

# What is a Lung Function Test?

Respiratory

## Introduction

This leaflet aims to provide information before your visit about Lung Function Tests. It does not replace the need for personal advice from a healthcare professional so please do not hesitate to ask if you have any questions at the time of your test.

## What is a Lung Function Test?

These are simple, non-invasive tests of your breathing so that the doctor can see how well your lungs are working.

## How do I prepare for my test?

- Don't smoke for 24 hours prior to the tests
- Don't consume alcohol for four hours before the tests
- Don't eat a large meal for two hours before the tests
- Avoid any vigorous exercise for 30 minutes before the tests
- Wear loose-fitting clothing during the tests to allow your chest to expand freely

The results of your tests may be affected by all of the above.

## Why do I need these tests?

You may have been referred by your GP or consultant because you have been experiencing symptoms relating to your breathing or a chest problem. Sometimes these tests are also needed to see how well the lungs are working in people who need lung surgery or radiotherapy or to assess if treatment is working.

## What should you tell us on the day of the test?

Please tell us if any of the following apply to you:

- You have coughed up any blood in the last two months
- You have had any surgery in the last two months (including eye surgery)
- You have taken any medicine for chest pain in the last month
- You have been told by a doctor you have a blood clot

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

- You have had a heart attack in the last two months
- You have a current chest infection requiring antibiotic treatment
- You have been told by your doctor that you have a collapsed lung, a broken or cracked rib or a problem with your neck vertebrae
- You feel generally unwell on the day of the test. If any of the above apply to you we may need to re-arrange your tests for a different day

## What should I expect?

On arrival your height and weight will be recorded to help us calculate what is normal lung function for you. Before the test starts the physiologist will explain the test to you in detail and will answer any questions you may have regarding it.

All the tests will involve you breathing through a mouthpiece with a peg on your nose. You will be given clear instructions throughout the test, which requires simply breathing normally combined with taking big deep breaths in and forcing air out of your lungs. You may also be asked to hold your breath for around 8-10 seconds.

You are welcome to bring a friend or relative in with you whilst you are having your test should you wish to do so.

## What happens during the test?

During the lung function test you will be seated on a chair which may be inside a glass-enclosed booth. You will be asked to wear a nose clip so that no air escapes through your nose and then to breathe into a sterile anti-bacterial filtered mouthpiece. The tests will usually be repeated a couple of times to get your best possible measurement.

Before the tests start the physiologist will explain the tests to you in detail and will answer any questions that you may have. Below is a brief guide to the types of tests that are carried out:

### **Spirometry / Flow Volume Loop**

This test shows how well you breathe in and out. You will be asked to take as deep a breath in as you can and to blow it all out as hard, fast and for as long as you can.

### **Gas Transfer Factor**

This test determines how well gases such as oxygen move from your lungs into your blood. You will be asked to breathe in, hold your breath for about 10 seconds and then breathe out again.

### **Lung Volumes**

This test can give us information on how big or small your lungs are.

The test can be performed in two ways. Either breathing in and out normally for a few minutes against a small resistance of air produced by our testing machine or just simply breathing normally over a period of 2-7 minutes.

Which method is used will be determined by whether you attend New Cross or Cannock Hospital for your test.

## Are there any risks?

There are no known risks associated with these tests however some of the breathing tests may be tiring. You will be given time to recover between and after the tests. You may also feel a bit dizzy after blowing out hard and fast but this feeling tends to pass quickly.

## When will I hear about my results?

You will either be told your results at your next consultant clinic appointment or a report will be sent through to your GP. Your results will be sent electronically to your hospital patient record promptly after completing the test.

## Can I continue to take my inhalers?

The doctor may want us to check your breathing response to certain types of inhaled medication by measuring your breathing before and after taking inhalers. This is why we ask you to stop taking inhalers before coming for the test.

If you find it difficult to manage without your inhalers, please use them and inform us on your arrival.

Try not to take any of your inhalers prior to your appointment. The table below outlines the time to withhold common inhalers prior to your lung function test. You can take all other medications and oxygen as normal.

Time to withhold	Medication
8 hours	Salbutamol (Ventolin®), Terbutaline (Bricanyl®).
12 hours	Ipratropium Bromide (Atrovent®) Seretide®, Serevent®, Formoterol (Oxis® Symbicort®), Fostair®
24 hours	Tiotropium Bromide (Spiriva®), aclidinium (Eklira Genuair®), Vilanterol (Anora Elipta®) Glycopyrronium (Seebri inhaler®)

## How long do the tests take?

The test takes between 30 to 45 minutes.

## Do I have to have these tests?

No. You don't have to have these tests but if you do not have them we will not be able to pass important information to your doctor which may affect the medical treatment that you receive.

## Can I find out more?

We hope that this booklet has answered questions that you may have about your breathing tests. Please do not hesitate to contact us if there is anything further you would like to know. You can speak to one of the physiologists on 01902 695061

Alternatively you may wish to make notes of any questions you would like to ask the physiologist at the time of the test. Please use this space for any notes you may wish to make:





## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਆਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。