

Heart Surgery



A Guide for Patients and their Loved Ones

June 2023

What to Pack for Your Hospital Stay

Remember to bring this booklet with you to your Pre-Surgical Clinic visit (if you have one booked) and when you come to hospital on the day of your surgery.

Have your loved one(s) bring these items to the CVICU on the day of surgery.

- Toothbrush and toothpaste
- Hair comb
- Deodorant
- Other toiletries (scent-free)
- Glasses
- Dentures and denture cleaning tablets
- Hearing aid(s) and batteries
- Housecoat/pajamas – must open fully in front (no “pull over the head” items)
- Undergarments (underwear, bra with an extension)
- Rubber-soled slippers with closed toe and heel
- CPAP machine (for patients with sleep apnea)
- Clothes to wear on the day of discharge, including a shirt that buttons up the front
- An up to date list of your home medications
- Incentive spirometer (your breathing device with 3 blue balls)

Please leave your valuables at home! The hospital cannot be responsible for belongings.

Important Phone Numbers:

St. Mary’s General Hospital:	(519) 744-3311 (Switchboard)
Regional Cardiac Care Coordinator for Surgery:	(519) 749-6578, ext. 1936
Pre-Surgical Clinic:	(519) 749-6907
Day Surgery Unit:	(519) 749-6654
Cardiovascular Intensive Care Unit (CVICU):	(519) 749-6690
Cardiac Surgery Unit (3 West):	(519) 749-6435
Cardiac Surgeon Office (Dr. Higgins & Dr. Ashe)	(519) 749-6946
Cardiac Surgeon Office (Dr. Salasidis)	(519) 749-6937

Visiting Hours

Please refer to the St. Mary's General Hospital website regarding the "Visitor and Care Partner" policies. The hospital has open visiting hours; however, the care team may need to implement restrictions. Please try to avoid phone calls, or visits to the CVICU or Cardiac Surgery unit (3 West) from 6:30 to 8:30 a.m. and 6:30 to 8:30 p.m.

Visitors are asked to allow patients to have quiet time from 12:30 p.m. to 2:00 p.m. daily to aid in their recovery after surgery.

Compassionate Rates for Lodging

You will find an up to date list of local businesses that provide compassionate rates for lodging on the St. Mary's General Hospital website:

<https://www.smgh.ca/patients-visitors/planning-your-stay>

Scroll down to "**Compassionate Hotel Rates**" and click on the arrow to expand the list.

Instructions for Patient/Loved Ones

- Patients/Loved ones are responsible for booking and paying for their accommodation.
- Each business listed has indicated that they will provide Compassionate Rates to loved ones of patients. These rates will vary by business.
- Please review the businesses and the instructions provided for booking accommodation.

*If you have any issues or concerns obtaining the rates indicated, please contact **Patient Experience** at St. Mary's General Hospital (519)749-6578, ext. 6867.*

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You have been referred for heart surgery at the St. Mary's Regional Cardiac Care Centre.

Your test results have been reviewed by a cardiologist and a cardiac surgeon. These experts have determined that heart surgery will provide the most benefit to your health and lifestyle.

The goal of this booklet is to keep you informed and to answer your questions. We will work with you to develop a plan for your recovery and build towards a healthy heart lifestyle for you and your loved one(s).

Having heart surgery can be a significant event in your life. It may affect you and your loved ones in many ways. This booklet is designed to help you and your loved one(s) understand your condition and what you can expect while you are in St. Mary's General Hospital. It will also describe what you need to do when you go home after surgery.

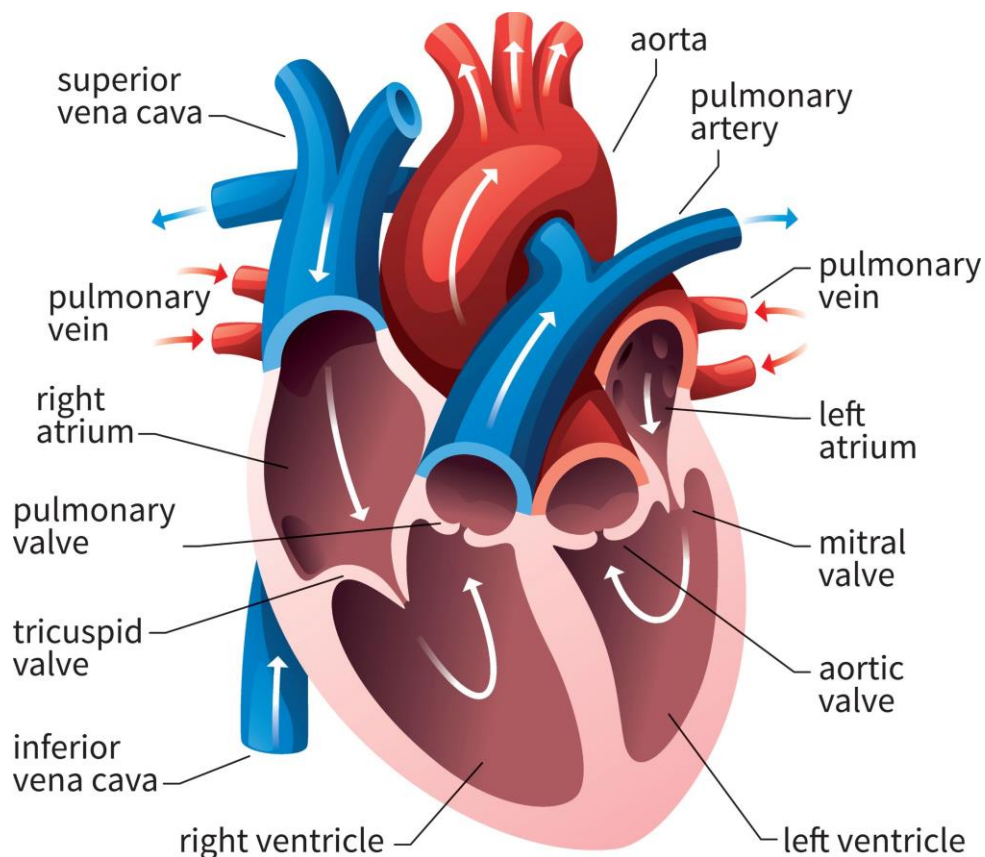
Bring this booklet with you each time you come to the hospital and keep it with you during your stay.



The Heart and How it Works

The human heart is an amazing piece of engineering. It is a muscle about the size of your fist that functions as a pump. It lies slightly to the left of the middle of your chest cavity, behind the breastbone (sternum). A muscular wall called the "septum" divides the heart into the right side and left side. The heart pumps continuously to supply blood to all parts of the body. Blood carries oxygen and nutrients that your body needs.

Anatomy of the Human Heart



© Cardiology Associates of Michigan. www.cardofmich.com/anatomy-human-heart-fun-facts/. Accessed May 8, 2023.

The right side of the heart has an upper chamber, the **right atrium**, and a lower chamber, the **right ventricle**. Blood, which has already circulated through the body, enters the right atrium. The blood passes through the **tricuspid valve** into the right ventricle. The right ventricle then pumps the blood through the **pulmonary valve** to the lungs. In the lungs, the blood exchanges the waste gases collected from circulating in the body for fresh oxygen.

The left side of the heart has an upper chamber, the **left atrium** and a lower chamber, the **left ventricle**. Oxygen-rich blood from the lungs enters the heart in the left atrium. It passes through the **mitral valve** into the left ventricle. The left ventricle pumps the oxygen rich blood through the **aortic valve** into the aorta. The aorta delivers the blood to the rest of the body.

Coronary Arteries

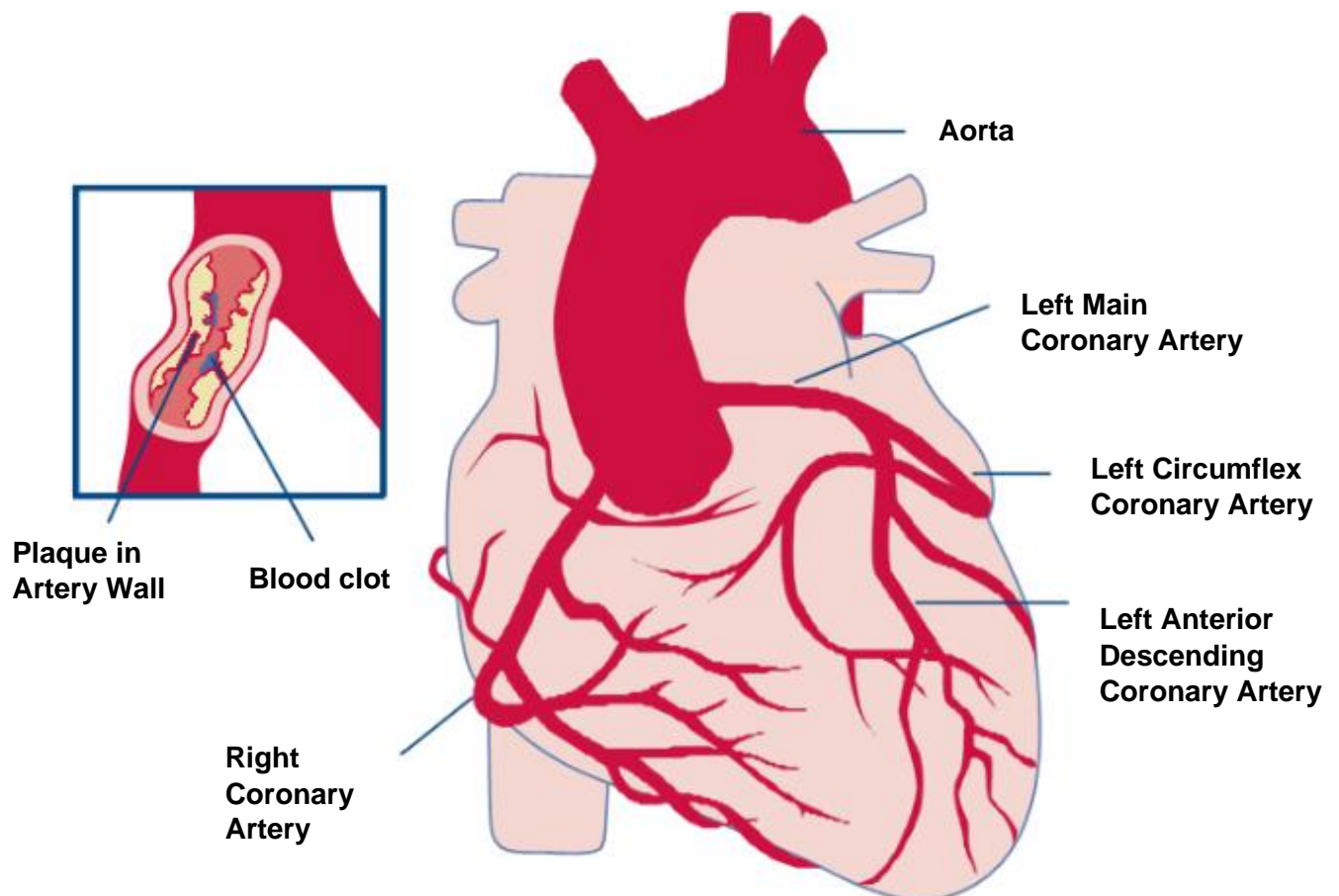
The heart muscle itself needs a good supply of blood to keep pumping. The arteries that supply the heart muscle with blood are called the **coronary arteries**. Normally, the aorta will supply the coronary arteries with a good supply of blood. This blood supply is rich in oxygen and nutrients. This keeps the heart muscle working properly.

Coronary Artery Disease

Coronary artery disease is a condition in which the arteries to the heart muscle become narrowed or blocked. This process is also called **Atherosclerosis**. It is caused by a build-up of cholesterol and calcium on the inner linings of the arteries. This build-up narrows the passage of blood through the artery. Blood flow becomes restricted.

When the blood flow is reduced, the heart muscle receives less oxygen. This is called **ischemia**. Many people will feel chest tightness or pain (**angina**) when ischemia occurs.

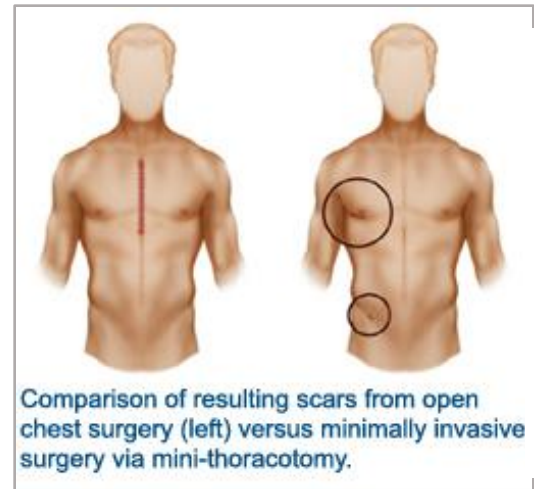
The build-up of fatty material and cholesterol in the coronary arteries can harden into **plaque**. Plaque deposits can break apart into smaller pieces that can block the artery. Sometimes the plaque deposits will crack, creating a place for a blood clot to form. If an artery becomes completely blocked, the blood flow to the heart muscle is cut off. This will cause damage to the heart muscle. This is also known as a "heart attack".



Heart Surgery

To perform heart (cardiac) surgery, the surgeon will need to make a chest incision. In most cases, the incision will be at the breastbone, this is called a sternotomy. This is often referred to as “open” heart surgery. Sometimes, your surgeon can use a minimally invasive technique using a smaller incision on the right side of your chest. Your surgeon will determine the best approach for your surgery.

To perform cardiac surgery the heart and lungs may be stopped, and your blood will be circulated using a bypass machine, (also called a “heart-lung machine”).

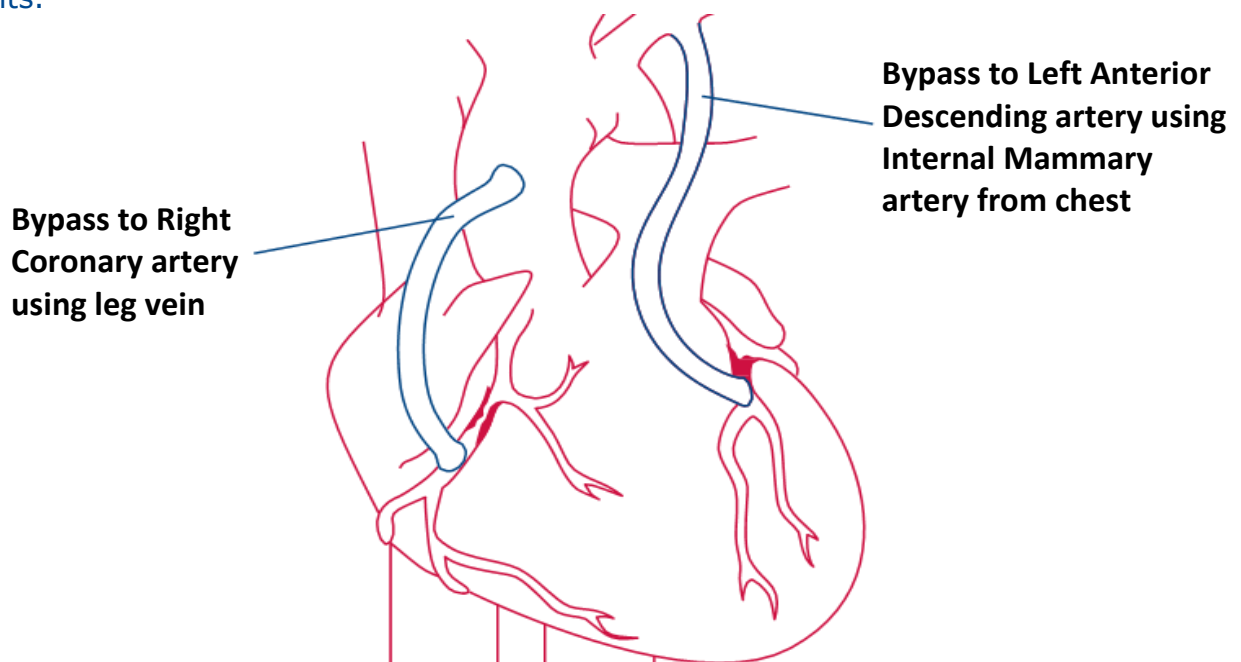


© Stony Brook University Medical Center. May 8, 2023.

Bypass Surgery

Cardiac bypass surgery may also be called “coronary artery bypass grafting (CABG)” or “aortocoronary bypass (ACB)” surgery. This surgery is used for people that have narrowed or blocked coronary arteries to increase blood flow and stop chest pain (**angina**).

The surgeon may use a vein from your leg, an artery from your arm, and/or an artery in your chest as a graft. A graft attaches to an artery with good blood supply at one end and the other end attaches to the coronary artery below the area of a blockage. The plaque built up inside the artery is not removed but is “bypassed” instead. Blood will now flow through the graft, past the blockage, so the heart muscle can receive oxygen and nutrients.



Heart Valves

The heart has 4 valves: the aortic, mitral, tricuspid, and pulmonic valves. Heart valves are delicate, yet very durable. Each heart valve opens and closes over 100,000 times every day. These valves maintain the forward flow of blood through the heart and, when working properly, prevent backwards flow when the heart beats.

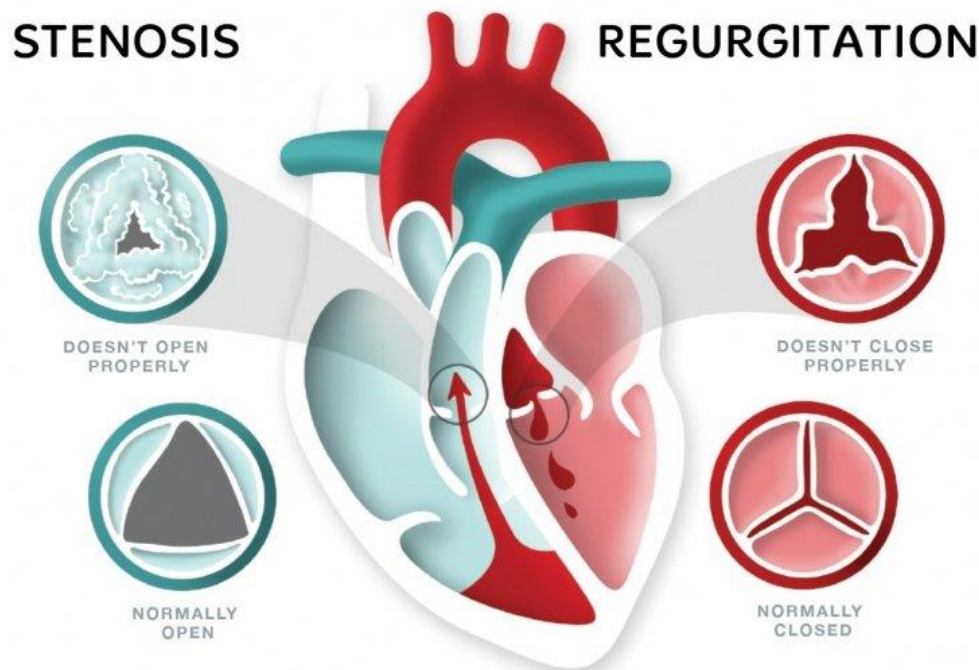
Valves may be abnormally formed at birth, or can become damaged later in life due to conditions such as:

- Infection
- Rheumatic Fever
- Heart attacks
- Normal aging process that causes calcium build up

Any of these conditions can result in a variety of types of damage to the valve:

1. The valve opening may become smaller and unable to open freely. This is called **stenosis**.
2. The valve may fail to close completely.
3. The valve may collapse backwards into the heart chamber it was supposed to seal off. This is called **prolapse**.

If the valve does not close completely or if it is prolapsed, it will allow blood to flow backward through the heart. This is known as **regurgitation**, and it causes your heart to work harder. The aortic and the mitral valves are the valves that are most frequently affected or damaged.



Valve Surgery

Heart valve problems may be fixed by either repairing or replacing the valve. Your surgeon will discuss the best treatment and the surgical approach that will be used, with you and your loved ones.

Valve Repair

Annuloplasty

An annuloplasty is used for either mitral or tricuspid valves. When the area around the heart valve has become enlarged, the valve is unable to close properly. To correct this, the surgeon will insert a new artificial ring or band. This ring or band is designed to restore the shape and size of the valve and help prevent further enlargement. This allows the valve to close completely and function properly.

Which of these applies to me?

Band



Ring



Valve Replacement

The heart valve may be too badly damaged to repair and replacement of the heart valve may be necessary. The surgeon will discuss with you and your loved ones the use of a tissue valve (called bio-prosthetic) or a mechanical heart valve.

Which one applies to me?

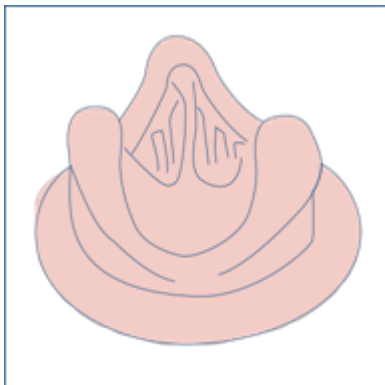
Mechanical Valves



Mechanical heart valves, first developed in the 1960s, are made of metal. The mechanical heart valve is durable. Some patients hear a “clicking” sound with each heartbeat.

The valve is made from a material that is “foreign” to the body and has moving mechanical parts. Blood clots can easily form in and around the valve. For this reason, patients receiving a mechanical valve must take blood thinners (warfarin) to prevent blood clots for the rest of their lives.

Tissue Valves

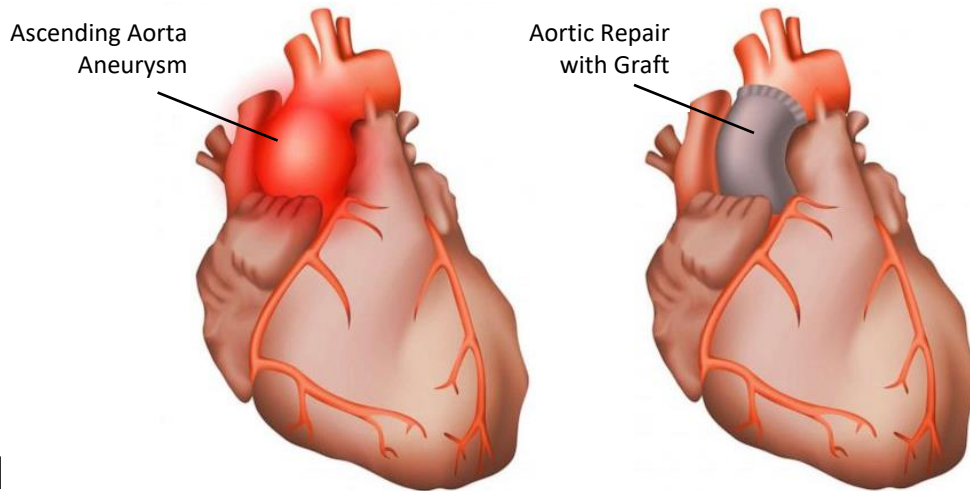


Tissue heart valves are prepared generally from the hearts of pigs or cows. These animal heart valves look and perform similarly to human heart valves. The tissue heart valve is not as durable as a mechanical valve.

The tissue valve does not have the moving mechanical parts, so the blood is less likely to form clots. In some cases, you may need to take blood thinners (warfarin) for the first 3 months after surgery. Although you may need to take blood thinners for other reasons, you will not need blood thinners lifelong for tissue valves.

Aortic Repair Surgery

The aorta is the largest artery in the body. It begins at the heart and runs through the chest and abdomen. Sometimes the walls of the aorta weaken and bulge in one area, this is known as an **aortic aneurysm**. Other conditions of the aorta include **dilation** (widening of the aorta) and **dissection** (tearing of the lining of the artery wall). Sometimes, these conditions can have no symptoms, but need to be fixed to prevent future problems, like rupture or dissection. An aortic repair is an open-heart surgery to replace the weakened or damaged area with a Dacron (polyester) tube.

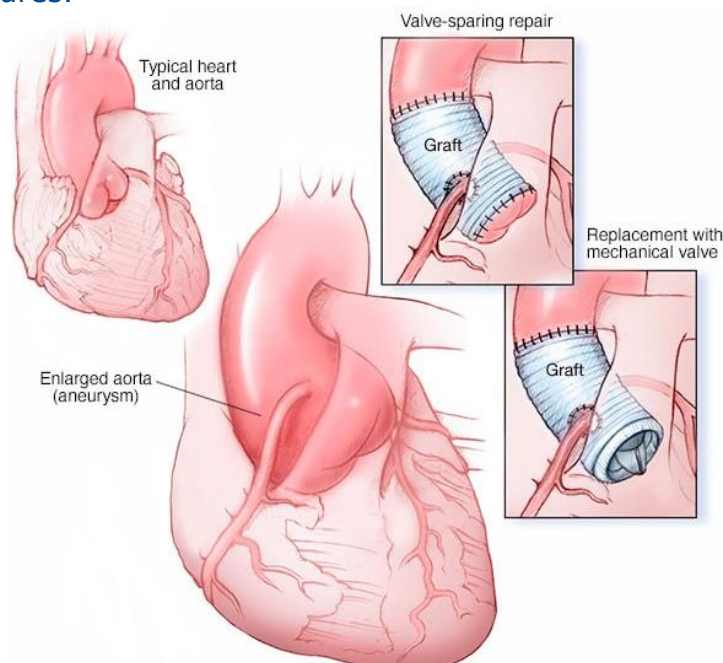


Band

Ring

© Illustration of an ascending aortic aneurysm before and after repair with a tube graft. Veronika Zakharova/Getty Images

Sometimes, other structures are affected by the problem with the aorta and may need to be fixed as well. For example, aortic arch and aortic root repairs include attaching arteries to the graft. Also, aortic root (where the aorta attaches to the heart) problems need aortic valve procedures.



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The Cardiac Team

During your stay at St. Mary's General Hospital, you will encounter many members of the health care/ multidisciplinary team. Some of these members will include:

Cardiac Surgeon	<ul style="list-style-type: none"> • Will meet with you before your surgery and perform the surgery. • You may not see your surgeon daily following the surgery, but you will follow up with him/her at your post-op visit.
Cardiac Anesthesiologist	<ul style="list-style-type: none"> • Will see you before your surgery. • Cares for you in the Operating Room, keeps you "asleep", and manages your blood pressure during surgery. • Is also responsible for your medical care in the CVICU.
Multidisciplinary Team	<p>Depending on your needs you may also see:</p> <ul style="list-style-type: none"> • Occupational Therapist (OT) - reviews your ability to complete routine daily activities. • Social Worker - assists in discharge planning, providing information on financial resources, and providing counseling on stress management and your emotional recovery. • Dietitian - provides healthy heart diet instruction. • Pharmacist - helps you to understand your new medications. • Respiratory Therapist - works with you in the CVICU to remove your breathing tube. • Spiritual Care - assists with coping strategies and provides spiritual support to those in distress. Available, regardless of spirituality or religious beliefs, 24 hours a day, 7 days a week.
Nurse Practitioner (NP)	<ul style="list-style-type: none"> • Manages your medical care while on the Cardiac Surgery ward (3 West). • You will see the nurse practitioner daily through the week during your stay on 3 West.
Physiotherapist (PT)	<ul style="list-style-type: none"> • Helps you to complete breathing exercises after surgery. • He or she will assist you to walk, complete the stairs, and teach you to get out of bed with minimal discomfort.
Regional Cardiac Care Coordinator (RCCC)	<ul style="list-style-type: none"> • Manages the details related to your surgical booking as you wait for cardiac surgery. • Is a contact for you, your loved ones, and your doctor(s) during the wait. • Ensures you understand the plans for your cardiac surgery.
Registered Nurses (RN)	<ul style="list-style-type: none"> • Care for you 24 hours a day, while you are in hospital. • Help you to meet your goals for recovery and going home. • Provide you with the information you need to understand your recovery. If you have any questions or concerns, please talk with your RN at any time.
Registered Nurse First Assist (RNFA)	<ul style="list-style-type: none"> • A specially trained Registered Nurse working in the Operating Room. • Will see you before your surgery to assess your limbs for removing the artery and/or vein. • Completes hair clipping of your limbs and chest if necessary.

Waiting for Surgery in Hospital

Some people will wait for surgery in hospital (either at SMGH, or another area hospital). Others will wait at home for their surgery. The average wait time for heart surgery can be days to months. It depends on each person's condition. In hospital, the medical staff will need to do a few things before your surgery. Here is what you can expect:

- A nurse practitioner or doctor will complete your medical history and do a physical exam.
- Your anesthesiologist will see you before your surgery.
- The nursing staff will go through this teaching booklet with you before surgery.

You may have some tests completed while you wait for surgery. Examples include:

- Bloodwork
- ECG
- Chest x-ray
- Nasal and rectal swabs (to check for antibiotic-resistant bacteria)
- Urine sample

Other healthcare specialists may need to see you before your surgery. Depending on your medical history, you may also have other tests.

Waiting For Surgery at Home

If you will be waiting at home for your heart surgery, your surgeon will arrange for you to have an appointment in the Pre-surgery Clinic. This appointment will take place within 6 weeks of your surgery date. You will receive the appointment information and some questionnaires and forms in the mail. You will need to fill out all of the forms and questionnaires before your clinic appointment.

You will find more information about the Pre-Surgery Clinic visit starting on page 17.

Chance of Cancellation

We will make every effort not to change your surgical date. There is always a chance, however, that it may change. Sometimes events occur without warning. If your surgical date needs to be changed, the RCCC or your surgeon's office will let you know as soon as possible. They will arrange for a new date to be booked. Ensure that the Regional Cardiac Care Coordinator (RCCC) has the correct day and evening phone number(s) to reach you.

What Can I Do While Waiting for my Surgery at Home?

Activity

It is important to stay active in the days and weeks leading up to your heart surgery. Do not try to increase your activity level. Avoid activities that lead to shortness of breath or chest pain. If you were not physically active before, ask your doctor before starting an exercise program before surgery. You may continue to work leading up to your surgery unless your surgeon tells you otherwise.

Limit your work to activities that do not cause angina, shortness of breath, or fatigue.

Physical activity will help your lungs and circulation. Being in better physical shape will make your recovery easier.



What If I Drink Alcohol?

Drinking alcohol before surgery can affect your recovery. **You should stop drinking alcohol now!** Make sure you tell the staff exactly how much alcohol you have had in the days leading up to your surgery. This will help the doctor, or nurse practitioner to adjust your medications properly.

Alcohol withdrawal can cause:

- Agitation
- Confusion
- Nausea and vomiting
- Increased sweating
- Tremors
- Headaches
- Feelings of anxiety



Weaning your body from alcohol before surgery can also help with pain control and developing normal sleep patterns after surgery. You can find more information on the following website: <https://www.ccsa.ca/alcohol>

What If I Smoke?

Smoking is a risk factor for heart disease. **If you smoke, it is important that you try to quit before your surgery. Ask your health care professional about medication to help with your efforts to quit.**

There are many benefits to stopping smoking in the days or weeks before your surgery. These include improved healing and better lung function. In short, it will help improve your recovery. Continuing to be a non-smoker after your surgery will improve your overall health. It will help you to keep both the short and long term positive outcomes of not smoking.



For more information, contact Telehealth Ontario: 1-866-797-0000

What Should I Eat?

Continue to follow a Healthy Heart diet. You are encouraged to follow this diet after surgery. For information on the Healthy Heart diet, see page 51-52.

For other diet information and heart-healthy recipes, check out the Heart and Stroke Foundation of Canada website:

<https://www.heartandstroke.ca/healthy-living/healthy-eating>

What if My Condition Changes?

Condition	Effect	Contact
Change in angina pain	If you are having angina more often or severe than usual, it may signal a change in your heart disease.	<ul style="list-style-type: none"> Contact your Cardiac Surgeon or the Regional Cardiac Care Coordinator at St. Mary's General Hospital.
<p>*If you have unrelieved chest pain, call 911, or have someone drive you to the nearest Emergency Department. DO NOT drive yourself.</p>		
Develop a cold with a fever, or cough with phlegm, or any other type of infection	Infections need to be treated before surgery.	<ul style="list-style-type: none"> Contact your family doctor and tell him/her that you are waiting for heart surgery. Your family doctor will contact the RCCC at St. Mary's General Hospital about your condition if needed.
Injured in an accident (Such as a fall, workplace injury, car accident, etc.)	You may need to be properly assessed and treated before your surgery. These injuries may or may not affect your surgical date.	<ul style="list-style-type: none"> See a doctor for your injuries. If you need to visit an Emergency Department or Urgent Care clinic, tell the staff you are waiting for heart surgery. Please ask for a report to be sent to the RCCC at St. Mary's General Hospital.

Please contact the Regional Cardiac Care Coordinator if:

- There is a change in your condition that you are unable or unsure how to manage at home.
- You need to provide an update on your condition.

Call (519) 749-6578, ext. 1936 during regular business hours, Monday to Friday, except for holidays.

Please leave a message if you are unable to reach the RCCC in person. Be sure to leave the correct day and evening telephone number(s) where you can be reached for the return call.

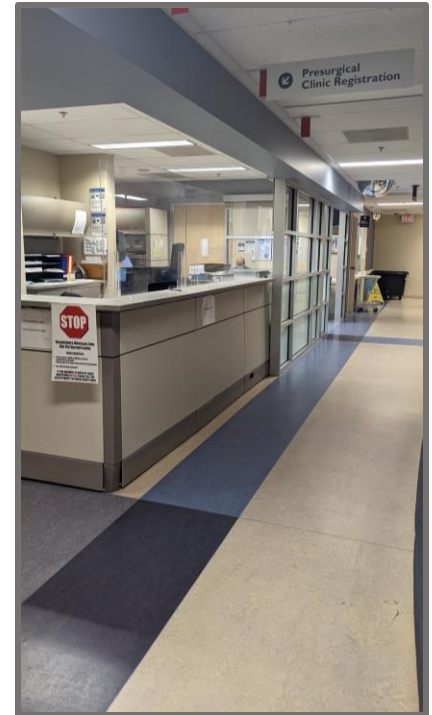
The Pre-Surgical Clinic

The goal of the Pre-Surgical clinic is to help prepare you and your loved ones for your upcoming surgery.

Plan to spend at least 4 hours at the clinic. Please bring 1-2 loved one(s) or support person(s) with you to this appointment. You will receive a lot of information about your hospital stay and recovery.

On the day of your clinic visit, please:

- Eat and drink as usual. You may bring lunch with you if your appointment is before noon, or eat lunch before you arrive if your appointment is in the afternoon.
- Take your usual medications.
- Wear loose-fitting, comfortable clothes. Wear socks instead of pantyhose.



Please bring the following items with you to the clinic:

- Completed forms and questionnaires
- Health card
- All of your medications in their original containers. This includes any herbals, naturopathic, or vitamin products.
- If English is not your first language, please bring someone who can translate for you.

What happens during my clinic visit?

- You will see a short video that describes what you can expect during your hospital stay. The clinic staff will answer your questions, and help you plan for your recovery at home.
- The nurse will complete your health history. The nurse will also teach you the things you will need to do to prepare for surgery, and what you will need to do after surgery.
- You will see the anesthesiologist.
- You may have some tests completed while you wait for surgery. Examples include:
 - Bloodwork
 - ECG
 - Chest x-ray
 - Nasal and rectal swabs (to check for antibiotic-resistant bacteria)
 - Urine sample

Getting Ready for Surgery

Please designate one support person (before your surgery) to act as spokesperson. This helps the healthcare team to streamline communication. It also gives nursing staff more time to focus on taking care of you as you recover from your surgery.

The weeks/days before surgery:

- Take your medications as instructed by the nurses in the Pre-surgical Clinic (refer to the Medication lists on page 19).
- Stop shaving below the neck 2 weeks before your surgery date. Men can and should only shave their face.
- Pack according to the instructions on page 1.
- Remove all jewelry, including wedding rings, before arriving to hospital.
- Remove all nail polish from your fingers and toes. We also recommend that you remove artificial nails.

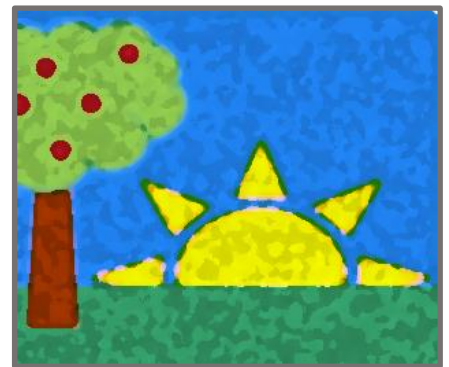


The night before surgery:

- Take a 15 minute shower.
- Do not eat or drink after midnight.
- Do not chew gum, eat hard candy, or smoke after midnight.
- Men may shave their face only. Women do not shave at all.

The morning of surgery:

- Have another 15 minute shower. Put on fresh, clean clothes after your shower.
- Do not wear make-up, perfume, or deodorant on the day of surgery.
- Brush your teeth, but do not swallow the water.
- Wear your dentures, eyeglasses, and hearing aids as needed. These will be removed before surgery. Bring all your cases and protective devices.
- Bring everything on the packing list (see page 1)
- Do not bring any valuables to the hospital
- After your surgery, loved one(s) may bring your belongings to CVICU.



Questions I have about getting ready for surgery:

Medication Instructions Before Surgery

The clinic staff will review all of your medications with you during your visit. It is important to take all of your regular medications unless otherwise instructed below.

Medications to stop **before**
surgery:

When to Stop:

Medications to take **the morning of** surgery (with a sip of water only):

How Long Can I Expect to be in Hospital After Surgery?

You will need to plan for what going home will be like before you have your surgery. You can expect to be in the hospital for at least 4-7 days after surgery. Your loved ones should arrive at 10:00 a.m. on the morning you are leaving hospital. This will allow them to take part in the teaching before you go home. The activities you will be able to do when you first go home will depend on what you were able to do before surgery. You can expect to return to doing basic activities, such as: walking, climbing a flight of stairs, preparing light meals, and completing your normal morning routine.

It is important that you inform the nursing staff early in your hospital stay if:

- You live alone or have no supports in the area
- You or your loved ones are unsure about your ability to cope at home
- You feel that you will need the services of the home supports ("Home and Community Care") or convalescent care.

Few patients need to go to a rehabilitation centre before going home. If you need this, staff will speak to you and your loved ones about it during your hospital stay.



Arriving at the Hospital

You may have your loved ones come with you on the day of surgery. Please arrive on time. When you arrive at the hospital, you will need to report to the 1st floor registration admission where you will be registered by a clerk. Please be sure to bring your health card with you. Then you will go to the 2nd floor Day Surgery area.

In Day Surgery, you will be shown to a stretcher area where you will change into a hospital gown. A nurse will come in to admit you, review your health history, and take your vital signs. The nurse will go over a pre-operative checklist with you. The nurse will also review all of your medications. Below, write all of the medications you took on the day of surgery.

Medications you took **the morning of** surgery:

When the nurse is finished, the Registered Nurse First Assist (RNFA) will come in to speak with you. He or she will ask you more questions. If you require hair clipping before your surgery, the RNFA will complete this task. The RNFA will also do a complete body wipe using cloths that contain an antibiotic solution (chlorhexidine 2%).

When the RNFA is finished it is almost time for you to go for your surgery. An operating room attendant will come to your stretcher, put an oxygen mask or nasal prongs, and wheel you over to the operating room.

Your loved ones will be shown to the waiting area. They will be asked to take all of your belongings with them, as there is no place to store them in the Day Surgery area.

Privacy Code

The nurse will give you a privacy code number. Your loved ones will have to repeat this number to staff when they want to obtain updates on your condition.

Give your privacy code only to those loved ones you wish to receive information on your condition from the health care team.

Your privacy code number is: _____

During Your Surgery

The surgery will usually take 4-6 hours. It will depend on the type of surgery you are having. Your loved ones can wait in the waiting area on the 2nd floor until your surgery is done.

When your surgery is finished, your surgeon will call your loved ones to give a report of how the surgery went.

You will be taken to the Cardiovascular Intensive Care Unit (CVICU) to recover from your surgery. You can read more details about what happens after surgery on page 23.

Once you are settled in the CVICU (this can take up to 1 hour), your loved ones will be allowed to visit you all together for the first visit after surgery. After this, only 2 visitors will be allowed at the bedside at a time.

Please try to avoid phone calls, or visits to the CVICU from 6:30 to 8:30 a.m. and 6:30 to 8:30 p.m.



Questions my loved ones have for the Surgeon and staff:

My Surgery:

Date: _____ Surgeon: _____

Surgery: _____

After Surgery

After your surgery you will be transferred to the Cardiovascular Intensive Care Unit (CVICU). The intensive care team will stabilize and help you recover from the surgery. You will be kept asleep until your vital signs are stable. You will be given medications to keep you comfortable.



Your loved ones will be allowed to visit for a short time before you wake up. They will get an update on how you are doing and the expected plan for your recovery while you are in the CVICU. All loved ones can come in for the first visit so they can hear the same information at the same time. Have your loved ones make sure the nursing staff has all of the correct contact number(s).

Please leave your valuables at home.

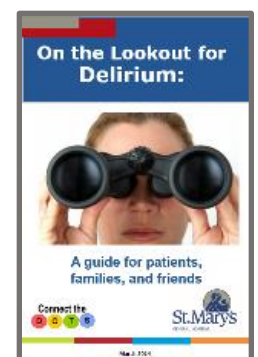
After the first visit, only 2 loved ones are allowed to visit for short periods at the bedside. Loved ones will need to stop at the desk outside of the CVICU doors to call into the CVISU. The staff will let you know if it is okay to come in and visit. Your loved ones will always need to provide the privacy code number to be allowed into the unit, or to receive information over the phone. Your privacy code can be found on page 21.

Please make every effort to designate a single loved one (before your surgery) to act as spokesperson. This helps the intensive care team to streamline communication. It also gives nursing staff more time to focus on taking care of you as you recover from your surgery.

You can expect to be in the CVICU for approximately 24 hours. You will be transferred to the Cardiac Surgery unit on the 3rd floor (3 West) for the rest of your recovery period.

Delirium after Surgery

People who have had surgery are at risk for developing **delirium** during their recovery. For more information, please ask for the "On the Lookout for Delirium" brochure. This will help you and your loved ones learn more about how delirium can affect someone after surgery and how it is treated. It also describes ways loved ones can help.



What to Expect While In the CVICU

Your loved ones can visit with you but you will not be alert yet. You will open your eyes for brief periods and may speak a little, but you will probably not remember that your loved ones visited that day. You will be more alert the morning after surgery.

You will be attached to many wires and tubes that will monitor your recovery. It is important that you and your loved ones do not touch any of these wires or tubes. As you recover, these wires and tubes will be removed.

You will have blood work, an ECG, and chest x-ray done.

Your healthcare team will complete frequent assessments on you. They will teach and support you as you begin to return to normal and everyday activities.



If you or your loved ones have any questions or concerns, please remember to speak to the staff about them.

What to Expect While on 3 West

When you transfer out of the CVICU to 3 west to continue your recovery, your breathing tube will have been removed. You will receive oxygen by nasal prongs or face mask.

You will still be connected to a few wires and tubes. It is important that you and your loved ones do not touch any of these wires and tubes. As you continue to recover, the rest of these wires and tubes will be removed.

You will have blood work, ECG's, chest x-rays, and any other required tests completed throughout the rest of your recovery.

Your healthcare team will complete frequent assessments on you. They will use your "My Journey Home Board" (MJHB, see on page 37) to plan your activity, education, and discharge with you. Your healthcare team will support you to move towards being safely independent.

You will take an **active** role in your recovery and track your progress throughout your stay.

Most patients are ready to return home 5-7 days after surgery.

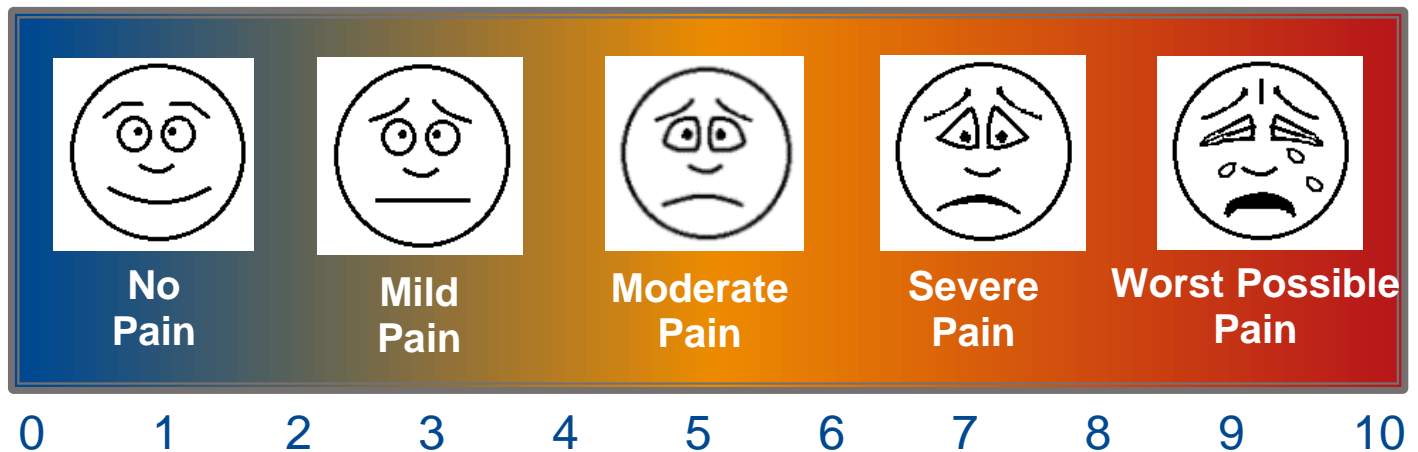


If you or your loved ones have any questions or concerns, please remember to speak to the staff about them.

Pain

The Pain Scale

You will be asked to rate your pain on a scale from 0 - 10. Zero "0" means you are feeling **no pain** and ten "10" means you are having the worst pain that you can imagine. Our goal is to always keep your pain at **3 or less**. We want you to be able to cough and move with relative comfort as you recover. If you are in too much pain, you will not be able to breathe fully or perform the exercises we will be giving you.



You will be asked to rate your pain using a scale like the one above. Let the nurse know the number, the intensity, the colour, OR the facial expression that best describes the pain you are having when moving or breathing deeply.

Please do not hesitate to let your nurse know if you are experiencing pain at any time.

What can you do?

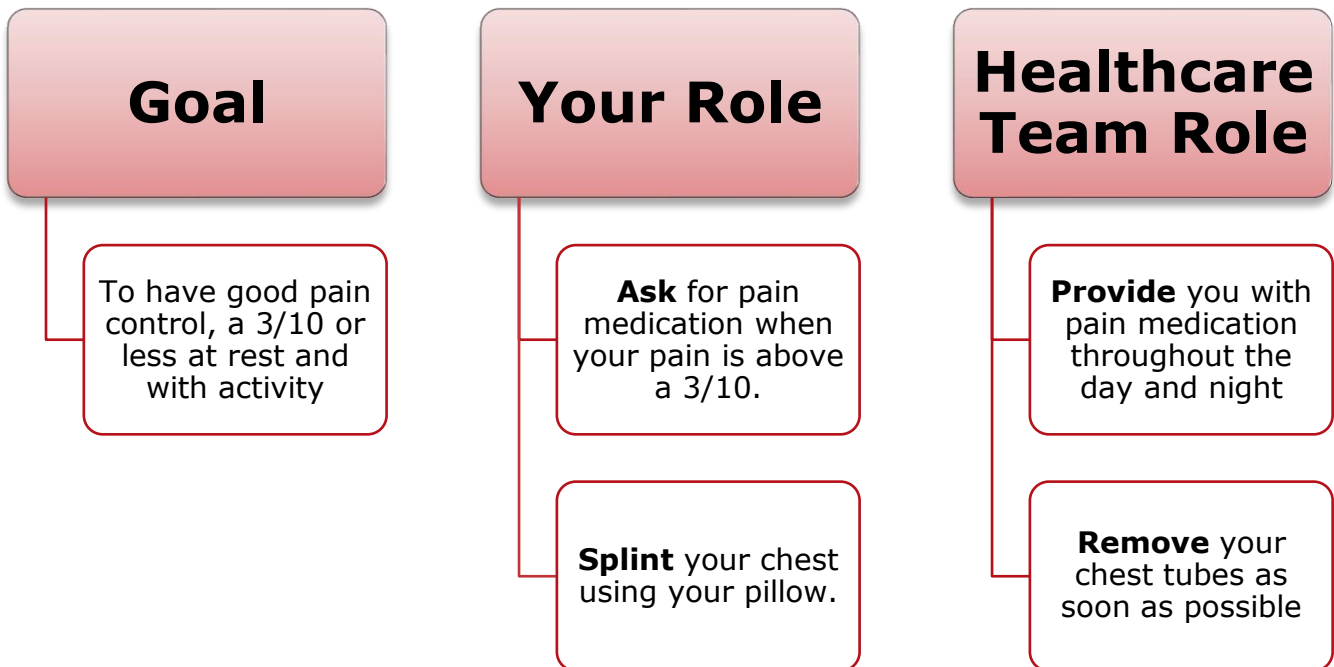
To help control your pain and healing, do not lift, push, or pull anything that weighs more than 10 pounds. We will encourage and assist you to splint your chest when coughing, sneezing, or laughing. You will receive a pillow after your surgery to help splint your sternum at all times. Women are encouraged to wear their bra after surgery (this may require an extension). This will help to ease the pain and protect your sternum.

Management of Pain

Some pain is to be expected after surgery. Depending on the type of surgery you have, you may have one or more incisions on the following areas: Sternum (middle of your chest), the right side of your chest, your arm(s), or leg(s).

You will have chest tubes below your sternal incision. These tubes help to drain extra fluid from the surgical area. These tubes can be quite uncomfortable while they are in place. The tubes generally remain in place for 1-2 days, depending on the amount of drainage.

Adequate pain control is an important factor in allowing you to do your activities and exercises and progress your recovery.



Preventing Complications

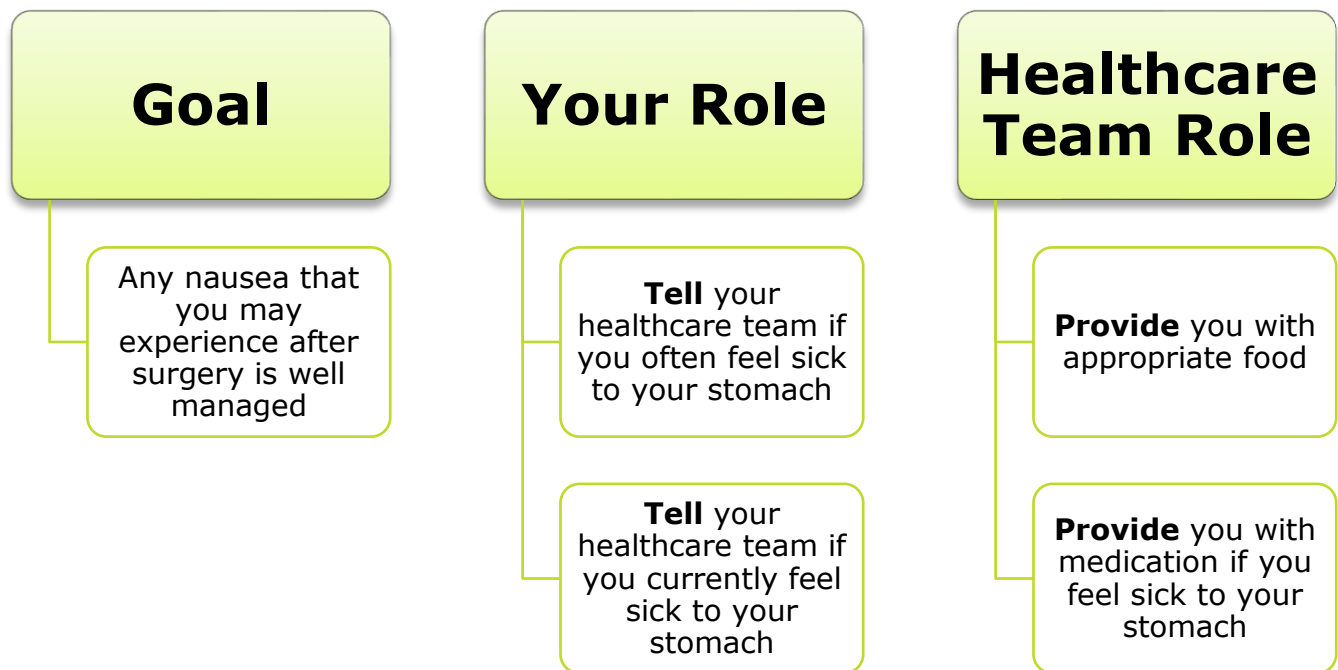
Prevention of Nausea

Some patients can feel sick to their stomach (also known as nausea) after surgery. Nausea can occur for a number of reasons. Some examples are:

- The medication used to keep you asleep during surgery
- Pain medication
- Changes to the food you eat

Feelings of nausea can often lead to a loss of appetite, decreased activity level, and increased pain.

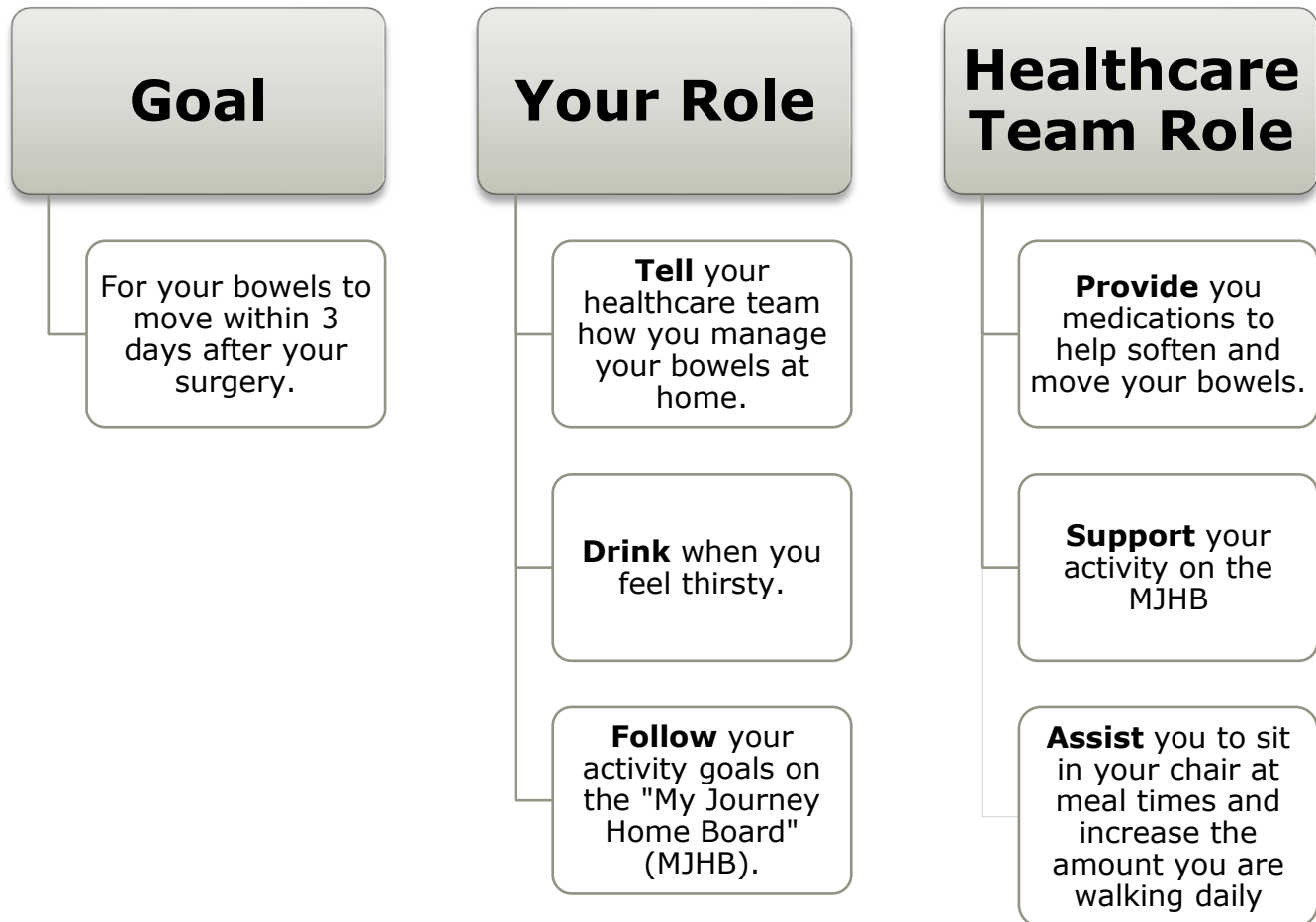
Having well controlled nausea will allow you to eat your meals to restore your energy and meet your activity goals.



Management of Constipation

Some patients may experience problems with constipation after surgery. Constipation may lead to feelings of nausea.

To learn more about eating foods that are good for your heart health, please see **Healthy Heart Diet** on pages 51-52.



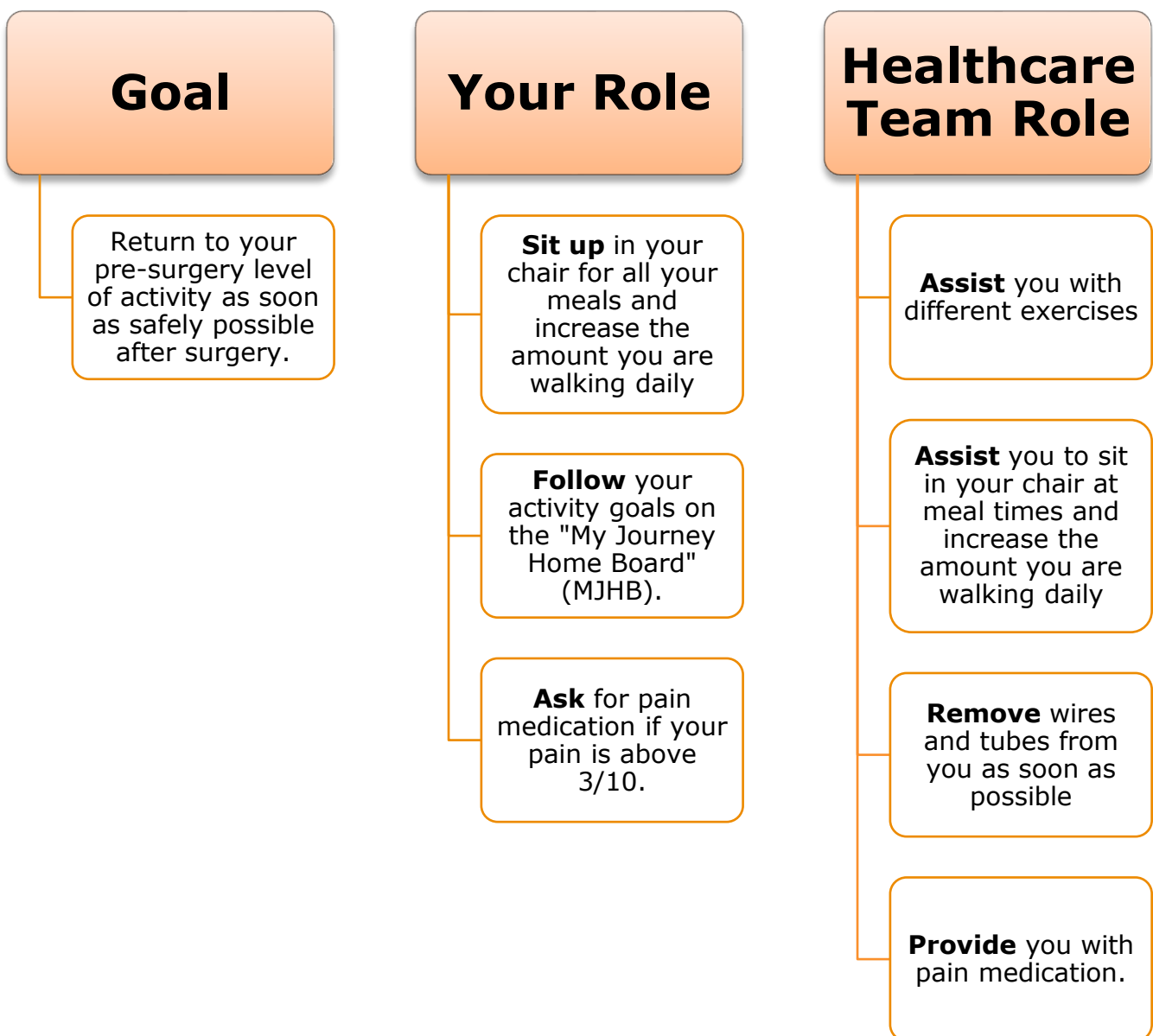
Prevention of Immobility

After surgery, you will have tubes, wires, monitors, and drains in place. These make the ability to move around more difficult.

Often, people also report feeling tired and low energy from the surgery. Sometimes the pain from surgery makes it harder to move around.

Despite these things, it is important to keep moving. The team will assist you to complete daily walks, physical exercise, and breathing exercises after surgery.

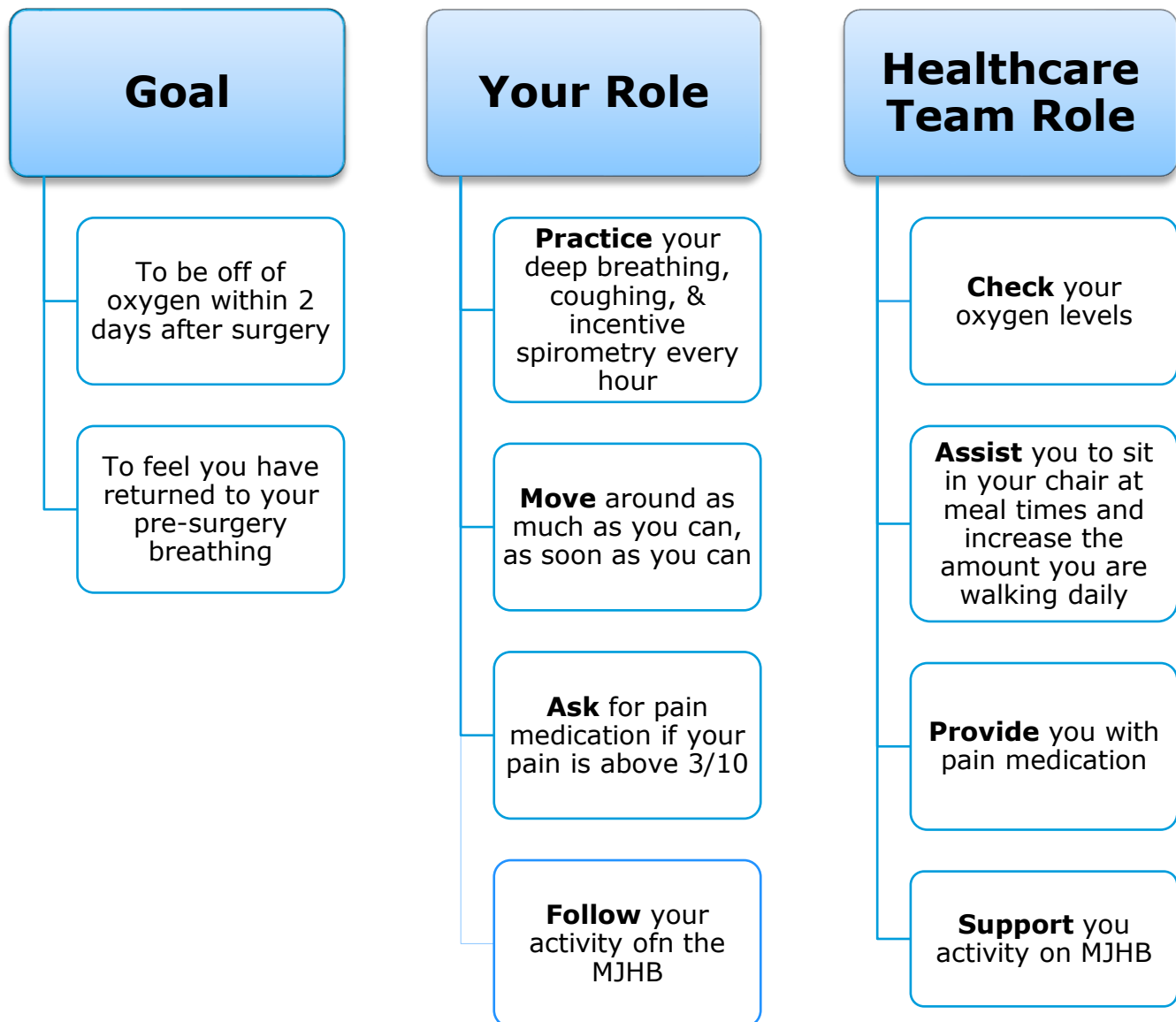
To learn more about the exercises that you will complete while in hospital, see **Physical Activity** on pages 44-45, **Exercises in Hospital** pages 32-33 and **Protecting Your Sternum** on pages 34-36.



Prevention of Respiratory Compromise

In surgery, you are usually on a “heart and lung bypass” machine. After surgery, you will have a breathing tube in place, and it will be attached to a breathing machine (respirator). Your condition will determine how long the breathing tube stays in.

These necessary therapies put your lungs under some stress. It is important to recover your lungs as quickly as possible to help prevent pneumonia and other problems. Using the breathing machine and doing your activities will help recover your lungs faster.



Exercises in Hospital

Exercises are an important part of your recovery. Throughout your hospital stay, the staff will teach you to complete breathing, arm, and leg exercises. They will also show you how to properly move from lying to sitting and sitting to standing positions.

Breathing Exercises using the Incentive Spirometer

The staff will instruct you how to use the incentive spirometer when you sit at the side of the bed for the first time.

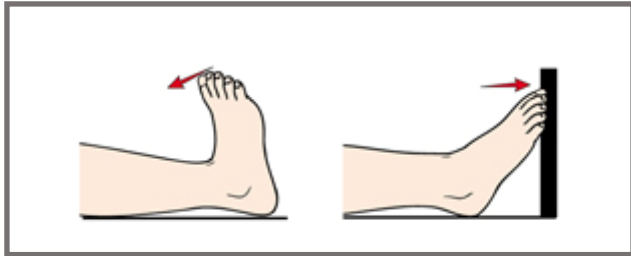
- Make a firm seal on the mouth piece and take in a slow, relaxed deep breath using your diaphragm. Try not to shrug your shoulders.
- Make sure you do not cover the holes at the bottom of the columns with your finger.
- Hold your breath for as long as you can. Then release.

You are encouraged to perform deep breathing **10 times every hour while you are awake** for the duration of your stay in hospital.



Ankle Exercises

You will perform these while you are still in bed and then later when you are sitting in a chair. You should perform these **every hour while you are awake**.



Up and Down: Move your foot to point your toes towards your shin, and then move your foot to point your toes to the ground. Complete this action 5 times with each foot.

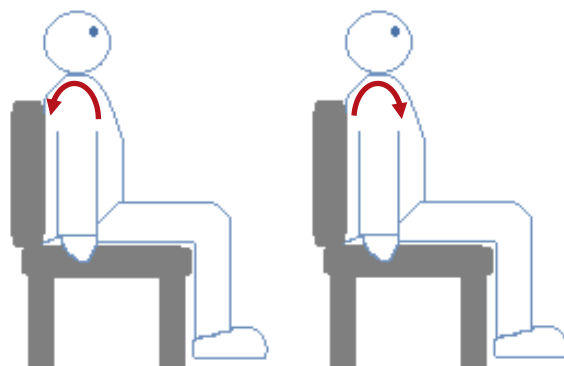


Circles: Make a circle moving your foot to the left, and then make a circle moving your foot to the right. Complete 5 circles in each direction. Repeat with the other foot.

Lewis, S.L. et al. (Eds.) (2007). *Medical-surgical nursing: Assessment and management of clinical problems* (7th Ed.). St Louis: Mosby.

Arm Exercises

Shoulder Shrugs: You can do this while sitting in a chair or standing. Circle your shoulders backwards and then forwards. Repeat this 5 times in each direction.



Protecting your Sternum

Sternal Precautions for Heart Surgery Patients who have had a Sternotomy

Your sternum is a large bone down the middle of your chest. If the surgeon has made an incision through your sternum during your surgery, this is called a **sternotomy**. This incision and the bone will need 3 months to heal completely. Moving around puts a lot of strain and pressure on this area. You will need to protect this area as it heals.



Follow these precautions for **6 weeks** to help your sternum to heal properly.

Make sure that you DO :	Make sure that you DO NOT :
✓ Hug your chest with your pillow when coughing, laughing, and sneezing.	✗ Use your arms to assist with getting into or out of the bed or chair.
✓ Hug your chest with your pillow when changing position.	✗ Lift or carry your chest tube drainage box.
✓ Hug your chest with your pillow when rolling over.	✗ Tie the back of your own gown.
✓ Roll your body without pulling with your arms.	✗ Put both hands behind your back at the same time.
✓ Use your legs to adjust your position.	✗ Extend either arm behind your back beyond your shoulder.
✓ Raise only one arm at a time above your head.	✗ Lift both arms over your head at the same time.
✓ Complete your exercises as directed in the "Heart Surgery" guide and as directed by your physiotherapist.	✗ Lift or move the furniture in your room.
✓ Lean forward and use your legs to stand up.	✗ Lift, push, or pull anything that weighs more than 10 lb.
✓ You may move your own wheelchair if necessary using your feet.	✗ Lay on your side when in bed.
✓ Lay on your back when in bed.	

Please Note: For 3 months – NO heavy lifting and NO activities with large arm movements (e.g. golfing, swimming, etc.)

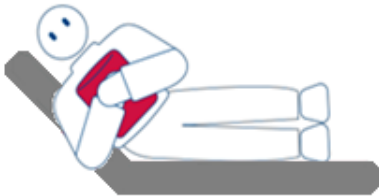
Protecting Your Sternum

In order to protect your sternal incision and sternum, it is important to follow these steps when changing positions. You will need to limit using your arms to move yourself around as much as possible. This will help decrease your pain and prevent injury to your sternum.

Getting Out of Bed



- Raise the head of bed to a 20-30° angle.
- **Hug your pillow** to your chest.



- Move close to the edge of the bed.
- Bend your knees up and roll over onto your side.
- Bring your legs over the edge of the bed. Push (a little) with the elbow that is against the bed to help you sit up.
- Use your legs to help you – push them against the side of the bed as you sit up.



- Sit on the side of the bed and rest for at least 30 seconds to make sure you are not dizzy.
- Stand up.

Getting Into Bed

- Make sure the head of the bed is raised to a 20-30° angle to make it easier.
- **Hug your pillow** to your chest.
- Stand squarely in front of the side of bed. Feel the legs.
- Lean forward - take a small 'bow' and lower yourself to the side of the bed.
- Sit on the edge of the bed.
- Lower your shoulder and head to the pillow while staying on your side.
- Lift 1 leg at a time onto the bed.
- When both legs are on the bed – Roll onto your back and position yourself straight in the bed.



Getting Up from a Chair



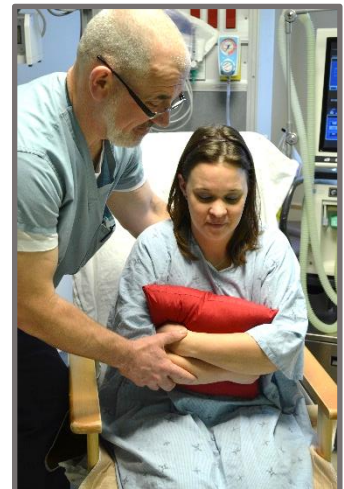
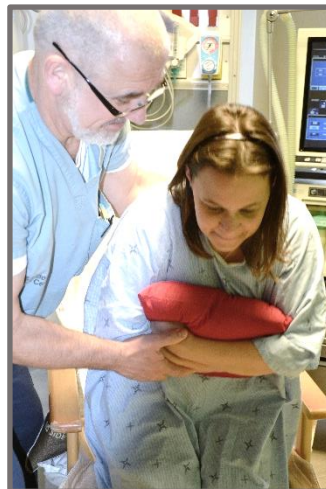
- **Hug your pillow** to your chest.
- Wiggle yourself forward with your hips to sit closer to the edge of the chair (or bed).
- Place your feet shoulder width apart with knees bent before you stand.




- Rock forward 3 times, bringing your "nose over your toes" while counting to 3.
- Stand up using your legs on "3".

Sitting down in a chair

- **Hug your pillow** to your chest.
- Stand squarely in front of the chair. Feel the chair with the back of your legs.
- Lean forward - take a small 'bow'.
- Slowly lower yourself to sit on the chair.



My Journey Home Board



MY JOURNEY HOME BOARD

Room: _____


Today's Date:


Mon Tues Wed Thurs Fri Sat Sun


My Post-Operative Day


My Discharge Plan

Date: _____


3+ days


2-3 days


24 hours


Less than 24 hours


Your family must ARRIVE by 10:00 AM on day of discharge


Notes/Pending Tests:


My Care Team


Nurse
Nurse Practitioner
Surgeon

My Daily Plan


10 times every hour


1 hour/meal
In chair for all meals


15 min/walk
___ walks ___ stairs


20 min/wash
Wash or shower

My Goals

4-6
hours
Activity


3 / 10
Pain


My Diet


Patient and Family Notes


Assistance Level: IND SPV 1A 2A LIFT BEDREST


My Education Plan



Anticoagulation


Endocarditis


Preparing for Home


Medications


DOTS sheets


Other Education

When you arrive in your room on the Cardiac and General Surgery unit (3 West), you will see this board hanging in the room. We call this "My Journey Home Board".

This board will tell you and your loved ones:

- The current date
- Your nurse's name
- Your nurse practitioner's name
- Your surgeon's name
- Your daily plan
- Your plan for discharge

Each day, your nurse and nurse practitioner will use this board to review the progress you are making towards going home. They will also review the expected activities, as well as the planned teaching topics for the day. This will help keep you and your health care team on track for ensuring that you are properly prepared to go home after surgery.

Medications

It is important that you understand when and how to take each medication before you go home. The nurse will give you a medication schedule. The schedule will guide you in which medication to take, how much, and when.

It is very important that you fill your prescription the day you go home. You may not be on all of the same medications or doses that you were on before your surgery. Your community pharmacist can make sure you only have the medications you should continue to take. Please take all of your home medications with you when you are getting your prescription filled. They should be in their original containers. Your community pharmacist should review all of your medication with you when you pick them up.

Do not start taking herbal, naturopathic medications, or vitamins without talking to your family doctor or nurse practitioner (NP). Some of these products can interact with your prescription medications or change how they work.

The nursing staff will provide teaching about your medications each day when you receive your pills. Our goal is for you to understand why you are taking each medication and how it will work in your body. If you would like more information, please ask to speak with the clinical pharmacist. After you leave the hospital, your community pharmacist is another valuable resource for medication information.

If you require a refill of your medication, please contact your family doctor or nurse practitioner.



How Do I Know I am Ready for Home After Heart Surgery?

Pain

Your Pain is well-controlled

Nausea

Your Nausea is well-controlled

Constipation

You have had a bowel movement

You are eating well

Immobility

You are able to walk with or without a rollator walker

You are able to shower with minimal help or supervision

If you have stairs at home, you have practiced stairs in hospital

Respiratory Compromise

You have a good oxygen level

Other

Your heart rate and rhythm have been stable

Your blood pressure is within normal range

You have a normal temperature

Your incisions are healing well

Your bloodwork results are within expected range



Cardiac Rehabilitation

Before you leave the hospital, the team will talk to you about taking part in a Cardiac Rehabilitation program after you go home. This program can help you achieve and maintain a heart-healthy lifestyle.

The program offers education and support to encourage heart-healthy habits. These habits will help you reduce your risk of a future cardiac event. The program team will work with you to improve your heart-healthy behaviours.

For patients in the Waterloo-Wellington region

While in the program you will benefit from:

- Full cardiac assessment
- Group education classes
- Individual education
- Exercise stress test
- Personalized exercise prescription
- A 3-month supervised physical fitness program
- Nutrition counseling
- Smoking cessation advice
- Stress coping strategies



The Cardiac Rehab nurse will contact you about when you can begin your program. Please reach out to the Cardiac Rehab team if you have not heard from them.

**St. Mary's General Hospital
Cardiopulmonary Rehabilitation Clinic**
Medical Centre 2
435 The Boardwalk, Waterloo, ON. N2T 0C2
Phone: (226) 806-5911

Website: <https://www.smgh.ca/areas-of-care/cardiac-care/cardiac-rehabilitation>

For patients outside of Waterloo-Wellington Region

If you are from outside the area, you will be given information about a program close to your home.

Is This Normal?

Why am I depressed or sad?



After the surgery, you will have “up and down” days. You may feel that progress is slow at times. It is normal to feel down, weepy or depressed at times. You may find it is difficult to concentrate. Feelings of sadness, irritability, fear, or anxiety are also common. Talk openly about your feelings with your loved ones and the health care team. Talking about your emotions will allow the staff and your loved ones to help you to cope with them.

You may have these feelings for up to 6 to 8 weeks. Speak with your family doctor or nurse practitioner (NP) if your depressed feelings:

- Last longer than this.
- Start to interfere with your relationships.
- Interfere with your ability to do your everyday activities.

Why am I so tired?

After surgery, you may feel exhausted. This may be due to being less active, lack of sleep, medications, or the surgery itself. Remember to increase your activity level gradually and rest when you are tired. This will help you regain your strength faster.

After heart surgery, each person will have a different level of energy. In hospital, the nurses and physiotherapist will help you to build up your level of activity. You will need to continue to build up your level of activity after you go home.

You may not feel you are more energetic each day. Judge your energy level weekly. Each week, you should feel as though you have more energy than the last. It is normal for it to take at least 4 weeks to gain back your energy.



Why do I have trouble falling asleep or staying asleep?

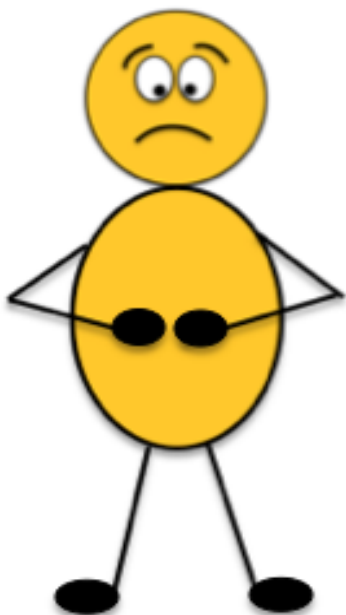
After heart surgery, some people have trouble falling asleep or staying asleep. Some people find they wake early in the morning. This change in sleep pattern can be caused by:

- Medications you received during the surgery
- Pain or discomfort in the recovery period
- Anxiety
- Need to urinate more often during the night (also due to medications)
- Vivid dreams



Your doctor or NP can prescribe pain and sleeping medication to help you get a good night's sleep. These problems with sleep may persist for up to 6 months. If you need a prescription renewed for pain or sleeping medication, please see your family doctor or NP.

Why am I not having regular bowel movements?



After heart surgery, some people have bloating in their belly, rectal discomfort, or constipation. Constipation can be caused by:

- Narcotic medications to control pain
- Lack of physical activity
- Dehydration
- Low intake of fibre in your diet

Symptoms may last until you are back to your normal activities. Your doctor or NP can prescribe stool softeners and laxatives to help promote regular bowel movements. If you need a prescription renewed for stool softeners or laxatives, please see your family doctor or NP.

Incisional Care

It is important that you shower and clean your incisions daily to prevent infections.

- Use warm water and a hand held shower head to be able direct the water
- Use unscented soap
- Wash your hair first – Remember, only have one arm above your head at a time
- Wash your face
- Wash your incision(s) as follows:
 - Wet a clean facecloth
 - Put unscented soap on the facecloth
 - Hold the cloth over top of the incisions, but not touching it
 - Squeeze the facecloth to let the soap and water flow over the incision
 - Use the hand held shower head to rinse
- Wash the rest of your body – Remember, only have one arm behind your back at a time
- Before your shut off the water – Rinse your incisions again
- Pat your incisions dry with a clean towel
- Dry the rest of your body

It is normal that your incision may be:

- Slightly red and sore
- Uneven or bumpy
- Itchy
- Bruised or slightly puffy
- Numb or tingly in some areas
- Draining a small amount of clear, yellow fluid

Radial (Arm) Graft Protection:

- You should not have blood pressure or blood sample(s) taken from the affected arm for **6 months**.
- You will be on specific medication for 6 months to prevent spasm of the radial artery.



Contact your Family Doctor if:

- Your incision becomes warm to the touch, more swollen or reddened, or if it is draining more than usual.
- You have a temperature higher than 38° C (100.4° F), twice in a 24 hour period.



Contact your Surgeon if:

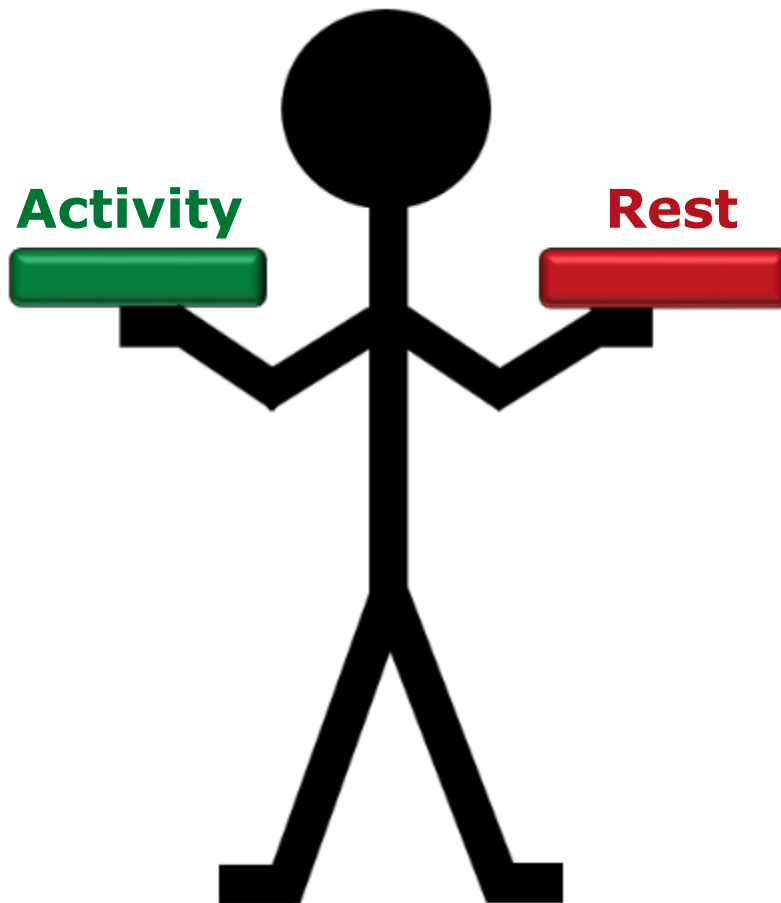
- You have new or widening gaps from the edges of your incisions.
- You feel or hear a “clicking” sound in your chest when you move your arms, cough, or sneeze.

Physical Activity

How to Manage with Low Energy after Heart Surgery

A balance of physical activity and rest is vital for your recovery. Too much physical activity will leave you exhausted and prevent healing. Too much rest can prevent your heart and muscles from getting stronger. Listen to your body. Balance your activity with your rest breaks.

When you go home, you will not have your usual energy level. Begin your physical activity at home at the level you were in the hospital. Set realistic goals for yourself. Follow the "**Home Activity guidelines**" in this book on pages 48-51.



It is all about balance.

Use the 4 “P”s to help manage your energy level.

Plan

- Plan your day, your week, and your activities. Remember to schedule in rest breaks between your activities for balance. Be realistic about your energy level. *STAIR CLIMBING* is an active form of exercise. Plan your day to reduce how often you need to climb stairs. If you live on the main floor of your home but your only bathroom is upstairs, you may need to get a commode or urinal to reduce stair climbing when you first go home.

Pace

- Pace yourself. You should be able to talk and breathe comfortably during your activities. Do not rush. Pace your activities by putting in many rest breaks.

Prioritize

- Make yourself and your activities a priority. Decide what is important for you and your recovery. Make yourself the priority so that you can heal and recovery well.

Position

- Position your body in the most comfortable posture during an activity. This will reduce the energy you burn up. If you can sit to do the activity you will burn up less energy and you will be less tired when you are done. The energy you save can be used for another task. When *SHOWERING*, you may want to sit on a bath chair rather than stand.



Stop any activity, including your exercises, if you develop:

- Chest pain that is similar to what you felt before surgery.
- Racing or fluttering heart beat with shortness of breath or feeling unwell.
- Difficulty breathing that does not get better with rest.
- A “clicking” feeling in your sternum (breast bone) when you move your arms, cough or sneeze.

If you develop any of these or other symptoms, refer to your “Symptoms after Heart Surgery” sheet for direction about who to contact for medical attention.

Exercises at Home

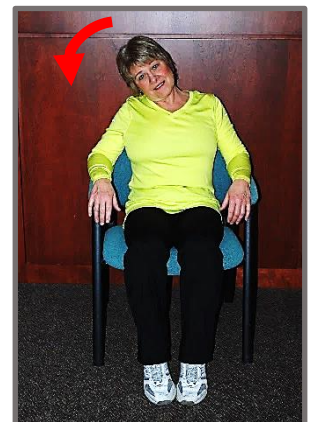
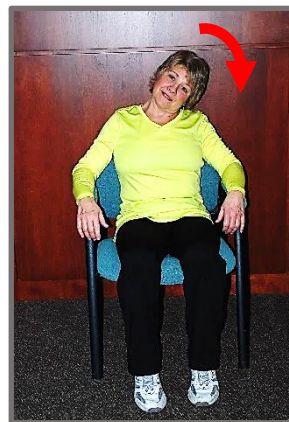
The physiotherapist has been involved in your recovery while you were in hospital. The following exercises are meant to help you as you continue on the road to recovery.

As you work through them, you should feel a gentle stretch in the muscles and joints. You should not feel any sharp pain. Begin by performing each exercise 5 times. As you are able, gradually increase to 10 times for each exercise, 2 to 3 times per day. Continue to perform these exercises until you see your surgeon.

Sitting in a comfortable chair, with your feet resting on the floor:

1. Neck Tilts

While looking straight ahead, slowly side-bend your neck so that your left ear moves toward your left shoulder. Repeat on your right side.



2. Neck Rotation

Turn your head slowly and look over your left shoulder. Repeat for the right side.



3. Elbow Circles

Touch your right shoulder with your right hand. Raise your elbow to shoulder level. Draw a large circle slowly with your elbow, first forwards and then backwards. Do not go past the midline. Repeat with your left elbow.

Sitting or standing with your feet shoulder width apart:



4. Forward Arm Lifts

Raise your right arm forward and above your head, then bring it back down to your side. Repeat same using your left arm.

5. Sideways Arm Lifts

Raise your right arm out to your side with your palm facing up. Raise your right arm above your head. Breathe in as you raise your arm and breathe out as you lower your arm. Repeat same using your left arm.



6. Trunk Side Bends

Place your feet shoulder width apart. Slowly slide your right hand down towards the floor, keeping your back straight. Return to your starting position and repeat, bending towards your left.

7. Hand behind Back

Reach with your left hand behind your back at your waist. Reach your hand up towards your shoulder blades. Repeat with your right hand.



Home Activity Guidelines

Beginning Level Activity – Weeks 1 to 2 at Home

Activity	May Do	Avoid
Showering	<ul style="list-style-type: none"> ✓ Shower daily ✓ Use mild, unscented soap ✓ Rinse soap and shampoo away from incision(s). 	<ul style="list-style-type: none"> ✗ Very hot or cold water ✗ Soaking in a bath or hot tub, or swimming ✗ Perfume, strongly scented soap ✗ Lotions, ointments or creams on your incision(s)
Household Activities	<ul style="list-style-type: none"> ✓ Do only light duties such as dusting, setting table, or simple meal preparation 	<ul style="list-style-type: none"> ✗ Lifting greater than 5 to 10 pounds (if you had a sternotomy) ✗ Strenuous arm activities, pushing or pulling activities such as vacuuming, mowing lawn, mopping floor, or ironing ✗ No washing dishes in the sink if you have an arm incision
Recreational Activities	<ul style="list-style-type: none"> ✓ Visit for short periods ✓ Enjoy sitting activities, handcrafts, reading, TV, movies, playing cards 	<ul style="list-style-type: none"> ✗ Heated discussions or arguments ✗ Long visits ✗ Too many visitors – limit them to 1 or 2 per day
Rest	<ul style="list-style-type: none"> ✓ A balance between physical activity and rest is crucial ✓ Plan at least 2 rest periods each day, 30 to 60 minutes each ✓ Rest after meals and after activities 	<ul style="list-style-type: none"> ✗ Visitors or distractions when you should be resting
Driving and Traveling	<ul style="list-style-type: none"> ✓ You may ride in a car ✓ Wear your seatbelt – it is the law. ✓ If the car has airbags in front of the passenger seat, sit in the back seat ✓ For trips longer than 1 hour, get up and stretch your legs every hour 	<ul style="list-style-type: none"> ✗ Driving ✗ Out of country travel ✗ Leaving the province without Medical Travel Insurance
Breathing Exercises	<ul style="list-style-type: none"> ✓ Breathing exercises 4 times per day, or as instructed 	
Post-op Exercise	<ul style="list-style-type: none"> ✓ 5 times for each exercise, 2-3 times per day 	<ul style="list-style-type: none"> ✗ Do not exercise when you are feeling ill or tired ✗ Do not exercise outside during extreme weather conditions: hot or cold, wind, or high humidity
Walking & Stairs	<ul style="list-style-type: none"> ✓ Walk in a shopping mall during bad weather ✓ You may climb stairs – plan your day so you don't have to go up and down too often ✓ Take your time and rest as needed ✓ Walk 15 minutes, 2-3 times per day ✓ When walking outdoors, walk with a buddy 	<ul style="list-style-type: none"> ✗ Slow your pace when walking up a hill or against the wind ✗ Avoid hot showers or a sauna before or just after you exercise ✗ Avoid heavy meals within 1 hour of exercising ✗ When walking outside, do not walk the dog on a leash

Home Activity Guidelines

Intermediate Level Activity – Weeks 3 to 4 at Home

Activity	May Do	Avoid
Showering	<ul style="list-style-type: none"> ✓ Shower daily 	<ul style="list-style-type: none"> ✗ Sternal precautions still apply ✗ No sitting in the bottom of a tub
Household Activities	<ul style="list-style-type: none"> ✓ Some household activities such as making the bed, dusting, or preparing meals 	<ul style="list-style-type: none"> ✗ Lifting greater than 5 to 10 pounds (if you had a sternotomy) ✗ Strenuous arm activities such as hammering, vacuuming, heavy scrubbing, or washing windows
Recreational Activities	<ul style="list-style-type: none"> ✓ Visit friends ✓ Take brief shopping trips and short outings ✓ Putting a golf ball 	<ul style="list-style-type: none"> ✗ Avoid strenuous upper arm activities such as golfing, raking, or bowling
Rest	<ul style="list-style-type: none"> ✓ Gradually shorten rest periods ✓ Rest after meals and activities 	
Driving and Traveling	<ul style="list-style-type: none"> ✓ Check insurance coverage with your insurance company before leaving the province 	<ul style="list-style-type: none"> ✗ Driving
Post-op Exercise	<ul style="list-style-type: none"> ✓ 10 times for each exercise, 2-3 times per day 	
Walking & Stairs	<ul style="list-style-type: none"> ✓ Continue to progress your walking program ✓ Walk 2 to 3 times per day for 30 minutes ✓ Walk in a shopping mall or indoors during bad weather ✓ May continue to climb stairs 	<ul style="list-style-type: none"> ✗ Do not exercise when you are feeling ill or very tired ✗ Do not exercise outside during extreme weather conditions: hot or cold, wind, or high humidity ✗ Slow your pace when walking up a hill or against the wind ✗ Avoid hot showers or a sauna before or just after you exercise ✗ Avoid heavy meals within 1 hour of exercising ✗ Do not use a treadmill until instructed to at Cardiac Rehabilitation program
Sexual Activity	<ul style="list-style-type: none"> ✓ May resume if can comfortably walk up 2 flights of stairs (24-30 steps). ✓ Report the following symptoms to your doctor: chest pain during or after sex, palpitations, increased heart rate or shortness of breath lasting longer than 15 minutes after intercourse 	<ul style="list-style-type: none"> ✗ Avoid if tired or tense ✗ Avoid putting strain on your upper body

Home Activity Guidelines

Upper Level Activity – Weeks 5 to 6 at Home

Activity	May Do	Avoid
Showering	<ul style="list-style-type: none"> ✓ Shower daily 	
Household Activities	<ul style="list-style-type: none"> ✓ Gradually resume all household activities ✓ Alternate strenuous with light tasks 	<ul style="list-style-type: none"> ✗ Avoid heavy lifting
Recreational Activities	<ul style="list-style-type: none"> ✓ Activities as instructed by Cardiac Rehabilitation team 	<ul style="list-style-type: none"> ✗ Avoid heavy lifting ✗ Avoid use of arms in large swinging motion for 3 months to allow the sternum to heal (e.g. golfing, swimming)
Driving and Traveling	<ul style="list-style-type: none"> ✓ At 6 weeks, you may drive short distances if you are feeling well ✓ Check with your insurance company for before leaving the province 	<ul style="list-style-type: none"> ✗ Driving if you are not feeling well or you are on any medications that make you feel sleepy.
Post-op Exercise	<ul style="list-style-type: none"> ✓ 10 times for each exercise, 2-3 times per day 	
Walking & Stairs	<ul style="list-style-type: none"> ✓ Continue to progress your walking program ✓ Extend your walk to 1 hour, once per day ✓ Slow your pace when walking up a hill or against the wind ✓ Walk in a shopping mall or indoors during bad weather ✓ May continue to climb stairs 	<ul style="list-style-type: none"> ✗ Avoid hot showers or a sauna before or just after you exercise ✗ Avoid heavy meals within 1 hour of exercising ✗ Avoid prolonged walking in extreme weather conditions
Sexual Activity	<ul style="list-style-type: none"> ✓ May resume if can comfortably walk up 2 flights of stairs (24-30 steps). ✓ Report the following symptoms to your doctor: chest pain during or after sex, palpitations, increased heart rate or shortness of breath lasting longer than 15 minutes after intercourse 	<ul style="list-style-type: none"> ✗ Avoid if tired or tense ✗ Avoid putting strain on your upper body
Return to Work	<ul style="list-style-type: none"> ✓ The length of time you will be off work depends on the type of job you have. Discuss the proper time to return to work full-time at your follow-up visit with the cardiac surgeon. Generally it is after 6 weeks. 	

Other Recommended Guidelines

Return to Work

- ✓ You may return to work after 6 weeks if your work is not physically demanding
- ✓ If your job is physically demanding, you may return to work after 3 months
- ✓ Note: some self-employed people may return to work right away. Discuss with your Nurse Practitioner or Surgeon for further instructions.

Physical Activity

- ✓ Avoid large, swinging arm motions for at least 3 months
- ✓ Do not engage in strenuous physical activity without discussing with the Cardiac Rehab Team
- ✓ During Sexual activity, avoid upper body strain for at least 3 months

Other Recommendations

- ✓ Avoid making significant life decisions within the first 4-6 weeks of surgery
- ✓ Avoid traveling out of province without medical insurance

Follow-up with the Surgeon

- ✓ The surgeon's office will call you to book your follow-up within 6-8 weeks of your surgery.
- ✓ Please call their office if you have not heard from them
- ✓ If you have concerns about your recovery, call the office to have earlier follow-up

Healthy Heart Diet

Food choices and eating habits can affect your blood pressure, blood cholesterol levels and belly fat. You can help manage the risk factors by following a healthy heart diet.

The **5F's** will help get you started on your Healthy Heart Diet:

Fats

Trans fats can damage your arteries. Choose heart healthy fats such as unsalted nuts/seeds, olive and canola oil and non-hydrogenated margarine. Choose skinless poultry, lean meats, and low fat dairy products such as skim or 1% milk more often.



Fish

Certain types of fish are high in omega-3 fat. Omega-3 fats have many benefits in heart health. Enjoy fish such as salmon, herring, sardines, and trout 2-3 times per week.



Fruits and Vegetables

Fruits and vegetables are high in fibre and a great source of vitamins and minerals. Aim for 4-5 servings of fruits and 4-5 servings of vegetables every day. ½ cup = one serving.



Fibre

Choosing high fibre foods is good for your heart and overall health. Choose legumes, 100% whole grain breads, nuts, seeds, high fibre cereals, pastas, and brown rice.

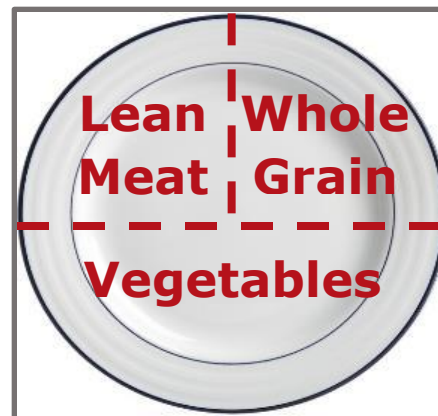


Food Portions

Portion control is the key. Practice moderation and balance – keep food portions in check! To help you make better food choices throughout the day and maintain healthy food portions:

- Eat at regular times
- Avoid skipping meals.

Aim to have balanced meals by filling ½ of your plate with vegetables, ¼ of your plate with meat, and ¼ with a whole grain.



While you are in hospital, you will receive further heart healthy diet information. If you have specific concerns, a dietitian is available for individual teaching. Comprehensive diet teaching and an individual assessment will be provided in the cardiac rehabilitation program.

If you have questions about your diet or need to speak to a dietitian after you go home, contact:

UnlockFood.ca <https://www.unlockfood.ca/en/default.aspx>

Telehealth Ontario at 811 or Toll Free

For other diet information and heart-healthy recipes, check out the *Heart and Stroke Foundation of Canada* website: <https://www.heartandstroke.ca/healthy-living>



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