### What's Being Measured?



Lung (Pulmonary) Function Testing refers to a variety of non-invasive tests that are used to measure lung capacity, efficiency and inflammation.

Different tests determine how much air your lungs can hold, how quickly you can move air in and out of the lungs, how well your lungs can supply oxygen into your bloodstream and can analyse the air you exhale.

They help your doctor diagnose, track and treat respiratory disease.



# Lung Function Testing

# The Woolcock Institute of Medical Research is a not-for-profit organisation

If you are interested in further information about becoming involved in our research studies or making a donation, please visit our website www.woolcock.org.au.

Your contribution will make a difference.

Thank you for your support.

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#### WHY ARE LUNG FUNCTION TESTS PERFORMED?

Lung (pulmonary) function tests help your doctor assess your breathing. There are used to:

- Determine the cause of breathing problems
- Diagnose certain lung diseases such as asthma or Chronic Obstructive Pulmonary Disease (COPD)
- Evaluate lung function before surgery
- Monitor the lung function of a person regularly exposed to potentially harmful substances such as asbestos which can damage the lungs
- Monitor the effectiveness of current treatment for lung disease

#### WHAT TESTS DOES THE WOOLCOCK OFFER?

The Woolcock Clinic's Lung Function Lab has a range of equipment to measure your lung and small airway function.

Spirometry, which is used to measure how effectively your lungs can be emptied, is the most commonly performed test. Airwave oscillometry determines whether your lungs or airways are blocked in any way by directing gentle pulses of air into the mouth.

Our FENO analyzer allows us to non-invasively determine how inflamed the lungs are by measuring exhaled nitrous oxide.

The lab is also equipped with a state-of-the-art Body Box which precisely measures how much air you can hold in your lungs and how efficiently you breathe.

#### **HOW ARE THE TESTS PERFORMED?**

The tests are performed on a variety of equipment, all of which require you to breathe into a mouthpiece. They are conducted by a specially trained respiratory physiologist.

For most tests, you will be instructed to apply a nose

clip to make sure you only breathe through your mouth. The speed and capacity of your breathing can be measured and your exhaled breath analysed.

For some of the test measurements, you can breathe normally and quietly. Other tests require forced inhalation or exhalation. The exact procedure is different for each type of test and the accuracy of the tests depends on your ability to follow all of the instructions given to you.

#### **HOW WILL THE TESTS FEEL?**

During your lung function testing, you will breathe through a mouthpiece while wearing nose clips.

Since the test involves some forced breathing and rapid breathing, you may have some temporary shortness of breath or light-headedness.



#### **HOW SHOULD I PREPARE FOR THE TESTS?**

- Do not eat a heavy meal before the tests
- Do not smoke for 4-6 hours before the tests
- You will be given specific instructions if you need to stop using bronchodilators or inhaler medications before your tests
- Your cooperation while performing the tests is crucial

#### WHEN WILL I GET MY RESULTS?

A GP referral is required for testing. Your results are reported by our respiratory physicians, sent back to your GP and can be expected in one week. Your GP will then be able to discuss the results and, if needed, your treatment plan at your next appointment.

If you would like further information or to make a booking for lung function testing at the Woolcock Clinic, please contact us.

## SEVEN SIMPLE QUESTIONS FOR ASSESSING WHETHER YOU SHOULD GET TESTED

- 1 Do you become short of breath when walking up inclines or climbing stairs?
- 2 Do you have a persistent cough?
- 3 Do you wheeze when you breathe?
- 4 Does you chest get tight?
- 5 Have you ever been a smoker?
- 6 Have you ever worked in a dusty occupation?
- 7 Are you finding your breathing medication ineffective?

Answering YES to any of these questions indicates you may benefit from lung function testing to determine the cause of your breathing problems and the best treatment for you.

To find out more, go to www.woolcock.org.au/clinic.