What is spirometry testing?

Spirometry is used to tell if breathing is obstructed by narrowed or inflamed airways. The results are useful in diagnosing lung conditions such as chronic obstructive pulmonary disease (COPD) and asthma. It can also be used to grade the severity of conditions. Spirometry measures the total amount of air you can breathe out from your lungs and how fast you can blow it out. It can help to assess if inhaled medication can open up your airways by reversibility testing. This is when your health care professional asks you to use your inhaler or other medication, wait some minutes, and then repeat the test.

A spirometry test usually takes less than 10 minutes but will last about 30 minutes if it includes reversibility testing.

Preparing for your test

Please wear fairly loose-fitting clothing. Stop smoking for 24 hours before the test (if you smoke, this can alter the results of some tests)

- Do not eat a large meal 2 hours before the test
- Avoid drinking alcohol and caffeinated drinks (like coffee, tea, cola or energy drinks) for 2 hours before
- Please do not take your medication for some hours before to bring along your medication, such as inhalers - please see back page for details.

If you've had a chest infection or a flare-up of symptoms and taken drugs such as steroids or antibiotics to treat it, this may affect your test results. If your test appointment is within 4–6 weeks of this, check with your health care professional about going ahead. Remember to tell whoever does your test about your recent chest infection and the drugs used to treat it.

However if whilst waiting for your appointment for spirometry you have another chest infection or need a further course of steroids, please rebook at least 4-6 weeks after you are well again.

What happens during the test?

You will be asked some questions before you start to check that there is no medical reason why you should not do the test.

It is important to put as much effort into the test as you can so the results are accurate.

You may have a clip put on your nose to make sure all the air goes into the mouthpiece. You will be shown how to blow into the spirometer before starting.

You may be asked to blow three or more times into the spirometer to check the readings are similar each time.

Normally, you will be first asked to breathe in deeply and out gently.

Once your health care professional is happy with the results you will move on to the next part of the test. You will have to breathe in again deeply, this time quite fast, and then breathe out as fast and as hard as you can until your lungs are empty.

Your health care professional may ask you to use your inhaler or other medication, wait 15–20 minutes and then repeat the test. For some drugs the wait may be longer between tests.

This is called a reversibility test to see if the medication improves your breathing. If you use inhalers, you should bring them to your appointment.
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:

**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 Formoterol Symbicort, Oxis, Fostair, Foradil,
- Atimos Modulite
- Tablet Theophylline Slo-phylline, Uniphylline Continus,
- Nuelin SA
- Tablet Aminophylline Phyllocontin continu
- Tablet or syrup Salbutamol Ventolin, ventmax

**For 24-36 hours**
- Inhaler Tiotropium Spiriva

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