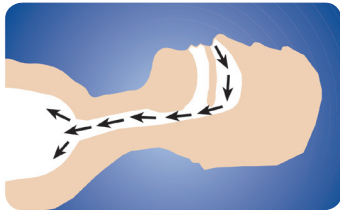


# Obstructive sleep apnoea and CPAP therapy

## WHAT IS OBSTRUCTIVE SLEEP APNOEA (OSA)?

Sleep Apnoea is a common sleep breathing disorder characterised by the periodic blockage of the upper airway with cessation of breathing during sleep.



Normally during sleep, the muscles which control the tongue and soft palate hold the airway open.



In some people, if these muscles relax, the airway narrows, causing snoring and partial blockage.



If these muscles relax too much the airway can become completely blocked, preventing breathing. This is Obstructive Sleep Apnoea.

After a period of time, which is on average 20 seconds, the brain realises there is a lack of oxygen and alerts the body to wake up. Though the sufferer is often not aware of it, this can happen several hundred times during the night, severely disrupting sleep.

## WHO GETS OSA?

OSA can affect people of any age from newborn babies to adults.

Up to 4 percent of males and 2 per cent of females suffer from OSA.

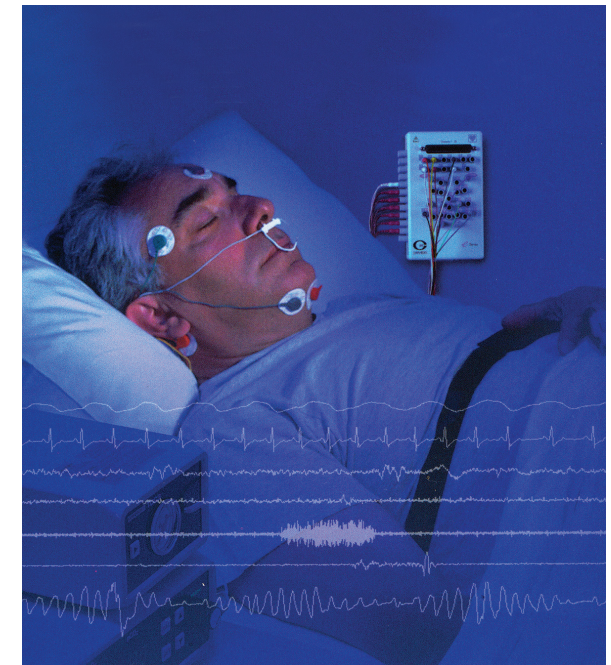
Overweight people are more likely to have sleep apnoea.

Some of the symptoms of sleep apnoea include:

Excessive daytime sleepiness
Irritability
Loud snoring
Restless sleep
Morning headaches
Memory lapses
General lethargy

## DIAGNOSIS

OSA is diagnosed following an overnight sleep study (at home or at a sleep investigation centre). A referral from a sleep disorders specialist is required.



## OVERNIGHT SLEEP STUDY

The information gathered from an overnight sleep study allows us to grade the severity of disease, the effect of posture and rule out other sleep disorders. This allows your doctor to decide which treatment is suitable for you.

**WellSleep**

UNIVERSITY OF OTAGO, WELLINGTON SLEEP INVESTIGATION CENTRE

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## HOW IS OSA TREATED?

Behavioural treatments such as weight loss, avoiding sleeping on your back, increasing sleep time and stopping evening alcohol can be helpful in reducing snoring and mild OSA.

Moderate or severe OSA is most effectively treated through the use of Continuous Positive Airway Pressure (CPAP).

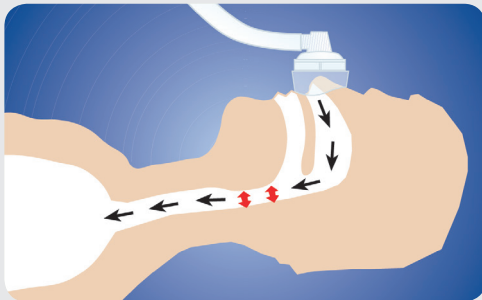


Diagram of nasal CPAP administration

CPAP is a mechanical device which provides air at a pre-set pressure through a nasal mask connected by a flexible tube to an air pump. The air pressure keeps the airway open by preventing the collapse of soft tissue into the airway.

An alternative option for controlling OSA in selected patients, is the use of a mandibular advancement splint. This device works by holding the jaw forward of its usual position, thereby enlarging the upper airway.

## WHAT HAPPENS DURING A CPAP TRIAL?

During your CPAP trial you will be supervised by an experienced sleep technologist who can advise about mask, machine and treatment issues.

### SUCCESS WITH CPAP

A number of strategies can be employed to help with your trial.

Use the ramp button which allows a gradual build up of pressure as you fall asleep

Use CPAP for as much of your sleep as possible. Practice during the day can help you adjust to breathing with the airflow

Follow the advice of your sleep technician

### COMMON FEARS/ISSUES

**Claustrophobia:** This may improve with practice. Ask the Sleep Technician to show you alternative masks.

**Noise of the machine:** Noise is significantly less than snoring. Make sure that your mask is correctly adjusted and CPAP machine is below head level.

**Pressure of air:** Use your ramp button when you wake up from sleep. This feeling will improve as you get used to treatment.

**Dryness, stuffy nose, dripping or blocked nose:** These side effects can indicate possible air leak from your mouth. Ask your sleep technician about this (options include chin strap, full face mask or humidification).



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If you have access to the Internet, you can view a short video of the home sleep study set up by clicking on the link on the WellSleep webpage:

[www.otago.ac.nz/wellsleep](http://www.otago.ac.nz/wellsleep)

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