



What Happened to Me?

The heart is a truly amazing organ. It can beat more than 100,000 times a day, pumping about 2,000 gallons of blood through a 60,000-mile network of blood vessels in the body. The blood that the heart pumps provides life-giving nutrients, including oxygen, throughout the body.

What causes a heart attack?

A heart attack happens when the blood flow that brings life-giving oxygen to the heart is fully blocked. This happens because blood vessels, the tubes that supply the heart muscle with blood, slowly become filled with plaque, a mixture of fat, cholesterol, and other matter. This is called hardening of the arteries, or **atherosclerosis**, and it may have no early warnings.

Plaques can sometimes rupture, which can cause a blood clot. This blood clot can either reduce or completely block blood flow, leading to **acute coronary syndrome (ACS)**.

When the blood flow that brings oxygen to the heart muscle is fully blocked, damage or death to part of the muscle can result. This is called a heart attack, or **myocardial infarction (MI)**.

- About 735,000 Americans have heart attacks every year
- For 525,000 of these Americans, this is a first-time heart attack
- For the other 210,000 people, a heart attack is a recurrent event

When a heart attack occurs, scar tissue forms at the site of the affected heart muscle that has lost its blood flow. The scarred area does not pump blood as well as normal heart muscle. This can also result in irregular heart beats, called arrhythmia.

Preventing another heart attack

Maintaining a healthy lifestyle, taking your medications as your doctor tells you, and getting regular follow-ups with your health care team are critical to help lower your risk of another heart attack.

Medications that a doctor may prescribe

Many medications support the heart. They can help to:

- Keep blood clots from forming
- Keep blood vessels healthy
- Decrease heart rate and help the heart work better
- Treat high cholesterol
- Treat high blood pressure
- Relax blood vessels

Heart procedures and treatments

You may have received one or more of these procedures or treatments while you were in the hospital:

- Bypassing a blocked blood vessel in the heart with a healthy vessel from elsewhere in the body
- Opening a narrow or blocked artery to restore blood flow to the heart
- Intravenous (IV) treatment to remove clots in blood vessels and improve blood flow



Importance of Staying on Your Medication

If you've had a heart attack, your doctor will likely prescribe medications that you will take for a long time. This may be new to you, and there may be a lot to remember. But it is a vital part of fighting against another heart attack.

Keeping on track

Take an active role in your treatment! This is very important for staying healthy. Before you leave the hospital or the doctor's office, be sure to get the name of your medication, the reason you are taking it, and the amount you need to take every day. Because you'll be getting a lot of information when you have had a heart attack, you might find it helpful to take notes. That way you can be sure you are taking your medications correctly. You can also ask your health care provider to print out a list of the medications you'll be taking. It is very important to keep the list of your medications with you at all times.

Suggestions for staying on your medications:

- Take medicines at approximately the same time every day
- Store medicines in a convenient place
- Use a daily medicine box that divides your medications into the days of the week
- Link taking your medicines with your other daily routines, such as brushing your teeth
- Add post-it reminders on the mirror in your bathroom or a kitchen cabinet

Food-Drug Interactions

Healthy eating is very important if you have heart disease. But even healthy foods, such as fruits and vegetables, should not be eaten when taking certain medications. Ask your doctor about foods that you should stay away from while taking your medication.

Medication storage

The place where you store your medication can help it maintain its effect. Ask your doctor or pharmacist for tips and suggestions.

Call your health care professional with any questions.

Heart medications

Tell your doctor about all medications you are taking, even over-the-counter medications. Doing so may help avoid harm.

A pharmacist is trained to give you valuable information about your medications. Stay active in your treatment by speaking with your pharmacist. After a heart attack, you may be prescribed a combination of medications, including:

Medication	How it helps
Antiplatelet agents	Help keep blood clots from forming by stopping blood cells from sticking together and forming a new and dangerous clot that can cause another heart attack
Angiotensin-converting enzyme (ACE) inhibitors	Lower blood pressure by primarily decreasing resistance by lowering levels of the enzyme angiotensin II
Angiotensin II receptor blockers (or inhibitors)	Block the effect of the hormone angiotensin II, causing the blood vessels to relax. This helps lower blood pressure. This class may be given if you are unable to take ACE inhibitors
Beta-blockers	Lower blood pressure and make the heart beat more slowly
Statins	Lower blood cholesterol levels, specifically LDL, the "bad" cholesterol
Sublingual nitroglycerin	Reduce the workload of the coronary arteries

You may be taking one or more of the medications above. Ask your doctor or pharmacist if you have questions about how to take your medications.



Making Healthy Choices

After a heart attack you may feel overwhelmed. Maybe you're afraid because heart disease runs in your family. But there are steps you can take to help your heart. A healthy diet and lifestyle changes can help prevent another heart attack. Small steps can have a big result!

Healthy eating

Making healthy food choices can help lower the risks of a heart attack.

Eating a healthy diet of vegetables, fruits, and whole grains, and limiting sweets, sugary drinks, and red meats, will help lower your risk of a subsequent heart attack.

With the help of a good diet, you can lower:

- **High Cholesterol.** Cholesterol, especially LDL, or "bad," cholesterol, can create fatty deposits in the blood vessels. This can raise the risk of another heart attack
- **High blood pressure** can make the heart work too hard and raises the possibility of a heart attack. Controlling the amount of sodium you eat can help lower blood pressure. High blood pressure and high cholesterol are the 2 leading causes of heart attacks
- **Blood sugar.** Diabetes causes your blood sugar to rise sometimes to dangerous levels, which can lead to problems with your kidneys, eyes, and heart. In time, diabetes can lead to a heart attack. Avoiding sweets and sugary drinks are just 2 ways of managing diabetes through diet
- **High triglycerides.** Triglycerides are major fats found in your blood. High triglyceride levels may harm blood vessels and when combined with high cholesterol increase the risk of heart attack. Avoiding high-fat foods, such as fatty desserts and fried food, can help lower triglyceride levels

Talk with your health care team, including a dietitian, about the benefits of a healthy diet.

Exercising

Being active can help prevent heart disease. Check with your doctor before starting any exercise. If your doctor gives you the go-ahead to exercise, ask if you can join a cardiac rehabilitation program. This can help you develop an exercise plan.

Quitting smoking

It's a fact: smoking is bad for you. It raises the risk of having a heart attack. But you can lower your risk by quitting. You can find help on stopping smoking at the American Lung Association website (www.lung.org) and with support groups at your local hospital or community center. You can also talk to your care team about nicotine-replacement therapy, which can help you get off nicotine.

Alcohol consumption

Drinking too much alcohol can raise your blood pressure and increase your risk of a heart attack. Talk with your doctor to determine an acceptable amount of drinks to consume, if any. A drink is one 12-oz beer, 4 oz of wine, 1.5 oz of 80-proof spirits, or 1 oz of 100-proof spirits.

Stress relief

A few studies have found a link between heart attack risk and stress. Stress can lead to activities that increase heart disease risk. For example, some people may deal with stress by drinking alcohol or smoking cigarettes. You can't get rid of stress in your daily life, but you can change the way you handle it. Try to reduce your stress with meditation, deep breathing exercises, or treat yourself to a massage.

Changing habits of many years can be hard. But research has shown that smoking, a lot of drinking, and high stress will probably cause health problems. And they are a major cause of going back into the hospital. Making changes is important. Even small steps can have a big impact on your health.



Cardiac Rehabilitation

A heart attack can be scary and confusing. You may find it difficult to adjust to a new lifestyle. Will it happen again? You can't change the past, but you can improve your heart's future. And you don't need to face this alone. There are programs that partner patients with doctors, nurses, pharmacists, dietitians, family, and friends to help you reach your goals and make heart-healthy choices. These programs are called cardiac rehabilitation.

Changing habits in your life

Cardiac rehabilitation can help you in 3 ways:

- Your team will help create an exercise routine that fits your heart-healthy needs
- You will learn how to lead a healthier life, such as choosing the right foods and quitting smoking
- You will begin to know the types of stress in your life and how you can control them

Patient education

In cardiac rehabilitation, you will learn how to:

- Manage your heart health
- Take your medication
- Get the most out of your visits with your doctors
- Create a plan that will help you reach your heart-healthy goals

Medicare and most other insurers can help patients afford covered conditions. Speak with your care team to see if you are eligible for cardiac rehabilitation.

Getting started

The first step is to find out if you are eligible for cardiac rehabilitation. Ask your care team for help in finding out if you are. Once you determine that you are eligible:

1. There are many cardiac rehabilitation programs available. Register for a program to take advantage of this support.
2. Cardiac rehabilitation requires a referral from a physician. Speak to your health care professional to find out which program would work best for you.
3. If you are not able to afford your copays, or do not have health insurance, financial help is available. Speak to your health care professional for more information.
4. Work with your cardiac rehabilitation team to set some heart-healthy goals and create a plan.
5. Stay active in your rehabilitation plan.
6. Keep on your medication regimen.
7. Call 911 if you notice new or worsening symptoms.



Signs and Symptoms of Another Heart Attack

The heart is the human body's hardest-working organ. It can pump close to 2,000 gallons of blood a day just to do daily tasks like walking to the bus or in a store.

After a heart attack, you are more likely to have another one. But the symptoms may not be the same as in your first attack. So it might be hard to know that you are having another heart attack. Knowing the symptoms can save your life.

Are you having another heart attack?

The most common symptoms of another heart attack are:

1. Chest pain or discomfort that lasts for more than a few minutes, or goes away and comes back. This is the most common heart attack symptom.
2. Upper body discomfort in other parts of your upper body. This can be in 1 or both arms, the back, neck, jaw, or upper part of your stomach.
3. Shortness of breath, often with chest pain, that seems out of proportion with your level of activity. This can happen even while resting. It can also happen while doing little, like walking a very short distance.

If you have already had a heart attack, pay attention to your body. The more of these signs and symptoms you notice, the more likely it is you are having another heart attack.

Heart attack signs in women

Many people think heart attacks only affect men. But heart disease is the **number 1 killer of women** in the United States. The signs of a heart attack in women can be different than in men. The classic symptoms of a heart attack may be accompanied by other symptoms that are specific to women. These include:

- Shortness of breath with or without chest discomfort
- Dizziness
- Light-headedness
- Fainting
- Extreme fatigue
- Cold sweats
- Nausea
- Acid reflux
- Flu-like symptoms

Knowing your symptoms

Pay close attention to your symptoms and ask your doctor about what typical symptoms are and when to call for help.

When you call with symptoms, your doctor may ask:

- What caused the chest pain to start?
- Did the symptom occur while resting or with minimal activity?
- How long did the symptoms last?
- Were you able to relieve your chest pain with a medication?

Speak to your doctor to learn more about these symptoms and when to call 911.

The symptoms of a heart attack may not be what you would expect. Some patients have minor symptoms. They might be surprised to learn they've had a heart attack. Treatments for heart attacks work better when started early. But most people who have a heart attack wait 2 hours or more after symptoms start before they seek medical help. This delay can result in lasting heart damage or even death. Again, the best way to prevent more damage is knowing what to do. Get help right away if you think you are having a heart attack.



Know Your Numbers

Using a health checklist helps you keep track of your health. When you go to the doctor and your blood is tested, write down the numbers below. Use it as a record for your next visit. Then, you and your doctor can know if your numbers have improved. Target numbers vary from patient to patient, so ask your health care provider what your target should be.

Before you begin:

- Know what your blood pressure means:
 - The top number is called “systolic.” It measures the pressure in the arteries when the heart beats (contracts)
 - The bottom number is called “diastolic.” It measures the pressure in the arteries between heartbeats (when the heart rests between beats and refills with blood)
- Know your total cholesterol number, as well as your LDL (or “bad cholesterol”) number. Cholesterol is measured in milligrams per deciliter of blood (mg/dL)
- Fasting glucose tests your blood sugar levels. If this number is high, you may have diabetes

Health Factors	My Readings
Blood pressure	mm Hg
Cholesterol	mg/dL
Fasting glucose	mg/dL
Weight	lb
Physical activity (in 1 week)	How much? What type?



Questions to Ask My Doctor

Finding out you had a heart attack may be hard. You may have to make lifestyle changes and take a medication. You might find it hard to remember what your doctor says and know what he or she means. It can help to bring someone with you to office visits to keep track of what your doctor says. The list below can help too. It has questions you may want to ask and space to write down the answers. This can help you manage your disease.

How long do I need to rest after a heart attack?

When can I go back to work?

Is it common to feel sad?

What can I do to help my family know what I'm going through?

Is chest pain normal after a heart attack?

How do I know if I'm having another heart attack?

Is it safe for me to have sex?

Why is cardiac rehabilitation so important?

What lifestyle changes should I make?

How can I include more physical activity in my life?

What should I do if I think I'm having another heart attack?

Does a heart attack prevent me from doing things I enjoy?



Patient Support

Living with the threat of another heart attack may not be easy. Changing the way you or your loved one do things can be hard. But remember, you don't have to do it alone. Good information is available. The following websites offer information and other support for you and your loved ones.

Cardiovascular education:

American Heart Association

www.heart.org

National Institutes of Health

<https://www.nhlbi.nih.gov/health/health-topics/topics/heartattack/>

National Heart, Lung, and Blood Institute

<http://www.nhlbi.nih.gov/>

NIH Senior Health

<https://www.nihseniorhealth.gov>

Centers for Disease Control and Prevention

www.cdc.gov/heartdisease/

Million Hearts

<http://millionhearts.hhs.gov/learn-prevent/index.html>

Quit smoking support:

American Lung Association

www.lung.org/stop-smoking/

Centers for Disease Control and Prevention

https://www.cdc.gov/tobacco/quit_smoking/

Legal support:

Americans with Disabilities Act

www.ada.gov/

Disability Rights Legal Center

<http://drlcenter.org/>

LawHelp.org

www.lawhelp.org/

Caregiver support and guidance:

Caregiver Action Network

<http://caregiveraction.org>

Caring.com

www.caring.com/support-groups/COPD

Caring Today

www.caringtoday.com

National Alliance for Caregiving

<http://www.caregiving.org>

Travel outreach:

Air Care Alliance

<http://aircarealliance.org>

Transportation Security Administration

www.tsa.gov/travel/passenger-support



Care for the Caregiver

When someone you love has been treated for a heart attack, you might feel relief. But you may soon be feeling the stress of taking care of someone who can't walk with you the same way as he or she did in the past. Or maybe your loved one has trouble performing tasks that were previously routine. Or you may see your loved one getting depressed by the diagnosis.

Suddenly, you might find yourself taking days off from work to care for your loved one, or taking your loved one to the emergency department or the cardiologist more and more often. You may need to cancel appointments and miss your regular activities because you have to take care of your loved one. This may make you irritable and tired. You might find yourself sad and depressed. In short, you might start feeling burned out.



Remember: You can't take care of anyone else if you don't take care of yourself first.

Check out this list of suggestions. They'll not only give you a sense of well-being, but you'll be a better caregiver, too.

- **Don't neglect your own health.** It's easy to overlook a doctor or dentist appointment when you're busy taking care of someone else. Make sure you are taking your own medicines and keeping any appointments you've made
- **Get enough sleep.** People generally don't function well when they haven't had a good night's sleep
- **Help reduce your stress with yoga, meditation, or a massage.** Some health plans offer discounts for these services
- **Ask for help!** Your friends and family are happy to do something for you if it'll make you feel better. Food shopping. Walking the dog. Going to the dry cleaner. These little things might not seem like much to them, but having someone else do them can give you a much-needed break
- **Make some "me" time.** It doesn't have to be a big night out. You can watch a TV show or go to a movie. Take a nap. Read a few pages of a book. Do something that is just for you
- **Be on the lookout for any signs of physical and emotional stress.*** Are you feeling tired? Experiencing lower back or neck pain? Are you gaining or losing too much weight? Are you worrying too much or feeling overwhelmed and alone? If any of these symptoms sound familiar, talk to your health care professional

***This information is provided as general knowledge only and is not medical advice. If you have questions or concerns, you should talk to your health care professional.**