# THE HEART OF THE MATTER: PEDIATRIC ECG TESTING

### WHAT IS AN ECG?

Electrical stimulation causes your heart to beat. This "electricity" can be measured by a test called an electrocardiogram (ECG, also known as an EKG). Let's break it down:

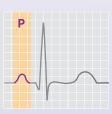


#### **HOW DOES AN ECG WORK?**

Typically, the heart is made up of two top chambers (atria) and two bottom chambers (ventricles). As the atria or ventricles beat, they generate a different shape on the graph.



When the top chambers contract, it generates the first part of the ECG called the P wave.









When the lower chambers relax, they generate the third part of the ECG called the T wave.



## WHAT DOES IT MEASURE?

By capturing these measurements, an ECG shows the cardiologist your heart's:



## WHAT ARE THEY LOOKING FOR?

Some medical conditions in infants and children may cause changes in the ECG pattern and can signal a heart problem.

ECG test showed:	This may mean:
Too fast, too slow or irregular heartbeat	Arrhythmia
Heart muscle that's too thick or parts of the heart that are too big	Heart enlargement
Lack of blood flow to the heart muscle	Coronary artery disease

To learn more about these conditions and to get a heart consultation, visit:

Pericarditis

Luriechildrens.org/ECG

Inflammation of the sac that surrounds

the heart

Ann & Robert H. Lurie Children's Hospital of Chicago