

Electrocardiogram (EKG)

One of the most common cardiac evaluation tools is an electrocardiogram, which is a simple, painless test that records the heart's electrical activity. An electrocardiogram is called an EKG or ECG or sometimes a 12-lead EKG or 12-lead ECG because the electrical activity of the heart is most often recorded from 12 different places on the body at the same time.

To understand this test, it helps to understand how the heart works. With each heartbeat, an electrical signal spreads from the top of the heart to the bottom. As it travels, the signal causes the heart to contract and pump blood. The process repeats with each new heartbeat. The heart's electrical signals set the rhythm of the heartbeat.

An EKG shows how fast your heart is beating, whether the rhythm of your heartbeat is steady or irregular, and the strength and timing of electrical signals as they pass through each part of your heart. This test is used to detect and evaluate many heart problems, such as heart attack, arrhythmia, and heart failure. EKG results also can suggest other disorders that affect heart function.

Your doctor may recommend an electrocardiogram (EKG) if you have signs or symptoms that suggest a heart problem. Examples of such signs and symptoms include:

- Chest pain
- Heart pounding, racing, or fluttering, or the sense that your heart is beating unevenly
- Problems breathing
- Feeling tired and weak
- Unusual heart sounds when your doctor listens to your heartbeat

You may have an EKG so your doctor can check how well heart medicine or a medical device, such as a pacemaker, is working. The test also may be used for routine screening before major surgery.

How to prepare for an electrocardiogram

No special preparation is needed for an electrocardiogram (EKG). Before the test, let your doctor know what medicines you're taking. Some medicines can affect EKG results

