



Government of **Western Australia**
Child and Adolescent Health Service



Perth Children's Hospital

Obstructive Sleep Apnoea in Children & Management

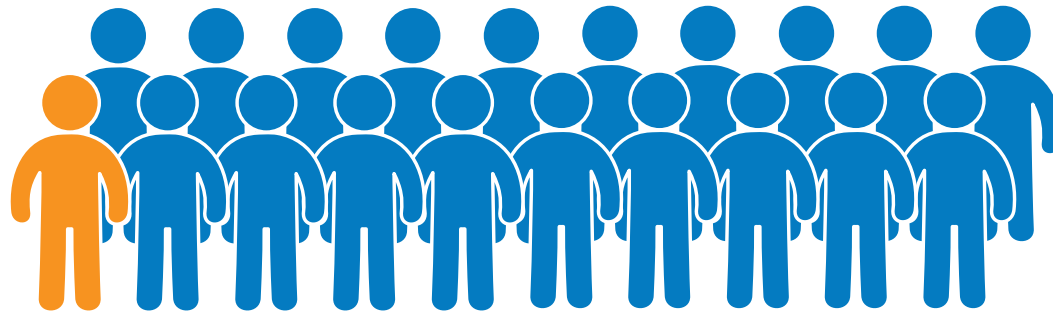


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What is Obstructive Sleep Apnoea (OSA)?

- OSA causes problems with breathing and snoring when you are sleeping
- OSA affects up to 1 in 20 children



- If you have OSA, you may have very broken sleep
- OSA can make you very tired during the day, so you may not feel like playing or doing activities

Night-time problems

- Snoring
- Noisy breathing - choking, gasping or snorting
- Stopping breathing for a short time
- Breathing with mouth open
- Restless or sweaty while asleep
- Waking up a few times at night
- Bedwetting



Daytime problems

- Hard to wake up in the morning
- Headaches in the morning
- Tired or sleepy during the day
- Problems with learning at school
- Grumpy or moody all the time
- Acting out or being disruptive



What causes OSA?

When you sleep, the muscles in your windpipe relax

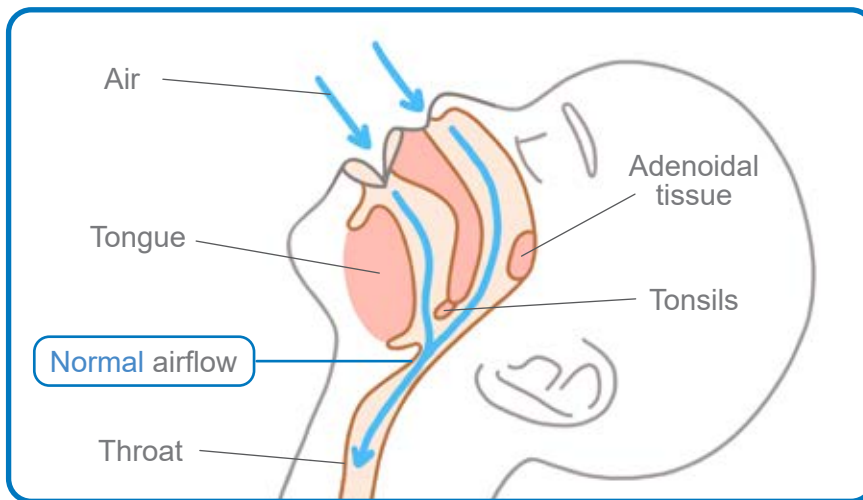
Some children have:

- **Big tonsils** in the back of the throat
- **Big adenoids** in the back of the nose

Windpipe can become partly or totally blocked

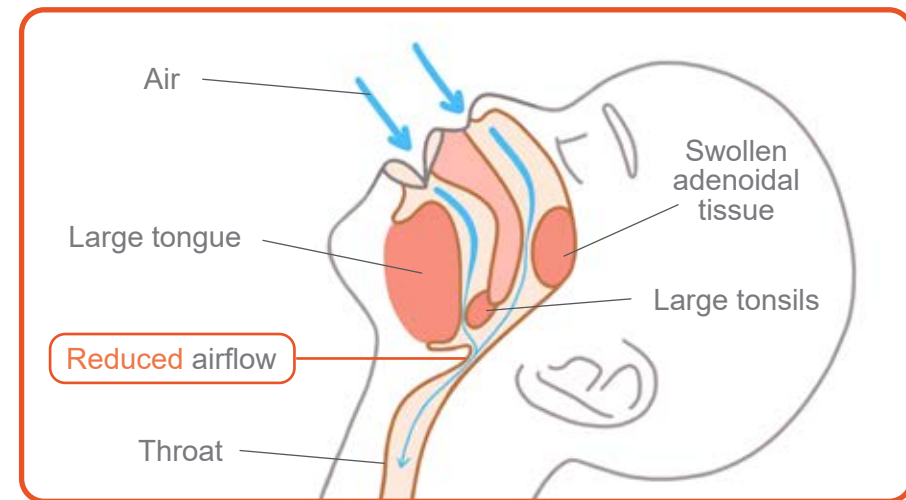
Difficulties breathing during sleep

Large tonsils and adenoids are the most common cause of OSA in children.



Normal anatomy

Open airways allow air to flow easily.



Common causes of sleep apnoea

Large tonsils, tongue and adenoids make airflow more difficult.

Other causes of OSA in children

- Facial features such as small jaw, small chin, flat face, large tongue
- Medical conditions that cause weak muscles or low tone e.g. Down syndrome
- Obesity



If not treated...

Untreated OSA can cause problems with:

- growing
- learning at school
- misbehaving at school or at home
- emotional and social wellbeing
- developing health issues e.g. high blood pressure, diabetes, heart problems



How do we know if you have OSA?

Your sleep doctor will talk to you and may ask you to do a sleep study that checks for breathing problems while you are asleep.



Most sleep studies are done overnight in hospital.



Some children can have a sleep study at home.

A sleep study looks at your ...



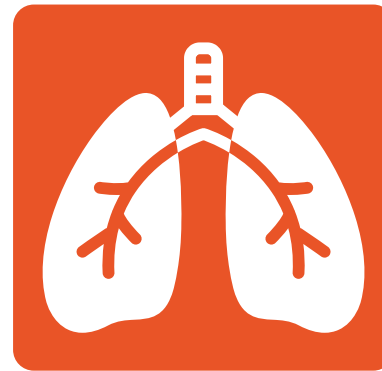
Brain waves
(to see when you are
asleep)



Snoring



Oxygen levels



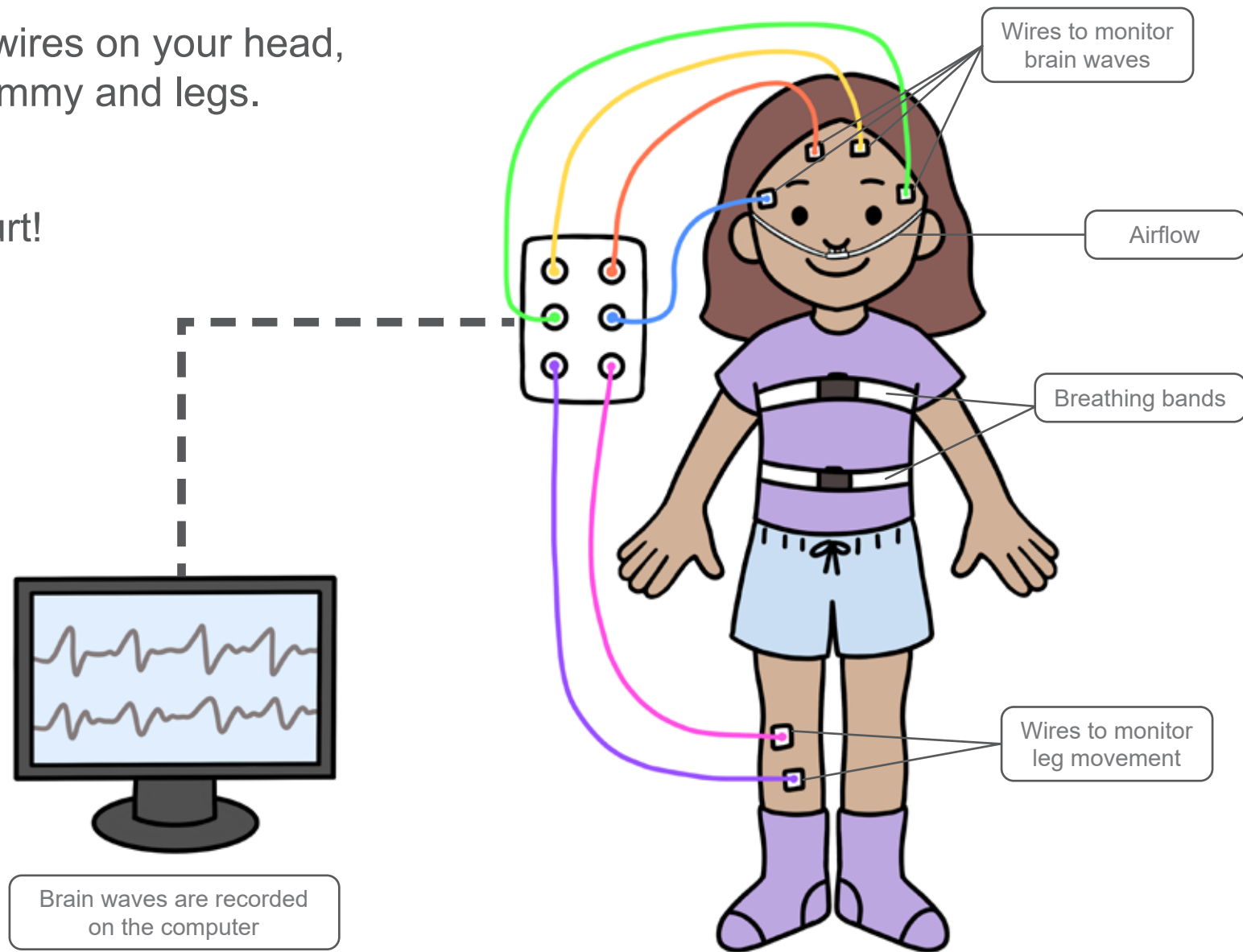
**Breathing
patterns**



Muscle activity

You will have wires on your head, face, chest, tummy and legs.

Nothing will hurt!



How is OSA treated?

Your sleep doctor may recommend different treatment options:

- For most children, removing the adenoids and/or tonsils fixes their OSA. You may be referred to an Ear Nose & Throat doctor to discuss surgery options.
- A healthy diet, exercise and a healthy weight can also help with OSA.
- Medications for some children.
- Positive airway pressure (PAP) support.



If positive airway pressure (PAP) support is needed, we can help you!

Positive airway pressure

- **Positive airway pressure (PAP)** support may be needed if surgery is not effective or not recommended.
- The most common PAP treatment is continuous positive airway pressure (CPAP).
- A CPAP machine is used at night and it gives constant airflow to help you breathe while you sleep.
- Some children may need another machine called bilevel positive airway pressure (BiPAP).
- A sleep study will tell us which is the best machine for you.



How does CPAP work?



Mask



Tube



Air pump

Humidifier

- The CPAP machine has 4 basic parts: an air pump, humidifier and a mask joined by a tube.
- The air pump takes normal air from the room and blows a gentle flow of air to keep the windpipe open while sleeping.
- A humidifier will add moisture to the air to make it less dry.

- There are different types of masks, and we will find one that suits you best
- The mask may cover just the nose, or both the nose and mouth
- We will make the mask as comfortable as possible and help you get used to it



Benefits of CPAP

- ✓ CPAP helps you to breathe better when asleep
- ✓ CPAP can help you to stop snoring and sleep better straight away
- ✓ You may start feeling better and have more energy during the day after using CPAP properly for a few nights



Using CPAP at home

- CPAP should be used all night, every night, for the greatest benefit
- Put the mask on as part of your bedtime routine
- It can take time to get used to wearing a mask and to fall asleep with a mask on
- Keep trying to use it for more hours every night
- Your sleep doctor can monitor the CPAP machine when you are at home to help you use it regularly



How long will you need to use CPAP?

- Sometimes kids grow out of having OSA and can stop using CPAP
- A healthy diet, exercise and a healthy weight can also help to fix OSA
- If you continue to have OSA, you may need to use CPAP for some time
- Your doctor will keep seeing you and may repeat the sleep study to know when CPAP can be stopped



CPAP will help you feel better so you can have a healthier and happier life!

If you have any concerns, please call
PCH Respiratory Support nurse on 0436 595 529.

Acknowledgements



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This document can be made available in alternative formats on request for a person with a disability.

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