

Pulmonary Function Tests

A patient's guide for a visit to the Pulmonary Function Laboratory

Pulmonary function testing

You have been referred to the Respiratory Physiology team to complete a full lung function test.

Why have I been asked to attend?

Pulmonary function tests help the doctor to assess how well the lungs are working. The results will help the doctor to make a diagnosis, assess your response to treatment or may be part of an assessment prior to surgery or treatment.

What is a Pulmonary Function Test?

The tests will be fully explained during your visit, and you may perform one, or several of the below tests:

- Spirometry – this measures volume and flow, and involves a fast, long blow into a mouthpiece
- Gas transfer – this measures how well oxygen can transfer from your lungs into the blood stream and involves a breath-hold
- Lung volumes – this involves gentle breathing while seated in a clear box that looks like a telephone booth. Changes in pressure allow us to measure your total lung capacity
- Fraction of exhaled Nitric oxide – a long slow blow to measure if you have inflammation of the airways

Preparing for your visit

Please contact us if you have had any of the following prior to your appointment as we may need to reschedule your test:

- Heart attack/myocardial infarction (within 1 week)
- Unstable Angina (within 48 hours)
- Eye surgery (within 2 weeks)
- Current or recent chest infection (within 2 weeks)
- Abdominal or thoracic surgery (within 4 weeks)
- Pulmonary Emboli (within 6 weeks, must be on treatment)
- Recent Stroke or TIA (within 6 weeks, must be on treatment)
- Thoracic, Abdominal (>6cm) or cerebral aneurisms (any size)
- Active infectious disease i.e. TB, Covid
- Please continue to take all medication as usual, including any inhalers or nebuliser therapy
- You may eat and drink prior to the test, but please avoid a large meal
- Please avoid the following:
 - Tight fitting clothing that restricts your ability to breathe freely
 - Alcohol for 4 hours prior to your test

How long will the tests take?

Tests usually take between 30-60minutes.

What will happen during your visit?

- Once in the test room, we will take your height and weight
- You will then take a seat and each test will be explained before you attempt it
- When performing each test, you will need to breathe in and out of a machine through a mouthpiece, with a nose-clip on
- We will ask you to perform each test several times to obtain the best possible results
- Your consultant may have requested that we give you a drug known as bronchodilator (usually Salbutamol) as part of the test. Occasionally people will experience mild side effects such as mild tremor and an increased heart beat following this. These symptoms usually pass quickly.

What are the potential risks of these tests?

The tests are very safe, but please inform us if you have had any recent surgery or illness. Following each test you may feel a little breathless or light headed, however, you will be given a chance to recover following each effort.

What will happen after the test?

After the test you can immediately continue with your day to day activities.

The results will be reviewed by the requesting Hospital Consultant.

Any further questions?

If you have any further questions about the tests please contact the Respiratory Physiology Secretary on **01392 402528**.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by Royal Devon staff undertaking procedures at the Royal Devon hospitals.

© Royal Devon University Healthcare NHS Foundation Trust

Designed by Graphics (Print & Design), RD&E (Heavitree)