

Having a cardiopulmonary exercise test

Respiratory Physiology Department

Information for Patients

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Introduction

This leaflet explains what will happen when you go for your cardiopulmonary exercise (CPX) test. This is a medical test which will accurately measure the function of your heart and lungs in response to exercise. You may need to have this test for one of the reasons below:

- To help your doctor understand why you may be having certain symptoms such as shortness of breath.
- To assess your fitness before certain types of surgery. This will enable us to plan the level of care that you will need after an operation.

If you are unwell before your appointment or you are scheduled for any operation in the 7 days before your test, please contact the Respiratory Physiology Unit on 0116 258 3420 as we may need to defer your appointment.

What will happen during the CPX test?

Your test will take place in the **Respiratory Physiology Unit**, Ground floor, South Entrance, Glenfield Hospital.

You will be asked to exercise on a bike to a set pattern whilst wearing a mask. The test will involve a gradual increase in the intensity of exercise to make your heart and lungs work hard. We will measure and record your breathing, your heart's rhythm (electrocardiogram (ECG)), blood pressure and oxygen levels. The more you are able to do, the more information we will have. However, the test may be stopped if you get too tired, or we decide to stop the test.

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How fit do I need to be to perform the test?

Many patients worry that because they do not take part in regular exercise that they may not be able to do the test. The test is as applicable to patients who are elderly or unfit as it is for athletes. We will adjust the difficulty of your test to your estimated ability.

It is important that you try as hard as you can during the test. At the end of the test you will be working hard and will feel out of breath. It will use muscles you may not have exercised for some time and so may make you feel tired later on. You may also experience sore muscles or joints the next day. This is normal.

Some patients may not be able to complete the test if they cannot pedal the bike because of problems in their hips or knees.

How long will the appointment take?

The whole appointment will take up to 1 hour. This will include time talking to you, signing a consent form if needed, examining you, having the lung function and exercise tests, plus recovery time.

What do I need to wear for the test?

You should wear cool, comfortable clothing and trainers or walking shoes. Clothing that is suitable for the gym is ideal.

Can I eat before the test?

Yes. However, we advise you not to have a large meal immediately before your test. It is best to have a light meal a few hours before. You should avoid caffeine (coffee, tea, energy drinks and cola) and alcohol. If you are diabetic, we advise you to bring snacks to have after the test.

Should I take my usual medications before the test?

Yes. Please continue all your usual medication, unless we specifically ask you not to.

Smoking

For patients who are smokers, we ask that you do not smoke for at least 8 hours before your test. Smoking before your test may cause you to have a falsely poor result.

What are the risks of this test?

As with all medical tests, there is a possibility of unwanted side effects or complications. The risks of these with CPX are the same as for mild exercise. The number of patients that develop problems during the test is low (1 in 1000).

The complications that may happen during the test can include abnormal blood pressure, fainting and irregular, fast or slow heart rhythm.

You will be closely monitored throughout the test, with continuous heart tracing (ECG), blood pressure and oxygen measurements. It is important however that you let us know if you have any pain in your chest or feel unwell in any way. We will stop the test if you develop any significant symptoms.

What are the benefits of this test for me?

A CPX test puts stress on your heart and lungs in a systematic, controlled way. Depending on the reason why you are having this test, analysis of data from the test can help with the following:

- The data can give us a measure of how fit you are and help your doctor identify what may be causing your symptoms.
- If you are due for surgery, the test will be similar to the extra work your body will need to do when having and recovering from surgery. The data gives us a way of deciding what level of care you are likely to need after your operation. If the test shows that you are very unfit, it will allow us to refer you to the appropriate specialists for further treatment of the medical condition. Or it may allow us to offer you alternative treatments.

When will I be told the results of my CPX test?

The results of the test will be sent to your consultant. If you are due for surgery, the results will be sent to your surgical consultant and your anaesthetist. They will be able to talk to you about the results. However, if you need more information you can contact the Respiratory Physiology Unit on 0116 258 3420.

Your results are confidential. They will only be seen by people who are directly involved in your care. Information about your tests will be used to monitor the quality of the service and report to our commissioners, but your personal information will be removed first (anonymised). We will ask for your permission before using any personally identifiable data from your test for analysis or research.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
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