After Limb Loss (Amputation)

Halifax Infirmary

This guide will help you understand:

- What will happen before and after your surgery
- > How you may feel
- > How to care for your amputation
- > How to adapt your lifestyle to this change



After Limb Loss (Amputation)

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

Why do I need an amputation?

If your leg was amputated because of poor blood flow, diabetes, or another condition, it is important for you to learn about your condition. This can help to prevent complications.

Levels of limb amputation

There are many things that affect how much of your limb is amputated.

The levels of limb amputation are:

A – Foot

- Amputation of the whole foot or any part of the foot.
 This includes:
 - Syme amputation (through the ankle joint)
 - Trans metatarsal (forefoot [section between the ankle and the toes])
 - > One (1) or more toes

B - Below the knee

Amputation at any place between the ankle and the knee.

C - Through the knee

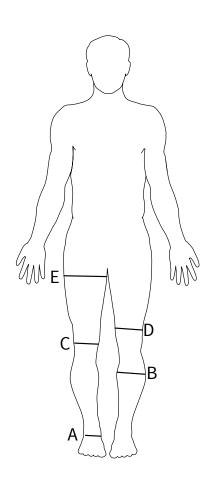
• Amputation at the knee joint.

D - Above the knee

 Amputation at any place between the knee and the hip.

E – Hip disarticulation

• Amputation at the hip joint.



My health care team

You will be cared for by a team that includes:

You and your support persons

- It is important that you and your support persons take an active role in your care and recovery. This may include:
 - > asking questions about your care.
 - > being involved in making decisions about your care.
- If you and your support persons would like to ask questions or share your concerns, talk to a member of your health care team. They will help arrange a meeting with the team.

Surgeon

• The surgeon will do your surgery. They will also do follow-up medical care.

Nursing team

- The nursing team is available at all times. They will:
 - > tell you what to expect before and after your surgery.
 - help with your personal care, if needed.
 - > ask about your pain, and give you pain medication, if needed.
 - > change your bandages and watch for infection.

Charge nurse

- Each unit has a charge nurse who meets with the health care team every day.
- They are responsible for the general coordination of care and patient movement on the unit. They keep the unit running smoothly.
- The charge nurse is also a resource and support for staff, patients, and support persons. They are the go-to person for dealing with concerns.

Physiotherapist (PT)

- The PT will work with you on your range of motion, strength, walking, and transfers (moving from one position or place to another, like from your bed to a chair). This will help you to be as independent as possible when you go home.
- If the physiotherapy team says it is safe, your support persons can also help you with your exercises.

Occupational therapist (OT)

- The OT will help you learn to manage your daily activities. They will suggest aids and equipment to help you do more things on your own at home (like a wheelchair or bathroom equipment).
- The OT may visit your home to suggest changes (like installing equipment, moving furniture, or renovations).
- They will also make a stump cap to protect the end of your leg as it is healing.

Social worker

- The social worker can offer emotional support and counselling to help you cope with the loss of your limb.
- They also work with you and your health care team to find resources (financial or other types of resources and services) you will need during your hospital stay and after you go home.

Dietitian

• The dietitian makes sure you are getting enough nutrients from the foods you eat. They can help you learn about healthy foods and prevent weight loss.

Continuing care

- The goal of continuing care services is to help you live safely at home for as long as possible.
- A continuing care coordinator will assess your needs, find out what services you are eligible for, and set up the services that are right for you.

Spiritual care

- Spiritual care offers support to patients and their support persons. They are available to help with understanding suffering, healing, and the recovery process. They support all cultural backgrounds, beliefs, and religious affiliations.
- Spiritual care can help you connect with clergy, denominational chaplains, and support persons, as available.
- If you would like the support of spiritual care, ask your nurse.

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, ask your nurse.

What will happen before my surgery?

- Your nurse will explain what to expect over the next few days.
- Your surgeon 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 raise your risk of infection or other complications. Talk with your surgeon if you would like help quitting smoking before your surgery.

What can I expect after my surgery?

- The surgery will take about 1 hour.
- After your surgery, you will 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 (I.V.) tube in your arm. The tube is used to give you fluids and medications. It will be taken out when you can drink by mouth and when your I.V. medications are stopped.
- There will be a bandage on your leg.
- You will have stitches or staples in your incision (cut made during surgery). They will be taken out when the incision is healed.
- You will need to start deep breathing and coughing exercises as soon as you are awake. It is important to do these exercises every hour you are awake.
- We will help you to sit in a chair the day after your surgery. We will teach you how to move from your bed to a wheelchair, and from the wheelchair to the toilet.
- You may have a pain catheter. This is usually removed after 5 days.

Incision

- It may take weeks for your incision to fully heal.
- Part of the incision may be slow to heal. It may have a scab or drain clear, yellow fluid. This is common.
- While you are in the hospital, staff will clean your incision as needed. A member of your health care team will talk with you about how to clean and bandage your incision at home.
- Sometimes, part of your incision may get infected. If this happens, you may need antibiotics (medication to help prevent infection).

Call your primary health care provider (family doctor or nurse practitioner) or your surgeon right away if you have any of the following signs of an infection:

- > Heat at or around the incision site
- > Redness at or around the incision site
- > Swelling at or around the incision site
- > Discomfort at or around the incision site
- Cloudy, green, bad-smelling drainage (pus) from the incision site
- > Fever (temperature above 38 °C or 100.4 °F)
- → Chills

If you cannot reach your primary health care provider or your surgeon, go to the nearest Emergency Department right away.

- Part of your incision may open.
 - If you are in the hospital, tell a member of your health care team right away.
 - If you are at home, call your primary health care provider or surgeon right away.

How will I feel after my surgery?

- It is very stressful to lose a limb, from disease or from an accident. It may affect you and your support persons differently.
- You may feel:
 - Relief that you are no longer in pain
 - Angry or upset about losing your limb
 - Scared of the unknown
 - > Anxious or angry about the changes you will have to make
- These feelings are common. There are people available to help you deal with your feelings (like your loved ones, members of your health care team, and other people who have had amputations). Do not be afraid to talk about this important part of your life. Ask your nurse for help. They will refer you to the right person.

Coping with amputation

Amputation means you will face new challenges. It is common to feel grief or loss. How you respond to amputation will depend on your values, attitudes, life experiences, support system, and the meaning you give to your amputation.

What will I feel after having a limb amputation?

· You may feel:

Sad
 Anxious
 Angry (towards yourself, your support persons, or your caregivers)
 Shocked
 In denial
 Hopeless
 Helpless
 Numb

These feelings may make you feel scared or overwhelmed. This is common.

- If your amputation was planned, you may feel relief at no longer having pain and having improved function.
- You may have highs and lows. Sometimes you may feel happy and like you are excited about the future, and at other times you may feel sad. You may also feel somewhere in between. These feelings are common. They are an important part of the healing process.

• These feelings may affect how you deal with your 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 get control of your life back in small ways, like:

- Be clear with yourself and others about what you can do for yourself and how others can help, if needed.
- Recognize that you will depend less on others over time. You will regain your independence and likely will feel more comfortable asking for help.
- Talk to people who are good listeners, are positive, and want what is best for you.
- Try to let go of how things were before your amputation and focus on the present. This will help you to:
 - accept what has changed.
 - > make the most of your life today.
 - focus on what you can do now, and in the future.
- Keep a journal. Write down your feelings about your challenges and successes, goals, and hopes for the future. This can help you see how far you have come since your amputation. You can also keep important phone numbers, dates, resources, and other information in your journal.

Going out

- You may find your first public outing scary. It may help to learn about the location before you go.
- Practicing may help to make your first outing better. If you can, visit the
 place in person or online to learn about the parking, stairs, elevators, and
 washrooms. Decide who will come with you and what equipment you may
 need.

Taking care of yourself

- It is important to take care of yourself physically. This includes eating healthy foods and getting enough sleep.
- Exercise will help you keep the fit of your prosthesis (artificial limb) or your wheelchair (see page 19).
- If you smoke, the best thing you can do for your health is to quit. Ask a member
 of your health care team for more information about 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 a member of your
 health care team.
- You are not alone. You have a health care team to help you make plans for your discharge from the hospital and for the future.

Pain after surgery

- It is common to have pain after surgery. It is important to work with the rehabilitation (rehab) team (OT and PT) and move your body as you are able. This should get easier as your body heals.
- Talk with your health care team about ways to deal with your pain. They can give you pain medication, if needed.

Muscle twitches and cramps

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

Phantom sensation

- This is the feeling that your amputated limb is still there. This is common.
- You may feel these things in the limb that was removed:

 - > Pressure> Itching or tickling

Phantom pain

- You may feel pain in your amputated limb. This can feel like:
 - > Squeezing
 - > Shooting
 - Cramping

- > Stabbing
- > Burning
- It is common to have phantom pain if you had a lot of pain before your amputation.
- Phantom pain may only bother you a bit, or it may be severe (very bad). It may be somewhere in between. Phantom pain usually gets better over time.
- You may feel phantom pain and pain from your surgery or your incision. Some things that can make both types of pain worse are:
 - > Very cold or very hot temperatures
 - Something tight (like clothes) that blocks blood flow to your leg
 - Keeping your leg in one position for too long
 - Feeling upset or anxious

- Not getting enough sleep
- > Infection at the incision site
- An infection or a virus (like a cold, flu, or a throat infection)
- > Scar tissue forming

What can help with pain?

- Keep your amputated leg clean and dry.
- Wrap your amputated leg in a warm blanket.
- Massage, tap, or rub your leg with terry cloth fabric (like a towel).
- Mentally exercise your leg. Do this by pretending you are moving the part of your leg that was amputated.
- Get more blood flow to your leg with gentle exercise. Try to slowly tighten, and then release, the muscles of your amputated leg.
- When lying down, use pillows to raise your whole leg (do not just put a pillow behind your knee). This can help to prevent swelling.
- 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 learn what makes the pain worse.
- Do relaxation exercises or deep breathing, or imagine a pleasant place.
- Try mirror image therapy (using a mirror to hide your amputated limb). Ask your OT or PT if they think this might be right for you.

- Ask your health care team about other ways to control your pain, like a TENS machine, acupuncture, medication, or support groups.
- Medication should **not** be the only treatment for your pain. It should be used along with an exercise and stretching program.

Phantom sensation and phantom pain risks

- If you feel like your limb is still there, you may stand up without thinking, lose your balance, and fall.
- Be careful, especially when you get up during the night. 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.

Eating after surgery

- Healthy eating is very important after surgery. You need nutrients from food to heal your incision. It is important to tell your dietitian if you follow a special eating plan (like for diabetes, heart health, or kidney health).
- After surgery, it is very important to eat enough every day. Your appetite may be low. If this happens, the dietitian will work with you to make changes to your meals. Your support persons can bring in your favourite foods from home. You may find that your appetite comes back quickly when you are getting out of bed and moving around.

What are your questions?
Please ask a member of your health care team. We are here to help you.

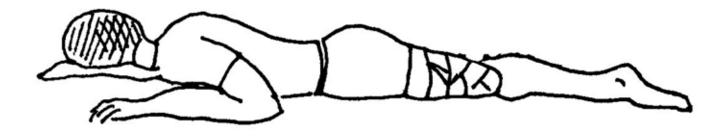
How do I position myself?

Lying in bed

- Always keep your legs flat and 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 2 times a day. This will help to stretch your hip joint. Turn your head away from your amputated side.



Sitting

- Do not sit for more than 4 to 6 hours at a time.
- Sit up straight. **Do not** slouch.
- Use a firm seat cushion.
- If your leg was amputated below your knee, **do not** let your limb dangle (hang in the air). This can cause pain and swelling. It will also slow down your healing.
 - Always rest with the end of your limb supported. This will help to 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 have been removed:
 - Wash your leg every day with plain, mild soap and water. Do not soak your leg for long periods of time. 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 hurts less, rub it dry. This will help to toughen the skin.
 - Never rub alcohol or hydrogen peroxide on your limb. This may make your skin dry and crack.
 - Moisturize your skin. After you wash and dry your leg, place a very small amount of moisturizing cream on your hand and massage your leg.
 Massaging 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 your surgeon if you have any of these symptoms**:

→ Rash

Blisters

Drainage from an open area

> Redness

Chafing

> Swelling

> Open sores

Protecting your amputated leg

- You are most likely to injure yourself when you are:
 - > moving from your wheelchair to a bed, a toilet seat, or an exercise mat.
 - trying to stand, especially if you have phantom sensation.
- The OT may make a plastic cap to help protect your leg (for a below the knee amputation only). You can remove the cap when you are resting, sleeping, or exercising.
- Tell the OT if the cap is loose or not comfortable.

Caring for your other leg and foot

- Diabetes and peripheral arterial disease (PAD) can lower the blood flow to your leg and foot.
- Not getting enough blood damages your nerves' ability to tell you if there
 is something wrong with your leg or foot. You may not be able to tell if you
 have pain, burning, or more serious problems (like open sores). Some signs of
 changes in the blood flow to your leg and foot are:

> Hair loss
> Sores

→ Less feeling → Brown staining of your skin

Leg care

- Check your leg each day for:
 - Cuts > Swelling
 - Scrapes
- Avoid knee highs and socks with tight elastics at the top.
- Wear socks that are soft, warm, dry, and have very few seams.
- Do not wear pants with elastics at the bottom of the pant legs. This may lower blood flow.
- Wear compression stockings, if recommended by your primary health care provider. Make sure the stockings do not form a roll at the top. This could cause swelling in your lower leg and foot.

Foot care

- Check your foot each day. Look for:
 - > Cuts
 - > Blisters
 - > Sores
 - > Dry, scaly skin
 - > Changes in skin colour

- Cracks (especially between your toes)
- > Swelling in your lower leg or foot
- Areas that are not healing
- If you have an open area (like an open sore or a crack in your skin), see your primary health care provider as soon as possible.
- Keep your foot clean. Wash your foot and leg each day with mild soap and lukewarm water. Dry well, especially between your toes. Do not soak your foot.
- If your skin is fragile, pat it dry. **Do not** rub.
- Try to prevent your skin from cracking. Apply moisturizing cream on your foot, but **do not** put it between your toes.
- Avoid very cold or very hot temperatures. Heating pads and hot water bottles can burn your skin. Be careful when using them.
- **Do not** cut corns or calluses. Contact a professional.
- If your foot is sweaty, make sure to change your sock often to lower the chance of infection. Fungus and yeast infections may cause toenail loss and skin problems.
- Do not walk in bare feet or sock feet.
- Always wear footwear that fits properly (length and width) to avoid injury.

Toenail care

- **Do not** cut your own toenails. There are foot care specialists available who can help you.
- There are clinics provided by pharmacies, Victorian Order of Nurses for Canada (VON), and Diabetes Clinics. Ask a member of your health care team to help you find resources in your area.
- If you need more care, you may need to visit a podiatrist (foot doctor). You will need a referral from your primary health care provider.

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 the 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 your foot enough support.
- Shoe seams and straps should not cause pressure spots on your foot.
- Your shoes should match the shape of your foot. Do not squeeze your foot to match the shape of your shoes.
- Wear leather shoes. Do not wear vinyl.
- Always check for pebbles or sharp objects inside your 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 you can. This will help increase your strength and your 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 body from getting stiff.

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 make your joints and muscles stiff. When a joint cannot move fully, we say it has a "contracture". Contractures can be painful.

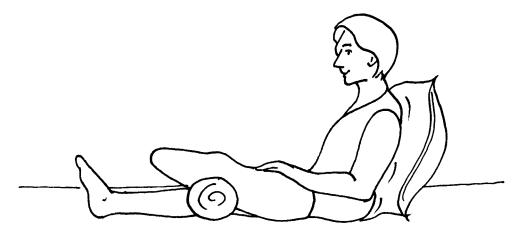
- You can help prevent contractures by:
 - ying as flat as you can on your back, instead of being propped up.
 - > using a firm mattress.
 - not putting pillows under your legs.
 - > lying flat on your stomach (belly) for at least 15 minutes, 2 times a day.
 Do not use a pillow. Turn your head away from your amputated side. If you find that this is not comfortable 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 knees as straight as you can.
 - > supporting your amputated leg on a firm surface.
- For a below knee amputation, 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.

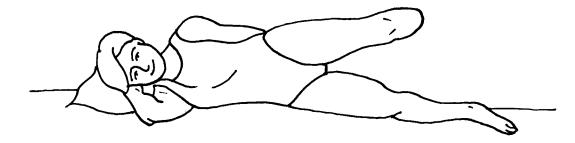
Exercises after your surgery and at home



- Lie flat on your back. Bend your non-amputated leg.
- Tighten the muscles on the top of your thigh, pushing the back of your knee into the bed.
- Hold for _____ seconds.
- Repeat _____ times, ____ times a day.



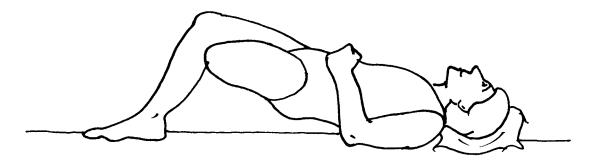
- Sit up straight with your back supported. Keep your non-amputated leg straight.
- Place a large can or a rolled up towel under your knee. Straighten your leg.
- Hold for _____ seconds.
- Repeat _____ times, ____ times a day.



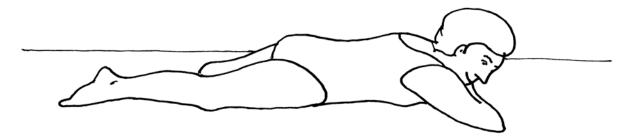
- Lie on your non-amputated side.
- Lift your amputated leg towards the ceiling.
- Repeat _____ times, ____ times a day.



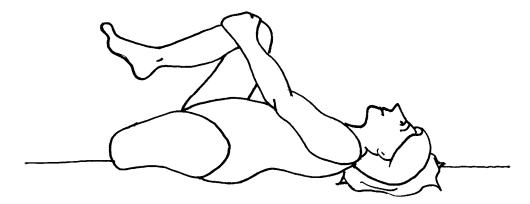
- Lie flat on your back. Keep your amputated leg straight.
- Gently bend your amputated knee as far as possible.
- Return to starting position.
- Repeat _____ times, ____ times a day.



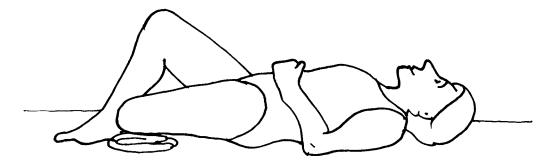
- Lie on your back. Bend the knee of your non-amputated leg, keeping your foot flat.
- Use your stomach muscles to lift your bum off of the bed.
- Hold for _____ seconds.
- Repeat _____ times.



- Lie on your stomach with your hips and knees straight.
- Do this for 15 minutes, 2 times a day.



- Lie flat on your back.
- Pull your non-amputated leg towards your chest, while pushing your amputated leg into the bed.
- Hold for _____ seconds.
- Repeat _____ times.



- Lie flat on your back. Place a folded towel under your amputated leg.
- Push your leg into the towel.
- Hold for _____ seconds.
- Repeat _____ times.

Getting around

Using a wheelchair

- After your surgery, you will need to use a wheelchair.
- You may choose to rent or borrow a wheelchair, depending on your needs. If you plan to buy a wheelchair, your OT can give you a prescription.
- Wheelchair safety is very important. Learn and practice these rules:
 - > Put the brakes on firmly when stopped, or when you are getting out of the wheelchair.
 - Move the footrests out of the way before standing.
 - > **Do not** stand on the footrests.
 - Do not push the wheelchair too quickly when starting off. This may tip it over.
- 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
 - To go to and from the bathroom
 - In the community or for longer distances
 - > When recovering from skin breakdown or problems with one of your legs
 - If your balance is poor
- Do not use a wheelchair on stairs.

Wheelchair transfers

- A transfer is when you move from your wheelchair to another place (like a bed, a toilet, a tub, an exercise mat, or a car). It is very important to learn how to do transfers safely.
- Your rehab team will help you learn how to transfer to and from your wheelchair. They will talk with you about equipment you can use and things you can do to improve your independence and safety.
- Using a wheelchair in your home may mean you have to:
 - > build a ramp.

> remove carpets or rugs.

> move furniture

- widen doorways.
- Ask your OT for more information about how to use a wheelchair safely in your home.
- There may be places in your home that are also not accessible by wheelchair. For these places, you may need to use a 2-wheeled walker.
- A PT will help you choose a 2-wheeled walker that is the right size for you.
 - > When you stand in front of the walker with your arms resting at your sides, the handles should come to the creases in your wrists.
- **Do not** hop when using a 2-wheeled walker.

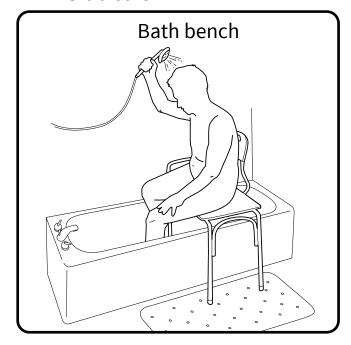
This pamphlet is just a guide. If you have questions, please talk to your health care provider. We are here to help you.

Living at home

- Talk with your OT before you install any equipment in your home. They will help you choose equipment that is right for you and your home.
- They will also talk with you about everyday activities, like:
 - > Washing yourself
 - › Getting dressed
 - Cooking
 - > Housekeeping

- Driving
- Grocery shopping
- > Work
- Relaxing or fun activities
- Your rehab team may suggest special equipment for safety and to make things easier in your home, like:
 - A raised toilet seat and safety frame
- A bath bench or board
- Grab bars





Grab bars

- Grab bars can help support you while you are getting in and out of the tub or shower, or getting up and down from the toilet. Do not use these items to support yourself as they are not designed to take your weight or support you:
 - > Shower curtain rods
 - Sliding doors
 - > Towel racks

- Soap dishes
- > Faucets

- The OT will help you choose the right grab bars for your toilet, and your tub or shower. A grab bar:
 - > must be installed into wall studs. If this is not possible, contact a medical supplier for suggestions.
 - > should have a rough surface. This is so you have a better grip when wet.
 - > should **not** be thicker than 1½ inches (4 cm). This is so you can have a proper grip.
 - > must leave enough space between the bar and the wall to avoid possible accidents (like scraped knuckles).
 - > must be at a height and a position that is comfortable for you. The best place for a grab bar is between your waist and shoulder height.
- You can buy grab bars from medical supply stores or hardware stores. Often, medical supply stores will install grab bars for an extra cost. Check the Yellow Pages[™] or search online for stores in your area.

What happens next?

- When you are discharged from the hospital, you may go:
 - home. > to the Nova Scotia Rehabilitation and Arthritis Centre (NSRAC).
 - > to your local hospital.
- Where you go after you are discharged will depend on your situation and on what your health care team recommends.
- If you go home or to your local hospital:
 - > You will be given an appointment for a follow-up visit at the Halifax Infirmary (Vascular Clinic or Orthopedic Clinic) to check your healing.
- If you go to the NSRAC:
 - > You will be cared for by a rehab team (doctor, nurse, PT, and OT).
- Your team will work with you to:
 - make function and movement create a plan to meet your goals. goals.
- You will have rehab to help you be active and learn how to do tasks and activities in your wheelchair.

Amputee Clinic

• If you have been referred to the NSRAC for a prosthesis assessment, staff will check your amputated leg and your general health to help decide if a prosthesis is right for you.

Notes:	

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find this pamphlet and all our patient resources here: https://library.nshealth.ca/Patients-Guides

Connect with a registered nurse in Nova Scotia any time: Call 811 or visit: https://811.novascotia.ca

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