



# POSITIVE AIRWAY PRESSURE SYSTEMS FOR OBSTRUCTIVE SLEEP APNOEA

## DID YOU KNOW?

Around **3 in 10** adults have moderate-to-severe obstructive sleep apnoea<sup>1</sup>



Most people **do not know** they have this condition because it is mistaken for "normal" snoring<sup>2</sup>



Tiredness from disturbed sleep can affect concentration, mood, and overall quality of life. It also **increases the risk** of workplace and road accidents<sup>2</sup>



## WHAT IS SLEEP APNOEA?

During sleep, the muscles in your airway naturally relax, causing your airway to narrow. For most people, this does not affect breathing. However, in some people, the airway becomes **too relaxed** or is narrowed by extra fat tissue around the throat. When this happens, the airway may partly or completely collapse and **block** airflow. This condition is called obstructive sleep apnoea (**OSA**) and is more likely to occur during deep sleep stages.

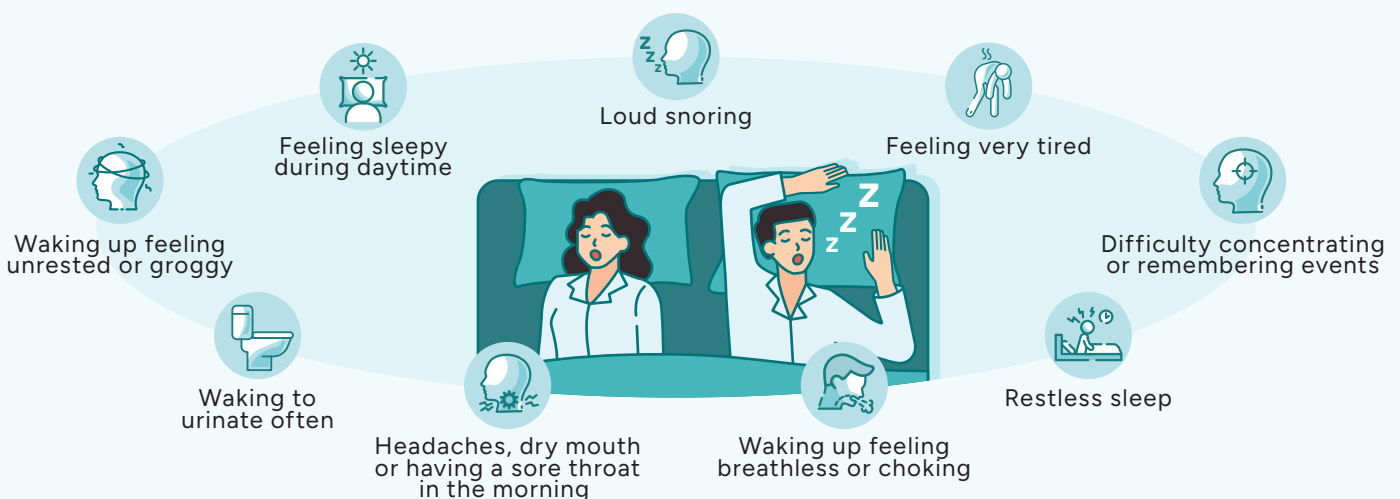
When your airway becomes blocked, the amount of oxygen in your blood drops. Your brain detects this and briefly wakes the body or moves it into lighter sleep stages so the airway can reopen. This may cause you to snort, cough, or choke. These breathing interruptions can happen **many times** during the night without you being aware of them. Sometimes, you may wake up suddenly feeling breathless or experiencing a choking sensation, and these repeated disruptions prevent you from getting deep, restful sleep. Even if you spend 6 to 8 hours in bed, you may still feel tired, unrefreshed, and sleepy the next day.

**Common symptoms** of OSA include loud snoring and feeling very tired (fatigued) or sleepy during the day. Symptoms often go **unrecognised**—fatigue is often blamed on work, stress or age, and those who sleep alone may not notice their snoring. If left untreated, OSA can increase the risk of **serious health problems** including high blood pressure, heart disease, and stroke. In severe cases, it may even shorten life expectancy.<sup>2</sup>

OSA is more common in:

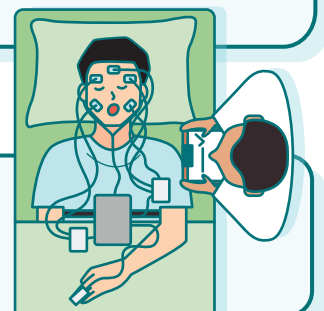
- **middle-aged and older** adults,
- **men**,
- people who are **overweight**, or
- those with a **smaller upper airway**.<sup>2</sup>

## COMMON SYMPTOMS OF OSA



## HOW DO YOU KNOW IF YOU HAVE OSA?

Doctors use a **sleep study** test to diagnose sleep apnoea. During this test, you wear special devices that monitor your breathing patterns, heart rate, oxygen levels and sleep stages while you sleep.<sup>3</sup> OSA is considered **moderate** if breathing stops 15 to 30 times per hour, and **severe** if breathing stops more than 30 times per hour during sleep.<sup>4</sup>



## MANAGING OSA

**Behaviour and lifestyle changes** such as losing weight can improve symptoms of OSA. For people with moderate-to-severe OSA, positive airway pressure (**PAP**) devices help to keep the airway open during sleep and improve breathing and sleep quality.

### LOSING WEIGHT

For people who are overweight, **losing weight** through exercise or dietary changes can be helpful in improving symptoms of OSA.<sup>2</sup>



### USING A PAP DEVICE

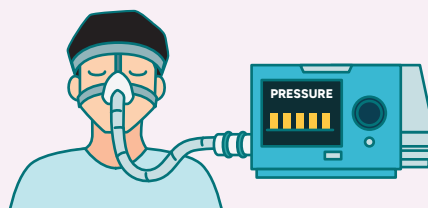
PAP devices help you breathe more easily while you sleep. They keep your **airway open** by delivering air pressure through a tube connected to a mask that fits over your nose or mouth.<sup>3</sup>



### DIFFERENT TYPES OF PAP DEVICES



**Automatic** PAP (APAP) devices automatically adjust the air pressure throughout the night based on your breathing patterns.



Fixed pressure **continuous** PAP (CPAP) devices deliver a constant, steady level of air pressure while you breathe in and out.

### WHAT DOES THE EVIDENCE SAY?

ACE reviewed the available clinical evidence and received expert advice from doctors and patients about the use of PAP devices for managing OSA.<sup>5</sup>

PAP devices are likely to be **better** than behaviour and lifestyle changes for **certain** people with moderate-to-severe OSA to:

- ✓ Reduce the severity of OSA
- ✓ Reduce excessive daytime sleepiness
- ✓ Lower blood pressure



### SUBSIDISED PAP DEVICES

Subsidy only applies to **certain models** that are **prescribed** by a specialist trained in sleep medicine in a **public** healthcare institution.

PAP devices are **subsidised** for patients aged 16 years and older with moderate-to-severe OSA if they successfully complete a **one-month trial** by using the device for at least 4 hours per night, on at least 70% of nights (about 21 out of 30 nights). Scan the QR codes to learn more.

One-time subsidy of **30% to 70%** for the device cost for eligible patients



ACE  
Technology  
Guidance<sup>5</sup>



Subsidies for  
Specialist  
Outpatient  
Care<sup>6</sup>



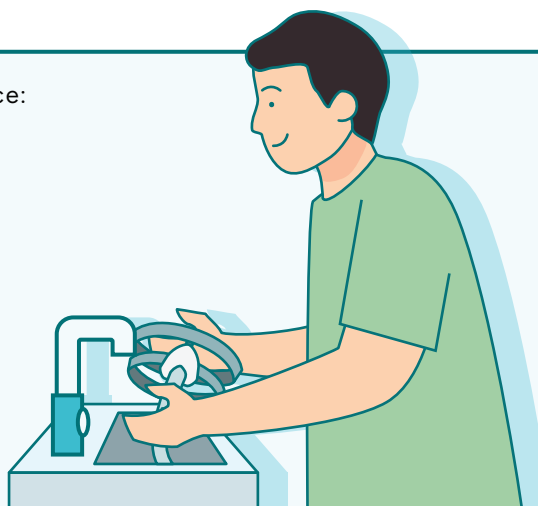
## TAKING CARE OF A PAP DEVICE

PAP devices generally have five parts that need maintenance:

- ▶ Mask (many designs and sizes available)
- ▶ PAP machine
- ▶ humidifier
- ▶ filters, and
- ▶ tubing



Scan the QR code for more details<sup>7</sup>



### MAINTENANCE SCHEDULE

EVERY DAY	EVERY WEEK	EVERY SIX MONTHS
<ul style="list-style-type: none"><li>• Hand-wash the mask gently with mild soap and lukewarm water. Avoid harsh chemicals like bleach or strong cleaners. Rinse thoroughly and air dry, away from direct sunlight or heat.</li><li>• Use only distilled water for the humidifier and empty the water chamber when transporting the PAP machine.</li></ul>	<ul style="list-style-type: none"><li>• Hand-wash the head strap for the mask, humidifier and air tubing gently with mild soap and lukewarm water. Avoid harsh chemicals like bleach or strong cleaners. Rinse thoroughly and air dry, away from direct sunlight or heat.</li><li>• Wipe the exterior of the PAP machine with a dry cloth.</li></ul>	<ul style="list-style-type: none"><li>• The air filter should be replaced every 6 months, or earlier if necessary.</li></ul>

## KEY MESSAGES

**Subsidised PAP devices** are available for people aged 16 years and older with **moderate-to-severe OSA**, if they meet certain clinical criteria and the device is prescribed by a specialist trained in sleep medicine in a public healthcare institution.

Discuss with your **doctor** if a PAP device is suitable for you, and your concerns. You can also speak to a **medical social worker** if you need further financial assistance for any treatments, or you can reach out to **local patient support groups** if you want to meet with people with OSA and share your experiences.<sup>8</sup>

### Sources

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8. Singapore Sleep Apnea Support Group



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