

HEART DISEASE AND YOU

Being diagnosed with heart disease can be overwhelming and can leave you with a lot of questions.

This chapter will help you better understand how the heart works, what causes heart disease and how it is treated.



LEARNING OBJECTIVES:

This chapter will help you to understand:

- The function of the heart
- How heart disease develops
- Common diagnostic tests and why they are done
- Procedures and medications used to treat heart disease

HOW THE HEART WORKS

The heart is an amazing organ that pumps blood throughout your body. All of the blood that circulates through your body starts its journey in your heart and returns there at the end.

Your heart beats about 100,000 times a day – approximately 35 million times a year. It supplies blood to its own tissues and to every cell in the body through 97,000 kilometers of arteries, veins and capillaries. The heart is a hard-working muscle – even at rest, the muscles of the heart work twice as hard as the leg muscles of a person sprinting.

The heart is a muscular organ about the size of a closed fist and weighs 8 ounces in females and 10 ounces in males. It sits in the centre of the chest, slightly to the left, under the chest bone and between the lungs. Its main function is to pump oxygen and nutrient-rich blood to every cell in the body – which is why heart health is so important.

STRUCTURE AND FUNCTION

The heart muscle is divided into a right and left side with a chamber on the top and bottom half of each side. Each top chamber is called an atrium and each bottom chamber is called a ventricle. The right side of the heart is responsible for collecting oxygen-depleted blood from the body and pumping it into the lungs. The left side of the heart receives the oxygen-rich blood from the lungs and is responsible for pumping the blood to all the cells in the body.

There are four valves in the heart – the tricuspid, mitral, pulmonary and aortic valves. These valves open and close with each heartbeat. Each heartbeat produces two heart sounds that you can hear when you listen to someone's chest. It is the rhythmic opening and closing of these four valves that ensures that the blood flows forward and not backward. The closing of these valves makes the heart sounds.

The heart has a natural electrical system that tells it when to beat. Ideally, this built-in “pacemaker” will trigger the heart to beat in a regular rhythm so that the heart can pump blood efficiently.

If you have an abnormal heart rhythm, an artificial pacemaker may be inserted to help the heart's electrical system keep a regular heartbeat.

CORONARY ARTERIES

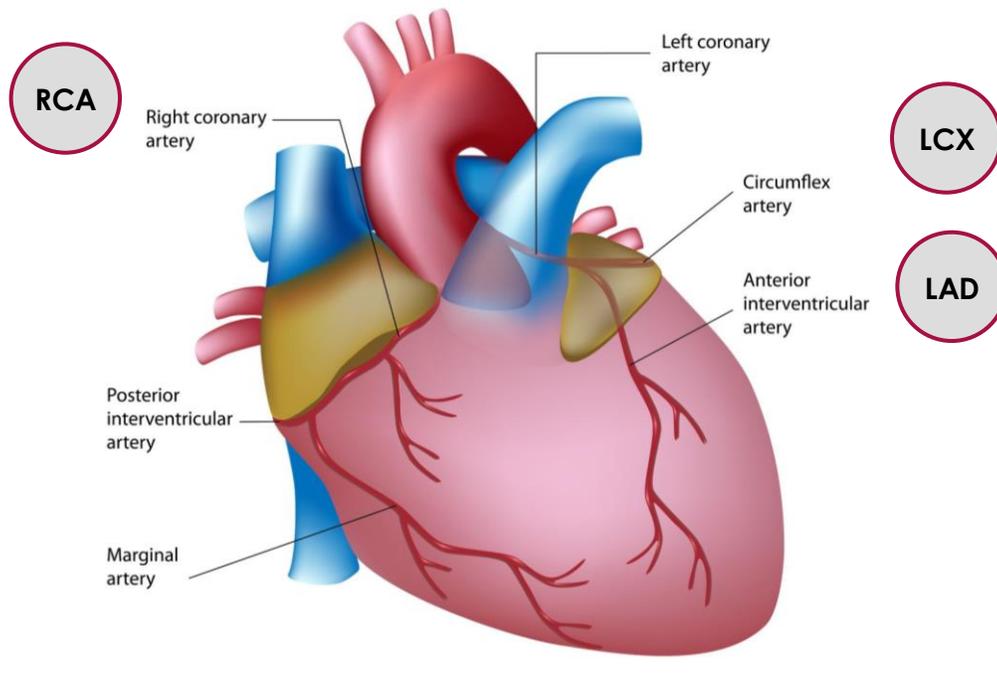
In order for the heart to work well, it needs a constant supply of oxygen. The heart receives its blood and oxygen supply from the coronary arteries. These coronary arteries lie on the outside of the heart muscle.

The main coronary arteries are the:

- Left Main Coronary Artery which divides into the:
 - Left Anterior Descending Artery (LAD)
 - Left Circumflex Artery (LCX)
- Right Coronary Artery (RCA)

These main coronary arteries divide into smaller blood vessels to supply the entire heart with oxygen and nutrients. The pumping action of the heart depends on a good supply of blood from these coronary arteries.

The main coronary arteries are only 2 to 5 millimetres in diameter. The arteries that branch off the main arteries are even smaller!

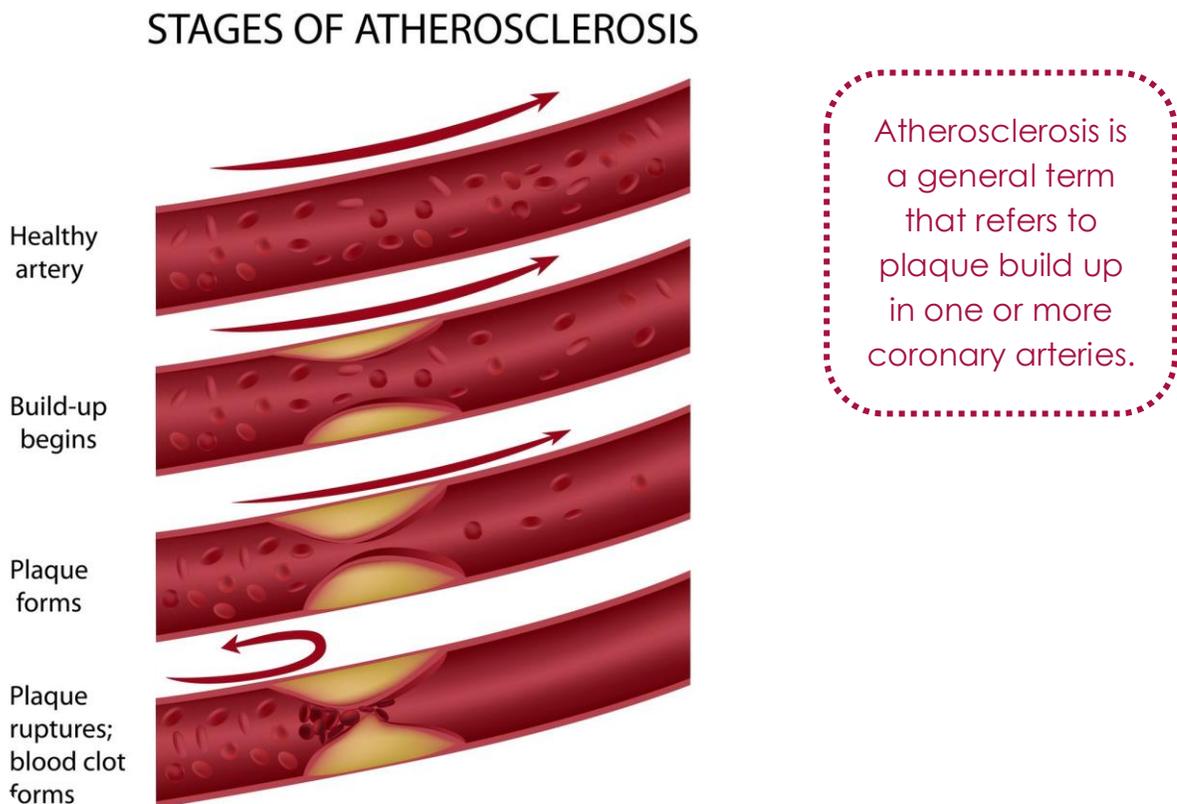


UNDERSTANDING HEART DISEASE

Heart disease includes several kinds of conditions that affect the heart's structure and function and has many causes. The most common type of heart disease is coronary artery disease, which is the focus of this chapter.

CORONARY ARTERY DISEASE (CAD)

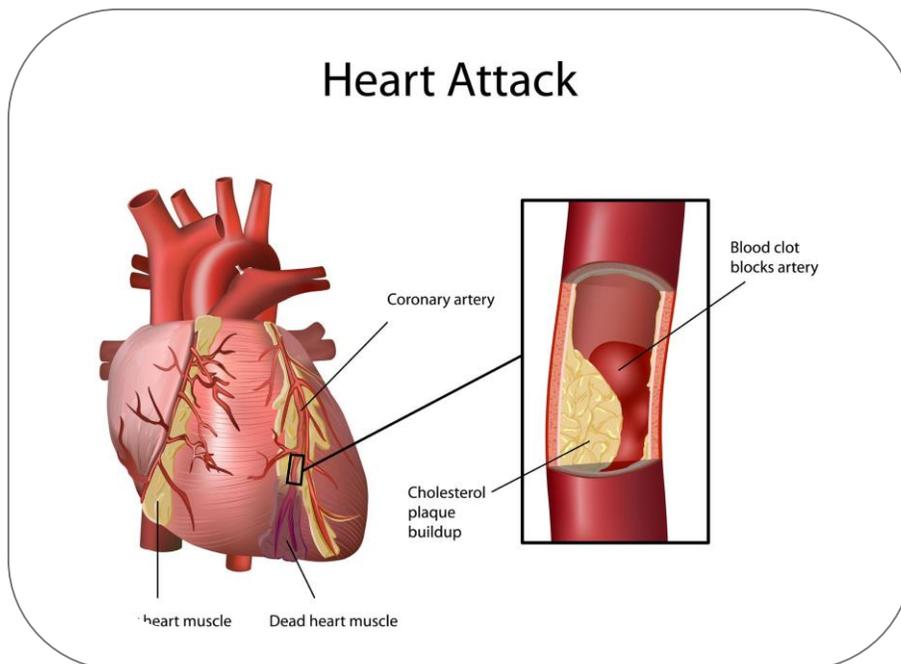
Coronary artery disease, called CAD for short, is the leading cause of death in men and women. CAD develops when there is a build-up of fat (cholesterol) and other substances (calcium, scar tissue) in the blood that stick to the inner wall of a coronary artery. This build-up is called plaque and, over time, this plaque narrows the coronary artery and the artery hardens.



When a coronary artery becomes narrowed or blocked from plaque, the heart muscle may not get the blood and oxygen that it needs to work well. This can result in chest pain (angina) and/or heart attack.

Angina is a symptom of CAD. It is a warning signal that the heart is at an increased risk of a heart attack because of the build-up of plaque within a narrowed coronary artery.

A **heart attack**, also called myocardial infarction (MI), can occur when a piece of plaque ruptures in a coronary artery. The body tries to close the rupture by forming a blood clot over it. The blood clot can completely block blood flow through the coronary artery to the heart muscle. The length of time the blood flow is blocked in the coronary artery will determine the amount of damage to the heart muscle.



ANGINA

Angina is usually temporary chest discomfort that will go away with rest and/or nitroglycerin spray. Symptoms include:

- Varying degrees of discomfort – from mild to severe
- Pain, tightness, pressure, heaviness, squeezing, burning, aching or numbness
- The discomfort may be felt in the chest, neck, jaw, shoulders, between the shoulder blades, arms or hands (left, right or both)
- Other symptoms may include indigestion, breathlessness, weakness, nausea, sweating

It is important to know your own angina symptom(s). Each person's angina may be different, but usually it will be the same from one time to the next.

WHAT CAN BRING ON ANGINA:

- Physical exertion (exercising, lifting heavy bags/objects, climbing stairs, having sex, mowing the lawn)
- Emotional stress
- Cold and windy weather or hot and humid weather
- Heavy meals
- High altitude

Generally, angina is caused by how hard the heart has to work, not how long. Pace yourself with activity, so you are comfortable and pain free.

HOW TO TREAT ANGINA:

Because angina is a signal that the heart is not getting enough blood and oxygen, it is important to treat even very mild angina quickly. The goal is to get rid of all discomfort. Only total relief indicates that the heart is getting enough oxygen/blood to meet its needs. Follow the steps below at the first sign of angina:

- Stop what you are doing. Sit or lie down and rest for 5 minutes.
- If chest pain remains, take one nitroglycerin tablet or spray under your tongue.
- Wait 5 minutes. If any chest pain/discomfort remains, take a second nitroglycerin tablet or spray under your tongue.
- Wait 5 minutes. If chest pain/discomfort remains, call 911 and take a third nitroglycerin tablet or spray.
- Once 911 has been called and if chest pain remains, continue taking one nitroglycerin tablet/spray every 5 minutes. Discontinue taking the nitroglycerin if your pain goes away or you are feeling unwell from it (e.g. severe dizziness)

WHEN TO CALL THE DOCTOR:

Report any change in your angina pattern to your doctor immediately, including changes in:

- How often you get angina
- How easily you get angina
- How much Nitroglycerin is required to relieve the angina
- How severe the angina is

Any angina that wakes you from sleep should also be reported to your doctor immediately.

THE DIFFERENCE BETWEEN ANGINA AND A HEART ATTACK	
ANGINA	HEART ATTACK (MYOCARDIAL INFARCTION)
<ul style="list-style-type: none"> • Angina is caused from a <i>decrease in blood flow</i> to the heart due to the build-up of plaque, small clots or spasm in the coronary artery. • Angina causes <i>no permanent injury</i> to the heart. • Angina that is not properly treated can progress to becoming a heart attack in a short period of time. • If angina symptoms do not subside after two sprays of nitroglycerin (as outlined on the previous page), it must be treated as a heart attack. Dial 911. 	<ul style="list-style-type: none"> • During a heart attack, <i>blood flow</i> to the heart is <i>severely decreased or stopped</i> due to the build-up of plaque, a blood clot, or spasm in the coronary artery. • A heart attack <i>can cause permanent injury or damage</i> to the heart. • Early treatment helps to restore blood flow and save heart muscle. Therefore, you must get medical treatment as soon as you feel the symptoms of a heart attack. • Symptoms of a heart attack can range from being very mild, such as the discomfort of a toothache or indigestion, to severe or crushing pain. Symptoms occur at rest or on exertion but are persistent. The most common symptoms include: <ul style="list-style-type: none"> – chest discomfort or pain – sudden sweating with cold, clammy skin, – nausea and/or vomiting – shortness of breath – weakness, dizziness, fainting, or extreme tiredness • If these symptoms do not subside after two sprays of nitroglycerin, it must be treated as a heart attack. Dial 911.

IF YOU THINK YOU ARE HAVING A HEART ATTACK:

- Stop what you are doing and lie down
- Take nitroglycerin as outlined and call 911 immediately
- Never drive yourself to the hospital

OTHER FORMS OF HEART DISEASE

Although coronary artery disease (CAD) is the most common type of heart disease, cardiac rehabilitation is also important for individuals diagnosed with other heart conditions, such as congenital heart disease, congestive heart failure, heart valve disease, arrhythmia and cardiomyopathy. The heart conditions described briefly below are only a few of the many heart conditions that exist. If you have any questions about these or any other heart condition, talk to a member of your healthcare team.

- **CONGENITAL HEART DISEASE**

A congenital heart defect occurs when the heart or the blood vessels in and around the heart do not develop normally during pregnancy. Congenital heart disease is the most common birth defect and occurs in about 8 out of every 1,000 births. There are various types of heart defects and though the cause is not known in many cases, some causes may include viral infections, drug abuse and Down Syndrome. Recent medical advances for both the treatment and correction of heart defects have helped to improve the survival rate and quality of life of individuals with congenital heart disease.

- **CONGESTIVE HEART FAILURE**

Congestive heart failure (CHF) occurs when the heart is not strong enough to pump the amount of blood required to meet the body's needs. This weakened pumping action of the heart can cause a backup of fluid in the lungs and to other parts of the body. Although CHF cannot be reversed once it has developed, there are a variety of treatments to help minimize the symptoms.

- **HEART VALVE DISEASE**

Valvular heart disease happens when one or more valves cannot open properly to let blood flow through (stenosis) or cannot close tight enough to prevent blood from flowing backwards (regurgitation). Heart valve disease can affect any of the valves in different ways, including a combination of stenosis and regurgitation.

- **ARRHYTHMIA**

An arrhythmia is an abnormal heart rhythm, such as atrial fibrillation or sick sinus syndrome. An arrhythmia can cause your heart to beat too slow (bradycardia) or too fast (tachycardia), or irregularly. If your heart has an abnormal rhythm, it may not pump effectively. The various types of arrhythmias can range from no symptoms to serious and life-threatening symptoms.

An implantable cardioverter defibrillator, or ICD, watches for and will deliver a mild electric shock for life-threatening heart rhythms. This small electronic device can also pace the heart.

- **CARDIOMYOPATHY**

Dilated, hypertrophic, restrictive or ischemic cardiomyopathy are diseases that cause the heart muscle to enlarge, thicken, become stiff, and weaken overtime. As a result, the heart has a hard time pumping blood through the body and maintaining a normal heart rhythm which can lead to heart failure or an arrhythmia. Often, the cause of the cardiomyopathy is not known. Depending on the type of cardiomyopathy and its symptoms, treatment will vary.

As you read through this manual you will learn more about the lifestyle choices that can positively impact a variety of heart conditions, not just coronary artery disease. A heart healthy lifestyle will help manage all types of heart disease while at the same time preventing the development of and the progression of coronary artery disease.

COMMON DIAGNOSTIC TESTS FOR HEART DISEASE

The common diagnostic tests in this section are described in relation to coronary artery disease. These tests can also be used for other types of heart disease, which are not described in this manual.

If you have questions about these tests for other types of heart disease, please speak to a member of your healthcare team.

BLOOD TESTS

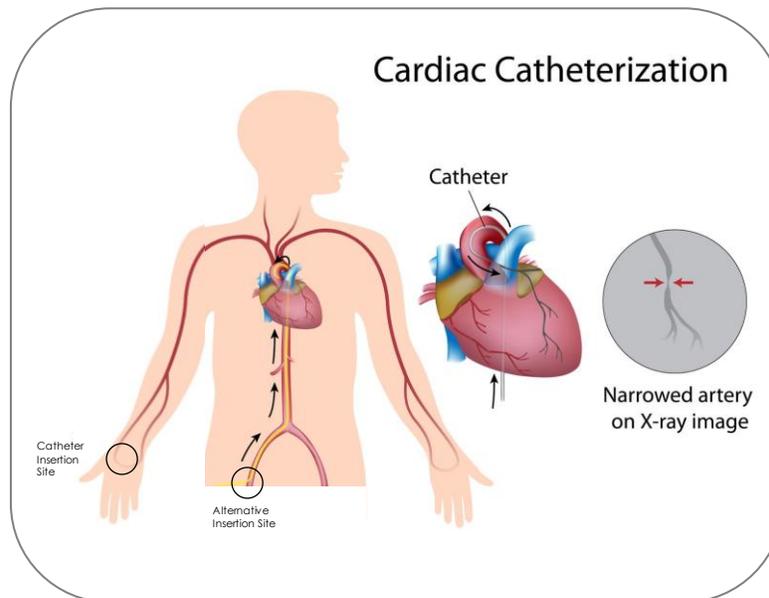
Specific blood tests can help to check if the heart muscle has been injured or damaged in order to determine if a heart attack or a heart event has occurred. These tests measure specific heart (cardiac) enzymes that the heart muscle releases when the coronary arteries are narrowed and blocked. This blood work may be repeated more than once to see the maximum amount of enzymes that are released. This is known as serial cardiac blood work. No fasting is required for the measurement of these heart enzymes.

Various other blood tests, including cholesterol, triglycerides and blood sugar, are used to manage coronary artery disease and monitor various risk factors. These blood tests are discussed throughout the manual.

CORONARY ANGIOGRAM

A coronary angiogram is a test that checks the blood flow of the coronary arteries. This test can determine if the coronary arteries are narrowed and blocked from the build-up of plaque and blood clots.

The coronary angiogram begins with a small tube that is inserted into an artery of the arm or leg. A catheter is then inserted through the small tube and is guided through the artery and up to the coronary arteries. Once the catheter reaches the coronary arteries, dye is injected through the catheter and x-ray pictures are taken to see the blood flow through the coronary arteries. The x-ray pictures and dye allow doctors to see the exact location and size of the plaque deposits and blood clots in the coronary artery.



The results of the coronary angiogram will determine if the doctor will continue on to perform other procedures during the angiogram or finish with the angiogram alone.

ECHOCARDIOGRAM

An echocardiogram, also called an echo, is a test that checks how well the heart is beating and pumping blood. This test may be ordered after a heart attack to determine the amount of injury or damage to the heart muscle. Echocardiograms may be ordered again, approximately 3 months after a heart attack, to assess the heart's recovery from the injury and damage from the heart attack.

An echocardiogram is an ultrasound of the heart. There are various types of echocardiograms. The most common type involves a device that is gently pressed to the skin of the chest that transmits sound waves to create moving images of the heart onto a video monitor.

ELECTROCARDIOGRAM

An electrocardiogram, also called an ECG or EKG, is a test that checks how the heart is functioning by measuring its electrical activity. This test can detect narrowed and blocked coronary arteries as well as heart muscle damage by a heart attack.

The electrocardiogram procedure involves the placement of small, sticky electrodes on the arms, legs and chest that are connected to wires which are

attached to the electrocardiogram monitor. The heart's electrical activity is then recorded.

EXERCISE STRESS TEST (EST)

An exercise stress test, also called stress test or treadmill test, is a test that can help determine if the coronary arteries are narrowed or blocked. Exercise stress tests are also done to determine how much exercise the heart can safely handle after coronary artery disease is diagnosed. A target heart rate may be calculated for individuals diagnosed with coronary artery disease.

An exercise stress test involves exercising on a treadmill or stationary bike while the heart's electrical activity, heart rate and blood pressure are monitored continuously.

THALLIUM SCAN

A thallium scan, also called myocardial perfusion imaging (MPI), cardiac perfusion scan, myocardial perfusion scan or nuclear stress test, is a test that measures how much blood is reaching different areas of the heart muscle at rest and during exercise. This test can determine if the heart muscle is receiving decreased blood flow from narrowed or blocked coronary arteries and if the heart muscle is injured or damaged after a heart attack.

During the thallium scan, a radioactive tracer is injected into a vein of the arm. The tracer will travel to the heart. A camera takes pictures of the heart muscle at rest and during exercise to see where the radioactive tracer travels. The doctor can then determine how much blood flow is reaching the various areas of the heart.

Some individuals may receive a medication to make the heart think that the body is exercising when exercise is not an option for an individual.

TREATMENT FOR CORONARY ARTERY DISEASE

There are various procedures that can be used to treat coronary artery disease. Some of the most common procedures are outlined in this section.

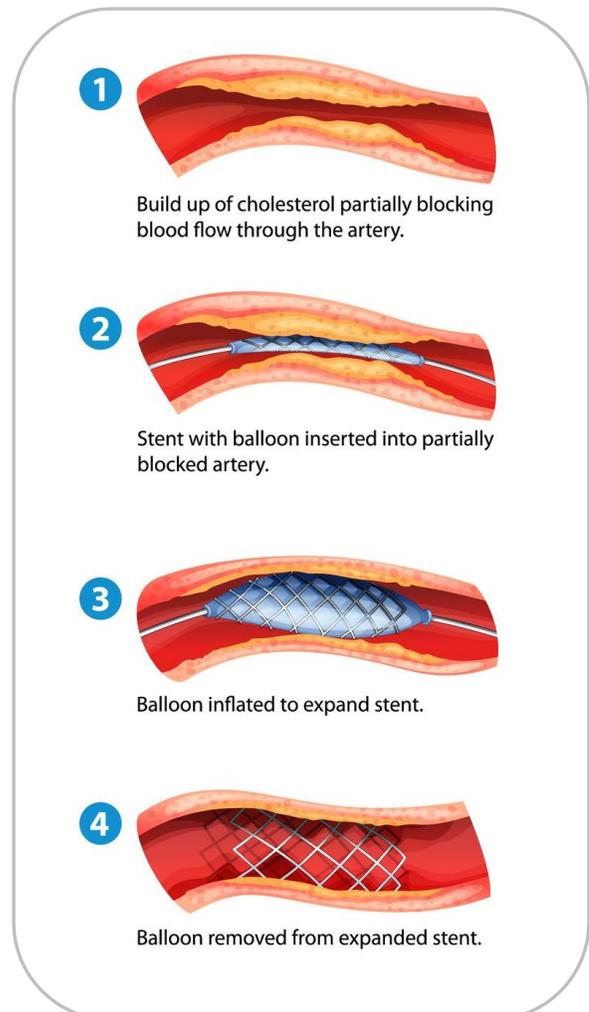
ANGIOPLASTY

Angioplasty, also called percutaneous coronary intervention (PCI), is a procedure that widens a narrowed coronary artery or opens a blocked coronary artery caused from the build-up of plaque and blood clots. This procedure will increase or resume blood flow through the coronary artery to the heart muscle once again.

An angioplasty is done after the coronary artery narrowing or blockage is identified from the angiogram. A catheter is moved to the narrowed or blocked section of the coronary artery and a balloon is inserted through the catheter. The balloon is inflated and opens the narrowed or blocked coronary artery by pressing the plaque against the wall of the artery. The balloon is then deflated and removed.

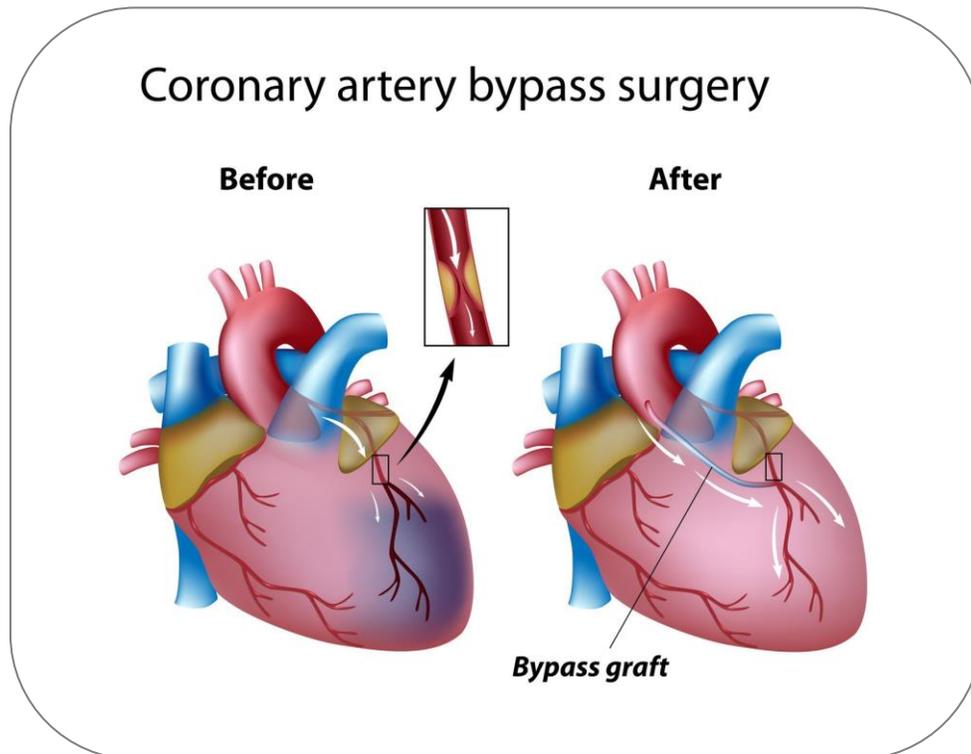
ANGIOPLASTY WITH A STENT

A stent is a small, expandable metal mesh tube. Stents are permanently inserted in the coronary artery during an angioplasty. Angioplasty with stent placement is also called percutaneous coronary intervention (PCI). The stent is delivered to the narrowed or blocked coronary artery with the angioplasty balloon. Once the angioplasty balloon is inflated, the stent is opened and pushed into the coronary artery wall. The stent keeps the coronary artery open. The doctor can choose from two types of stents: drug eluting stents or bare metal stents.



AORTOCORONARY BYPASS SURGERY

Aortocoronary bypass surgery, commonly referred to as coronary artery bypass graft (CABG) or bypass surgery, is a surgical procedure that reroutes or bypasses the narrowed or blocked coronary artery (caused from the build-up of plaque). Aortocoronary bypass surgery will increase or resume blood flow through the coronary artery to the heart muscle once again.



Aortocoronary bypass surgery is done after the coronary artery narrowing or blockage is identified from an angiogram. The narrowed or blocked coronary artery is bypassed with a healthy artery or vein graft. Bypass surgery typically requires open-chest surgery.

If you are wondering why you had bypass surgery versus a stent, talk to your heart surgeon or cardiologist as many factors are considered with this decision.

MEDICATION MANAGEMENT OF HEART DISEASE

After a heart event, medications will be prescribed to minimize complications and to help prevent future heart events. Taking medicine as prescribed is one of the best ways to protect against future heart problems.

Your medications are just as important as the procedures discussed earlier in this chapter (e.g. angioplasty, stent and bypass surgery). Even if you have not had any of these procedures after your heart event, you will be prescribed medications.

The most common medications that are prescribed are described on the following pages. Your cardiologist will determine what heart medications you will need and how long you will need to take them.

MEDICATION	COMMON NAMES	HOW IT WORKS AND HOW LONG YOU WILL TAKE IT FOR
Acetylsalicylic Acid	ASA Asaphen Aspirin Entrophen Novasen	<ul style="list-style-type: none"> • Has been shown to reduce the risk of recurrent heart attacks and strokes. • Prevents platelets from sticking together to form blood clots that could get stuck in narrowed arteries and/or on stents. • This medication will be used indefinitely as tolerated.
Angiotensin Converting Enzyme Inhibitors (ACE inhibitors) OR Angiotensin Receptor Blockers (ARBs)	ACE INHIBITORS: Enalapril (Vasotec) Lisinopril (Prinivil/Zestril) Perindopril (Coversyl) Ramipril (Altace) ARBs: Candesartan (Atacand) Irbesartan (Avapro) Losartan (Cozaar/ Hyzaar) Telmisartan (Micardis) Valsartan (Diovan)	<ul style="list-style-type: none"> • Helps the heart function more efficiently by decreasing blood pressure. • Prevents heart enlargement after a heart attack. • Known to reduce the risk of recurrent heart attacks, heart events and strokes. • This medication is usually used indefinitely as tolerated.

MEDICATION	COMMON NAMES	HOW IT WORKS AND HOW LONG YOU WILL TAKE IT FOR
Beta Blockers	Atenolol (Tenormin) Bisoprolol (Monacor) Carvedilol (Coreg) Metoprolol (Lopressor)	<ul style="list-style-type: none"> • Slows the heart rate and lowers blood pressure to reduce the workload on the heart. • When used after a heart attack or heart event, beta blockers can help improve survival rates. • Usually taken for minimum one year after a heart event but may be prescribed for longer.
Platelet Aggregation Inhibitors	Clopidogrel (Plavix) Ticagrelor (Brilinta) Prasugrel (Effient)	<ul style="list-style-type: none"> • Helps to prevent another heart attack or heart event. • Prevents platelets from sticking together to form blood clots that could get stuck in narrowed arteries and/or on stents. • This medication is used for a minimum of one year from the time after a heart attack if you have a stent called a 'drug eluding stent'.
Statins and other Cholesterol-Lowering Medications	<p>Statins: Atorvastatin (Lipitor) Pravastatin (Pravachol) Rosuvastatin (Crestor) Simvastatin (Zocor)</p> <p>Other: Ezetimibe (Ezetrol)</p>	<ul style="list-style-type: none"> • Reduce the risk of heart attack or heart event. • Helps prevent and slow down the buildup of plaque in the coronary artery. • Stabilizes plaque that is in the coronary artery. • Statins are the drug of choice for lowering cholesterol levels. • This medication is usually used indefinitely as tolerated.

NITROGLYCERIN

Another medication commonly used to manage heart disease, particularly angina and chest pain, is nitroglycerin. Nitroglycerin helps to improve blood flow to the heart.

If you are prescribed nitroglycerin, it is important to keep it with you at all times. It is also very important to always prime the pump of the nitroglycerin bottle prior to your first dose. To prime the pump, simply spray a dose into the air first and then spray a dose underneath your tongue as prescribed. And remember to keep track of the expiry date listed on the bottle.

The proper way to use nitroglycerin is as follows:

- Stop what you are doing. Sit or lie down and rest for 5 minutes.
- If chest pain remains, take one nitroglycerin tablet or spray under your tongue.
- Wait 5 minutes. If any chest pain/discomfort remains, take a second nitroglycerin tablet or spray under your tongue.
- Wait 5 minutes. If chest pain/discomfort remains, call 911 and take a third nitroglycerin tablet or spray.
- Once 911 has been called and if chest pain remains, continue taking one nitroglycerin tablet/spray every 5 minutes.

NOTE

Nitroglycerin needs to be used with extreme caution when taking Viagra, Levitra and Cialis as it may cause a large drop in blood pressure:

Do not take nitroglycerin within 24 hours of taking Viagra

Do not take nitroglycerin within 24 hours of taking Levitra

Do not take nitroglycerin within 48 hours of taking Cialis

If you have chest pain or angina and it is not safe to take your nitroglycerin based on the above guidelines, call 911.

The medications mentioned above are the most common medications for coronary artery disease. For more information about these and other medications prescribed for coronary artery disease and for other heart conditions, check out the 'Resources' chapter at the end of this manual.

FREQUENTLY ASKED QUESTIONS

When can I drive?

Weakness and fatigue following your hospital stay, along with side effects from some medications may slow your reaction time. As a result, you may receive an order from your doctor requesting you not to drive for a certain amount of time after you have been released from the hospital. The time will vary depending on the type of license you have, the type of heart event you had, and your specific heart disease. Please talk to your doctor about when it is safest for you to resume driving.

If you are a commercial driver, you will likely not be permitted to drive for at least 3 months after having had a heart attack or heart surgery. The Alberta Ministry of Transportation usually requires information from your doctor before re-issuing your commercial license. Please talk to your doctor if you have any questions.

When can I return to work?

Back to work decisions are based on the type of work you do, your heart function and symptoms after your heart attack/event. Your family doctor usually coordinates your return to work using information from your hospital records, follow-up from your cardiologist, and results from any diagnostic tests, including your exercise stress test and rehabilitation progress reports. Although the cardiac rehabilitation program does not complete insurance forms, it does provide your family doctor with information that can be used in the decision-making process.

Should I get the annual flu (influenza) vaccine?

After a heart attack or heart event, it is important to protect yourself from developing conditions which lead to inflammatory responses in your body, such as a common cold, flu, or pneumonia. Getting your annual flu shot, in addition to proper sleep, a healthy diet and physical activity, is your best protection against illness. Several studies have shown that cardiac patients who get the influenza vaccine have fewer heart attacks. For more information on influenza, visit www.albertahealthservices.ca/influenza.

When can I travel?

This will be determined by your family doctor and depends on your heart function, length of travel, and your mode of transportation (e.g. airplane or by car). If you are considered clinically stable to travel by your doctor, please ensure you take the necessary steps to get adequate travel insurance. Most insurance companies

will require that you have stable medications for a minimum of 3-6 months (depending on the insurance company) before they will insure you for travel outside the country. Please consult your insurance company to confirm this information. You must clearly tell them you have had a heart attack or heart event, when your last change in medications was as well as any procedures or treatments you've had.

Is it ok to consume alcohol?

Drinking too much of any type of alcohol can raise the levels of some fats in the blood and may increase blood pressure. We recommend that you avoid alcohol or limit your intake to:

- Men – aim for no more than 2-3 standard drinks/ day, with a maximum of 15 per week.
- Women – aim for no more than 1-2 standard drink(s)/day, with a maximum of 10 per week.

WHAT IS A STANDARD DRINK?

- 12-ounce bottle of beer
- 5-ounce glass of wine
- 1.5 ounce shot of spirits

When can I resume sexual activity?

Many patients who have had a heart event worry about whether or not it is safe for them to resume sexual activity. The maximum heart rate during usual sexual activity is similar to other daily activities such as walking or climbing two flights of stairs and is usually safe for low-risk patients. If you have no symptoms during your exercise stress test and if the doctor tells you that you can start exercise, then it is likely safe for you to resume sexual activity. If you have not had your exercise stress test but you are able to climb two flights of stairs without symptoms, talk to your doctor to decide if it is safe for you to resume sexual activity. If you cannot start exercise based on your exercise stress test results or for ongoing symptoms, check with your doctor to see when you can resume sexual activity.

How long after having a stent(s) inserted can I have dental work done?

After a stent placement, it is generally recommended to wait four to six weeks before having any dental work done, including teeth cleaning, unless your cardiologist advises otherwise. Antibiotics are not necessary with stents. For patients with various heart valve problems, including artificial heart valves, congenital heart disease and those who have previously experienced endocarditis, antibiotics may be needed prior to having dental work done and should be discussed with your cardiologist.

My dentist has asked that I stop taking my medications until after my upcoming dental appointment. Is it safe for me to do this?

Your dentist's office should contact your cardiologist to find out if it is safe for you to stop taking any medications and for how long, prior to your dentist appointment. This is especially important if your dentist has asked you to stop taking ASA, Brilinta, Coumadin Effient, Eliquis, Plavix, Pradaxa or Xarelto. Every patient's medical history is different and therefore this issue needs to be addressed on an individual basis by your cardiologist in consultation with your dentist. Stopping these medications can be dangerous for some patients.

Will I need to take heart medications for the rest of my life?

In most circumstances, you will be on some medications long-term to prevent the progression of heart disease and another heart attack or heart event.

Who is responsible for prescribing my medications? How does my family doctor know the medications that I should be on?

Your family doctor is ultimately the person who will monitor your prescriptions and provide prescription refills after you have been discharged from the hospital (your family doctor will receive recommendations from the cardiologist who saw you in hospital). However, during the first 12-weeks of the rehabilitation program, your heart medications may be adjusted by our program doctors as needed (depending on your response to these medications). Our program doctors will provide your family doctor and cardiologists with your exercise stress test results and any recommendations based on these tests.

Should I take my medications as prescribed when I am going for lab bloodwork?

Yes, take your morning medications with a drink of water prior to going to the lab.

ONLINE RESOURCES FOR HEART DISEASE AND RISK FACTORS

- **Alberta Health Services Online Education:** <http://wcmprod2.ucalgary.ca/cdm>
Audio-video sessions on topics such as diabetes, weight and stress management from your home computer.
- **Alberta Health Services Alberta Healthy Living Program:** www.ahs.ca/ahlp
Group classes and self-management workshops to support those living with a chronic condition. For more information or to register, visit www.ahs.ca/ahlp or call 403-943-2584.
- **Alberta Quits:** www.albertaquits.ca
Website with tools and services to help you quit smoking. Toll-free helpline with trained cessation counselors available daily from 8:00 am to 8:00 pm at 1-866-710-QUIT (7848).
- **Poison & Drug Information System (PADIS)**
Free and confidential advice and expertise on the health effects of poisons, chemicals and medications, 24 hours a day, 7 days a week. Call toll-free 1-800-332-1414.
- **American Heart Association:** www.heart.org
An online resource for heart disease and the lifestyle changes you can make to improve your heart health.
- **Canadian Diabetes Association:** www.diabetes.ca
A site for people living with diabetes/ pre-diabetes to help them manage their condition and minimize their cardiovascular risk
- **Cardiosmart:** www.cardiosmart.org
Online patient education to help individuals prevent, treat and manage heart disease.
- **Heart and Stroke Foundation:** www.heartandstroke.ca
Online resource for heart disease, risk factors and lifestyle change. Includes a variety of e-tools to help you manage your heart health.
- **MyHealthAlberta:** <https://myhealth.alberta.ca>
Online resource for Albertans that includes information on various medical conditions, health tools, as well as links to programs and services.
- **MayoClinic:** www.mayoclinic.com/health-information
Online medical information and tools for healthy lifestyles.