

Exercise Stress Testing

Exercise stress testing is a test of your heart rhythm and stamina while you exercise. The exercise may be running on a treadmill at standard speeds and ramps or riding a stationary bike at a steadily increasing resistance. During exercise you are connected to ECG leads and the heart rhythm is continuously recorded. In some centers you may be asked to breathe into a tube so the amount of oxygen used can be measured. This gives information about how well the heart works.

The stress test gives information about the effect on exercise on your blood pressure, heart rate, heart muscle and heart rhythm. If you have symptoms during exercise, this test will help to recreate them to see whether they are caused by the heart.

The test takes about 10–15 minutes to set up, 10–15 minutes to do and an additional 10–15 minutes of observation afterward. If you're scheduled for the test, you should bring gym clothes and sneakers appropriate for jogging.

As your body works harder during the test, it requires more oxygen, so the heart must pump more blood. The test can show if the blood supply is reduced in the arteries that supply the heart. It also helps doctors know the kind and level of exercise appropriate for a patient.

A person taking the test

- is hooked up to equipment to monitor the heart.
- walks slowly in place on a treadmill. Then the speed is increased for a faster pace and the treadmill is tilted to produce the effect of going up a small hill.
- may be asked to breathe into a tube for a couple of minutes.
- can stop the test at any time if needed.
- afterwards will sit or lie down to have their heart and blood pressure checked.

Heart rate, breathing, blood pressure, electrocardiogram (ECG or EKG), and how tired you feel are monitored during the test.

Healthy people who take the test are at very little risk. It's about the same as if they walk fast or jog up a big hill. Medical professionals should be present in case something unusual happens during the test.

A physician may recommend an exercise stress test to:

- Diagnose coronary artery disease

- Diagnose a possible heart-related cause of symptoms such as chest pain, shortness of breath or lightheadedness
- Determine a safe level of exercise
- Check the effectiveness of procedures done to improve coronary artery circulation in patients with coronary artery disease
- Predict risk of dangerous heart-related conditions such as a heart attack.

Depending on the results of the exercise stress test, the physician may recommend more tests such as a nuclear stress test or cardiac catheterization.