

Title: What is Bundle Branch Block?

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Date: 1/10/2008

Key words: bundle branch block

Abstract:

This Patient Education Tool defines bundle branch block for patients and their families.

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# What happens if my doctor finds bundle branch block on my ECG?

If your ECG shows bundle branch block, your doctor may want to do further testing. Your doctor may order an ultrasound, called an echocardiogram, of your heart. The echocardiogram is essentially a picture of your heart that evaluates its structure and function.

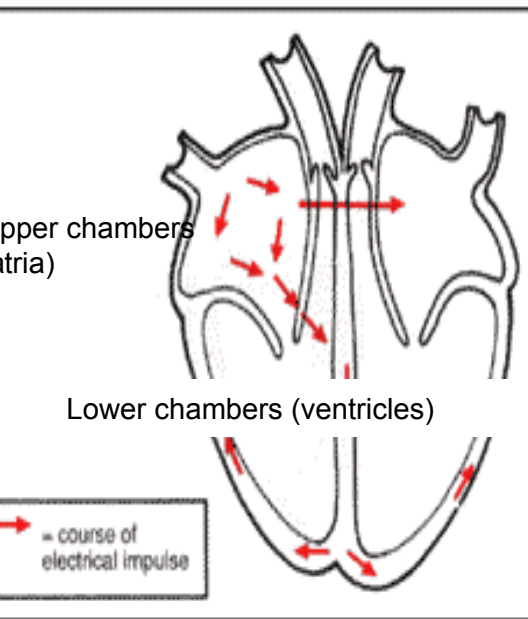
For more information please visit the American Heart Association Website:  
<http://www.americanheart.org>

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## What is Bundle Branch Block?

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**Anatomy:** The heart has 2 upper chambers (the atria) and 2 lower chambers (the ventricles).



**Function:** The primary function of the heart is to supply blood and nutrients to the body. Each contraction or beat the heart pumps blood throughout the body.

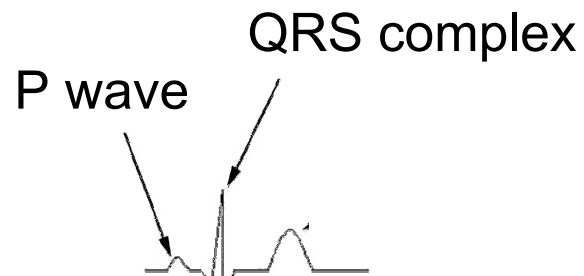
**Physiology:** The heart is a specialized muscle that contracts (beats) when stimulated by electrical activity.

## The heart's normal pacemaker:

The normal pacemaker of the heart is a specialized group of cells in the right atrium (one of the upper chambers). This pacemaker sends out an electrical impulse that travels through the heart along a preset track. The impulse travels first through both upper chambers, and then after a brief delay, along left and right tracks (bundles) in the lower heart chambers. The impulse path is shown by the red arrows in the picture to the left.

**ECG:** The ECG is a recording of the impulses traveling within the heart.

The first deflection on the ECG is the P wave caused by the impulse traveling through the upper chambers. The next deflection is the QRS complex caused by the impulse traveling through the lower chambers.



## What is Bundle Branch Block?

Normally, the electrical impulse travels along the right and left bundles in the lower chambers of the heart simultaneously. In bundle branch block, one of the bundles is disrupted. Because of the block, the impulse travels through the nondisrupted bundle first and then slowly to the remainder of the heart. When this happens, the ECG looks different.

In Left BBB, the impulse travels through the right bundle first and then spreads to the left side of the heart.

LBBB



In right BBB, the impulse travels through the left bundle first and then spreads to the right side of the heart.

RBBB

