

BRADYCARDIA

What is bradycardia? — Bradycardia is the term doctors use for when a person's heartbeat is slower than normal.

How do normal heartbeats happen? — A normal heartbeat happens when an electrical signal starts in one spot near the top of the heart. This electrical signal follows a path to spread across the heart. As it spreads, the signal causes the heart muscle to squeeze. Each time the heart squeezes ("beats"), it pumps blood all over the body. Normally, the heart beats in a regular way 60 to 100 times a minute.

What causes the heart to beat too slowly? — The heart can beat too slowly if:

- Electrical signals don't start often enough.
- The electrical signal gets slowed down or blocked as it spreads across the heart.

Having a slow heartbeat doesn't always cause problems. Both children and adults can have bradycardia and still be healthy. For example, it is common for athletes to have a slow heartbeat. It is also common for people to have a slower heartbeat when they are sleeping.

Certain medicines, especially medicines used to treat heart problems or high blood pressure, can also cause bradycardia.

Other times, bradycardia is caused by a problem or condition, such as:

- A problem with the heart's electrical system.
- Other heart problems, including recent heart surgery or a heart attack.
- Certain infections.
- Sleep apnea – This is when people stop breathing for short amounts of time when they are asleep.
- Anorexia – This is an eating disorder that makes people lose more weight than is healthy.

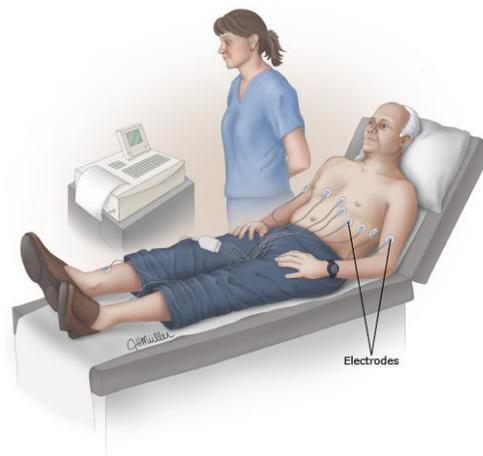
What are the symptoms of bradycardia? — Some people have no symptoms. Other people have symptoms with their bradycardia. These can include:

- Feeling light-headed or dizzy
- Fainting or feeling like you are going to faint
- Feeling tired, either all the time or only when you exercise
- Chest pain
- Trouble breathing
- Eating less than usual or acting tired (in babies)

Should I call my doctor or nurse? — Yes. If you or your child has symptoms of bradycardia, call your doctor or nurse.

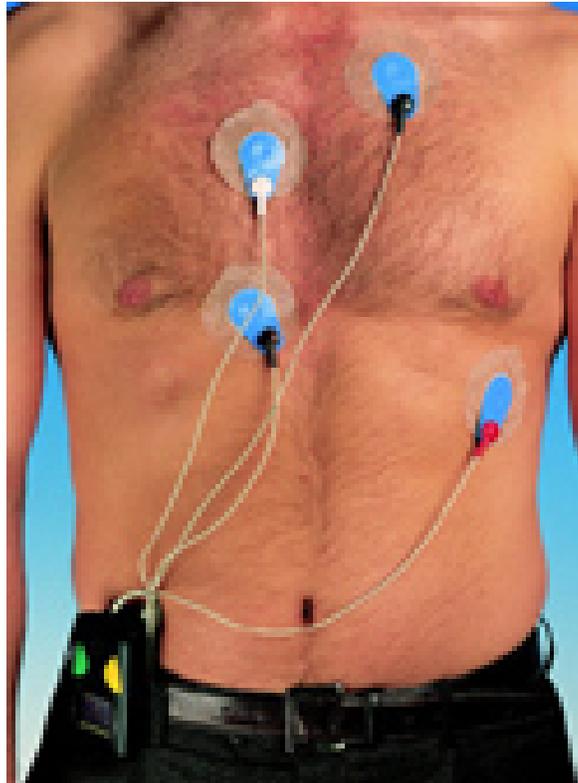
Is there a test for bradycardia? — Yes. The doctor or nurse will ask about your symptoms and do an exam. During the exam, he or she will check your pulse and listen to your heart.

To see if your heartbeat is slower than normal, he or she will do an ECG (also called an "electrocardiogram" or "EKG"). An ECG is a test that measures the electrical activity in the heart (see cartoon below).



This cartoon shows a man having an ECG (also called an electrocardiogram or EKG). He has patches, called "electrodes," stuck onto his chest, arms, and legs. Wires run from the electrodes to the ECG machine. An ECG measures the electrical activity in the heart.

Your doctor might want to record your heartbeat over the course of one or more days. If so, he or she will have you wear a heart monitor device at home (see picture below). This device will measure and record your heart's electrical activity. You should keep doing your normal activities while you wear or carry the monitor. While you wear the monitor, you should also write down any symptoms you have. That way, your doctor can see if bradycardia is causing your symptoms.



After your doctor knows for sure that you have bradycardia, he or she will do tests to look for the cause. These can include:

- Blood tests
- Tests to see how your heartbeat changes when you get certain medicines

How is bradycardia treated? — Treatment depends on your symptoms and what's causing your bradycardia.

People who have no symptoms usually do not need treatment.

People who have symptoms may need treatment. Your doctor might change or stop any medicines that could be slowing your heartbeat.

Some people with bradycardia are treated with a device called a "pacemaker." A pacemaker sits under the skin near a person's heart and sends electrical signals to the heart (see cartoon below). These signals help the heart beat at a normal rate.

