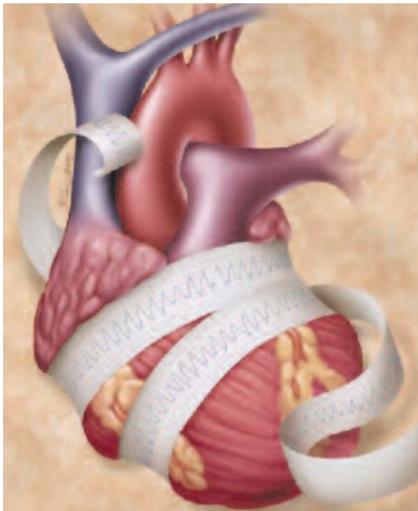


Rapid Heartbeat

An abnormally fast heart rhythm, or tachycardia, can prove dangerous because the racing interferes with the heart's ability to pump properly.



As a result, a victim may suffer a range of symptoms, from lightheadedness to sudden cardiac death.

Each heart has its own normal rhythm brought about by the seamless flow of electrical impulses that begins in the heart's natural "pacemaker" (sinus node).

The electricity flows through the upper chambers (atria), crosses the bridge between the upper and lower chambers (atrioventricular node), and travels to the lower chambers (ventricles). This passage of electricity culminates in a carefully coordinated contraction of heart muscle that pumps blood throughout the human body. Each day, a normal heart contracts about 100,000 times, at a rate mostly less than 100 beats per minute. Changes in rate brought about by variations in activity, diet, medication, and age are normal and common. During intense exercise or emotional distress, a heart may speed up to 160 to 180 or more beats per minute. This rapid heart rate is normal and appropriate, and does not pose any danger.

Most Dangerous Rapid Heart Rhythms

Sudden rapid heartbeats originating in the ventricles are the most dangerous arrhythmias. Ventricular tachycardia, a rapid yet steady beat, is dangerous in its own right. Worse, it can turn into ventricular fibrillation, or VF, which is characterized by irregular and chaotic rapid heartbeats. Because the fibrillating ventricular muscle cannot contract and pump blood to the brain and vital organs, VF is the number one cause of sudden cardiac death. Without immediate emergency treatment of an electric shock to restore normal rhythm, an individual loses consciousness within seconds and dies within minutes.

DID YOU
know

Blood is actually a tissue. When the body is at rest, it takes only six seconds for the blood to go from the heart to the lungs and back, only eight seconds for it to go the brain and back, and only 16 seconds for it to reach the toes and travel all the way back to the heart.

When a heart begins to race for no apparent reason, however, it can be a sign of an abnormality in the electrical pathways and is cause for evaluation. Abnormal rapid heart rates can range from 100 beats a minute up to 400 beats a minute and can be relatively harmless or life threatening.

Symptoms

When the heart beats too quickly, the ventricles do not have enough time to fill with blood and cannot effectively pump blood to the rest of the body. The lack of oxygen can prove deadly and gives rise to the following symptoms:

Heart skipping a beat

Beating out of rhythm

Palpitations

Rapid heart action

Shortness of breath

Chest pain

Dizziness

Lightheadedness

Blackouts

Temporary blind spots

Fainting or near fainting

Chaotic, quivering, or irregular rhythm

Death

Types of Arrhythmias

Understanding some common terms in the language of cardiac arrhythmias helps sort through the types of rhythm problems. An arrhythmia is any abnormality in heart rhythm. Arrhythmias are categorized in three main ways:

Rate

If the heart rate is rapid, or greater than 100 beats a minute, it is considered a tachycardia. Alternatively, a slow heart rate, below 60 beats a minute, is known as a bradycardia.

Location

The location of the problematic electrical circuit helps define the arrhythmia. For instance, a rhythm is called ventricular if it originates in the lower chambers of the heart, and supraventricular if it originates above the ventricles (in the atria).

Irregular

The nature of the heartbeat, whether it is steady or chaotic, is another key to categorizing an arrhythmia. A rapid beat that is irregular and chaotic may be a type of fibrillation, or quivering beat.

Who develops rapid heartbeats?

Anyone can develop a rapid heartbeat, even a young person without other heart problems. However, problems are more common in those:

- With previous heart trouble
- Over 65 years of age
- Who have suffered damage caused by a heart attack, cardiac surgery, or other conditions
- With rare, inherited heart electrical defects

Most Common Rapid Heartbeat

More than 2 million people in the United States experience atrial fibrillation, making it the most common heart rhythm disorder. In AFib, the heartbeat is irregular and rapid. The upper chambers, or atria, may beat as often as 400 times a minute, about four times faster than normal. Although it isn't life threatening, AFib can lead to palpitations, fatigue, and heart failure. Chances of having a stroke are five times higher for those with AFib than for those without AFib. If you have AFib your doctor may prescribe blood thinners to reduce your risk of having a stroke.