

Limb Loss (Amputation) Post-operative Care

This guide will help you understand what will happen before and after your surgery, and how you may feel. It also explains how to care for your amputation in the future, and how to adapt your lifestyle to this change.

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This guide will help you get ready for your surgery by letting you know what to expect. Please feel free to ask questions.

Why are amputations needed?

- In Nova Scotia, more than 100 people have a major amputation (limb loss) each year.
- The most common cause of lower limb amputation in older people is poor blood flow in the leg arteries. This sometimes is caused by smoking, which can cause narrowing of the arteries.
- If your leg was amputated because of poor blood flow, diabetes, or other conditions, it is important for you to learn about these conditions. This helps prevent complications.

Levels of lower limb amputation

There are many things that determine how much of the limb is amputated. Your health care team will use the level of your amputation when talking with you. The amputation levels are listed below.

A - Foot amputation

Amputation of any part of the foot. This includes:

- Syme amputation (through ankle)
- Forefoot amputation (transmetatarsal)
- Toe amputation

B - Below the knee amputation

Amputation at any level between the knee and the ankle.

C - Through knee amputation

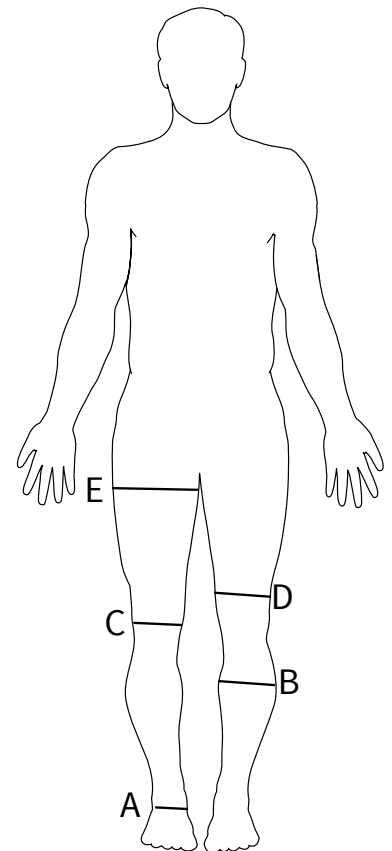
Amputation at the knee joint.

D - Above the knee

Amputation at any level between the hip and knee joints.

E - Hip disarticulation

Amputation at the hip joint with the whole leg removed.



My health care team

Your health care team will:

- help you to do as much as you can on your own after your surgery.
- work with you to make a safe plan for your discharge from the hospital.

Who is on my health care team?

You — You are the most important member of the team.

Surgeon

The surgeon and their team of clerks and medical residents will do your surgery and followup medical care.

Nurses

Nurses are available at all times. Your nurse will help you with your personal care (if needed), ask about your pain, and give you medicine to manage it (if needed), change your bandages and watch for infection, and tell you what to expect before and after your surgery.

Each unit has a Charge Nurse who meets with the care team every day.

Physiotherapist (PT)

The PT will help you start moving again. They will work with you to help improve your strength, mobility (movement), and balance.

The PT will teach you exercises to improve the movement in your limbs. They will also help you decide what equipment you need.

Occupational therapist (OT)

The OT will help you learn to manage daily activities. They will suggest aids that will help you to do more things on your own at home (like a wheelchair or tub bench). The OT may visit your home to see if any changes are needed.

Social worker

The social worker can offer emotional support and counselling to help you cope with your limb loss. They can help with lifestyle changes you may need to make, such as finances and plans to return home.

Dietitian

The dietitian will give you info to help you make healthy food choices at home. You will also get resources to help you make good food choices for problems you may have, such as diabetes, high blood pressure, or high cholesterol.

Continuing care

Continuing care services help people live safely. Their goal is to help people live well at home for as long as possible. A Continuing Care Coordinator will assess your needs for care, find out what you are eligible for, and set up the services that are right for you.

Spiritual care

Spiritual care is available to provide support and counselling to you and your family. It is non-denominational. Please tell your nurse if you would like to talk with a spiritual care worker.

Pharmacist

The pharmacist works with your health care team to make sure your medications are right for you. If you would like to talk with a pharmacist, please tell your nurse.

What will happen before surgery?

- Your nurse will explain what to expect over the next few days.
- Your doctor will talk with you about your surgery. You will be asked to sign a consent form.
- **You cannot eat or drink anything after midnight the night before your surgery.**
- Smoking slows wound healing and may increase your risk of infection or other complications. For help to quit smoking before your surgery, ask your doctor.

What can I expect after surgery?

- The surgery will take about 1 hour.
 - You will then be taken to the Recovery Room.
 - After a few hours, you will be taken to your room on the unit.
- There will be an intravenous (IV) in your arm to give you fluids and medicine. This will be taken out when you are drinking well and your IV medicines are stopped.
- You will need to start deep breathing and coughing exercises as soon as you are awake. It is important to do these every hour during the day.

- We will help you to sit in a chair the day after your surgery. We will teach you how to move from the bed to a wheelchair, and from the wheelchair to the toilet.
- There will be a bandage on your leg. We will clean your incision (cut) every day and put on a light bandage.
- The stitches or staples will be taken out when the incision is healed.

Incision

- It may take weeks for the incision to heal completely. Part of the incision may be slow to heal. It may have a scab or drain a clear yellowish fluid. This is normal. Your doctor or nurse will talk with you about cleaning and bandaging your incision.
- Sometimes, part of the incision may get infected. Signs of infection include:
 - Heat
 - Redness
 - Swelling
 - Discomfort
 - Cloudy yellow or green bad-smelling drainage (pus)
 - Fever
 - Chills
- **Contact your doctor if you think you have an infection. You may need antibiotics.**
- Part of the incision may open up. **Tell your nurse or doctor right away if this happens.**

How will I feel after surgery?

- The loss of a limb, from disease or an accident, is very stressful. It may affect you and your family differently.
- People have many feelings after surgery. You may feel:
 - Relieved to no longer be in pain
 - Angry or upset by the loss of your limb
 - Scared of the unknown
 - Anxious or angry about the changes you will have to make in your lifestyle
- **All of these feelings are normal and common.** Sometimes you may need help dealing with your feelings. Friends, family, members of your health care team, and other people who have had amputations can offer you support. Do not be afraid to talk about this important part of your life.

Coping with amputation

Amputation means you will face new challenges. It is common to feel a sense of grief and loss. How you respond to the amputation depends on your personality, values, and attitudes, life experiences, support systems, and the meaning you give to the amputation.

What will I feel after having an amputation?

- You may feel sad, anxious, angry (towards yourself, your family, or caregivers), shocked, in denial, hopeless, helpless, or numb. These feelings may make you feel frightened and overwhelmed.
- If your amputation was planned, you may feel relief at being free of pain and having improved function. You may have highs and lows, ranging from optimism to despair. These feelings are normal and are an important part of the healing process.
- These new feelings may affect how you usually deal with daily life. After an amputation, you may find it hard to concentrate or have trouble focusing. You may need to find new ways to cope with the stress of your amputation. These intense (very strong) feelings will change over time.

How can I deal with my feelings?

- You can start to regain control of your life in small ways. For example:
 - Be clear with yourself and others about what you can do for yourself and how others can help, if needed.
 - Recognize that you will be less dependent on others as you regain your independence and feel more comfortable asking for help.
- Talk to people who are good listeners, are positive, and have your best interests at heart.
- Letting go of the way things were can help to shift your focus to the possibilities of the present, as well as the future. Living in the present will help you accept what has changed and make the most of your life today.
- Keep a journal of important phone numbers, dates of important events, resources, etc. Recording your feelings about your challenges and successes, goals, and hopes for the future can help you see how far you have come since your amputation.

- Remember that you are not alone. You have a care team to help you make plans for discharge and for the future.
- People often find their first public outing scary. It may help to become familiar with the location before you go out. Visit the place in person or online (if possible) to check out the washrooms, parking, stairs, elevators, and how accessible it is. Decide who will come with you and what equipment you may need. Practicing may help to make your first outing more positive.
- It is important to take care of yourself physically. This includes eating healthy foods and getting enough sleep. Find new ways to exercise so that you can keep the fit of your prosthesis (artificial limb) and/or wheelchair. If you smoke, the best thing you can do for your health is to quit. Ask your nurse or doctor for more info on resources to help you quit.
- Know when to ask for support. There are counselling resources in the hospital and in the community. If you need support, talk with your doctor or nurse.

Will I have pain after surgery?

It is natural to have some pain after surgery. This should get better as your body heals. Talk with your health care team about ways to deal with your pain. Pain medicine will be given, if needed.

Muscle twitches and cramps

- The muscles in your leg may twitch or jump for the first few months after surgery. This is normal. Your muscles are getting used to the amputation. If you have cramping, it may help to stretch the cramped muscles of both legs and breathe calmly.
- You may have sensations which seem to be coming from the part of your limb which was removed. This is called phantom sensation or phantom pain.

What is phantom sensation?

This is the feeling that your amputated limb is still there. This is normal. It may feel like tingling, pressure, warmth, cold, wetness, itching, tickling, or fatigue (tiredness) in the limb that has been removed.

What is phantom pain?

You may have a feeling of pain in the missing limb, such as squeezing, shooting, cramping, stabbing, or burning. If you had a lot of pain before your amputation, it is common to have phantom pain. It can range from annoying to severe (very bad). It usually gets better over time.

What can make surgical and phantom pain worse?

- Very hot or cold temperatures
- Emotional upset, not getting enough sleep, or being anxious
- Something tight blocking blood flow to the leg (like clothing)
- Wound infection
- Keeping your leg in one position too long
- Scar tissue forming
- Some infections and viruses, such as cold, flu, or throat infection

What can help the pain?

- Practice good hygiene and take care of your amputated leg.
- Wrap your amputated leg in a warm blanket.
- Massage, tap, or rub your leg with a piece of terry cloth (like a towel).
- Mentally exercise your leg (pretend you are moving the part of your leg which is no longer there).
- Get more blood flow to your leg. Try mild exercise to improve blood flow. For example, slowly tighten and then release the muscles of your amputated leg.
- Raise your whole leg to prevent swelling. (Do not just put a pillow behind your knee.)
- Change your position. Try moving around or standing up.
- Keep a record of when the pain is worst. This will help your health care team to find out what makes your pain worse.
- Use relaxation exercises, deep breathing, or imagining a pleasant place.
- Ask your doctor about other ways to control your pain, such as a TENS machine, acupuncture, medication, or support groups.
- **Medication should not be the only treatment for your pain.** Medication should be used along with an exercise and stretching program.

Possible hazards

- Be careful, especially when getting up during the night. If you feel like the limb is still there, you may stand up without thinking, lose your balance, and fall. Keep your walker or wheelchair close to your bed.
- Severe pain can affect your sleeping, walking, mood, daily activities, and relationships. It is important to tell your health care team if you have severe pain.

What can I eat after surgery?

- Healthy eating is very important after your surgery. You need nutrients from food to heal your incision. It is important to tell your dietitian if you follow a special diet at home, such as a diabetes or kidney diet.
- After surgery, it is very important to eat enough every day. You may find that your appetite is low. If this happens, the dietitian will work with you to make changes to your meals. Your visitors can bring in your favourite foods from home. Once you are able to get out of bed and move around, you may find that your appetite comes back quickly.

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

How do I position myself?

Lying in bed

- Always keep your leg flat and legs together.
- **Do not put a pillow under your hip or knee.** Over time this may cause loss of movement in your hip or knee joint.



- If you are able, lie flat on your stomach for 15 minutes twice a day to stretch out your hip joint. Turn your head away from your surgery side.



Sitting

Do not sit for a long time. Do not slouch. Use a firm seat cushion. If your leg has been removed below your knee, do not let your limb dangle. This can cause pain and swelling and will slow down your healing. Always rest with the end of your limb supported to help keep your limb from becoming permanently bent.

Standing

Try to keep your limb relaxed, in line with your body, and straight down toward the floor.

Remember:

- Keep your leg supported while sitting.
- **Do not** hang your leg over the edge of your bed or chair.
- **Do not** place a pillow under your hip or knee while sitting or lying.
- **Do not** lie with your knees bent.

Care of your amputated leg

After your wound is healed and the stitches or staples are removed:

- Wash your leg every day with plain mild soap and water. Do not soak your leg for long periods. This may make the incision and skin too soft.
- Rinse your leg well to remove all of the soap. Pat or gently rub the skin dry. Make sure all of the skin folds are well dried. When your leg is less painful, rub it dry to toughen the skin.
- **Never rub alcohol or hydrogen peroxide on your limb.** This may make your skin dry and crack open.
- Moisturize your skin. After your leg has been washed and dried, place a very small amount of lotion on your hand and massage your leg. Massage will make your skin and muscles less sensitive. It can also keep scar tissue from forming between the soft tissue and the bone.

Check the skin on your amputated leg every morning and evening. Use a mirror for the areas you cannot see easily. **Tell your primary health care provider or surgeon if you have any:**

- Rash
- Redness
- Swelling
- Blisters
- Chafing
- Open sores
- Drainage from an open area

Protecting your amputated leg

- You are most likely to injure yourself when moving from your wheelchair to your bed, toilet seat, exercise mat, or when trying to stand, especially if you still have phantom sensation.
- The OT may make a plastic cap for you to help protect your leg. It can be removed when resting, sleeping, and during exercise. You may need to change or replace the cap when you no longer need your wound dressing or if your leg gets smaller. If the cap is loose or uncomfortable, tell your OT.

Care of your other leg and foot

Diseases such as diabetes and peripheral arterial disease can lower the blood supply to your legs and feet. The lower blood supply damages the nerves' ability to tell you if there is something wrong with your legs or feet. You may not be able to tell if you have pain, burning, or more serious problems like open sores. Signs of changes in circulation are:

- Loss of hair on your leg or feet
- Sores
- Less feeling
- Brown staining of the skin

Leg care

- Examine your leg each day for cuts, scrapes, or swelling.
- Avoid garters, knee highs, and socks with tight elastic at the top.
- Socks should be soft, warm, dry, and have very few seams.
- Avoid elastics on the bottom of pant legs that might lower blood flow.
- Wear compression stockings for increased swelling and circulation if recommended by your doctor. Make sure the stocking does not form a roll at the top. This could cause swelling in the lower leg and foot.

Foot care

- Examine your foot each day. Look for cuts, blisters, sores, dry scaly skin, and cracks, especially between your toes.
- If you have an open area, see your doctor or nurse as soon as possible. Also watch for changes in skin colour, swelling in your lower leg or foot, and areas which are not healing.
- Wash your foot and leg daily with mild soap and lukewarm water. Dry well, especially between your toes.
- Do not soak your foot.
- Keep your foot clean.
- **Do not rub fragile skin.** Pat skin dry.
- Prevent your skin from cracking. Apply rich moisturizing cream to your foot, but not between your toes.
- Avoid extreme (a lot of) heat or cold. Heating pads and hot water bottles can burn healthy tissue — use carefully.
- Do not cut corns or calluses. Contact a professional.

- If your feet sweat, make sure to change your socks often to lower the chance of fungal infection. Fungus and yeast infections may cause toenail loss and skin problems.
- **Never walk in your bare feet or sock feet.** Always wear proper fitting footwear (length and width) to avoid injury.

Nail care

- **Do not cut your own nails.** There are foot care specialists available who can help you, if needed. There are clinics provided by pharmacies, Victorian Order of Nurses (VON), and Diabetes Clinics. In more complicated cases, a foot doctor (podiatrist) may be consulted to manage your foot care.
- Ask a member of your health care team to help you find resources in your area.

Shoes

Orthotic services can help with shoe fitting. You will need a referral from your primary health care provider.

- Wear the correct shoe size to fit both the length and width of your foot. If you have no feeling in your foot, you could develop sores if your shoes do not fit properly. Slippers and sandals do not give enough support.
- Shoe seams and straps should not cause pressure spots on your foot.
- The shoe should match the shape of your foot. Do not squeeze your foot to match the shape of the shoe.
- Wear leather shoes, not vinyl.
- Always check for pebbles or sharp objects inside shoes before putting them on. Shake out your shoes before putting them on.

Exercise

- It is important to exercise. Keep doing all of the exercises that you learned during your hospital stay. Stay as active as possible. This will help to increase your strength and ability to do things on your own.
- Staying active:
 - makes your muscles stronger and healthier.
 - keeps your joints moving.
 - strengthens your heart.
 - improves your balance.
 - improves your breathing.
 - helps with pain control, especially phantom pain.
 - keeps your arms, legs, and body from stiffening up.
- These things will make you stronger and give you more energy for walking or wheeling a wheelchair. This will help you be more comfortable and independent.

Flexibility

- Lying in bed or sitting for long periods of time can cause stiffness in your joints and muscles. When a joint cannot move fully, we say it has a “contracture”. Contractures can be painful.
- You can help prevent contractures by:
 - lying as flat as you can on your back, instead of being propped up.
 - using a firm mattress.
 - not putting pillows under your legs.
 - lying flat on your stomach (belly) for at least 15 minutes twice a day. Do not use a pillow and turn your head away from the side with the amputation. If you find that this is uncomfortable for your neck, put a pillow under your chest.
 - sitting with your back straight and well supported. Do not slouch. Use a firm seat cushion.
 - keeping your knee as straight as you can.
 - supporting your amputated leg on a firm surface.
- We may suggest your wheelchair be fitted with a board to keep your knee from bending.
- **Prevention is much easier than trying to fix a major problem.**

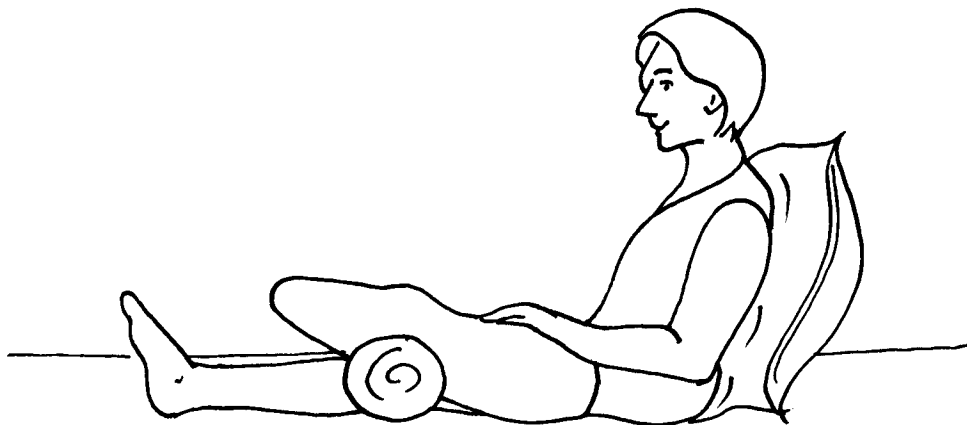
Walking

- We may help you learn how to use a walker or crutches during your hospital stay. Using a walker or crutches will:
 - be good exercise.
 - keep your remaining leg in shape.
 - help you develop strength and balance.
 - give you a way of getting around.

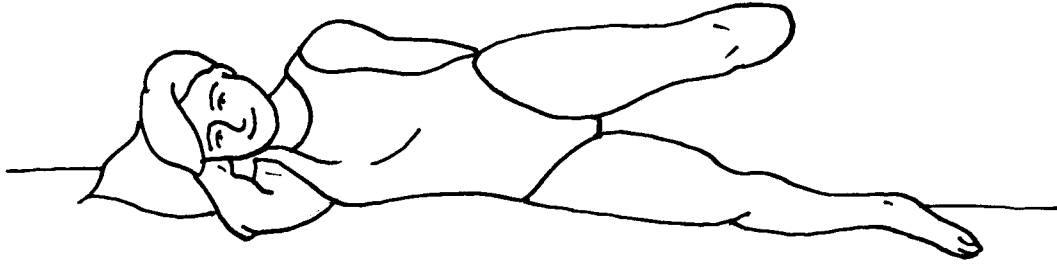
Post-operative and home exercises



- Tighten the muscles on the top of your thigh, pushing the back of your knee into bed.
- Hold for _____ seconds.
- Repeat _____ times, _____ times a day.



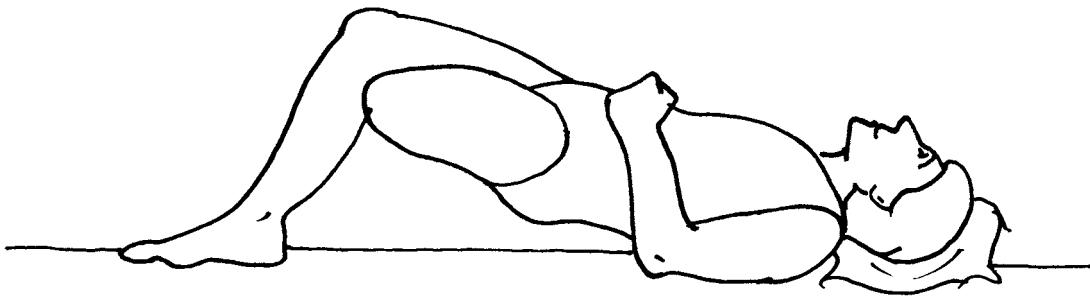
- Place a large can or roll under your knee. Straighten your leg.
- Hold for _____ seconds.
- Repeat _____ times, _____ times a day.



- Lie on one side and lift your top leg towards the ceiling.
- Repeat _____ times, _____ times a day.



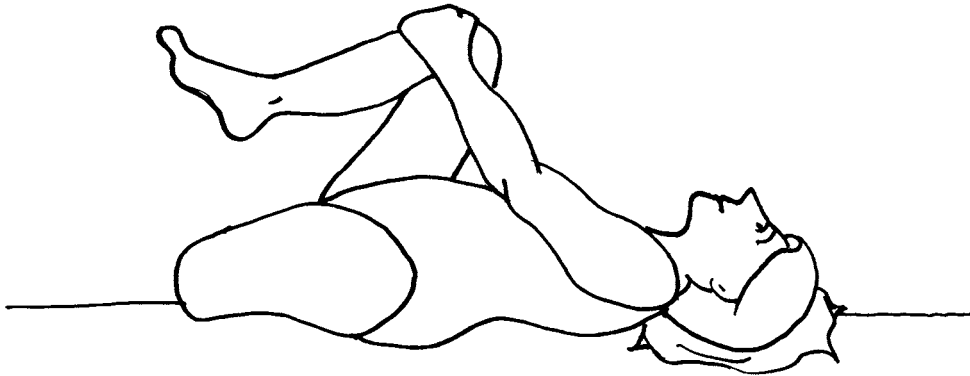
- Gently bend one knee as far as possible.
- Return to resting position.
- Repeat _____ times, _____ times a day.



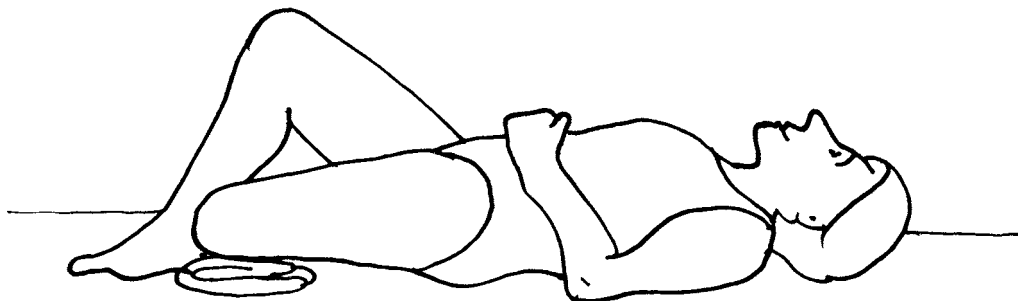
- Lie on your back, with your knee bent and your foot flat.
- Lift your bum off of the bed.
- Hold for _____ seconds, repeat _____ times.



- Lie on your stomach with your hip and knee straight.
- Do this for 15 minutes, twice a day.



- Pull one leg to your chest, pushing the other leg into the bed.
- Hold for _____ seconds.
- Repeat _____ times.



- Place a folded towel under your leg.
- Push your leg into the towel.
- Hold for _____ seconds.
- Repeat _____ times.
- Repeat with other leg.

Getting around

Wheelchairs

- Until you know what is best for you, plan to rent or borrow a wheelchair instead of buying one. If you plan to buy a wheelchair, get a proper prescription from your OT.
- **Wheelchair safety is very important and requires some training.**
- **Wheelchair rules:**
 - Put brakes on firmly when stopped or getting out of the wheelchair.
 - Swing footrests out of the way before standing.
 - **Do not** stand on the footrests.
 - **Do not** push the wheelchair too quickly when starting off, as it may tip.

Using a wheelchair

- When you go home from the hospital, you will be using a wheelchair for most of the day.
- You may need a wheelchair:
 - first thing in the morning before getting dressed. You may use your wheelchair to go to and from the bathroom.
 - in the community or for longer distances.
 - when recovering from skin breakdown or problems with either leg.
 - when safety is a concern or your balance is poor.
- Using a wheelchair in your home may mean:
 - building a ramp.
 - moving furniture and removing carpets and/or rugs.
 - widening doorways.
- Ask your OT for more info.

Transfers

- Getting safely to and from your wheelchair to the bed, toilet, tub, exercise mat, and car is important. This is a skill you will develop with the help of your OT. They will talk with you about special equipment or techniques to improve your independence and safety.
- **Do not use a wheelchair on stairs.**

Using a walker

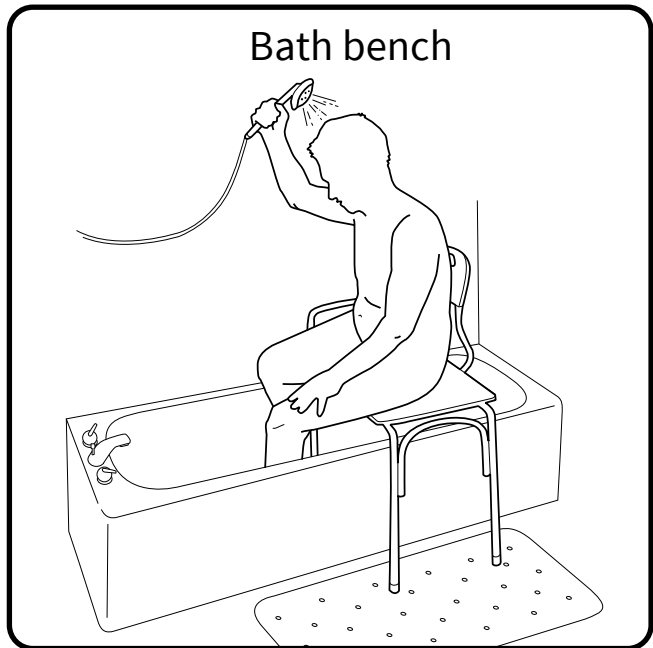
- A walker will help you to move around in your home and community.
- A physiotherapist will help you choose the walker that is right for you.
- When you get your walker, check to make sure:
 - the walker is ready to use. You will need rubber wheels on the 2 front posts to make the walker easier to move.
 - **the walker is the right size.** When you are standing with your arms resting at your sides and the walker is in front of you, check the placement of the hand supports. The handles should come to the crease in your wrist. **When you hold onto the walker, your elbow should be slightly bent — never straight.**

Remember that walking with a walker takes practice. It is normal to have some problems at first.

Living at home

- Before you install any equipment in your home, talk with your OT. They will help you choose equipment that is right for you and your home.
- They will also talk about everyday activities, such as:
 - Washing yourself
 - Dressing
 - Cooking
 - Housekeeping
 - Driving
 - Grocery shopping
 - Work
 - Relaxing or fun activities

- Special equipment may be suggested for safety and to make things easier in your home, such as:
 - A raised toilet seat and safety frame
 - A bath bench or board
 - Grab bars



Grab bars

- Grab bars can help support you while getting in and out of the bathtub or shower, or getting up and down from the toilet. Shower curtain rods, sliding doors, soap dishes, faucets, and towel racks are not designed to take your weight. **Do not use these items to support yourself.**
- The OT will help you choose the correct grab bars to improve safety in the tub/shower or by your toilet:
 - **A grab bar must be installed into the wall studs.** If this is not possible, contact a medical supplier for suggestions.
 - A grab bar should have a rough surface for better grip when wet.
 - A grab bar should not be thicker than 1 1/2 inches (4 cm) in diameter (around) for proper grip.
 - A grab bar must leave enough space between the bar and wall to avoid possible accidents, such as scraped knuckles.
 - A grab bar must be at a height and position that is comfortable for you. It is best to place the grab bar between your waist and shoulder height.
- You can buy grab bars from medical supply stores or hardware stores. Medical supply stores will often install grab bars for an extra cost. Check the YellowPages™ or online for local contacts.

What happens next?

- When you are discharged from the Halifax Infirmary (HI), you may:
 - go home to heal, OR
 - be transferred to your home hospital, OR
 - be transferred to the Nova Scotia Rehabilitation and Arthritis Centre (NSRAC).
- **If you go home to heal or are transferred to your home hospital:**
 - You will have a scheduled followup visit at the HI Vascular or Orthopaedic Clinic to check your healing.
- **If you are transferred to the NSRAC:**
 - The rehabilitation (rehab) team will work with you to find out your everyday function and movement goals, and create a plan to meet those goals.
 - The rehab team is made up of a doctor who has training in rehabilitation, a nurse, a PT, and an OT.
 - You will be offered rehab to help you be active and do as much as you can on your own from a wheelchair.
- As an outpatient, you may be referred to the NSRAC Amputee Clinic to find out your everyday function and movement goals, and future steps to meet these goals. They will check your leg and general condition. At that time, they will help you decide if you would benefit from having a prosthesis (artificial leg).

This pamphlet is just a guide. If you have questions, please talk to your health care provider. We are here to help you.

Looking for more health information?

Find this pamphlet and all our patient resources here: <https://library.nshealth.ca/PatientEducation>

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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