

Home recording of spirometry tests for interstitial lung disease

Respiratory Medicine

Produced: May 2021

Information for Patients

Review: May 2024

Leaflet number: 185 Version: 1

Name: _____

Hospital Number: (Label) _____

S Number: _____

NHS Number: _____

Start date: _____ End date: _____

Baseline spirometry if known: _____

Forced vital capacity (FVC) % predicted: _____

What is a spirometry test?

Spirometry is a simple test used to help diagnose and monitor certain lung conditions by measuring how much air you can breathe out in a forced breath.

It's carried out using a device called a spirometer, which is a small machine with a mouthpiece.

You can perform spirometry tests in your own home to monitor your lung condition, and the hospital can see the results if the equipment is set up correctly.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

Why do I need to do spirometry at home?

You have a diagnosis of interstitial lung disease (ILD) and have agreed to monitor and record your spirometry test results at home with the support of the ILD Team.

We will advise you on how to set up and use the equipment, and how to record your results.

You should do a spirometry test every month. If you feel your symptoms are suddenly worse please discuss with the team before doing a test.

You will need to agree to return the equipment when your trial finishes or when asked to do so.

You will be contacted by telephone by a healthcare professional within 1 week of receiving the equipment. We will ask you how you are getting on with your home spirometer and how you are feeling including your symptoms of cough, breathlessness and tiredness (fatigue). You can write down any questions you have in preparation for the call and the nurse will try to help you.

What do I need to do before taking a test?

Avoid activities which might affect your normal lung function. To make sure the results are accurate you must follow the instructions below in the hours leading up to the test:

- Do not smoke for 24 hours before the test.
- Do not drink alcohol for 4 hours before the test.
- Do not do any physical exercise for 30 minutes before the test.
- Do not eat a heavy meal in the 2 hours before the test.
- Wear comfortable clothing that allows you to breath easily.

Performing the spirometry test at home

- Download the App (type 'patient Mpower' into Google Play Store or the Apple Store)
- For a reminder of how to do a spirometry test watch the video on the Mpower app before you start, or read the patient guide booklet.
- Take 2 or 3 normal breaths.
- Sit down preferably in a chair with arms.
- Set up the spirometer equipment (the patient guide booklet will tell you how to do this).
- Turn on the spirometer and access the app on your phone or ipad.
- Take the biggest breath in that you can.
- Place the spirometer in your mouth and wrap your lips tightly around the mouthpiece, keeping your head up straight, and breathe out as hard and as fast as you can.
- Keep blowing until you feel your lungs are empty (at least for 6 seconds).
- You will see the windmill turning on the app, as you blow.

- Rest and then repeat 2 more times.
- Take your time.
- The hospital automatically sees your results through a connected portal.

Do not do a spirometry test if you have recent or current:

- chest pain caused by reduced blood flow to the heart muscles (angina).
- heart problems.
- concussion.
- uncontrolled high or low blood pressure.
- high blood pressure that affects the arteries in your lungs (pulmonary hypertension).
- a blocked blood vessel in your lungs (pulmonary embolism).
- a collapsed lung (pneumothorax).
- recent surgery on the brain, middle ear, sinuses, eyes, chest or abdomen
- overdue (late term) pregnancy.
- weakening of an artery/ blood vessel wall that creates a bulge (aneurysm).

What should I do if I feel unwell?

Contact the ILD team on the number below if you have a problem carrying out your normal activities:

- You start feeling more unwell or more breathless after undertaking a spirometry test and this does not pass after 1 hour.
- You are having more difficulty breathing when getting up to go to the toilet or similar.
- You have general weakness, extreme tiredness, loss of appetite, or are peeing less.
- You are unable to do simple tasks and care for yourself, like taking a bath/shower, getting dressed or cooking.

Contact details

If you have any questions or concerns please contact the interstitial lung disease (ILD) team Monday to Friday (8am to 4pm):

Telephone: 0116 258 3949 / 0116 250 2844

Email: uhl.ild@nhs.net

