

# **Bradycardia (Slow Heartbeat)**

## **What is bradycardia?**

Bradycardia is a slow heart rate that stays below 60 beats per minute. The normal adult heart rate ranges from about 60 to 100 beats per minute.

## **What is the cause?**

An electrical signal in your heart starts each heartbeat, causing the heart muscle to squeeze (contract). Normally, this signal starts in the upper right chamber of the heart (the right atrium) at a place called the sinus node. The signal then follows pathways to the upper left atrium and to the lower chambers of the heart (the ventricles).

Bradycardia happens when the electrical signal slows down or is blocked. Bradycardia may happen because you:

- Have a heart disorder that has been present since birth
- Have heart tissue that has been damaged by heart disease, such as heart failure or a heart attack, or by an infection, heart surgery, or aging
- Have high blood pressure
- Have medical problems such as an underactive thyroid gland, too many or too few of the chemicals in your body that control your heart rate, obstructive sleep apnea, or a disease such as rheumatic fever or lupus
- Take certain medicines, such as medicines used to control other heart problems or high blood pressure

Slow heart rates can be normal in athletes and people who exercise regularly. Regular exercise helps the heart to pump blood efficiently, so fewer heart contractions are needed to supply the body's needs. Also, it's normal for your heart rate to be slower during sleep.

## **What are the symptoms?**

A slow heartbeat may not cause any symptoms. If it does cause symptoms, they may include:

- Fainting spells
- Dizziness
- Weakness
- Unusual lack of energy or tiredness
- Shortness of breath
- Chest pain

## **How is it diagnosed?**

Your healthcare provider will ask about your symptoms and medical history and examine you. Tests may include:

- Blood tests
- Chest X-rays
- An ECG (also called an EKG or electrocardiogram), which measures and records your heartbeat. You may have an ECG while you are resting or while you exercise on a treadmill. You may also be asked to wear a small portable ECG monitor for a few days or longer.

## **How is it treated?**

Many times, bradycardia does not cause any symptoms and does not need to be treated. When it causes symptoms, the treatment depends on the cause. For example, when bradycardia occurs as a side effect of medicine, your healthcare provider may change the dosage of medicine or prescribe a different medicine. If a thyroid problem is causing a slow heart rate, it is treated with thyroid hormones.

In some cases you may need surgery to put an artificial pacemaker under the skin of your chest. A pacemaker is a battery-powered device that helps your heart beat in a healthy rhythm.

## **How can I take care of myself?**

If you have heart disease, high blood pressure or another medical problem, follow your treatment plan. Be sure to take all medicines as prescribed by your provider.

Try to have a heart-healthy lifestyle:

- Eat a healthy diet.
- Try to keep a healthy weight. If you are overweight, lose weight.
- Stay fit with the right kind of exercise for you.
- Learn ways to manage stress.
- If you smoke, try to quit. Talk to your healthcare provider about ways to quit smoking.
- If you want to drink alcohol, ask your healthcare provider how much is safe for you to drink.
- Try to get at least 7 to 9 hours of sleep each night.

Ask your healthcare provider:

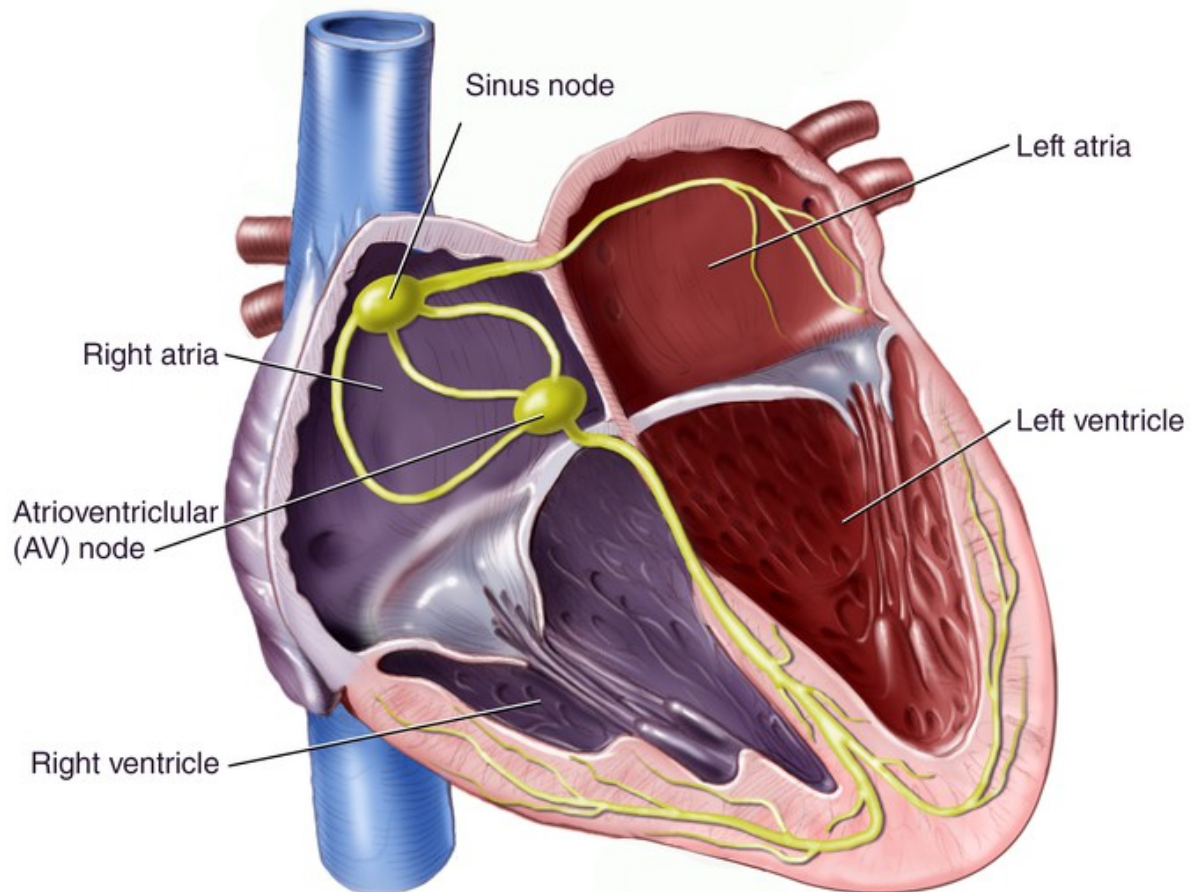
- How and when you will hear your test results
- What activities you should avoid and when you can return to your normal activities
- How to take care of yourself at home
- What symptoms or problems you should watch for and what to do if you have them

Make sure you know when you should come back for a checkup.

Developed by RelayHealth.

*This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.*

## Nodes Responsible for Cardiac Rhythm



The electrical impulse starts in the sinus node. It travels to both atria, causing them to contract, and triggers the AV node. The impulse travels from the AV node, stimulating contraction of the ventricles.

Copyright ©2014 McKesson Corporation and/or one of its subsidiaries. All rights reserved.