

## Sleep Centre

# Your transcutaneous carbon dioxide study

## Information for patients, relatives and carers

### Introduction

The transcutaneous carbon dioxide test measures your breathing while you are asleep and sees how well your lungs get oxygen in and carbon dioxide out. This test will be performed in hospital and you will need to stay overnight.

The results from this test will help us to understand if your current symptoms are caused by the way you breathe at night. The results will also help us to determine appropriate treatment, if necessary.

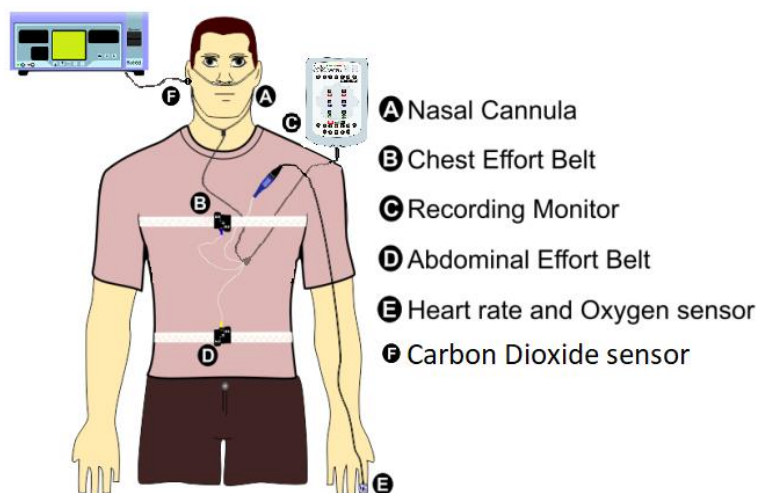
### What does the test involve?

You will have multiple sensors attached to your waist, chest, finger and nose, which will be connected to a headbox (recording device) in a stand near the bed.

You will also have a heated sensor attached to your ear, which will be connected to a monitor.

We will also monitor your sleep with audio and video recording.

The following morning, we will take a small blood sample from your wrist. This will confirm your oxygen and carbon dioxide levels.



### How long will the test take?

You will be asked to attend an appointment in the evening at 20.30. Please make sure you have something to eat before attending as we do not provide an evening meal. You should be ready to go to bed when the sensors are all in place.

We will wake you up at 07:00. If you wake up earlier, we will encourage you to stay in bed until wake-up time. We will offer you a light breakfast in your room.

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You can go home once you have had the blood test. This will normally happen by 09:00.

## Before attending your test

- **If you need a translator or a carer to attend with you, please contact us to discuss this**
- Carry on taking your medication unless you are told to stop
- Please make sure you have something to eat before attending. We do not provide an evening meal
- Please remove any nail varnish and false nails
- If you suffer from a chronic lung condition, we will only be able to perform the test if you are stable. Please call the sleep centre if you have had a recent chest infection

## What do I need to bring?

There are a few things you will need for your stay. Please bring with you:

- comfortable and loose nightwear
- toiletries
- regular medication
- reading material (if desired)

You also need to bring a list of the medication you take. You may be asked to complete a sleep diary prior to attending.

## At the sleep centre

When you arrive, a member of staff will direct you to your private room where you will be asked to get changed and ready to go to bed. We normally start setting up the equipment at 21.00.

Overnight you will be able to use your own private toilet. Make sure that all wires are still in place when you go back to bed.

We will monitor you via a live video. This is to ensure that the sensors remain in place without having to disturb you. Occasionally, staff may need to come into the room to fix a sensor that has come off. You might wake-up for a few moments.

During the night you will have a small sensor attached to your ear. This may feel warm and tingly.

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## Your sleep test results

The results from this test will help us to understand if your current symptoms are caused by the way you breathe at night.

The results are analysed in detail by a highly specialised physiologist and can take a few weeks to process. The information recorded will be discussed with a doctor. You will receive a letter with your test results.

If you need treatment, our administrator will contact you to book an appointment.

## How to find the Sleep Centre

The Sleep Centre is located on the fourth floor of Charing Cross Hospital, Fulham Palace Road, London, W6 8RF. We have specialist sleep rooms on both the north and south wings. Your appointment letter will tell you which wing you need to go to.

If you need to contact us you can reach us on 020 3311 7188. Alternatively, our email address is [imperial.sleeplab@nhs.net](mailto:imperial.sleeplab@nhs.net)

## How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at [imperial.pals@nhs.net](mailto:imperial.pals@nhs.net) The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street  
London W2 1NY

Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

Telephone: **020 3312 1337 / 1349**

## Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: [imperial.communications@nhs.net](mailto:imperial.communications@nhs.net)

## Wi-fi

Wi-fi is available at our Trust. For more information visit our website: [www.imperial.nhs.uk](http://www.imperial.nhs.uk)