

Cardiopulmonary Exercise Stress Testing

The Cardiopulmonary Exercise Stress test looks at your heart, lungs and muscle response to exercise. It provides important information about what limits your ability to exercise including:

This test looks at your heart, lungs and muscle response to exercise.

- How you compare to other people of your same age and gender
- If you are efficient in your exercise
- If your heart and lungs respond normally to exercise

With this data, your doctor may be better able to diagnose and treat your symptoms. As needed, it can also assist in setting exercise guidelines.

Before the Test

On the day of the test, plan to arrive 15 minutes before your test time. Take all of your medicines unless told otherwise. If you wear glasses, hearing aids or dentures, please have them for the test. Eat a light meal no later than 2 hours prior to your test. Drink no coffee, tea or caffeinated beverages on the day of your test. Also, be sure to bring:

- Your doctor's written order for the test
- A list of all your current medications (prescription and over-the-counter)
- Medical insurance information
- Medicare card (Medicare patients only)

Please wear (or bring with you) comfortable clothing and shoes for walking on the treadmill. Patient lockers and showers are available for your use.

Please come to the Galter Pavilion, 201 E. Huron St. Check in at the reception desk on the 8th Floor. Parking is available for patients and visitors in the garage at 222 E. Huron, across from the Feinberg and Galter Pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter Pavilions; 1st floor of Prentice (including the Prentice 24-hour desk near the Superior St. entrance).

During the Test

The test is divided into 2 parts. You will first have pulmonary function testing (PFT) done.

This is a group of tests that checks lung function, such as:

- How easily the air moves in and out of your lungs
- The amount of air your lungs can hold
- How much oxygen your lungs send to the heart

These tests will last about 30 to 60 minutes.

Once the PFT is done, the exercise portion of the test will begin. This portion of the test will take 45 to 60 minutes. An electrocardiogram (ECG) will be used to monitor your heart rate and rhythm. You will be asked to undress from the waist up and wear either a hospital gown or your own T-shirt. This allows for electrodes to be placed on your chest. The electrode placement areas may be shaved if needed. These 10 areas on your chest are rubbed with a soft pumice gel and then cleaned with rubbing alcohol to remove normal skin oils and dirt. This procedure is not painful, but may cause some skin redness that goes away within a few hours after the test. Once the electrodes are in place, monitor wires are attached to each electrode. These wires are connected to a box worn on a belt around your waist.

You also will be asked to breathe into a plastic mouthpiece. It is used to collect the air that you exhale to check lung function during exercise. A small clip is placed on your finger or ear to measure the blood oxygen level.

If blood tests are needed, samples are drawn from the artery near your wrist. A small, flexible catheter (tube) may be inserted into the artery and left in place during the stress test.

Exercise begins slowly, at a low level, and will increase to higher levels of exertion. During the test, your blood pressure, heart rate and ECG will be closely monitored.

After the Test

You are free to leave as soon as the test is finished. There are no diet or activity restrictions. The test results will then be sent to your doctor.

When to Seek Medical Attention

If blood samples were taken from your artery, and any bleeding is noted at the puncture site, apply firm pressure right away. Go to the nearest hospital Emergency Room if you note any of the following in the affected arm:

- Prolonged bleeding after pressure has been applied
- Swelling or change in color
- Pain, numbness or tingling

If you have questions about this test, please call the Cardiopulmonary clinical nurse specialist at 312-926-1583.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

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Developed by: Cardiopulmonary/Nuclear Cardiology

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1100-07
900814 (02/08)