

Treating obstructive sleep apnoea (OSA) with a CPAP machine

Respiratory Physiology and Sleep

Information for Patients

Last reviewed: March 2023

Updated: March 2024

Next review: April 2025

Leaflet number: 324 Version: 4.2

What is obstructive sleep apnoea (OSA)?

OSA is where the top part of the throat narrows and closes during sleep. This causes a disruption to your breathing (apnoea). During this time air cannot get to the lungs so the oxygen level falls. The brain detects the falling oxygen and partly wakes you up to start breathing again. This can happen many times a night. This disruption in your breathing is itself not dangerous, but each brief awakening needed to open the airway disrupts your sleep. Sleep may become so badly disturbed that it causes considerable sleepiness in the daytime.

What is the difference between snoring and OSA?

Snoring happens when air flowing through a narrowed airway makes it vibrate. Sucking air through a narrowed airway needs more effort so can disturb your sleep. Snoring often in the night can disturb your sleep and cause daytime sleepiness too. OSA is severe airway narrowing, snoring is a milder form of this. You may have snoring and no OSA, or both.

Treatment

Continuous positive airway pressure (CPAP) is used to treat the daytime sleepiness caused by OSA and snoring. OSA and snoring disrupt sleep by narrowing or closing off the airway. A CPAP machine blows air down the airway to stop this happening by holding the airway open.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals

To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

What does the CPAP system consist of?

- CPAP is a breathing machine that draws in air from the room, and blows it out at higher pressure.
- The air comes from the machine, through a flexible tube, to a mask on your face.
- Soft straps hold the mask in place while you are asleep.

Setting up the CPAP

The machine you have been loaned is simple to use:

1. **Put the mask on** - there are different sizes and styles of mask available, we will fit the best mask to suit you when we give you the CPAP. All masks have a soft flexible cushion which rests on your face, with a frame that the head straps attach to. The easiest way to get the mask on is to hold the mask in place with one hand, then pass the straps over the head with the other. The straps should be adjusted so that the mask fits snugly against the face to stop too much air leaking out.
2. **Attach the tubing** - a standard length of tubing is attached to the CPAP machine at one end, and to your mask at the other.
3. **Switch on the CPAP** - the settings are prescribed from sleep tests and for your comfort when we set it up. The CPAP will blow a continuous flow of air to hold your airway open.

Common problems

Soreness on the bridge of your nose - if you find that the bridge of your nose is becoming red and sore try wearing the mask with the straps a little looser. In the first week it's likely that you will have some redness as your skin gets used to the mask.

Air leaking from the mask - remember to put on the mask when the CPAP is switched off. Rest the mask on your face and make sure the cushion is not folded. Tighten the straps a little more and switch on the CPAP. A small leak from the mask is fine but leaks into the eyes can cause them to become sore. If you cannot solve the leak you should contact the department.

Cold/ dry throat and nose - if this happens it might help to keep your bedroom a little warmer and increase the humidity by placing a tray of water over the radiator. It may also help to use a couple of drops of olive oil at the entrance to each nostril.

Runny nose/ sneezing - using a CPAP can sometimes cause irritation to the lining of the nose. You might find this settles down over time, but if not there are nasal sprays that can help.

Blocked nose - if your nose becomes blocked overnight it may be hard to use the CPAP. A short course of a nasal spray may help.

Warm air from the CPAP - this usually means that the filter is blocked so you will need to contact the department. Make sure that the unit is away from bedclothes and curtains so the air can enter the machine.

Mouth leak (nasal mask use only) - most people naturally keep their mouth closed when asleep. If not then a change in sleeping position may help or you may need a chin strap from the department to solve the problem.

Routine care and maintenance

- **Once a day** - wash the mask in warm soapy water to remove any oils or grease from the skin.
- **Once a week** - remove the straps from the mask and the tube from the mask and machine. Wash all 3 in warm soapy water, rinse well and hang up to drip dry. The CPAP should be cleaned on the outside only. Disconnect from the mains supply and wipe over with a lightly damp cloth.

Can I travel abroad with the machine?

If you are travelling abroad the department can provide a letter to show to customs officials if they ask about your machine. If you are travelling by air, please remember the CPAP should always be carried as hand luggage and never stored in the hold. If you are travelling to the USA or Canada, check whether your CPAP is able to run from a 115 volt supply.

Please contact the department for advice if needed.

Follow-up appointments

After a trial period on the CPAP we may need to change the settings to help your breathing more. A follow-up appointment will be made for you to see a member of staff a few weeks after being given the CPAP machine. You can use this appointment to discuss any problems you may be having. If you are worried about anything to do with the CPAP, tubing or mask you should call the department and ask to be seen sooner.

If you need an appointment to see a sleep consultant, we will discuss this with you to see if it is needed and an appointment will be made for you. Always bring the CPAP, mains cable, mask and tubing with you so they can be checked at these appointments.

Contact details

Place sticker with contact details here:

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk



LEICESTER'S
RESEARCH ★

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/patient-and-public-involvement