

## Sleep apnoea

Sleep apnoea occurs when the walls of the throat come together during sleep, blocking off the upper airway. Breathing stops for a period of time (generally between a few seconds and up to one minute) until the brain registers the lack of breathing or a drop in oxygen levels and sends a small wake-up call. The sleeper rouses slightly, opens the upper airway, typically snorts and gasps, then drifts back to sleep almost immediately.

In most cases, the person suffering from sleep apnoea doesn't even realise they are waking up. This pattern can repeat itself hundreds of times every night, causing fragmented sleep. This leaves the person feeling unrefreshed in the morning, with excessive daytime sleepiness, poor daytime concentration and work performance, and fatigue. It's estimated that about five per cent of Australians suffer from this sleep disorder, with around one in four men over the age of 30 years affected.

### Degrees of severity

The full name for this condition is obstructive sleep apnoea. Another rare form of breathing disturbance during sleep is called central sleep apnoea. It is caused by a disruption to the nerve messages sent between the brain and the body. The severity of sleep apnoea depends on how often the breathing is interrupted. As a guide:

- **Normal** – less than five interruptions an hour
- **Mild sleep apnoea** – between 5 and 15 interruptions an hour
- **Moderate sleep apnoea** – between 15 and 30 interruptions an hour
- **Severe sleep apnoea** – over 30 interruptions an hour.

### Symptoms

People with significant sleep apnoea have an increased risk of motor vehicle accidents and high blood pressure, and may have an increased risk of heart attack and stroke. In the over-30 year age group, the disorder is about three times more common in men than women. Some of the associated symptoms include:

- Daytime sleepiness, fatigue and tiredness
- Poor concentration
- Irritability and mood changes
- Impotence and reduced sex drive
- Need to get up to toilet frequently at night

### Causes

Obesity is one of the most common causes of sleep apnoea. A loss of around 5kg to 10kg may be enough to dramatically reduce the severity of the disorder. Other contributing factors include:

- Alcohol, especially in the evening – this relaxes the throat muscles and hampers the brain's reaction to sleep disordered breathing
- Certain illnesses, like reduced thyroid production or the presence of a very large goitre
- Large tonsils, especially in children
- Medications, such as sleeping tablets and sedatives
- Nasal congestion and obstruction
- Facial bone shape and the size of muscles, such as an undershot jaw.

## Treatment

Treatment for sleep apnoea relies on changes to lifestyle, including losing weight and cutting down on alcohol. Any contributing medical condition, such as low production of thyroid hormone, also needs to be corrected. Any surgical conditions such as large tonsils should be corrected.

The most effective treatment available is a mask worn at night that keeps the back of the throat open by forcing air through the nose. This is called 'nasal continuous positive airway pressure' (CPAP). However, some people with sleep apnoea find the mask difficult to tolerate.

Another treatment is the use of a mouthguard (or oral appliance or mandibular advancement splint). They work by holding the jaw forward during sleep. When properly made, they can be effective for mild to moderate sleep apnoea.

Although not always effective, surgery to the palate and base of tongue may be useful when other therapies fail. These types of surgeries are best undertaken by otolaryngologists (ENT surgeons) who take a special interest and have had training in sleep-related surgery.

## Where to get help

- Your doctor
- Sleep disorders clinic.

## Things to remember

- Sleep apnoea occurs when the walls of the throat come together during sleep, blocking off the airway above the voice box.
- Around one in four men over the age of 30 years have some degree of sleep apnoea, which makes it more common than asthma.
- Conservative treatment includes weight loss and cutting back on alcohol.
- Active treatment includes nasal CPAP, mouthguards or surgical correction of upper airway obstruction.
- Daytime sleepiness may distinguish simple snorers from people with sleep apnoea.

**This page has been produced in consultation with, and approved by:**

Sleep Health Foundation

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