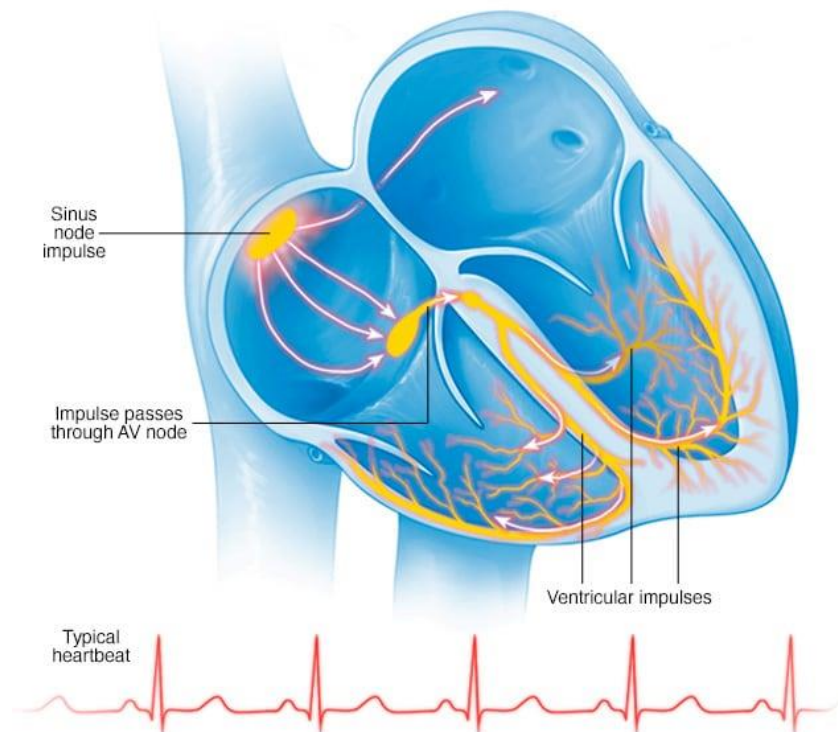


Heart arrhythmia

<https://www.mayoclinic.org/diseases-conditions/heart-arrhythmia/symptoms-causes/syc-20350668>

Overview



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Typical heartbeat

A heart arrhythmia (uh-RITH-me-uh) is an irregular heartbeat. A heart arrhythmia occurs when the electrical signals that tell the heart to beat don't work properly. The heart may beat too fast or too slow. Or the pattern of the heartbeat may be inconsistent.

A heart arrhythmia may feel like a fluttering, pounding or racing heartbeat. Some heart arrhythmias are harmless. Others may cause life-threatening symptoms.

There are times when it is OK to have a fast or slow heartbeat. For example, the heart may beat faster with exercise or slow down during sleep.

Heart arrhythmia treatment may include medicines, devices such as pacemakers, or a procedure or surgery. The goals of treatment are to control or get rid of fast, slow or otherwise irregular heartbeats. A heart-healthy lifestyle can help prevent heart damage that can trigger some heart arrhythmias.

Types

In general, heart arrhythmias are grouped by the speed of the heart rate. For example:

- Tachycardia (tak-ih-KAHR-dee-uh) is a fast heartbeat. The heart rate is greater than 100 beats a minute.
- Bradycardia (brad-e-KAHR-dee-uh) is a slow heartbeat. The heart rate is less than 60 beats a minute.

Fast heartbeat, called tachycardia

Types of tachycardias include:

- [Atrial fibrillation \(AFib\)](#). Chaotic heart signaling causes a rapid, uncoordinated heartbeat. AFib may be temporary and start and stop on its own. But some episodes may not stop unless treated. AFib has been linked to stroke.
- [Atrial flutter](#). Atrial flutter is similar to AFib, but the heartbeats are more organized. Atrial flutter also is linked to stroke.
- [Supraventricular tachycardia](#). This broad term includes irregular heartbeats that start above the lower heart chambers, called the ventricles. Supraventricular tachycardia causes episodes of a pounding heartbeat that start and stop suddenly.
- [Ventricular fibrillation](#). Rapid, chaotic electrical signals cause the lower heart chambers to quiver instead of squeezing in a coordinated way. This serious problem can lead to death if a regular heart rhythm isn't restored within minutes. Most people with ventricular fibrillation have an underlying heart disease or had a serious injury.
- [Ventricular tachycardia](#). This rapid, irregular heart rate starts with faulty electrical signals in the lower heart chambers, called the ventricles. The rapid heart rate doesn't let the ventricles properly fill with blood. So the heart may not be able to pump enough blood to the body. Ventricular tachycardia may not cause serious problems in people with otherwise healthy hearts. In those with heart disease, ventricular tachycardia can be an emergency that needs immediate medical care.

Slow heartbeat, called bradycardia

A heart rate below 60 beats a minute is considered bradycardia. But a low resting heart rate doesn't always mean there's a problem. If you're physically fit, your heart may be able to pump enough blood to the body with less than 60 beats a minute.

If you have a slow heart rate and your heart isn't pumping enough blood, you may have a type of bradycardia. Types of bradycardias include:

- **Sick sinus syndrome.** The sinus node sets the pace of the heart. If the node doesn't work properly, the heart rate may switch between too slow and too fast. Sick sinus syndrome can be caused by scarring near the sinus node that slows, disrupts or blocks heartbeat signals. The condition is most common among older adults.
- **Conduction block.** A block of the heart's electrical pathways can cause the signals that trigger the heartbeats to slow down or stop. Some blocks may cause no symptoms. Others may cause skipped beats or slowed heartbeats.

Premature heartbeats

Premature heartbeats are extra beats that occur one at a time, sometimes in patterns that alternate with a regular heartbeat. If the extra beats come from the top chamber of the heart, they are called premature atrial contractions (PACs). If they come from the bottom chamber, they are called premature ventricular contractions (PVCs).

A premature heartbeat may feel like your heart skipped a beat. These extra beats are generally not a concern. They rarely mean you have a more serious condition. Still, a premature beat can trigger a longer lasting arrhythmia, especially in people with heart disease. Occasionally, having very frequent premature ventricular beats may lead to a weak heart.

Premature heartbeats may occur when resting. Stress, heavy exercise and the use of stimulants, such as caffeine or nicotine, also may cause premature heartbeats.

Symptoms

A heart arrhythmia may not cause any symptoms. The irregular heartbeat may be noticed during a health checkup for another reason.

Symptoms of an arrhythmia may include:

- A fluttering, pounding or racing feeling in the chest.
- A fast heartbeat.
- A slow heartbeat.
- Chest pain.
- Shortness of breath.

Other symptoms may include:

- Anxiety.
- Feeling very tired.
- Lightheadedness or dizziness.
- Sweating.
- Fainting or almost fainting.

When to see a doctor

If you feel like your heart is beating too fast or too slow, or it's skipping a beat, make an appointment for a health checkup. You may be told to see a doctor trained in heart diseases, called a cardiologist.

Get emergency medical care if you have these heart symptoms:

- Chest pain.
- Shortness of breath.
- Fainting.

Always call 911 or your local emergency number if you think you might be having a heart attack.

A type of arrhythmia called ventricular fibrillation can cause a dramatic drop in blood pressure. This can cause the person to fall to the ground within seconds, also called collapse. Soon the person's breathing and pulse will stop. Ventricular fibrillation is an emergency that needs immediate medical help. It's the most frequent cause of sudden cardiac death.

If this happens, follow these steps:

- Call 911 or your local emergency number.
- If there's no one nearby trained in cardiopulmonary resuscitation (CPR), provide hands-only CPR. Push hard and fast on the center of the chest. Do 100 to 120 compressions a minute until medical help arrives. You do not need to breathe into the person's mouth.
- CPR helps keep blood flowing to the organs until an electrical shock can be given with an automated external defibrillator (AED). An AED is a device that delivers a shock to restart the heart.
- If an AED is available nearby, have someone get the device and follow the instructions. No training is required to use it. The device tells you what to do. It's programmed to allow a shock only when appropriate.