

Cardiac Surgery



Maritime
Heart
Centre



nova scotia
health authority

www.nshealth.ca

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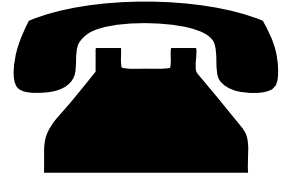
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Cardiac Surgery:

A Guide for Patients and Families

Contact information

If you have a change in your symptoms or other concerns while you are waiting for your surgery, please contact your surgeon's office at 902-473-8531 between 8 a.m. and 4 p.m.



Please complete the following contact information:

Contact person

Name: _____ (Cell): _____

(Home): _____

Family doctor

Name: _____ Phone: _____

Pharmacy

Name: _____ Phone: _____

Cardiologist

Name: _____ Phone: _____

Cardiac surgeon

Name: _____ Phone: _____

Important dates and appointments

Surgery date: _____ Time: _____

Discharge date: _____ Time: _____

Family doctor follow-up appointment:
Date: _____ Time: _____

Cardiologist follow-up appointment:
Date: _____ Time: _____

Cardiac surgeon follow-up appointment:
Date: _____ Time: _____

Purpose

This guide will help you and your family through your heart surgery. It gives information about your hospital stay and what you can do to help yourself before and after your surgery.

Please encourage your family or support person to read this guide. You and your family play an important part in your recovery and your continuing good health.

We want you to take an active role in deciding about how to best manage your current health condition. If you are considering heart surgery, we have a Shared Decision-Making Tool that can help you make a well-informed decision, in partnership with your care team. Contact our Heart Health Patient Navigator at 902-483-8197 or the Maritime Heart Center at 902-473-7890 for more information.

Admission checklist

- If English is not your primary language and you have trouble speaking or understanding English, please bring someone with you who can translate. Please tell a member of the health care team if you need help finding a translator.
- Bring all medications in their original bottles
- Toiletries (toothbrush, toothpaste, razor, shaving cream, hair brush, comb, deodorant) — please note: NSHA is scent-free, so do not bring any perfume, cologne, or any strong-smelling products.
- Special items if needed, such as:
 - Ear plugs
 - Glasses and case
 - Contact lens and case
 - Hearing aid(s) and case
 - Dentures and case
 - Walking aids (walker, cane, prosthetics)
 - CPAP machine
- Provincial Health Card
- Copy of discharge plan
- Copy of Personal Directive (if you have one)
- Pyjamas (that do not pull over your head) and housecoat (robe)
- Slippers (rubber non-slip sole with closed heel)
- Bra, underwear
- Leave all valuables at home (all jewelry, including wedding rings)
- Bring this guide with you to the hospital

Predicted timeline

This timeline shows the usual plan of care for most patients. Your plan of care may be changed to meet your individual needs after surgery.

Before surgery

- The Cardiovascular health care team will talk with you and your family about your surgery.
- You will meet your surgeon and sign a consent form for your surgery.
- Your nurse will help you get ready for surgery by:
 - › arranging tests before your surgery, such as blood work and an Electrocardiogram (ECG)
 - › teaching you how to complete your skin treatment
 - › telling you what to expect during your hospital stay
 - › reviewing this guide with you
- Your nurse will tell you when to stop eating and drinking before surgery.
- The doctor will tell you what medications you should take the night before and morning of your surgery.
- You and your family should talk about any questions or concerns with your health care team before or during your hospital stay.

Day of surgery

- Your family may stay with you until you go to the Operating Room (OR).
- The surgeon will meet with your family or support person right after your surgery to answer any questions.
- You will wake up in the CVICU on the 5th floor.
- You will have several intravenous (IV) lines, drainage tubes and be connected to a heart monitor (see page 20 of this guide).
- You will have a breathing tube (see page 20 of this guide).
- Once your breathing tube is removed, you will be able to sit up.
- You will be shown how to do deep breathing and coughing exercises while using your heart pillow for support. Your nurse and physiotherapist will teach you about sternal precautions.

**Cardiovascular Intensive
Care Unit (CVICU)
Phone: 902-473-7554**

- Pain medication will be given via IV or by mouth to keep you comfortable after surgery.
- After your breathing tube is removed, you will be able to take small sips of fluids.
- Your arterial line and chest tube will be removed before your move to the Intermediate Care Unit (IMCU).
- Family members may visit with you.

Day 1 after surgery

- You will be moved to the IMCU on Unit 7.1, where you will be closely monitored.
- Your team will teach you about sternal precautions. You will be shown how to get in and out of your bed and chair safely. You will sit up in a chair for all meals.
- Your meals will slowly change from fluids to solids as you are able to tolerate them.
- You will walk with supervision at least twice a day.
- Pain medication will be given regularly, as scheduled. If you need medication before your next scheduled dose, please ask your nurse.
- You will need to think about your discharge plans.

**7.1 IMCU phone:
902-473-7552**

Day 2 to 3 after surgery

- You will be moved from the IMCU to the regular ward, 7.1.
- You will be on a portable heart monitor.
- You may still be on oxygen.
- Your catheter (hollow tube that drains urine) will be removed.
- You will sit up in a chair for all meals and your diet will change to solid food.
- You will take part in your personal care (such as bathing and feeding).
- You will do deep breathing exercises every time you move and as needed.
- You will walk with supervision 3 times a day.

- A mild laxative will be started on day 2 after surgery until your bowels move (you're able to poop).
- Regular pain medication will be available.

Day 3 to 5 after surgery

- You will walk on your own, taking longer walks each day.
- Your health care team will talk with you about your discharge plan .
- You will walk up and down stairs with your physiotherapist, to get ready for when you go home, if needed.
- You and your family or support person will talk about and finalize your discharge plan with your health care team.

Day 4 until discharge

- You and your family or support person will get final instructions about your care at home.
- Your physiotherapist will teach you exercises and give you a walking program to follow at home.
- You must be able to get in and out of the chair and bed, and walk in the hallways on your own, to be ready to go home (if you were able to do so before surgery).
- You will be discharged from the hospital when it is safe for you to go home. Your heart rate, heart rhythm, and blood pressure need to be stable. You need to be off oxygen and your bowels need to move.
- Your health care team will tell you where you are in your recovery and what goals you need to meet in order to be discharged.
- You will recover from surgery at your own pace. Please do not compare yourself to other patients.

Your health care team

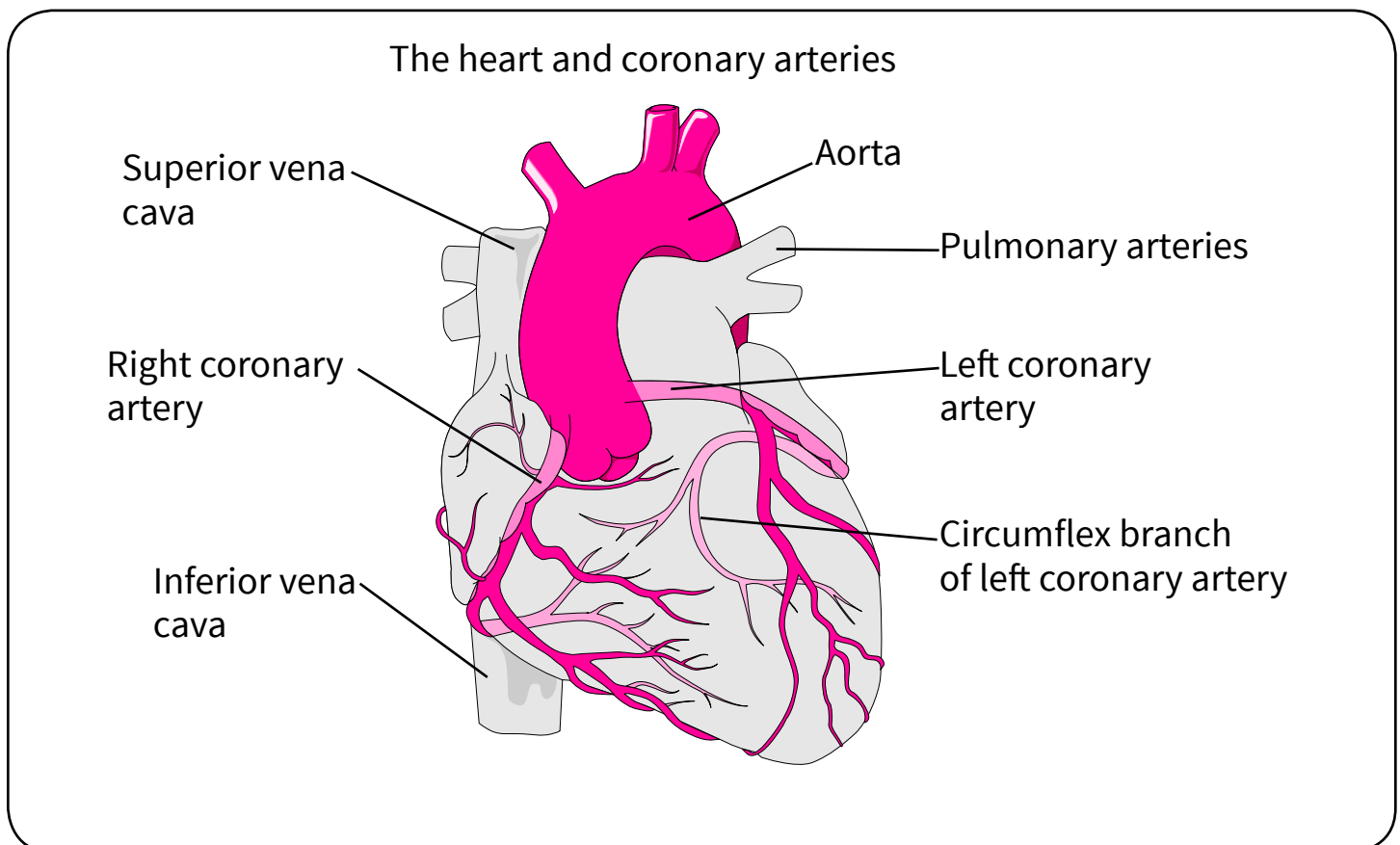
There are many members of the Heart Health Program who will take care of you before and during your hospital stay. You and your family are an important part of your care team.

Your team includes:

Surgeons, resident surgeons, cardiologists, nurse practitioners, nurses, anesthesiologists, perfusionists, pharmacists, dietitians, social workers, physiotherapists, occupational therapists, respiratory therapists, unit clerks and aides, and many others.

About the heart

Your heart is a muscular organ. It is about the size of your fist and is located between your lungs, slightly to the left of your breastbone (sternum). Your heart works like a pump that sends blood throughout your circulatory system, including arteries, veins, and capillaries. Blood pumped from your heart delivers oxygen and nutrients to every cell and takes away waste products made by those cells.



Chambers

The heart has 4 chambers and 4 one-way valves. The upper chambers are called the right and left atria, and the lower chambers are called the right and left ventricles.

The 2 right chambers of the heart pump blood from the heart to the lungs to pick up oxygen. The 2 left chambers of the heart pump oxygen-rich blood from the heart to the rest of the body.

Valves

The 4 one-way valves keep blood flowing through the 4 chambers of the heart. The valves open to let blood flow through them and then close to stop blood from flowing backwards.

Coronary arteries

The coronary arteries supply the heart with oxygen and nutrient-rich blood. The heart has a right and left coronary artery. The left coronary artery further divides into the circumflex and left anterior descending arteries.

Coronary Artery Disease (CAD)

The most common form of heart disease is coronary artery disease (CAD). CAD happens when the arteries of the heart become narrowed or blocked with plaque. As the coronary arteries become narrowed or blocked, this affects the blood supply to part of the heart. Angina (chest pain) and/or a heart attack are complications of coronary artery disease.

What are your questions? Please ask. We are here to help you.

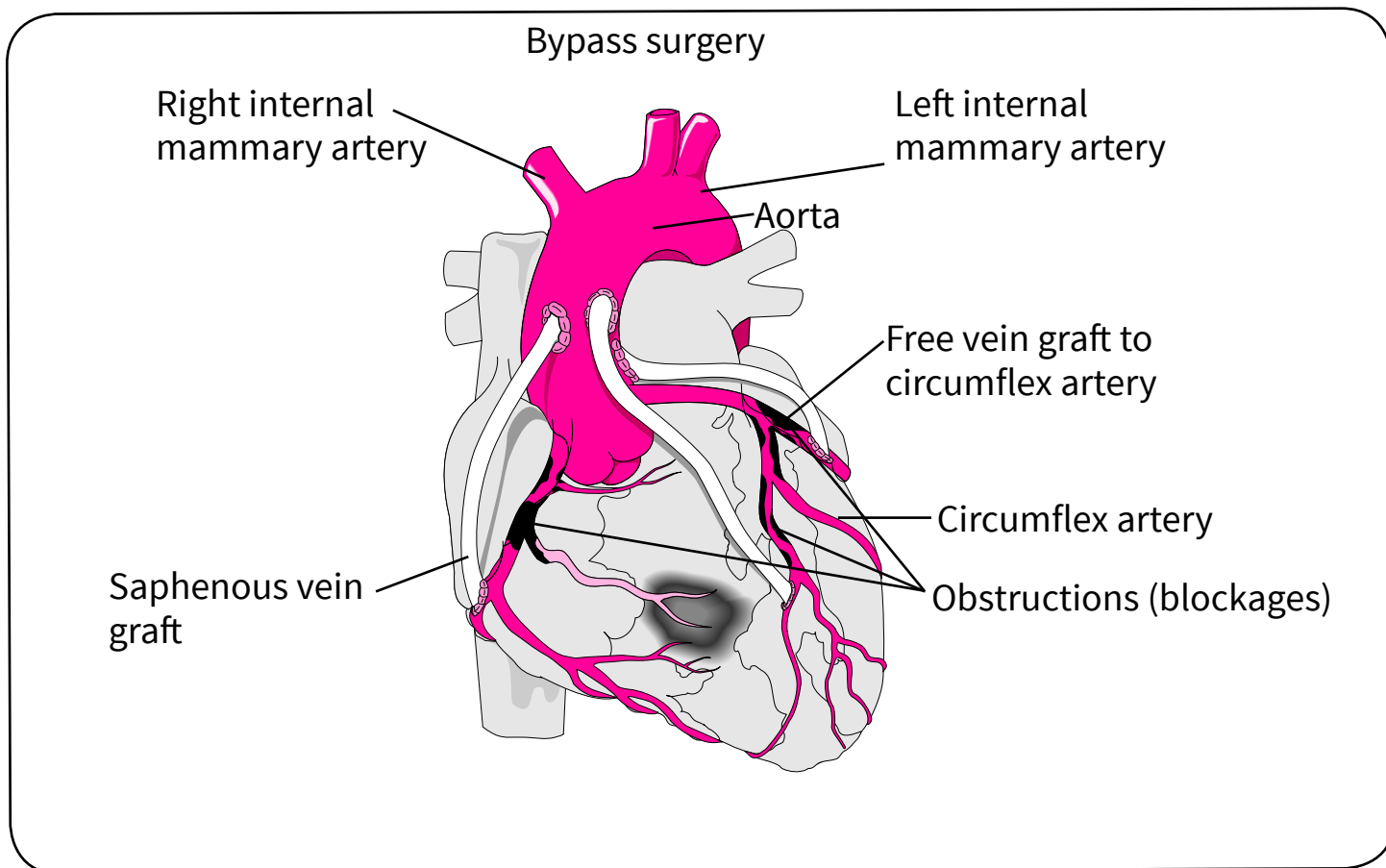
About your surgery

Coronary artery bypass graft surgery

Coronary artery bypass graft surgery improves the blood flow to the heart muscle. A piece of a healthy blood vessel (artery or vein) is taken from another part of the body to make a bypass around the narrowed or blocked part of the coronary artery. The blood vessel used for the bypass is referred to as a graft. The bypass can be done with an artery taken from your chest wall (internal mammary), your arm (radial), and/or your leg (saphenous vein). Depending on the number of narrowed or blocked arteries you have, several bypasses may be created to supply the heart with oxygen and nutrients.

After surgery you will have an incision (cut) on your chest and possibly one on your leg or arm, depending on where your surgeon took the graft from.

Bypass surgery does not cure your heart disease, but it should help or stop your angina and make you feel better. This should improve your quality of life and your ability to be physically active. To help lower your chances of another blockage, lifestyle changes and medications as prescribed by your doctor are needed. For more information, visit www.heartandstroke.ca/heart.



Precautions after coronary bypass surgery

Follow the “Staying healthy guidelines” at the end of this guide.

Incisions

Watch for signs of infection (redness, change in drainage, pain, warmth, bad smell, or swelling). Report changes to your family doctor.

Temperature

Record your temperature once a day for one month after surgery. Tell your family doctor right away if you have a fever. This is an early sign of infection. Your nurse will talk about this with you before you are discharged.

Heart valve surgery: Repair or replacement

Heart valve surgery repairs or replaces a heart valve that is not working properly. Valves control the flow of blood through the different chambers of the heart by moving it in one direction. If a valve is not working correctly, blood flow through the heart is impaired, which can make the heart work harder than normal. If not treated, valve disorders can lead to dizzy spells, shortness of breath, fainting, irregular pulse, or serious complications.

A valve may need to be repaired or replaced if it has been damaged by infection (endocarditis), rheumatic heart disease, congenital heart defect, mitral and/or aortic valve disease, or normal wear and tear.

- **Valve repair surgery**

Surgery is done to repair the damaged valve or insert a ring to hold the valve in place. This will allow the valve to open and close properly.

- **Valve replacement surgery**

Surgery is done to remove the damaged valve. Heart valves are replaced with either a bioprosthetic (tissue) or a mechanical valve.

- › Bioprosthetic (tissue) valve - Bioprosthetic valves are made from specially treated natural valves from animal sources. They are very similar to those found in the human heart. You will not need to take medication to prevent blood clots for this type of valve replacement. However, tissue valves are not as long-lasting as mechanical valves.
- › Mechanical valve - Mechanical valves are made of very durable and long-lasting metals and plastics. These valves make a clicking noise. Mechanical valves can lead to the formation of blood clots which can cause a heart attack or stroke. To

prevent clot formation, you must take a blood-thinning medication every day and have frequent blood tests for the rest of your life.

Your surgeon will talk with you about your options for valve replacement.

Precautions after heart valve surgery

Follow the “Staying healthy guidelines” at the end of this guide.

Temperature

Record your temperature once a day for one month after your surgery. Tell your family doctor right away if you have a fever. This is an early sign of infection. Your nurse will talk about this with you before you are discharged.

Antibiotics

Tell your dentist that you have had a valve replacement. You will need antibiotics before and after any dental procedures, including routine cleaning of your teeth.

If you are to have any type of surgery or minor procedure, tell the surgeon that you have had a valve replacement so that they give you antibiotics before and after the procedure to prevent possible infection.

Valve card

Carry your valve card with you at all times. You may wish to wear a MedicAlert® bracelet. For more information on MedicAlert®, talk to your pharmacist.

Anticoagulants

You may need to take a blood thinner (warfarin, Coumadin®). A pharmacist will teach you about this medication before you are discharged home.

When taking an anticoagulant, it is important to:

- Take it at the same time every day.
- Have regular blood work done, as told by your family doctor.
- Tell your family doctor about any signs of bleeding (such as bruising, frequent nose bleeds, more bleeding than normal from a cut or from your gums after dental care, bowel movements [poops] that are red, black, or dark wine coloured, blood in phlegm from coughing).
- Take extra precautions to avoid cuts in the kitchen and with outdoor activities, such as gardening.
- Call your family doctor if you have chest pain or palpitations.

Before your surgery

Getting ready for your heart surgery

While waiting at home or in the hospital, you can get ready for your surgery by doing these exercises. If you are in the hospital before your surgery, your nurse or physiotherapist can talk about these exercises with you.

Deep breathing and coughing exercises

You will have deep breathing and coughing exercises to do after surgery. The first few days after your surgery you will have more mucus (phlegm) in your lungs than normal. You will be encouraged to breathe deeply and cough every hour. These exercises will help keep your lungs clear and make breathing easier. They will also help prevent you from getting pneumonia. Your chest will be sore after surgery – this is normal. You will be given a pillow to hold against your chest to protect it when you cough and when you go from sitting to standing.

The best time to do these exercises is about 20 minutes after you take your pain medication. Talk to your nurse or physiotherapist about how often to do these exercises.

To practice deep breathing and coughing, follow these steps:

Deep breathing:

1. Take a deep breath in through your nose.
2. Hold your breath for 2 to 3 seconds, by counting 1, 2, 3 in your head.
3. Blow the air out through your mouth.

Repeat this type of breathing in and out 2-3 times.

Coughing

1. Hold your pillow in front of your chest. This will help make coughing more comfortable and prevent strain on your chest.
2. Take a deep breath in through your nose.
3. Cough 2 or 3 times in a row as you breathe out.

Moving around

Getting up from a chair:

- Hold a small pillow in front of your chest.
- Lean forward and stand up using your legs. You will not be able to push through with your arms until your sternum heals (6-8 weeks).
- Someone will help you with this after surgery until you can safely do it yourself.

Getting out of bed:

- Hold a small pillow in front of your chest.
- Bend your knees and roll to one side.
- Slide your legs over the edge of the bed and hook them under the bed.
- Without using your arms, sit up using your tummy muscles, pulling with your legs. The weight of your legs will help to pull you up.

Someone will help you with this after surgery until you can safely do it yourself.

Leg exercises

Moving your legs in bed after surgery will help blood circulate better and prevent blood clots from forming.

Practice these exercises before your surgery, twice a day:

- Move each foot up and down 5 times.
- Move each foot around in a circle 5 times.
- Bend and straighten each knee 5 times. If you have a graft taken from your leg, this leg may be stiff and painful. This exercise will help with the stiffness and pain.

These exercises should be done at least 5 times every hour after your surgery. Do not stay in bed for long periods of time without moving your legs.

Stop these medications

If you are taking any of the following medications, please check with your surgeon about when to stop taking them before your surgery:

- Coumadin®, warfarin, Entrophen®, Novasen®, Naprosyn®/Naproxen, Motrin®, ibuprofen.
- All anti-inflammatories.

- Aspirin® may be continued until the day of surgery unless you are told otherwise.
- Take all of your other medications unless otherwise directed.
- During your Pre-admission Clinic appointment, the anesthesiologist will tell you which medications you should take the night before and morning of your surgery. Make sure you have this information before leaving your appointment.

Stop smoking before your surgery

- Smoking can increase your risk for heart disease.
- Smoking narrows the arteries in your heart.
- Smoking increases your blood pressure and pulse rate.
- If you stop smoking before your surgery, the results of your surgery will be better.
- If you start smoking again after your surgery, your bypass grafts have a higher chance of blocking.



It is best if you can stop smoking for 2 weeks leading up to your surgery date. If you are not able to do this, please do not smoke after your evening meal, the night before surgery. Smoking can cause more secretions in your lungs, and you could have problems breathing after your anesthetic.

Smokers' helpline

Toll free: 1-877-513-5333

Website: www.smokershelpline.ca/home

NSHA is smoke-free. Ask your doctor or nurse about the Smoking Cessation Program while in hospital to help you quit smoking.

Alcohol

- Please do not drink alcohol (e.g. liquor, beer, wine) for at least 48 hours before your surgery.
- If you drink alcohol regularly and this concerns you, please talk to your surgeon before your surgery, as this can affect the recovery process.



Before your surgery you will:

- Have an appointment for a medical history and a physical. You will meet with your surgeon and they will explain your surgery and ask you to sign a consent form.
- Attend the Pre-admission Clinic. (You will not attend the Clinic if you are admitted to hospital before your surgery.)

Pre-admission Clinic

The Pre-admission Clinic is open Monday to Friday, 7 a.m.–3 p.m.

The Clinic is located on the 5th floor of the Halifax Infirmary (use the Robie Street entrance). The Clinic phone number is 902-473-3120.

You can eat and drink as normal before this appointment.

Please bring all your medications in their original bottles from the pharmacy with you. They will be returned to you at the end of the appointment.

Please plan to be at the Clinic for a few hours.

The purpose of the Pre-admission Clinic is to:

- Provide out-patient services before your admission to hospital, so you can stay at home until the day of your surgery.
- Give you educational material about your surgery and hospital admission.
- Teach you about your care before and after your surgery.
- Begin early discharge planning and find out what services you might need when you go home.
- Meet with an anesthesiologist (doctor who puts you to sleep for surgery). The anesthesiologist will tell you which of your medications should be taken the night before and morning of your surgery.
- Have blood work, an ECG, and any other tests you might need.
- Possibly meet with a researcher to give your permission to enter a research trial. These trials are well-screened by other doctors to make sure they are safe. The results can improve the care of all patients. Your participation is appreciated, but you are under no obligation to take part. You will receive the same care whether or not you choose to take part.

A member of the Open Heart Support group will visit you, either during your Pre-admission Clinic appointment or while you are waiting in hospital. This is someone who has had heart surgery and may be able to answer many of your questions.

Surgery date

After your Pre-Admission Clinic appointment, the booking clerk for cardiac surgery will contact you with your surgery date. Sometimes there is a long waiting period for heart surgery. It is also possible for your surgery to be postponed, even on the day it is scheduled. We do everything we can to prevent this from happening. If your surgery is postponed, you will be rescheduled for the next available date. The booking clerk for cardiac surgery will contact you with your new date and time.

Before you come to the hospital, you should think about your discharge plans. By the time you are discharged, you should be able to walk by yourself and manage your own personal care (if you were able to before surgery). You must plan to have someone help you with housework and get groceries, as you will not be able to drive for 6-8 weeks after surgery. You will need to have someone pick you up from the hospital and stay with you for the first few days at home. It may help to write down your discharge plan before your surgery. If you need help planning for your discharge, such as arranging transportation or medication coverage, please let us know. A social worker would be happy to help you.

Waiting in hospital for surgery

If you are admitted to the hospital to wait for your surgery, you will:

- Review the information in this guide with a nurse and other health care professionals as needed.
- Get teaching from your nurse and physiotherapist as needed.
- Meet with your surgeon to talk about your surgery and sign the informed consent form.
- Meet with your anesthesiologist (doctor who puts you to sleep for surgery).
- Have pre-operative testing, including blood work, an ECG, and a chest X-ray.
- Start preparing your discharge plan.
- Meet with a member of the Open Heart Support group. This is someone who has had heart surgery and may be able to answer many of your questions.
- Possibly meet with a researcher to give your permission to enter a research trial. These trials are well-screened by other doctors to make sure they are safe. The results can improve the care of all patients. Your participation is appreciated, but you are under no obligation to take part. You will get the same care whether or not you choose to take part.

Night before surgery

- Take a bath or shower and shampoo your hair the evening before your surgery. Do not shave any part of your body, including your face.
- Complete your skin prep using the antiseptic solution or cloths, as directed by your nurse.
- Do not eat or drink after midnight, including water, unless otherwise directed.
- Do not eat candy or chew gum after midnight.
- You may take your medications with sips of water as told by your doctor.

If you live out of town, the Department of Health will cover the cost of your overnight stay at Point Pleasant Lodge (902-421-1599) the night before your surgery. There is an additional cost for any family members that may accompany you. Reservations may be made online at <https://pointpleasantlodge.com>.

Day of surgery

- If you have a fever, cold, or flu-like symptoms, call your surgeon before coming to the hospital.
- Only take medications as directed by your doctor.
- Repeat your skin prep as you were told by your nurse.
- Come to the hospital 3 hours before your scheduled surgery, or at the time you were asked to arrive (if different).
- Report to Same Day Surgery, 5th floor of the Halifax Infirmary (use Robie Street entrance elevators), to be admitted.
- Your support person can stay with you until you go to the Operating Room (OR) on the 5th floor.
- You will get a sedative to relax you.
- Your family should take home any valuable items. You will be given a locker for your toiletries, dentures, hearing aids, glasses or contact lenses, and walking aids.
- All jewelry, including your wedding band and all body piercings, must be removed.
- If your surgery is later in the day, you may be allowed a liquid breakfast.
- You will be taken to the OR on a stretcher.
- Your anesthesiologist will start an intravenous (IV) to give you medicine to put you to sleep. When you wake up, you will be in the Cardiovascular Intensive Care Unit (CVICU) on Unit 5.1.

Family and friends

Wait time

The amount of time in the OR depends on what has to be done during surgery. It may be 4 hours or longer. We realize that this is a stressful time for your family. The family room on 5.1 is available for them during this time. The surgeon will look for your family or support person in the family room after the surgery. The surgeon will meet with your family or support person right after your surgery to answer any questions.

If your family will not be in the hospital when your surgery is over, please leave a phone number where they can be reached.

A Surgical Liaison Nurse (SLN) is available Monday to Friday from 9 a.m.-5 p.m. to contact family members who are waiting for relatives having surgery. The SLN makes rounds every 2 hours to give information to family members. Feel free to ask questions and/or express concerns to the SLN during this time.

After your surgery, you will be taken to the ICU. It may take an hour or more to get you settled in the ICU before the nurses will be ready to have your family in to see you. There is a phone outside the ICU doors that your family can use to talk with ICU staff. Visitors must call the ICU before entering at all times.

Visiting

- Your family is encouraged to visit you during your stay in the ICU and recovery on 7.1. Your nurse will talk to your family about visiting, keeping in mind your needs and those of your family. Your family should remember that your rest is important for your recovery.
- Please limit visitors to 2 at a time.
- Visiting hours for family and friends will be decided by the patient and his/her health care team.
- Generally, patient rest period is between 2:30 and 3:30 p.m.
- Visitors are reminded of our no-smoking and scent-free policies.
- Please do not visit when you are sick and could spread germs.

Hand hygiene for patients, families and visitors

Health care providers, patients, residents, clients, friends and visitors, and anyone who is cared for in or visits health care settings, such as hospitals or long-term care facilities, has a role to play in preventing infections. It begins with clean hands.

Hand hygiene is the number one way to stop the spread of germs in health care settings, the community, and at home.

Hand hygiene methods include:

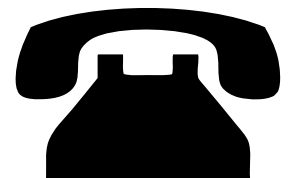
- › cleaning hands with an alcohol-based hand rub – look for dispensers throughout health care settings
- › washing with soap and water



After your surgery

5.1 Cardiovascular Intensive Care Unit

The Cardiovascular Intensive Care Unit (CVICU) is on the 5th floor of the Halifax Infirmary. The phone number is 902-473-7554.



After your surgery, you will be taken to the CVICU. When you wake up, you will notice several tubes. Your surgeon and anesthesiologist will talk about these with you before your surgery. Once your vital signs are stable and you begin to wake from the anesthetic, your nurse and respiratory therapist will start getting you ready to have the breathing tube taken out. The breathing tube is taken out once you are alert and following commands, and tests show that you are ready to breathe on your own. This may be as soon as 4-6 hours after your surgery or may take several days.

Soon after this tube is out, you will be helped to sit at the side of your bed for deep breathing and coughing exercises. These exercises are very important and you are encouraged to do them often to help get rid of any secretions that build up in your lungs after surgery. Deep breathing and coughing exercises and moving after surgery not only help to clear your lungs, they also help to lower your risk of pneumonia or having a blood clot.

It is important that you ask for pain medication for any pain or discomfort because this will help you to move and clear secretions more easily.

Your health care team will help you to get moving as soon and as often as possible after your surgery to make sure you have a quick recovery. This will be a team effort, including your nurse and/or physiotherapist and, most importantly, YOU.

Tubes and wires in CVICU

Breathing tube

After you are asleep, a smooth tube will be placed in your windpipe (breathing tube). This tube is connected to a breathing machine that will breathe for you during your surgery and the early part of your recovery.

When you wake up, the tube will still be in your windpipe. You will not be able to talk or drink while the breathing tube is in place. The nurse will ask questions that you can answer by nodding your head yes or no. Some patients have hoarseness (rough feeling in the throat) after the tube is taken out; this goes away over time. The breathing tube will be taken out when you are awake enough to follow commands and you can breathe and cough on your own.

Oxygen tubing

Once the breathing tube is taken out, you will be given oxygen either through nasal prongs or a face mask. It is normal to need oxygen for the first few days after surgery.

Chest tube

One or two tubes will be placed through a small incision (cut) in your chest area, below your sternal incision. These are for draining fluid and old blood from around your heart. These tubes will be taken out when there is only a small amount of drainage and you have been able to sit up on the side of your bed at least twice.

Intravenous (IV) tubing

Fluids, medications, and blood (if needed) are given through IV tubes. These will be placed in your neck and arms. There will be a small tube in your wrist through which we will take blood and measure your blood pressure.

Catheter

A small rubber tube will be placed in your bladder to drain urine (pee) and help monitor how your kidneys are working. This will usually stay in place for 2 to 3 days after your surgery.

Heart monitor

Small pads are placed on your chest to continuously monitor and record your heart rate and rhythm.

Pacing wires

One or two pacing wires are connected to your heart during surgery to temporarily allow us to control the electrical activity of your heart, if needed. These will either be cut or taken out before you go home.

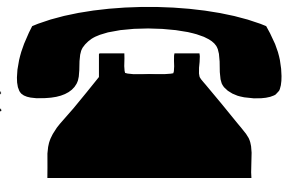
The CVICU can be noisy. The heart monitor and breathing machine make loud noises to notify the nurses. Do not be scared of these noises. You are not in danger.

Pain control after surgery

After your surgery you will be given medication to help your pain and discomfort. Your nurse will check your pain often. Pain management is important for deep breathing and coughing, mobilization, and rest needed for recovery. Although you may feel sleepy from the medication, you should be awake enough to follow directions and know your family.

Transfer from CVICU to 7.1

After your CVICU stay, you will be moved to the Intermediate Care Unit (IMCU) on 7.1. The phone number is 902-473-7552.



During your recovery it is very important to walk, exercise, deep breathe, and cough.

- Deep breathing and coughing helps to open up your air passages and move secretions out of your lungs. Use your “heart pillow” to support your incision when coughing. This will help lessen the discomfort caused by coughing and stabilize your breastbone.
- You will be sore after surgery. Pain medication will be given every 3-6 hours and as needed. Please ask for pain medication when you need it. Pain should not limit your breathing or walking.
- Relaxing, changing your position regularly, avoiding holding your breath when moving, and using your pillow to support your chest incision will help with your discomfort. It is also important to rest.
- Try to limit visitors to 2 at a time and try to keep visits short. Entertaining visitors can be tiring. Please note that flowers are not allowed in the IMCU as the scent can bother patients.
- The rest period is from 2:30-3:30 p.m., so visitors may be asked to leave so you can rest.
- You will get teaching from your nurse, physiotherapist, and other members of your health care team about exercise, diet, and activity. Family is encouraged to attend during these teaching sessions, as they will be helping with your care at home. This is your chance to learn how to maintain good health for the long term.

Sternal (breastbone) precautions

For 6-8 weeks after your surgery, you will be on sternal precautions (6 weeks for non-diabetics and 8 weeks for diabetics).

Sternal precautions allow for the best healing of your breastbone (sternum) after surgery. During surgery, your sternum is broken to give access to your heart. Once your heart is repaired, your sternum is wired back together, and it takes 6-8 weeks for your sternum to heal completely. The wires stay in place after surgery.

Following these precautions will lower the stress on your healing bones and prevent the stabilizing wires from breaking through your sternum:

- For the next 6-8 weeks, do not lift, push, or pull more than 10 pounds (5 pounds per arm).
- You can use your arms for normal movements. Do not put any body weight on your hands or elbows for 6 weeks
- Hug your “heart pillow” to your chest when you cough or sneeze to support your sternum.

Do not:

- › lean on your arms
- › use your arms or hands to push yourself up in bed or out of a chair
- › lift a heavy or full saucepan or dish
- › lift a baby or small child
- › move furniture
- › carry groceries
- › use a vacuum cleaner, lawn mower, etc.
- › change bed linens
- › carry laundry
- › drive a vehicle

After 6-8 weeks, it is important to slowly return to your previous activities and increase the use of your arms and sternum slowly over time to further strengthen and heal your sternum.

Common concerns after surgery

Dry mouth, sore throat

This is the result of the breathing tube used during your surgery. Cough drops, ice chips, and time will help.

Nausea (feeling sick to your stomach) or vomiting (throwing up)

This is common after surgery and can be caused by your medications. Sipping fluids and having ice chips for the first few hours after the breathing tube is removed, and a liquid diet for at least the first 24 hours after surgery will help. Please let your nurses know if you are feeling nauseated after surgery.

Poor appetite

This is common after surgery. As you recover from the effects of the anesthetic, your hospital diet will be slowly increased from liquids to solids. Talking with the dietitian about your menu choices may help, as proper nutrition is essential for the best healing. Follow a heart-healthy diet to help lower your chance of future heart problems.

Constipation

Many patients have problems with constipation (not having a bowel movement) after surgery. You will be given a light laxative starting on day 2 after your surgery and continuing until you have a bowel movement (poop). The following may also help:

- As you return to a solid diet, make sure you are getting enough liquids. Water, milk, and juice are all good choices. Water is the best liquid to drink so try to get lots of it.
- Food with lots of fibre will help, such as whole grain breads and cereals, bran, fruits, vegetables, and pulses (peas, beans and lentils). It may take a while before you feel like eating a lot of these foods, but try to start as soon as you can.
- Regular walks will help get your bladder and bowels moving.

If you are constipated and have not received a laxative, please ask your nurse.

Numbness and pain

You may have some numbness and tingling in your hands. This will get better over time. You may also have tingling over your breast area if a graft has been taken from the chest wall. If you have an incision on your forearm or leg, the skin around the incision may also feel numb. Aches and pains between your shoulders, on the back of your neck, and around your chest, arm, or leg incision are common and may last several weeks. The physiotherapist will teach you stretching exercises to help this discomfort. Please ask your nurse for medication if you are in pain.

Women may find it helpful to wear a bra after surgery. A bra will support the breasts and help support the incision line. A sports bra with a back closure may be the most comfortable.

Swelling

You may have be swelling in your leg where the graft was taken. You may also have swelling in your hands, legs, and feet. Keep your legs up when sitting in a chair and wear support stockings, if told by your doctor. Do the leg exercises in this booklet as often as possible and walk regularly to help your body remove the buildup of fluids.

Mood changes

You may have mood changes while recovering from surgery. You may feel happy and cheerful one day and cranky and down the next. This should change as you become more active. Remember to stick with the exercise and a walking schedule whether you feel like it or not. Please talk to someone if you are experiencing more cranky, down, or sad days than good days. We want your recovery to be successful and your mental health is just as important as your physical health. Please visit www.heartandstroke.ca/get-healthy/reduce-stress for helpful tips.

Poor memory and bad dreams

You may notice that your memory is poor and you have bad dreams after your surgery. This is often caused by medications. In time, you will be back to yourself. It is important for you to tell the nurse how you are feeling.

Sweating

Sweating during sleep is common after heart surgery and may even happen after discharge from the hospital. It can seem like a lot, but it will get better over time.

Fast heart rate

It is not unusual to have a fast heart rate and/or irregular heart rhythm. One in three patients after heart surgery will have an irregular heart rhythm known as atrial fibrillation. Fast and/or irregular heart rates can be controlled with medications, but this may take several days and may delay your discharge. If your heart rate stays irregular, a blood thinner medication may also be prescribed.

Pressure Injury (bed sore)

A nurse will assess your skin to see if you are at risk for developing a pressure injury, also known as a bed sore. Changing position often while in bed, and getting out of bed to sit or walk can help lower your risk as well as improve your overall recovery. We will help you move if you can't do this by yourself. Dietitians, occupational therapists, and/or physiotherapists may also be included to help develop a care plan to minimize your risk of bed sores.

Please tell your nurse or another member of your health care team if you notice redness over bony parts of your body or feel pain, itchiness, numbness, or tingling in areas where there is pressure on your skin.

Falls

A nurse will assess your risk for falls after surgery. This information will be shared with the members of your health care team, which includes you and your family, to help reduce the chance of falls while in the hospital. Ask for the patient guide on *Fall and Injury Prevention in Acute Care* for tips on preventing falls while in the hospital.

Pleural effusion

After surgery, fluid can collect in the space between the lining on the outside of the lungs (pleura) and the chest wall. Normally, very little fluid is in this space. A buildup of extra fluid between the layers of the pleura is called a pleural effusion. A large amount of fluid may make it hard to breathe. A physician may need to drain this fluid to help with symptoms that may include chest pain, shortness of breath, and/or coughing. These symptoms are caused by the extra fluid in this space that is compressing (pushing on) the lung. This procedure can be done at the bedside and will be explained to you in detail.

Delirium after surgery

Delirium is not rare after cardiac surgery. This can be stressful for you and your family. Delirium is a medical condition that causes a problem with mental function. It is not the same as dementia. People with dementia have a greater risk of having delirium if they become physically ill.

Causes of delirium after surgery:

- › General anesthesia alcohol, or tobacco
- › Complication from the surgery
- › Low oxygen levels
- › Stress of surgery
- › Infection, such as a bladder or lung infection
- › Suddenly stopping certain drugs, chronic (ongoing) health problems getting worse, such as heart failure or obstructive lung disease
- › Dehydration (not getting enough fluids), or uncontrolled diabetes
- › Taking many medications, or the toxic effects of certain medications

Symptoms of delirium:

- › Symptoms often begin suddenly
- › Symptoms tend to come and go, and often get worse at night
- › Less ability to concentrate and focus
- › Confused thinking and actions
- › Sleepiness or drowsiness
- › Restlessness or agitation, picking at or seeing things that are not there
- › Symptoms may change from drowsiness to agitation and back
- › Delirium is often caused by an underlying illness

Treatment and recovery:

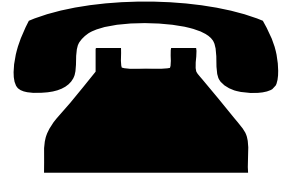
Your health care team will try to find the underlying cause(s) of this condition by doing a careful assessment, including a number of tests.

The goal is to keep you safe and from harming yourself or others. Medications may be given to help improve the symptoms. At times, restraints may be needed. If this is necessary, staff will talk about this with you. Having family present is helpful. Recovery may take days or months. Please ask a nurse for more information if needed.

Recovery after surgery

My physiotherapist's name is: _____

Phone: 902-473-3578



Daily exercise program

A regular walking and exercise program will help you recover. You will watch a video showing these exercises as part of your discharge teaching. These exercises should be done once a day while in hospital and be continued for at least 4 weeks after discharge.

Remember that it's OK to use your arms; just don't put weight through them while your breastbone heals.

These exercises will help with:

- › stiffness from the surgery and from being in bed
- › your muscle strength, bone health, and endurance, and will make your daily activities easier
- › your overall well-being
- › your recovery

Walking program

Before you begin walking, remember:

- Always wait at least 1 hour after eating before walking.
- If you are feeling sick, do not walk as far. If you do not walk for more than 3 days, do not walk as long when you start again.
- In very humid weather, walk indoors (e.g. a shopping mall). In the summer, walk during the cool part of the day. In the winter, walk during the warm part of the day or walk indoors.
- Wear comfortable, loose clothes and walking shoes with support. In the winter, wear layers of clothing instead of a heavy coat.
- If you shower after you exercise, the water should be warm, not hot. Do not use saunas, steam baths, or whirlpools.

Daily walking program

Begin your walking program 3 full days after you are home from the hospital. You can do your daily exercise program starting on the first day home from the hospital.

- Remember to walk at a comfortable pace.
- Do not climb hills for the first 2-3 weeks.
- Walk on a flat surface.
- Let your arms swing gently and enjoy the fresh air.
- Remember the “Walk and Talk” test: slow down if you are too short of breath to talk while you are walking.

My personal walking program:

Start by walking _____ minutes twice a day.

Increase the time of your walk by _____ minutes per day until you are walking for a total of _____ minutes.

Once you have reached _____ minutes, you may decrease your walking to once a day.

Remember to always “Walk and Talk”.

Using an exercise bike or treadmill:

- Exercise bike: do not use any tension until you can cycle comfortably for 20 minutes.
- Treadmill: keep it flat (no incline) until you progress to your target time. After you reach your target time, you may add an incline.

Exercise exchange

After 2 months, you may begin to swap some of your walks for other activities. Talk about these with your physiotherapist, surgeon, or family doctor. Below are some suggestions:

- › Aqua aerobics or swimming
- › Aerobics for Seniors
- › Bowling
- › Dancing or dance classes
- › Gardening
- › Golfing
- › Grocery shopping
- › Household chores
- › Lawn mowing
- › Line dancing
- › Playing with grandchildren
- › Tai Chi

Physiotherapy exercises

Directions

- Sit on a supportive chair without armrests. (Fig. 6)
- Do each exercise 10 times, once a day.
- Do the exercises at a slow to moderate pace.
- Work within your pain-free range (as directed by your physiotherapist).
- Continue doing your deep breathing and coughing exercises in addition to these exercises.

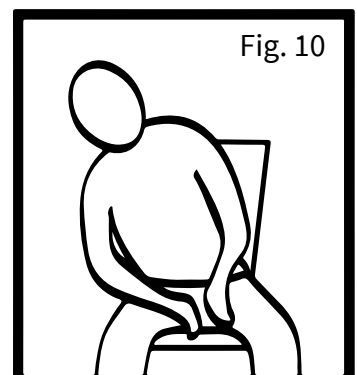
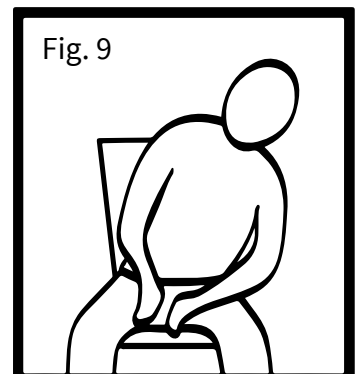
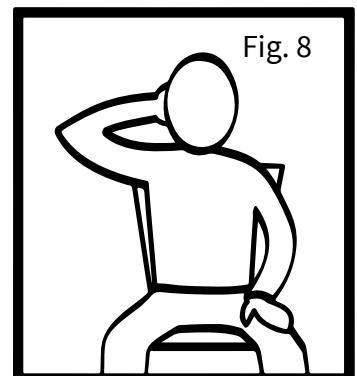
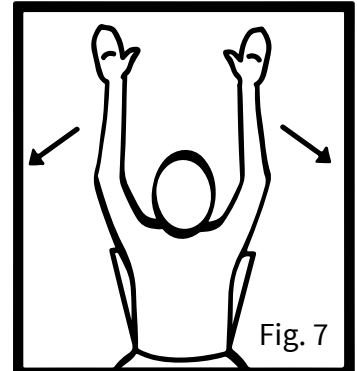
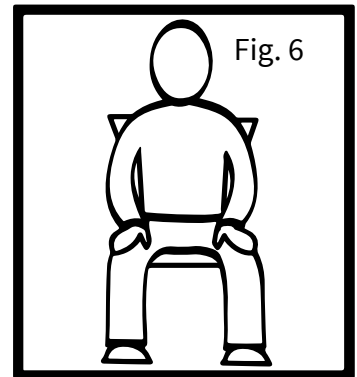
Daily arm exercises

- Breathe in as you lift your arms out to the sides and over your head. (Fig. 7)
- Breathe out as you lower your arms.
- Touch the back of your neck with your hand as you breathe in. (Fig. 8)
- Lower your hand to your side as you breathe out.
- Repeat this movement with your other hand.

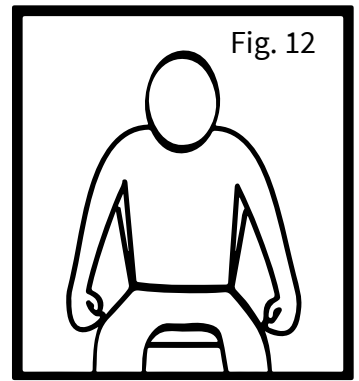
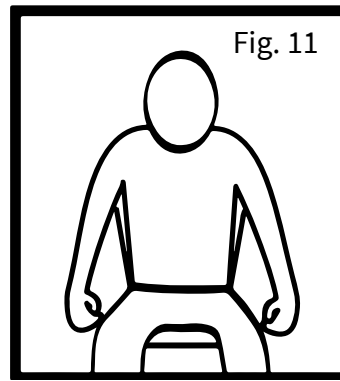
Daily neck and shoulder exercises

- Place your arms on your lap.
- Sit up straight in the chair.
- Lean to the side while keeping your bottom flat on the chair. (Fig. 9)
- Now straighten up and lean to the other side. (Fig. 10)

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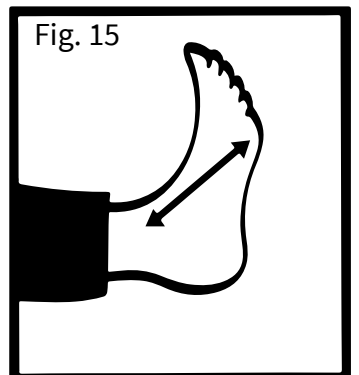
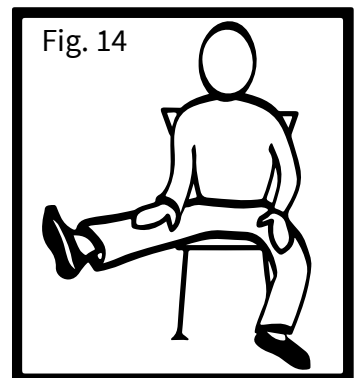
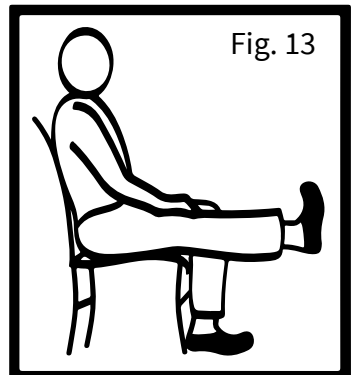


- Circle your shoulders backwards. (Fig. 11)
- Now circle your shoulders forwards.
- Shrug your shoulders, then relax them. (Fig. 12)



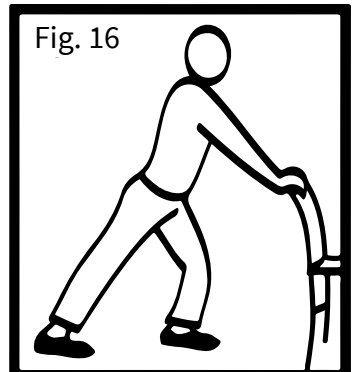
Daily leg exercises

- Start with your feet flat on the floor.
- Straighten one knee all the way, pulling your toes up towards you. (Fig. 13)
- Return to the starting position and repeat with the other leg.
- With your knee straight, lift your leg to the side. (Fig. 14)
- Return to the starting position and repeat with the other leg.
- Lift your leg so your foot is slightly off the floor.
- Move your foot up and down in a pumping motion. (Fig. 15)
- Circle your ankle in each direction.
- Repeat with your other foot.



Calf stretch

- Stretch before and after you walk.
- Use the back of a chair for balance. With your feet one in front of the other, keep your back leg straight and your heel on the floor. (Fig.16)
- As you shift your weight onto your front foot, you should feel a gentle stretch in the calf muscle of your back leg.
- Hold this position for 10-15 seconds. Do not bounce.
- Repeat with the other leg.
- Do this 2-3 times on each leg.



Discharge and followup

Discharge

The usual discharge time is between 10 and 11 a.m. You should arrange your own transportation home from the hospital before your surgery. An ambulance is not necessary. If possible, please arrange for someone to be at home with you or to stay with someone after discharge from hospital.

To avoid delays in your discharge, you should plan for who will be picking you up from the hospital on the day of discharge. If you need help finding transportation, please let your nurse know **before** your planned day of discharge.

Your nurse, physiotherapist, and other members of your health care team will give you and your family discharge instructions.

Make sure you understand what medications you need to take and when. You may want to have a family member review this information as well, so that all your questions are answered before you leave. A pharmacist can help answer any questions about your medications.

Plan to be discharged home following your hospital admission for cardiac surgery. Sometimes patients require a longer hospital stay and may be transferred to either home hospital (closest to where you live) or to another unit which is more appropriate for your level of care. You must be stable from your heart surgeon's perspective before being transferred to another unit or hospital.

The Restorative Care Unit (Veterans Memorial Building) and Progressive Care Unit (Abbie. J. Lane Building) are two units within QEII that may take appropriate patients. These are multi-disciplinary units that help patients with their independence, to continue living in their community and to avoid readmission to hospital.

Please do not leave the hospital without the following:

- Your interim report to give to your family doctor within 1 week of discharge from hospital
- Your prescriptions for your medications
- A list of your discharge medications
- This guide, including your discharge instructions
- Completed and returned the 5.1 and/or 7.1 Cardiovascular Patient Experience Survey. These surveys are not mandatory but they help us to better understand your experience, so we can improve our health care service.

Followup

You may find it helpful to keep a daily diary to record your weight and temperature. You can also write down any questions about your medications, activity, diet, etc. Bring your diary when you visit your doctor, cardiologist, and surgeon.

You will have a follow-up appointment with your surgeon 6-8 weeks after discharge. You will get a letter from your surgeon's office with the date of this appointment.

You should also see your cardiologist in 3-4 months. Your family doctor's office should arrange this appointment. If you do not have a cardiologist, it will be up to your family doctor to refer you to one.

Check your temperature

Take your temperature at the same time every day for 1 month. Normal temperature is about 37°C or 98.6°F. If your temperature is greater than 38°C or 100.4°F for 2 days in a row, contact your family doctor.

Incisions and home care

Look at your incisions before leaving the hospital. They may be numb, sore, or have some swelling. This will get better over time. If you notice an increase in redness, swelling, a bad smell, or drainage from your incisions, contact your family doctor. The staples will be taken out by your family doctor 10-14 days after surgery. If home care is needed to care for your incisions at home, this will be arranged before discharge.

Weight

Keep a record of your weight for 1 month. Weigh yourself at the same time each morning, after you go to the bathroom, and wearing the same amount of clothing. If you gain 2-3 pounds in 1 day, you may be retaining (holding onto) fluid. Call your family doctor if you gain 4-5 pounds in 2 days.

Healing time

It takes 1-2 months for your breastbone (sternum) to heal completely (6 weeks for non-diabetics and 8 weeks for diabetics). For the next 6-8 weeks, do not lift, pull, or push more than 10 pounds. You may go back to your usual routine bit by bit after this time. Check with your doctor about when you may shovel snow or mow the grass.

It is important to let your doctor know if you hear a pop or clicking noise coming from your chest.

If you are interested in becoming a Patient Representative for our Cardiovascular Surgery Quality Committee, please contact Maritime Heart Centre at 902-473-7890.

Monitoring your blood sugars

If you are diabetic, controlling your blood sugar is very important. You must follow your diabetic diet, take your medication, and monitor your blood sugars. High blood sugars can increase blood pressure and cholesterol, slow healing, and increase your risk of infections.

Stable blood pressure

It is important to keep track of your blood pressure. Talk with your family doctor about what levels are best for you. Take your blood pressure medication as prescribed.

Know your cholesterol level

Tell your family doctor if you have not had a recent cholesterol level test. A cholesterol level test should not be done until 6 weeks after your surgery.

Smoking and secondhand smoke

Do not enter smoke-filled rooms. Family and friends should not smoke near you. If you smoke and need help stopping, please contact your family doctor or the Heart and Stroke Foundation, or ask your nurses for information before discharge.

Smokers' Helpline

Toll-free: 1-877-513-5333

www.smokershelpline.ca/home

Stress

Stress can strain your heart, making it pump harder and faster, and increase your blood pressure. You may find it helpful to practice deep breathing, yoga or meditation, or listen to relaxing music. Please talk to your nurse if you have any concerns about stress before your discharge.

Call your family doctor if you have:

- › Increased redness, swelling, pain, a bad smell, or drainage from incision
- › Fever over 38°C/100°F for more than 2-3 days in a row
- › Flu-like symptoms (such as aches, chills, fever, loss of appetite, tiredness) lasting 2-3 days
- › Weight gain of 4-5 lbs over 2-3 days
- › A pop or clicking noise from your chest

When to go to the Emergency Department (ED):

- › Angina symptoms, like those before your surgery (try NITRO spray)
- › Pain in chest, neck, or shoulders that gets worse with deep breathing
- › Shortness of breath that does not go away with rest
- › Your heart is racing and does not settle down after half an hour of rest, or you have pain or shortness of breath with a fast heart rate

If you have any of the above symptoms and are not sure whether you should see your family doctor or go to the ED, call Nova Scotia Telecare at 811 to talk to a nurse.

Notes:

The risk of having a stroke after discharge is relatively low but it is important to be aware of the signs.

Learn the signs of stroke

Face is it drooping?

Arms can you raise both?

Speech is it slurred or jumbled?

Time to call 9-1-1 right away.

Act **F A S T** because the quicker you act, the more of the person you save.

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A stroke is a medical emergency. Knowing and recognizing the signs as listed above and acting quickly could mean the difference between life and death, or between a full recovery and lasting disability.

If you have any of the above signs of stroke, **CALL 9-1-1**. DO NOT DRIVE yourself or have a family member drive you to the hospital. An ambulance will take you to the right hospital for stroke care, and will tell the hospital you're on the way, so staff are ready.

Knowing the exact time that the stroke signs began is important, because it can help decide which treatment is right for you.

Staying healthy

For tips on healthy eating, healthy weight management, stress reduction, staying active and heart healthy recipes, please visit www.heartandstroke.ca/get-healthy.

Diet

Eating a well-balanced diet will speed healing and make you less tired. Your appetite will get better over time. A healthy diet is low in cholesterol, salt, and caffeine. Please refer to the “Food for a healthy heart” section of this guide for helpful information.

Rest

You will need to rest. Plan to have a 30 minute to 1 hour rest once or twice a day. Try to get a good night’s rest. Your rest is an important part of your recovery.

Exercise

Walking will be your exercise for the first few months after surgery. Walk outdoors when you can, as fresh air is good for you. Follow the exercise plan in this guide. If you have any questions about your exercise or walking programs, please contact your physiotherapist. There is an educational video on the Nova Scotia Health Authority website that you can watch at home that shows how to do the exercises in this guide:

www.cdha.nshealth.ca/media-centre/video/exercise-after-heart-surgery

Cardiac Rehabilitation Program

We strongly recommend that you participate in Cardiac Rehab if you have a program in your area. The Cardiac Rehabilitation Program is a 3-month program that combines exercise, education, support, and risk factor reduction to improve your heart health. The health care team includes nurses, dietitians, physiotherapists, and consultation with a cardiologist, as needed. Referral to other health professionals is on an as-needed basis. We will make a referral to a rehab program in your area if you do not receive a call before your first follow-up with your surgeon.

What are the benefits of cardiac rehabilitation?

Cardiac rehabilitation may help to:

- › improve your energy
- › increase your fitness level
- › strengthen your heart
- › decrease your symptoms of angina or shortness of breath
- › control your diabetes
- › control or lower your blood pressure
- › control or lower your weight
- › control or lower your cholesterol level
- › improve your flexibility and muscle strength
- › strengthen your bones
- › help you return to work
- › help you stop smoking
- › lower anxiety and depression

The exercise classes are 1 hour, once or twice a week. During these classes, you will use treadmills, arm cycles, and leg cycles. Every class has a group warm-up and cool-down. A home-based program is also available for eligible participants. A program will be made just for you based on your exercise stress test, medical history, and goals.

Cardiac Rehabilitation is a standard of care for all heart surgery patients. A referral will automatically be sent on your discharge from the hospital. If you live within a 1-hour drive from the Halifax Cardiac Rehabilitation sites, you will be contacted by Rehabilitation staff about when and where you will start your Cardiac Rehabilitation.

For those living longer than a 1-hour drive from Halifax, we encourage you to speak to your family doctor about Cardiac Rehabilitation programs in your community. These programs are not mandatory but are highly encouraged for the best recovery.

Cardiac Rehabilitation Programs in Nova Scotia

<p>Halifax/Dartmouth/Lower Sackville Hearts and Health in Motion 902-473-3846</p> <p>Hearts In Motion also offers mobile programs in the Guysborough, Antigonish and Richmond Counties and the southern portion of Inverness County. It is offered in one community at a time, throughout the region. 902-863-7192 or 902-863-7193</p>	<p>Truro Cardiac Maintenance Program 902-893-5528</p> <p>New Glasgow Pictou County Cardiac Rehabilitation Program 902-752-7600 ext. 4700 902-752-0202 (YMCA)</p>
<p>Kentville Extended Warranty II Cardiac Rehabilitation 902-679-2657 ext. 1360</p> <p>Yarmouth Yarmouth Cardiac Rehabilitation Program 902-742-3542 ext. 1460</p> <p>Bridgewater Cardiac Rehabilitation 902-527-2417</p> <p>Lunenburg Cardiac Rehabilitation 902-527-5523</p> <p>South Shore Cardiac Rehabilitation 902-543-4604 ext. 2222</p>	<p>Cape Breton Cardiac Rehabilitation Program</p> <p>Sydney 902-563-8566</p> <p>Inverness 902-258-1905</p> <p>Baddeck 902-563-8566</p> <p>Antigonish Community Cardiovascular Hearts in Motion 902-863-7192 or 902-863-7193</p>

For information about cardiac and/or exercise programs and support groups in your area, please contact:

Cardiovascular and Pulmonary Health in Motion/Hearts in Motion
6969 Mumford Road, Halifax
Phone: 902-473-3847
www.nshealth.ca/content/cardiac-rehabilitation-program

What is Cardiac Rehab?

www.cdha.nshealth.ca/media-centre/video/what-cardiac-rehab-what-heart-show

The Heart and Stroke Foundation of Nova Scotia

Phone: 902-423-7530 or toll-free: 1-800-423-4432
Visit www.heartstroke.ca for information, resources and programs.

Complete list of cardiovascular services available throughout Nova Scotia:

www.cdha.nshealth.ca/cardiovascular-health-nova-scotia

Some programs may require a referral from a physician or other health care provider.

Heart healthy eating guidelines

Healthy eating can lower your risk of heart disease by controlling weight, cholesterol, blood pressure, and diabetes. Eat regular meals and follow Canada's Food Guide.

This is a great time to start looking at what you eat and decide what changes you can make to help your heart. Diet is one of the easiest risk factors for heart disease that you can control. Adding more fibre to your diet, reducing unhealthy fats, and lowering your salt intake will help with a healthy heart lifestyle. For more information on healthy eating, please visit www.heartandstroke.ca/get-healthy/healthy-eating.

Fibre

Adding more fibre to your diet can help lower your cholesterol and help your bowels work better. Oatmeal, fruit, and vegetables are packed with fibre and great nutrition, and can help lower cholesterol. Whole grain breads and cereals help your bowels work regularly. When you start to eat more fibre, remember to drink plenty of fluids, especially water.

Fat

Your body can use extra unhealthy fats in your diet to make extra cholesterol, which can block your arteries.

Eating too much fat will make you overweight, which makes your heart work harder. You can help your heart by eating less fat. Try some of the tips below:

- Trim the fat off meat and the skin off chicken before cooking.
- Avoid processed meats (such as hot dogs, sausages, bacon, pepperoni, salami, and bologna).
- Bake, broil, grill, BBQ, or roast meat, fish, or chicken instead of frying it.
- Avoid deep-fried, pan-fried, or creamed foods.
- Add less fat to food, such as butter, margarine, mayonnaise, salad dressing, and salad oil. Try sandwiches with low-fat mayonnaise, mustard, or horseradish instead of regular mayonnaise. Use jam on toast instead of butter or margarine. Use flavoured vinegars on salads instead of creamy dressings.
- Skim milk or 1% milk are the best choices in your coffee or tea; use 2% regular milk only occasionally.
- If you eat dessert, choose fresh fruit, angel food cake, frozen fruit, or fruit crisps. Most pies, cakes, cookies, and squares are too high in fat to eat often.

Helpful hints

“Cholesterol-free” does not mean fat-free or low in fat. For example, cholesterol-free french fries never had any cholesterol in the first place, but have plenty of fat.

“Light” does not always mean low in fat or calories. It may mean the food is light in colour, flavour, or texture. Read the label closely to see why it is marked “light”.

Salt

Too much salt can make your blood pressure go up, which makes your heart work harder.

- Try to use less salt. Use only a little salt to cook with if you like, but take the salt shaker off the table. Add flavour to foods with herbs and spices.
- Eat less salty snack foods (chips, salted nuts, pretzels, etc.). Try popcorn (the “light” microwave kind or air popped), fresh fruit and vegetables, or low-fat cheese and crackers for a snack.
- Avoid regular canned soups, dried soup mixes, OXO®, bouillon, and split pea soup made with ham bone.
- Look for foods labeled salt-free, no added salt/sodium, or low-sodium.

Try eating one evening meal each week without meat, fish, or chicken. These sources of animal protein can be a very big source of fat. You don’t have to become a vegetarian to eat a heart-healthy diet, but meatless meals can be good for your heart. Beans and whole grain bread, a salad, and some fruit for dessert is a great example of a meatless meal. Other ideas are chili, casseroles, and thick soups with lots of foods like vegetables, pasta, lentils, and peas. Vegetarian cookbooks are full of delicious, low-fat recipes. Give them a try! There are lots of low-fat and vegetarian cookbooks at your local library or bookstore.

Sugar

Sugary foods and drinks are high in calories and can lead to weight gain. Try to limit sugar, candy, pop, and sweet desserts.

- Try not to add sugar to tea, coffee, and breakfast cereals. Your taste for sweetness will change over time. Use artificial sweeteners only if necessary.
- If you eat sweet desserts, try to eat only a small amount.
- Drink water instead of pop, diet pop, or juice.

Alcohol

Check with your family doctor to see if there is any reason why you should not drink alcohol. Drinking too much alcohol can lead to serious health problems. Alcohol can change how some medications work, so talk to your doctor or pharmacist before drinking alcohol.

If you have been given the OK from your doctor to drink alcohol, do so in moderation. Moderation means 1 drink per day for women and no more than 2 drinks a day for men. A drink is:

- › 12 oz (340 ml) of beer
- › or 4 oz (110 ml) of wine
- › or a 1 oz (30 ml) shot of hard liquor (rum, whiskey, gin, vodka, etc.)

Eating out

You can make healthy choices when eating out.

- Choose a restaurant that cooks food in many ways, not just deep-fried.
- Ask how foods are cooked. “Crispy” often means deep-fried. Pan-fried or sautéed usually mean cooked in fat. Ask for fish to be poached instead of fried as a healthy alternative.
- Ask for sauces and dressings on the side and just use a little, or none at all. Sauces such as béchamel, béarnaise, and hollandaise have a lot of fat.
- Watch out for salads. Caesar salad and “salad items” at a salad bar (such as chicken salad, potato salad, pasta salad, etc.) are high in fat. If you add chicken or seafood to a salad, make sure it is grilled instead of deep-fried. Ask for light salad dressing and use small amounts. You can also try lemon juice and olive oil instead of packaged dressing.

Eat heart healthy! It’s up to you!

If you have any questions about heart healthy eating, write them down in the space at the end of this guide and ask to speak with a dietitian.

Useful tips

Visit the dietitian at your local grocery store for free tips and classes on heart healthy eating.

<http://healthy Canadians.gc.ca/eating-nutrition/healthy-eating-saine-alimentation/food-guide-aliment/index-eng.php>

Frequently asked questions

1. Do I still take my old medications after surgery?

You will get a prescription for all the medications you will need before you leave the hospital. There may be changes to the medications that you were taking before surgery and there will probably be new medications added. Your nurse will review your medications with you and your family. Only take the medications that are prescribed for you on discharge.

2. Who makes changes to my prescriptions?

Your family doctor or cardiologist may make changes to your prescriptions. It may be helpful to keep a current list of all your medications with you and bring it to all follow-up appointments.

3. Can I hurt myself by doing too much activity?

Pace yourself, as you will get tired easily. Follow the exercise plan that your physiotherapist has made for you. You will need to work on increasing your strength by following the exercises in this guide.

4. Why am I coughing so much?

Coughing is normal after surgery. You probably have fluids or secretions in your lungs, and coughing helps to remove them. If coughing continues, talk to your family doctor. They may order a chest X-ray or change your medication.

5. How long will I probably stay at the hospital?

The average length of stay in hospital following heart surgery is 5-10 days. If your stay is longer, the health care team will meet with you and your family. Communication with the cardiovascular team is important to give you and your family the chance to ask questions and be informed of your plan of care.

6. Do I have to sleep on my back after surgery?

You do not have to sleep on your back after surgery. You can sleep on your right or left side as long as it does not cause you pain or discomfort. For 6-8 weeks after surgery, do not use your arms to pull yourself onto your side. You must use your legs to roll over.

7. How do I care for my incision at home?

Look at your incision before leaving the hospital. Your incision will not need a dressing after you are discharged, as long as there is no drainage. It is normal for your incision to be tender, sore, and numb. The chest incision may be swollen at the top. This should get better over time. If you notice an increase in redness, swelling, pain, or drainage, or an increase in open/gaping areas, tell your family doctor. If you need a nurse to change your dressing at home, homecare will be arranged before you leave the hospital.

8. Do I need a hospital bed or a special chair after surgery?

You should not need a hospital bed or special chair after surgery. Your nurse and physiotherapist will teach you how to safely get in and out of a chair and bed before you are discharged from the hospital.

9. Where can I find more patient and family information?

For general patient information starting points, visit <http://library.nshealth.ca/PatientEducation>.

Below is a list of a few Patient & Family Guides that you and your family might like to review before or during your hospital admission. To find a specific pamphlet title, search the NSHA Library catalogue here: <http://libcat.nshealth.ca>.

- Welcome to the QEII
- Hand Hygiene for Patients, Residents & Clients
- Fall and Injury Prevention in Acute Care: A Guide to Preventing Falls and Related Injuries During Your Hospital Stay
- Fall Prevention
- Fall Prevention Checklist
- Patients First: Inpatients
- Patients First: Your Safety, Your Well-Being
- Pressure Injury (Ulcer) Prevention
- Let's Talk About Personal Directives

When can I...?

- **Shower:** You can safely shower when you get home. Stand with your back facing the shower. It is best not to use very hot water (it may make you feel dizzy). Pat your incisions dry with a clean towel and leave them open to air unless there is drainage. If so, they will need a dry dressing.
- **Take a bath:** Do not have a bath for 6-8 weeks. It is not good to let your incisions soak in bath water (due to the risk of infection) and it will be hard to get in and out of the tub safely.
- **Do housework:** When you get home, you may do light housework, such as setting the table, drying dishes, and preparing light meals. Do not lift anything heavier than 5 pounds per arm (10 pounds total). Do not do heavy work (such as vacuuming or laundry) for 6-8 weeks.
- **Go back to doing my hobbies:** Don't do activities such as hunting, fishing, golfing, swimming, and bowling for at least 6-8 weeks.
- **Drive:** Do not drive for 6-8 weeks. Always use a seat belt when you are a passenger. If you are a passenger and there is an airbag, please make sure your seat is pushed all the way back. On a long trip, stop every 2 hours so you can stretch your legs. Do the leg exercises in this guide often when in the car.
- **Have sex:** You may have sex once you can climb 18 stairs with little problem. Do not bear any weight through your arms for 8 weeks. Lie on your back or side.
- **Go back to work:** Ask your surgeon or family doctor. This will likely be in 6-8 weeks, and once you can climb stairs with little problem.

Notes:

Discharge medication chart

Medication name	Dose	Times	Reason for medication

Medications

- Your doctor will tell you what medications you will need to take when you go home.
- Your nurse and pharmacist will review these medications with you, if needed.
- Make sure that you understand what medications you need to take.
- You may want to have a family member review your medications as well, so that all of your questions are answered before you go home.

Looking for more health information?

Find this pamphlet and all our patient resources here: <http://library.nshealth.ca/PatientGuides>
Contact your local public library for books, videos, magazines, and other resources.
For more information, go to <http://library.novascotia.ca>
Connect with a registered nurse in Nova Scotia any time: call 811 or visit <https://811.novascotia.ca>
Learn about other programs and services in your community: call 211 or visit <http://ns.211.ca>

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