

Illinois Heart & Lung Associates - Patient Services

Electrocardiogram (ECG or EKG)

What is an electrocardiogram (ECG or EKG)?

An electrocardiogram (ECG or EKG) is a recording of the electrical activity of the heart. Each heartbeat is caused by an electrical impulse that causes the heart to squeeze. The ECG records the electrical pattern of the heartbeat. Many different diseases, conditions, and/or medications may affect the ECG pattern. Your doctor can make a diagnosis by interpreting those patterns.



What is an ECG used for?

The ECG is used to record heart rhythms. It can diagnose abnormal heartbeats and rhythms. It can show also thickening of the heart muscle due to high blood pressure or other diseases. It is particularly helpful for diagnosing an acute heart attack and shows the effects of old heart attacks as well. It can show whether a part of the heart is not getting enough blood and hint at chemical imbalances in the body.

How is an ECG done?

An ECG can be done in a clinic, doctor's office, or hospital. It is a painless procedure that takes less than 5 minutes. Small, sticky electrode patches are placed on your chest, wrists, and ankles. A special machine that records the electrical activity of your heart is connected to the patches by multiple wires. A recording is made and printed on paper for your doctor to interpret.

What are the benefits of an ECG?

The ECG is a simple, inexpensive, easily performed test that gives a lot of information to your doctor about how well your heart is working. It can speed up the diagnosis of a heart attack so treatment can be started quickly. In critical care units, the ECG is recorded continuously and displayed on a monitor so that the medical team can quickly spot any change in your heart function.

Are there any risks to an ECG?

Some people's skin reacts to the electrode patches, but any skin irritation quickly disappears when the patches are removed.