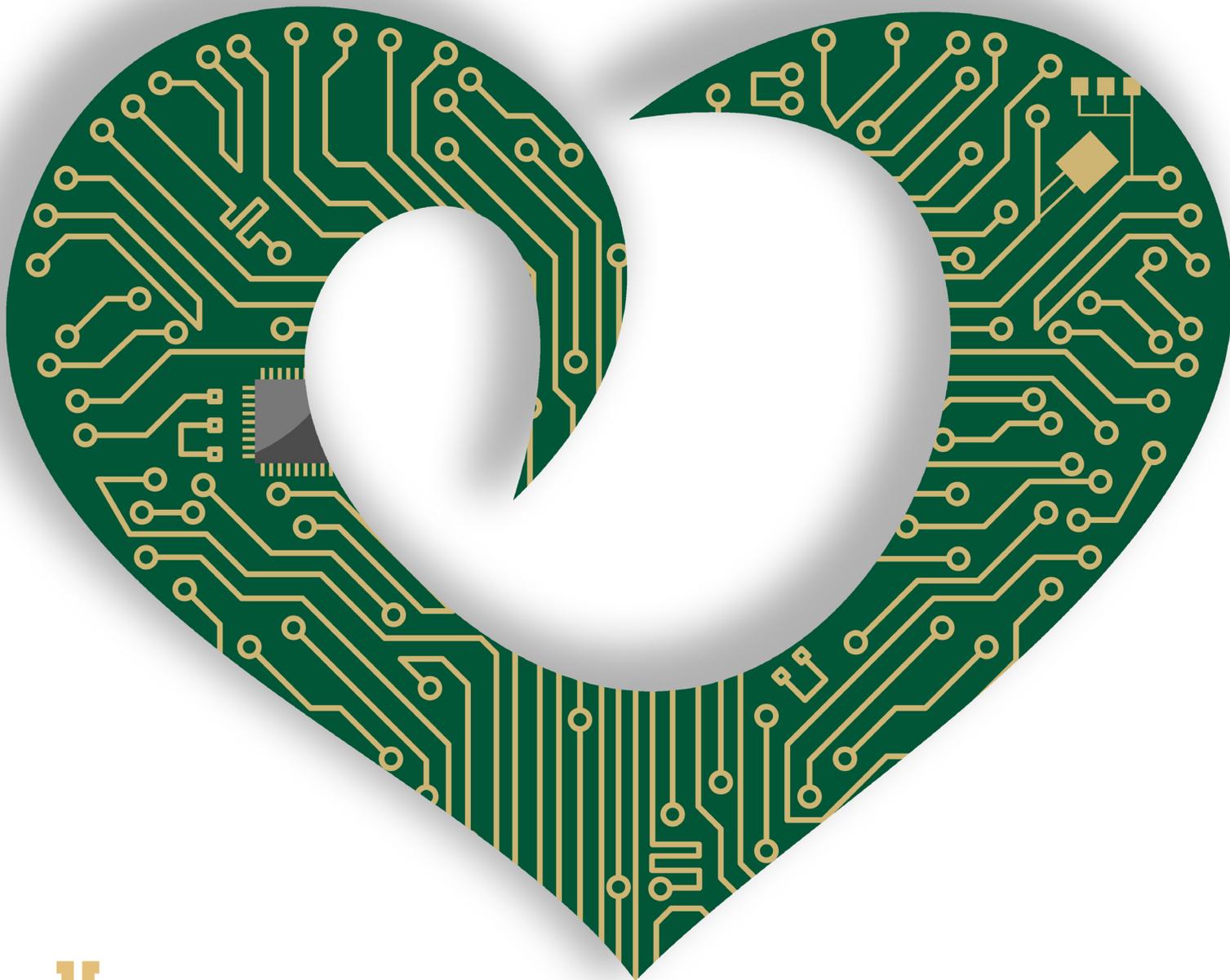


# Shock to the Heart



**H**ear rhythm problems, or arrhythmias, occur when the electrical impulses that coordinate your heartbeat don't work properly, causing your heart to beat too fast, too slow or irregularly. A heartbeat that is too fast is called a tachycardia and one that is too slow is called a bradycardia.

Atrial fibrillation (AF) is an arrhythmia with an irregular and often rapid heartbeat that causes decreased

blood flow to the body. During AF, the atria (the heart's two upper chambers) beat out of sync with the ventricles (the heart's two lower chambers). AF can be occasional, with symptoms that come and go from minutes to hours, or chronic, with symptoms that will not resolve without treatment.

**AF SYMPTOMS** Some people with AF will not experience symptoms and will only learn they have it from their doctor. Others may experience one or more of the following symptoms:

- Palpitations (feelings that your heart is skipping a beat, fluttering or beating too hard or fast)
- Shortness of breath
- Weakness or problems exercising
- Dizziness or fainting
- Fatigue
- Confusion
- Chest pain—this requires immediate medical attention

**AF RISK FACTORS** If you have AF, your risk of stroke increases up to five times. AF can also lead to heart failure. Other risk factors include:

- Heart attack, heart failure or cardiomyopathy
- Heart tissue that is too thick, stiff or hasn't formed normally
- Leaking or narrowed heart valves
- Congenital heart defects
- High blood pressure
- Damage to the heart muscles
- Diabetes
- Sleep apnea
- Overactive or underactive thyroid glands

Though most arrhythmias are harmless, some can be life-threatening. During an arrhythmia, the heart may not pump enough blood through the body, which can cause damage to the heart, brain and other organs.

The cause of arrhythmias are often unknown, although factors such as smoking, alcohol use, drug use, over-the-counter medication or too much caffeine or nicotine are known to provoke them.

People with AF can lead normal and active lives. Treatments are available that can help control symptoms and prevent complications,

including medications,

medical procedures and positive lifestyle changes.

Although AF is not usually immediately life-threatening, it is a significant medical issue that requires prompt medical attention, evaluation and diagnostic workup.

### Electrophysiology

Electrophysiology is the study of this electrical activity in the heart and how it beats. Cardiac electrophysiologist or arrhythmia specialists diagnose heart rhythm abnormalities based on a series of tests and medical history.

Evaluations for rhythm in heartbeats include:

- An electrocardiogram (an ECG or EKG) to monitor heartbeats during rest
- A Holter monitor to record the heartbeats over a 24-hour period or longer
- An event monitor to record heart rhythm when active (usually worn for about a month)
- An exercise stress test, often taken on a treadmill, to detect more irregular rhythms during physical activity

- A tilt table test, for those who experience lightheadedness or fainting.

Treatment plans for arrhythmia can include:

- Medication
- Using ablation (radio wave energy) to destroy specific areas of the heart that are causing the rhythm abnormality
- Implanting a pacemaker, for those hearts that are beating too slowly
- Implanting a defibrillator, for those hearts that are beating too rapidly

### Know your pulse

Your pulse is one tool to help get a picture of your health. Even if you're not an athlete, knowledge about your heart rate can help you monitor your fitness level, and it might even help you spot developing health problems.

Your heart rate, or pulse, is the number of times your heart beats per minute. Normal heart rates vary from person to person. Knowing your heart rate can be an important heart-health gauge.

The best places to find your pulse are:

- Wrists
- Inside of your elbow
- Side of your neck
- Top of the foot

To get the most accurate reading, put your finger over your pulse and count the number of beats in 60 seconds.

Your resting heart rate is the heart pumping the lowest amount of blood you need when you're not exercising. If you're sitting or lying, and you're calm, relaxed and aren't ill, your heart rate is normally between 60 (beats per minute) and 100 (beats per minute).

### When to call your doctor

If you're on a beta blocker to decrease your heart rate (and lower blood pressure) or to control another common abnormal rhythm (arrhythmia), your doctor may ask you to monitor and log your heart rate. Keeping tabs on your heart rate can help your doctor determine whether to change the dosage or switch to a different medication.

If your pulse is very low, or if you have frequent episodes of unexplained fast heart rates, especially if they cause you to feel weak or dizzy or faint, tell your doctor, who can decide if it's an emergency.