

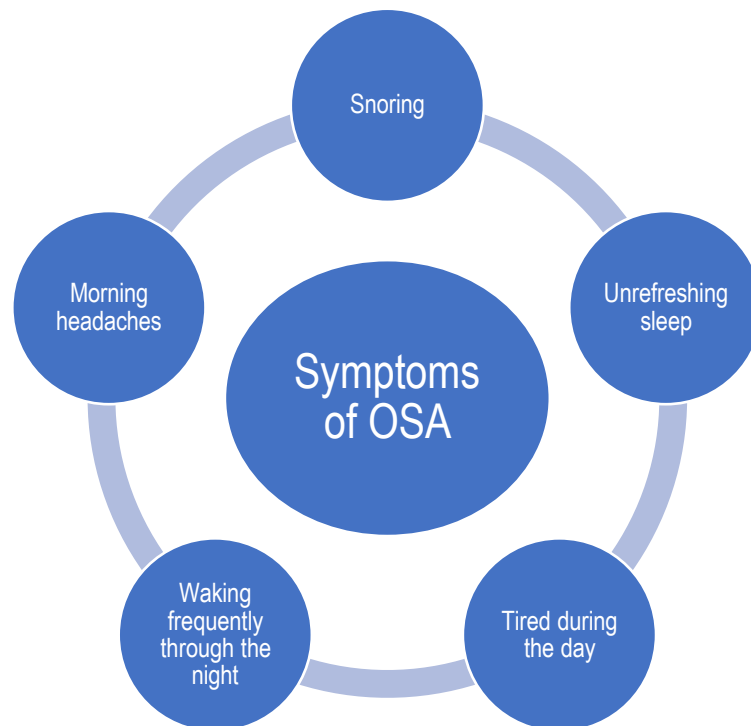
*Is your bed partner complaining that your snoring is driving them nuts? Are you constantly sleepy, despite getting to bed on time? Women can get sleep apnoea too! This article will discuss what sleep apnoea is, when to seek investigation, and what treatment options are available.*

## What is obstructive sleep apnoea?

Obstructive sleep apnoea (OSA) is a sleep disorder which results from narrowing or closure of the upper airway during sleep. The upper airway is the part of our windpipe which carries air from the mouth and nose to the lungs. It is made up of multiple muscles groups working together to allow us to speak, sing, swallow, cough, and breathe.

When we go to sleep these muscles relax, which in some people can lead to narrowing or complete blockage of the upper airway. This makes it difficult for air to get into the lungs and can cause the oxygen levels in the bloodstream to drop. The brain senses a disruption to normal oxygen levels from this breathing problem and sends an alert signal to wake you up.

Some people are aware of this sleep disruption, but many will have no recollection. Due to constant sleep disruption, people with OSA struggle to achieve deep sleep and often wake unrefreshed and feel sleepy during the day. Poor quality sleep can lead to irritability, low mood and difficulty concentrating. Sleep apnoea increases the risk of dozing off or falling asleep behind the wheel and can lead to car crashes.



## OSA in women

Sleep apnoea is common in Australia, with approximately one in twenty adults suffering from OSA. There is a frequent misunderstanding that OSA is a condition which only affects men; though OSA is uncommon in young women, it becomes more common after menopause. The female hormone progesterone helps to regulate breathing and seems to be protective against sleep apnoea in pre-menopausal women. As progesterone decreases after menopause, the incidence of sleep apnoea

increases. Younger women with hormone imbalances, such as polycystic ovary syndrome (PCOS), are at higher risk of sleep apnoea, as are women who are overweight or obese.

Studies suggest that sleep apnoea is under-reported and under-diagnosed in women. Sleepiness or fatigue can be normalised by societies pressures on women – balancing the demands of family, work, and personal responsibilities will wear you out! However, persistent tiredness can be a sign of sleep apnoea or other health issues. Some women feel embarrassed to report snoring because it is seen as a masculine problem. These beliefs can lead to a delay in women seeking medical attention for their symptoms.

Women with sleep apnoea can experience different symptoms to men, which may lead to delayed diagnosis. Whereas men often report loud snoring, daytime sleepiness and pauses in their breathing with sleep, women more commonly describe general fatigue, insomnia, morning headaches, low mood, or poor concentration. If you experience these symptoms, it is worth talking to your GP about work up for sleep apnoea.

### **I think I might have OSA, what next?**

Your GP will ask you questions about your sleep habits – such as when you go to sleep, time spent in bed, how you feel on waking, and go through some standard questionnaires. Then, if your doctor thinks you could have sleep apnoea, they will refer you for a polysomnogram, or sleep study. Sleep studies can be performed in a sleep laboratory or can be performed at home. Many wires and electrodes will be fitted to record your brain activity, oxygen levels, breathing patterns and heart rate. These results are then analysed by a sleep specialist, to determine whether you have sleep apnoea and the severity.



Image source: [Sleep Studies - Macquarie Respiratory & Sleep](https://sleepstudies.mqrs.com.au)

[mqrs.com.au](https://mqrs.com.au)

### **Treating sleep apnoea**

Depending on your symptoms and the results of your sleep study, you may be recommended treatment for sleep apnoea. The goal of treatment is to improve sleep quality and daytime energy levels. Patients with severe sleep apnoea causing low oxygen levels are at increased risk of health problems such as high blood pressure, heart disease, and stroke. Treatment for OSA, in addition to a healthy lifestyle, can reduce this risk.

There are several different treatment options for sleep apnoea and the right treatment for you depends on your symptoms, how severe your sleep apnoea is, and what you are most comfortable with.

Weight loss – Weight loss can reduce the severity of sleep apnoea, allowing some people to come off treatment all together. Weight loss has the added benefit of improving blood pressure, diabetic control, and heart health. Talk to your GP about what target might be appropriate for you.



Figure 1 Image source: CPAP vs BiPAP | Sleep Foundation

#### Continuous Positive Airway Pressure (CPAP)

- CPAP is a small bedside air pump, that attaches to your face via a mask. Pressurised air is delivered through the mask, splinting the upper airway open, to prevent airway collapse. There are lots of different masks, ranging from nasal masks which sit under the nose, to full face masks which cover the nose and mouth. The right mask for you depends on how you breathe in your sleep and what you find comfortable. CPAP machines can deliver a set pressure or can have variable pressures (called auto-titrating or APAP

machines). The amount of pressure required to control your sleep apnoea needs to be individualised. For links to certified CPAP suppliers in Australia, see this Sleep Health Foundation link - <https://www.sleephealthfoundation.org.au/cpap-directory.html>

Mandibular Advancement Splint- Mandibular advancement splints (MAS) are an alternative to CPAP therapy. They are custom made dental devices, like mouth guards, which work by bringing the jaw forward, opening the upper airway and preventing collapse. They need to be fit by a dentist with experience managing sleep apnoea and are adjusted regularly to maximise treatment effect. They are generally not the first treatment of choice in people with severe sleep apnoea.

Positional therapy- Some people's sleep apnoea is only a problem when they sleep on their backs. If this is the case, you may benefit from positional therapy. Positional therapy works by encouraging you to sleep on your side. There are high tech devices with computer detected position monitors to help keep you off your back at night. Low tech options can simply include a tennis ball sewn into the back of your night shirt, to make it uncomfortable for you to lie on your back.

Sleep apnoea treatment should be individualised. Your GP may give you direct advice or refer you to a sleep specialist (also called a sleep physician), to determine which is the best treatment for you.

#### **Key messages:**

- Sleep apnoea is a common condition which can affect women of all ages, though is more common after menopause.
- If you suffer from fatigue, broken sleep, morning headaches or snoring you may benefit from assessment for sleep apnoea – see your GP!
- Treatment for OSA improves symptoms and quality of life. Talk to your doctor about the best treatment for you.