

Spirometry Testing (BaseLine | Reversibility)

What is spirometry testing?

Spirometry is a breathing test that can help to diagnose and monitor lung conditions such as asthma and chronic obstructive pulmonary disease (COPD). The test is carried out using a machine called a spirometer which measures how well your lungs work.

Reversibility testing involves performing spirometry before and after you have taken medication and is sometimes done to investigate a diagnosis of asthma, or when diagnosis is not clear.

What are the benefits of the test?

The benefit of the test is that it can help to diagnose or monitor your lung condition so that you can be given the right treatment. It also helps us to see whether your lung function improves with medication or not.

What are the risks of the test?

Occasionally people feel dizzy during the test or faint; if you feel dizzy or faint please stop and tell the person doing the test.

In addition to this, blowing out hard can increase the pressure in your chest, abdomen (tummy), eyes and ears which could cause complications so you may be advised not to have spirometry if you have recently had any of the following:

- Unstable angina
- Heart attack
- Stroke
- Uncontrolled high blood pressure
- Blood clot in your lung
- Pneumothorax (burst lung)
- Aneurysm
- Surgery to the chest or abdomen
- Eye surgery
- A burst ear drum
- Coughing up any blood of unknown cause

If you have any questions or concerns about any of these, please contact the Community Respiratory Service or your doctor.

What are the risks of not having the test?

If you don't have this test we won't know how well your lungs are working so you may not get an accurate diagnosis or the most appropriate treatment for your condition.

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Preparing for the test

Please stop taking the following medication for the following time periods before your test unless you need to use them because your symptoms are worsening:

Medication Type	Drug Name	Brand Name
For 4-8 hours before		
Inhaler or nebuliser	Salbutamol	Ventolin, Salamol, Asamol clickhaler, Salbumin, Airomir, Combivent
Inhaler	Terbutaline	Bricanyl
For 6 hours before		
Inhaler or nebuliser	Ipratropium bromide	Atrovent
For 24 hours before		
Inhaler	Salmeterol	Seretide, serevent
Inhaler	Fometerol	Symbicort, Oxis, Fostair, Foradil, Atimos Modulite
Tablet	Theophylline	Slo-phylline, Uniphylline Continus, Nuelin SA
Tablet	Aminophylline	Phyllocontin continus
Tablet or syrup	Salbutamol	Ventolin, ventmax
For 24-36 hours		
Inhaler	Tiotropium	Spiriva

- ✗ Refrain from smoking 24 hours before the test
- ✗ Avoid eating a large meal for 2 hours before the test
- ✗ Avoid vigorous exercise for 30 minutes before the test
- ✗ Avoid alcohol on the day before the test
- ✓ Bring your inhalers (plus anspacer device)
- ✓ Wear loose fitting clothing

During the test

The appointment will take up to 40mins. We will measure your height and weight and ask your ethnicity as these details need to be recorded in the spirometer to generate results.

This is what happens next:

1. You will be asked to take a deep breath in and then seal your lips around the spirometer mouthpiece.
2. You will be asked pinch your nose and to blow out slowly as far as you can; this may take several seconds.
3. This will be repeated a few times so we can check the readings are the same each time.
4. You will then be asked to take a deep breath in, seal your lips around the spirometer mouthpiece and breathe out as fast and hard as you can until it feels like your lungs are empty; this may take several seconds.
5. You will be asked to repeat this a few times so we can check the readings are the same each time.
6. We may ask you to use your Salbutamol inhaler via the Chamber and wait 15 minutes before repeating the test from step 1.

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After the test

You can go home and return to your normal activities after the test. Some people find it hard work to do the test, so you may feel tired.

Results

The results of the spirometry will be discussed with you during your consultation. If you need to see another clinician in the surgery or be referred to the hospital you will be informed by the appropriate person

*Based on Patient Information Leaflet from Sandwell and West Birmingham Hospital Leaflet