

# Why Stress Testing?

A stress test can be used to test for heart disease. Stress tests are tests performed by a doctor and/or trained technician to determine the amount of stress that your heart can manage before developing either an abnormal rhythm or evidence of ischemia (*not enough blood flow to the heart muscle*). The most commonly performed stress test is the exercise stress test.

## What Is an Exercise Stress Test?

The exercise stress test -- also called a stress test, exercise electrocardiogram, treadmill test, graded exercise test, or stress ECG -- is used to provide information about how the heart responds to exertion. It usually involves walking on a treadmill or pedaling a stationary bike at increasing levels of difficulty, while your electrocardiogram heart rate, and blood pressure are monitored.

## Why Do I Need a Stress Test?

Your doctor uses the stress test to:

- Determine if there is adequate blood flow to your heart during increasing levels of activity
- Evaluate the effectiveness of your heart medications to control angina and ischemia
- Determine the likelihood of having coronary heart disease and the need for further evaluation
- Check the effectiveness of procedures done to improve blood flow within the heart vessels in people with coronary heart disease
- Identify abnormal heart rhythms
- Help you develop a safe exercise program



## What Are the Types of Stress Tests?

There are many different types of stress tests, including:

- **Treadmill Stress Test:** As long as you can walk and have a normal ECG, this is normally the first stress test performed. You walk on a treadmill while being monitored to see how far you walk and if you develop chest pain or changes in your ECG that suggest that your heart is not getting enough blood.
- **Dobutamine or Adenosine Stress Test:** This test is used for people who are unable to exercise. A drug is given to make the heart respond as if the person were exercising. This way the doctor can still determine how the heart responds to stress, but no exercise is required.
- **Stress Echocardiogram:** An echocardiogram (often called "echo") is a graphic outline of the heart's movement. A stress echo can accurately visualize the motion of the heart's walls and pumping action when the heart is stressed; it may reveal a lack of blood flow that isn't always apparent on other heart tests.
- **Nuclear Stress Test:** This test helps to determine which parts of the heart are healthy and function normally and which are not. A small amount of radioactive substance is injected into the patient. Then the doctor uses a special camera to identify the rays emitted from the substance within the body; this produces clear pictures of the heart tissue on a monitor. These pictures are done both at rest and after exercise. Using this technique, areas of the heart that have a decreased blood supply can be detected.

Preparation for these types of stress tests will vary from preparation for the exercise stress test. Ask your doctor about any specific instructions. Although the appointment lasts about 60 minutes, the actual exercise time is usually between seven and 12 minutes.

**Ask your doctor if you have any questions about the exercise stress test.**