

Impulse oscillometry

Patient information sheet

What is Impulse oscillometry?

Impulse oscillometry (IOS), is a simple, non-invasive test to look at how easily air can pass in and out of your airways. The test uses gentle pressure waves, generated by a loudspeaker, that are sent down into the airways.

We can detect changes in these waves, as your airways reflect them back. This allows us to measure resistance to airflow.

What does the test involve?

When you attend for the IOS test, you will be asked to sit at the equipment and breathe normally and relaxed through a mouthpiece. A nose peg will be used, so that the air only comes in and out through your mouth.

The mouthpiece is attached to the loudspeaker, which will pass the gentle pressure waves into your airways.

At the same time, your physiologist will hold your cheeks flat with their hands.

All you are required to do is to breathe normally for around 30 seconds.

The test is repeated a minimum of three times, to ensure the results are accurate.

Who needs the test?

Sometimes, patients can struggle performing standard breathing tests, such as spirometry. Other patients may have a medical problem that means we cannot perform certain manoeuvres. In these cases, we may not be able to report accurate results, but your doctor still needs to know how

healthy your lungs are. We can offer IOS as an alternative way to help monitor your lung disease.

IOS can also be more sensitive in finding small airway change in some lung conditions.

How long will the test take?

The test should only take around ten minutes.

What do I need to bring with me?

You do not need to bring anything with you; however, a list of your medications may be useful for reporting the test.

What symptoms might I get during the test?

The pressure waves that pass into your airways can feel a little strange. You will hear vibrations from the loudspeaker, and feel them in your chest, but they cause no harm.

Some people report feeling slight chest tightness during the test. If it happens, this should normally ease within two minutes of rest.

There are no adverse effects associated with the IOS test.

How do I find out my results?

The results are analysed and reported, and a copy is sent to your hospital records immediately.

Your referring doctor will discuss the results with you at your next consultation.

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Large print copies and alternative language versions of this leaflet can be made available on request.

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Further information

If you have any further questions before or after your IOS test, please contact the department below:

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