

**ANSWERS** by heart



Cardiovascular Conditions

## What Is Cardiac Arrest?

Cardiac arrest occurs when the heart malfunctions and stops beating on its own. It's caused by an electrical problem in the heart that causes an abnormal heartbeat (arrhythmia). With its pumping action disrupted, the heart can't pump blood to the brain, lungs and other organs.

Seconds later, a person becomes unresponsive, isn't breathing or is only gasping. Death can occur within minutes if the person doesn't receive treatment right away.

More than 350,000 cardiac arrests occur outside of the hospital in the U.S. each year.



### Is a heart attack the same as cardiac arrest?

No. While a heart attack may cause cardiac arrest, the two aren't the same.

A heart attack is caused by a circulation problem. Heart attacks are caused by a blockage that stops blood flow to the heart.

Cardiac arrest is caused by an electrical problem in the heart. The heart stops beating properly, and the heart's pumping function is "arrested," or stopped.

Both heart attack and cardiac arrest are medical emergencies and require prompt medical treatment.

### What causes a cardiac arrest?

Most cardiac arrests are caused by abnormal heart rhythms called ventricular tachycardia or ventricular fibrillation.

Other factors that increase risk for or can trigger cardiac arrest include:

• Cardiomyopathy (thickened heart muscle)

- Congenital heart defects
- Coronary heart disease
- Heart valve disease
- Heavy alcohol use
- Heavy blow to the chest (commotio cordis)
- Illicit drug use
- Severe emotional stress

# How do I know if someone is having a cardiac arrest?

The signs of cardiac arrest:

- The person collapses suddenly and passes out.
- The person doesn't respond, even if you tap them hard on the shoulders or ask loudly if they're OK. The person doesn't move, speak, blink or react.
- The person isn't breathing or is only gasping for air.
- The person has no pulse.

Certain medications

## What Is Cardiac Arrest?



## What should I do if someone is having a cardiac arrest?

Anyone who witnesses a cardiac arrest outside the hospital can perform CPR. For adults and adolescents, Hands-Only CPR is easy to learn. It requires only two steps:

- Call 911
- Use both hands to push hard and fast on the center of the person's chest at a rate of 100-120 beats per minute.

It's important to continue CPR until first responders arrive to take over.

If an AED is available, even untrained people should be able to use it by following the prompts.

#### What happens next?

Once the person is resuscitated, an ambulance will take them to the hospital. There an emergency room doctor will do a physical exam. They also will order tests to assess the person's condition. The test results can help the health care team decide on a treatment plan to reduce the person's risk of long-term problems and death.



Some tests may include:

- Blood tests
- Exercise stress tests
- Imaging tests
- Cardiac catheterization
- Electrophysiology (EP) study

Genetic testing also may be recommended for the patient and their blood relatives. This is done because some unexplained cases of cardiac arrest have been linked to inherited heart problems.

## HOW CAN I LEARN MORE?

- Call **1-800-AHA-USA1** (1-800-242-8721) or visit **heart.org** to learn more about heart disease and stroke.
- 2 Sign up for our monthly *Heart Insight* e-news for heart patients and their families at **HeartInsight.org**.
- Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at heart.org/SupportNetwork.

#### Do you have questions for your doctor or nurse?

Take a few minutes to write down questions for the next time you see your health care professional.

For example: Where can I get CPR training in my area?

### MY QUESTIONS:

We have many other fact sheets to help you make healthier choices to reduce your risk for heart disease, manage your condition or care for a loved one. Visit **heart.org/AnswersByHeart** to learn more.