REVIEWED
By Chris at 11:13 am, Aug 06, 2020

About Heart Attacks

A heart attack is a frightening experience. If you have experienced a heart attack, or are close with someone who has, you should know this: You are not alone. In fact, tens of thousands of people survive heart attacks and go on to lead productive, enjoyable lives.

As you work toward recovery, the frequently asked questions below can help you better understand what has happened, and how your heart can heal. Knowledge is power. Arming yourself with this information can help you can live a healthier, longer life.

See how coronary artery damage leads to a heart attack.

Heart attack questions and answers

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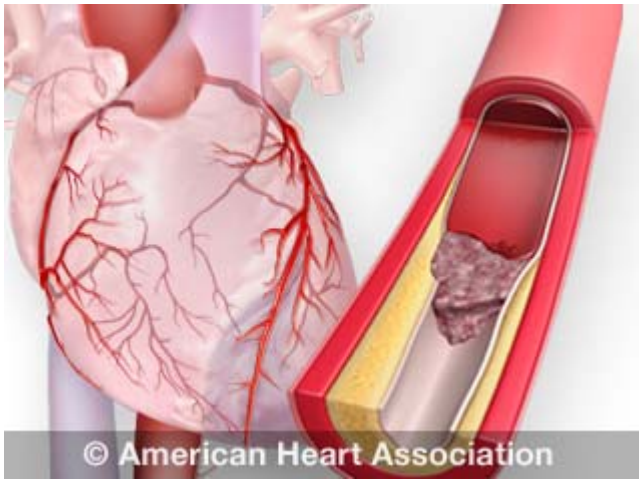
What is a heart attack?

Your heart muscle needs oxygen to survive. A heart attack occurs when the blood flow that brings oxygen to the heart muscle is severely reduced or cut off completely.



View an animation of blood flow between the heart and lungs.

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This happens because coronary arteries that supply the heart muscle with blood flow can become narrowed from a buildup of fat, cholesterol and other substances that together are called plaque. This slow process is known as atherosclerosis.

When plaque within a heart artery breaks, a blood clot forms around the plaque. This blood clot can block the blood flow through the artery to the heart muscle.

Ischemia results when the heart muscle is starved for oxygen and nutrients. When damage or death of part of the heart muscle occurs as a result of ischemia, it's called a heart attack, or myocardial infarction (MI).

About every 40 seconds, someone in the United States has a heart attack.

Why didn't I have any warning?

The process of atherosclerosis has no symptoms. When a coronary artery narrows and constricts blood flow, other nearby blood vessels that serve the heart sometimes expand to compensate, which may explain why there are no warning signs.

Such a network of expanded nearby blood vessels is called collateral circulation, and it helps protect some people from heart attacks by delivering needed blood to the heart. Collateral circulation can also develop after a heart attack to help the heart muscle recover.

Is my heart permanently damaged?

When a heart attack occurs, the heart muscle that has lost blood supply begins to suffer injury. The amount of damage to the heart muscle depends on the size of the area supplied by the blocked artery and the time between injury and treatment.

Heart muscle damaged by a heart attack heals by forming scar tissue. It usually takes several weeks for your heart muscle to heal. The length of time depends on the extent of your injury and your own rate of healing.

The heart is a very tough organ. Even though a part of it may have been severely injured, the rest of the heart keeps working. But, because of the damage, your heart may be weakened, and unable to pump as much blood as usual.

With proper treatment and lifestyle changes after a heart attack, further damage can be limited or prevented.

Learn more about heart damage detection.

Will I recover from my heart attack?

The answer is most likely yes.

The heart muscle begins to heal soon after a heart attack. It usually takes about eight weeks to heal.

Scar tissue may form in the damaged area, and that scar tissue does

not contract or pump as well as healthy muscle tissue. As a consequence, the extent of damage to the heart muscle can impact how well the heart pumps blood throughout the body.

How much pumping function is lost depends on the size and location of the scar tissue. Most heart attack survivors have some degree of coronary artery disease (CAD) and will have to make important lifestyle changes and possibly take medication to prevent a future heart attack. Taking these steps can help you lead a full, productive life.

Learn more about recovering from heart attack.

Is all chest pain a heart attack?

No. One very common type of chest pain is called angina. It's a recurring discomfort that usually lasts only a few minutes. Angina occurs when your heart muscle doesn't get the blood supply and oxygen that it needs.

The difference between angina and a heart attack is that angina attacks don't permanently damage the heart muscle.

There are different types of angina, including:

- Stable angina, or angina pectoris Stable angina often occurs during exercise or emotional stress when your heart rate and blood pressure increase, and your heart muscle needs more oxygen. Learn more about stable angina.
- Unstable angina, sometimes referred to as acute coronary syndrome Unstable angina occurs while you may be resting or sleeping, or with little physical exertion. It comes as a surprise. Unstable angina can lead to a heart attack and it should be treated as an emergency. Learn more about unstable angina.

What are the different medical terms for a heart attack?

Acute coronary syndrome (ACS): An umbrella term for situations where the blood supplied to the heart muscle is suddenly blocked. Learn more about ACS.

STEMI: A common name for ST-elevation myocardial infarction, a type of heart attack caused by a complete blockage in a coronary artery.

NSTEMI: A non-ST-elevated myocardial infarction, a type of heart attack in which an artery is partially blocked and severely reduces blood flow.

Myocardial infarction (MI): The damaging or death of an area of the heart muscle (myocardium) resulting from a blocked blood supply to that area. It's also the medical term for a heart attack.

Coronary thrombosis: Formation of a clot in one of the arteries that supply blood to the heart muscle. Also called coronary occlusion.

Coronary occlusion: An obstruction of a coronary artery that hinders blood flow to some part of the heart muscle. Coronary occlusion is a cause of heart attack.

Are there other causes of heart attack besides blockage?

Sometimes a coronary artery temporarily contracts or goes into spasm. When this happens the artery narrows, and blood flow to part of the heart muscle decreases or stops.

The causes of spasms are unclear. A spasm can occur in normal-appearing blood vessels as well as in vessels partly blocked by atherosclerosis. A severe spasm can cause a heart attack.

Another rare cause of heart attack is spontaneous coronary artery dissection, which is a spontaneous tearing of the coronary artery wall.

How is a heart attack different from cardiac arrest?

People often use these terms to mean the same thing, but they describe different events.

A heart attack is when blood flow to the heart is blocked. It's a circulation problem.

With sudden cardiac arrest (SCA), the heart malfunctions and suddenly stops beating unexpectedly. Sudden cardiac arrest is an electrical problem.

A heart attack can cause a cardiac arrest. In cardiac arrest (also called sudden cardiac death or SCD), death results when the heart suddenly stops working properly. This is caused by irregular heart rhythms called arrhythmias.

The most common arrhythmia in cardiac arrest is ventricular fibrillation. This is when the heart's lower chambers suddenly start beating chaotically and don't pump blood. Death occurs within minutes after the heart stops.

Cardiac arrest may be reversed if CPR (cardiopulmonary resuscitation) is performed and a defibrillator is used within minutes to shock the heart and restore a normal heart rhythm.

Learn more about the differences between heart attack and cardiac arrest.

You aren't alone

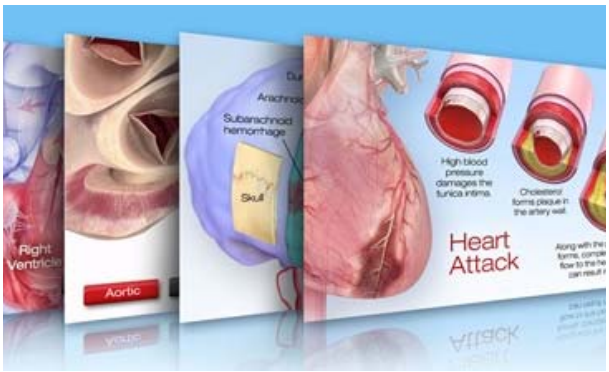
Connect with other heart attack survivors and caregivers through our Support Network.

Learn more about diseases and conditions that affect your heart.

Last Reviewed: Jul 31, 2016

Heart Attack Tools and Resources

- What is a Heart Attack? (PDF)
- How Will I Recover? (PDF)
- Heart Attack Discharge Worksheet (PDF)
- Heart Attack Discharge Worksheet (Spanish) (PDF)
- 5 Ways to Lower Your Risk of a Second Heart Attack (PDF)
- 5 Ways to Lower Your Heart Attack - Spanis
- Cardiac Rehab Referr
- Cardiac Rehab Referr (PDF)
- What Are the Warnin Attack? (PDF)
- Common Heart Attac (PDF)



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