

# Polysonnography

## WHAT IS POLYSOMNOGRAPHY?

Polysonnography is the medical term for a sleep study. It involves the monitoring of various aspects of the body's activity during sleep. It is the best way to make a definitive diagnosis of various sleep disorders, such as:

Obstructive Sleep Apnoea (OSA)

Central Sleep Apnoea (CSA)

Narcolepsy

Periodic leg movements

Parasomnias

In an overnight sleep study the following functions are monitored:

Brain activity

Eye movements

Muscle tone

Respiratory airflow

Respiratory muscle effort

Leg movements

Blood oxygen levels

Body position

Sound

Polysonnography enables the severity of disease to be accurately graded so that the most suitable treatment can be chosen.

Polysonnography can be undertaken at a specialised sleep laboratory or in your own home.

## SLEEP STUDY AT HOME

### EVENING

A WellSleep technician will arrive at your home between 7.30 and 8.30pm. The sleep study process will be explained and set up. It usually takes about 45-60 minutes to attach all the sensors and leads. A quick check will be made to make sure all the monitors are working and then you will be left to get a good night's sleep. Feel free to ask the technician any questions about the study.

### MORNING

The WellSleep technician will return at about 7.30am to remove all of the equipment. This usually takes about 20 minutes.

## SLEEP STUDY AT WELLSLEEP

### (Bowen Hospital)

A laboratory-based study requires attendance at WellSleep from approximately 7pm to 8am the following day.

This includes:

Introduction and orientation

Video explaining OSA, CPAP

(Continuous Positive Airway Pressure) and polysonnography (if appropriate)

Mask fitting and CPAP familiarisation (if appropriate)

Change into night clothes

Attachment of sensors

Depending on the type of study your doctor ordered, a mask may be fitted and CPAP applied during the second part of the night. The introduction of the mask occurs between 12.30 – 2.30am. In the morning all sensors are removed and breakfast is provided.

You will need to bring with you personal toiletries (such as shampoo) and nightwear. Other items you may like to bring include reading material, dressing gown and favourite pillow. Shower facilities are available.



## WellSleep

UNIVERSITY OF OTAGO, WELLINGTON SLEEP INVESTIGATION CENTRE

Bowen Hospital | Churchill Drive | Crofton Downs | Wellington  
Tel 04 920 8819 | Fax 04 920 8861 | Email [wellsleep@otago.ac.nz](mailto:wellsleep@otago.ac.nz)

## POLYSOMNOGRAPHY

### Frequently asked questions

#### Will I be able to sleep?

The equipment is designed to be slept with, but it does help if you are relaxed and ready for sleep. You should avoid napping on the day of your study as well as caffeine from 3pm.

#### Will I need to be plugged in to the wall?

Not during a home sleep study. The portable PSG monitor used in the home sleep studies runs on batteries. If your sleep study is at WellSleep, the monitoring equipment is plugged into the wall.

#### Will I be able to move during the night?

Yes. The electrodes are held firmly in place by a special gel and taped down, so rolling over in your sleep shouldn't dislodge them.

#### Can I get out of bed during the night?

Yes. In a home sleep study the portable monitor has a convenient shoulder strap, so it can follow you anywhere. At the WellSleep laboratory your technician will be able to help you during the night.

#### What will happen next?

Your sleep study will be analysed by trained sleep technologists and sleep specialists who will send a report to your referring doctor.

## CHECKLIST FOR YOUR SLEEP STUDY

### DO

Wash your hair on the day of the study

Relax. A calm frame of mind will enable you to sleep well

Stick to your normal evening routine on the night of the study. This includes:

- taking medication
- regular food and alcohol intake

### DON'T

Use hairspray or mousse on the day of the study, as these can stop the sensors from working properly

Nap on the day of your study as this may impair your sleep at night

If you have any questions about the information in this brochure, please contact WellSleep  
tel 04 920 8819



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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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## WHAT TO EXPECT FROM AN OVERNIGHT SLEEP STUDY

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