

Royal Brompton & Harefield NHS NHS Foundation Trust

# Royal Brompton Hospital

# Your lung function tests



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This leaflet gives you general information on your lung function tests. It does not replace the need for personal advice from a healthcare professional. Please ask us if you have any questions.

# What are lung function tests?

Lung function tests look at how well your lungs work. The tests usually take around an hour and may include some of the tests described in this booklet.

# **Routine lung function tests**

Routine lung function tests include spirometry, lung volumes and gas transfer.

#### Spirometry

Spirometry is a test that shows how well you breathe in and out. We use a device called a spirometer to take the measurements. We will ask you to breathe in fully and to blow out as hard and fast as you can into the mouthpiece of the spirometer. You may have to repeat this a number of times.

# Lung volumes

Measuring lung volumes (the total size of your lungs) can give us more detailed results. This test involves sitting inside a glass box with a clip on your nose to make sure that no air escapes from your nose (see the picture on the right). We will ask you to breathe into a mouthpiece similar to that of the spirometer. The test is not painful. We will talk to you and give you clear, easy instructions.



#### **Gas transfer**

This test measures how easily oxygen passes from your lungs into your blood.

We will ask you to inhale (breathe in) a harmless gas through a mouthpiece. Once your lungs are full, we will ask you to hold your breath for about 10 seconds and then exhale (breathe out) the gas.

The gas will be tested to see how much oxygen has been transferred from your lungs to your blood.

#### Other tests you may have

We may need to carry out more tests to find out as much as possible about your lungs.

Other tests include:

#### **Blood test**

We may ask you to give a blood sample from your finger and / or your earlobe. You will feel a tiny scratch. This is not painful, but may feel a little uncomfortable.

#### **Exercise test**

The exercise test lets us look at your breathing and heart rate during exercise. We will ask you to walk on a treadmill (a running machine often seen in gyms) or cycle on a stationary bike (see picture opposite) while you breathe through a mouthpiece. It is a good idea to wear comfortable, flat shoes as this will make it easier to walk on the treadmill or use the bike.

So that we can monitor your heart rate during the test, we will place small sticky patches, called electrodes, on your chest. Please wear comfortable, loose fitting clothes so it is easier to attach the patches.

If we need to carry out any other tests (not described here), we will discuss these with you first.

# **Preparing for your tests**

For the tests to be carried out successfully, it is important that you **do not**:

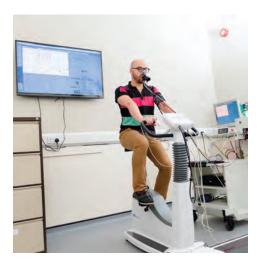
- smoke for at least 24 hours before your tests
- exercise in the 30 minutes before your tests
- eat a large meal in the two hours before your tests
- drink alcohol in the four hours before your tests.

# If you use inhalers

If you take inhaled steroids, such as Flixotide, please keep using them as prescribed by your doctor.

If you regularly use bronchodilators (inhalers), such as Ventolin, Atrovent and Serevent, please follow the instructions below:

- Ventolin do not take in the four hours before your tests
- Atrovent do not take in the six hours before your tests
- Serevent do not take in the 12 hours before your tests.



If you are unsure which type of inhaler you have, please contact the lung function unit on 020 7351 8910 and we will be able to advise you.

If you find it difficult to manage without your inhaler, please use it and make a note of the time. When you arrive for your tests, please tell us if you have used your inhaler and at what time.

# If you use other medication

If you take steroids as tablets or use any other medication, please continue to take them as prescribed by your doctor.

#### Injuries and conditions you need to tell us about

Please let us know before your tests if you have recently had any injuries that may affect your breathing, particularly if you have had:

- a broken or cracked rib
- any problems with your neck vertebrae

a collapsed lung.

If you have had recent surgery (within the last month), please tell us before you come for your tests.

We may need to arrange for you to take the tests on a different day.

### Are there any side effects?

We would not expect you to have any side effects during or after these tests. You may feel a little tired, as we usually ask you to do the breathing exercises a number of times. This is normal and the tiredness will disappear quickly. However, if you have any chest pain or other problems, such as dizziness during a test, please tell us. We will stop the test and wait until you feel well enough to continue or give you treatment if necessary.

#### **Test results**

Your results will be available after the tests and we will provide a report, if you need it, for another hospital or clinic. You can take the results with you to the clinic or ward where you receive treatment or we can send them out for you.

# Where is the lung function unit?

The lung function unit at Royal Brompton Hospital is on the first floor of Fulham Wing on Fulham Road. You can reach it by lift or by stairs. Please note that the first floor is on the second level if you come up the stairs. (The first level is called the mezzanine floor.)

# **Cancellations**

If you are unable to come to your appointment, please contact us on 020 7351 8910 or 020 7352 8121, extension 4302 as soon as possible. We can then give your appointment time to another patient and arrange a new time for you.

# Who can I contact for more information?

If you need more information or would like to book an appointment, please contact the lung function unit on the numbers below:

020 7351 8910 (direct line)

020 7352 8121, extension 4302

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call PALS on:

- Royal Brompton Hospital 020 7349 7715
- Harefield Hospital 01895 826 572

You can also email pals@rbht.nhs.uk. This is a confidential service.

Royal Brompton Hospital Sydney Street London SW3 6NP tel: 020 7352 8121 textphone: (18001) 020 7352 8121

Harefield Hospital Hill End Road Harefield Middlesex UB9 6JH tel: 01895 823 737 textphone: (18001) 01895 823 737

Website: www.rbht.nhs.uk

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Turkçe tercumesi için tedavi goruyor oldugunuz bolume bas vurunuz. Bolum personeli tercumenin gerçeklesmesini en kisa zamanda ayarlacaktir.

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