating persistent nasal blockage
- Surgery to remove or reshape tissue blocking the airway
- Upper-airway nerve stimulation for selected people
- Removing enlarged tonsils or adenoids in some children

Complications

Untreated sleep apnea can cause persistent sleepiness and reduced concentration. This can increase the risk of driving and workplace accidents.

Sleep apnea is also associated with high blood pressure, irregular heart rhythms, heart disease, stroke, and problems controlling blood sugar. Risk differs between people and may also reflect other health conditions.

Poor sleep can affect memory, mood, relationships, school, and work. Children may have

learning or behavior difficulties. Treatment can reduce symptoms and may lower some health risks, although it does not remove every risk from other medical conditions.

Prevention

Sleep apnea cannot always be prevented. Inherited features, aging, jaw shape, tonsil size, and some medical conditions are outside your control.

You may be able to lower the risk or reduce obstructive sleep apnea by maintaining a weight that supports your health, limiting alcohol near bedtime, and not smoking. Avoid taking sleep medicines or sedatives unless they have been recommended for you.

Central sleep apnea is often related to another condition, medicine, or high altitude. Managing the underlying cause may help, but it does not always prevent breathing pauses.

Living with it and what to expect

Sleep apnea is often a long-term condition, but effective treatment can improve sleep quality, alertness, and daily functioning. Some people notice a difference quickly. For others, improvement is gradual or requires adjustments to the mask, device, or treatment plan.

Follow-up is important even when treatment seems to work. Equipment may need maintenance, and symptoms can return if treatment is not used. A sleep service may review device data or repeat testing to check whether breathing is controlled.

Sleep apnea can change over time. Weight change, pregnancy, aging, surgery, new medicines, or changes in heart or neurological health may affect it. A treatment that once worked may need to be reviewed if snoring, gasping, headaches, or daytime sleepiness return.

Some people no longer meet the criteria for sleep apnea after a reversible cause is removed, such as enlarged tonsils or substantial weight-related airway narrowing. Many people, however, need ongoing management. Do not stop treatment based only on feeling better; follow-up testing may be needed first.

If you are sleepy while driving, stop driving until the risk has been assessed and controlled. Treatment often allows people to return safely to their usual activities, but local driving-reporting rules may apply.

When to get medical help

Arrange a routine appointment if you or someone close to you notices repeated breathing pauses, choking, loud snoring, or persistent daytime sleepiness. You should also seek assessment for morning headaches, poor concentration, or sleep that remains unrefreshing despite enough time in bed.

Seek prompt medical advice if you are falling asleep during conversations, at work, or while driving, or if you have had a near-miss accident. Do not drive when you feel unable to stay alert.

Contact your sleep service routinely if your mask is painful, your device is difficult to use, or symptoms return. These problems often need practical adjustments rather than stopping treatment.

Call emergency services if someone:

These are not typical routine sleep apnea symptoms and may indicate another urgent medical problem.

- Has severe difficulty breathing while awake
- Develops blue or grey lips or skin
- Cannot be woken normally
- Has new chest pain, one-sided weakness, or difficulty speaking

Common questions

Can sleep apnea go away on its own?

Sometimes, but it should not be assumed. Sleep apnea may improve if a reversible cause is removed, such as enlarged tonsils, temporary airway swelling, or a contributing medicine. Many cases remain long term. A repeat sleep test is the reliable way to check whether it has resolved.

Does everyone who snores have sleep apnea?

No. Snoring is common and does not always involve breathing pauses. However, loud snoring combined with gasping, witnessed pauses, morning headaches, or daytime sleepiness should be assessed.

Can I have sleep apnea if I am not overweight?

Yes. People at any weight can develop it. Jaw and throat anatomy, age, family history, muscle control, tonsil size, medicines, and medical conditions can all contribute.

Will CPAP cure sleep apnea?

CPAP usually controls sleep apnea rather than curing its cause. It keeps the airway open while

you wear it. Breathing pauses commonly return if treatment is stopped, unless the underlying condition has changed.

Can sleep apnea cause anxiety or depression?

Poor and interrupted sleep can affect mood, energy, and concentration. Sleep apnea may contribute to anxiety or depression symptoms, but these symptoms can have several causes. Treating sleep apnea may help, while separate mental health support may still be needed.

Can a smartwatch tell me if I have sleep apnea?

A watch may detect snoring, oxygen changes, or unusual sleep patterns, but it cannot make a diagnosis. Consumer devices can miss sleep apnea or produce false warnings. A medical sleep study is needed for confirmation.

Sources

- National Heart, Lung, and Blood Institute: Sleep Apnea
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- American Academy of Sleep Medicine: Treatment of Adult Obstructive Sleep Apnea with Positive Airway Pressure
- American Academy of Sleep Medicine and American Academy of Dental Sleep Medicine: Oral Appliance Therapy for Obstructive Sleep Apnea and Snoring
- American Thoracic Society: Patient information on obstructive sleep apnea in adults