

Below-the-Knee Leg Amputation: Before Your Surgery

What is a below-the-knee amputation?

A below-the-knee amputation is surgery to remove your leg below the knee. Your doctor removes the leg and keeps as much healthy skin, blood vessel, and nerve tissue as possible.

Having your leg removed is traumatic. You have to learn to live with new limitations. This can be hard and frustrating. You may feel depressed. Or you may grieve for your previous lifestyle. Talking with your family, friends, and health professionals about how you feel may help. You may also find it helps to talk with a person who has had an amputation.

Many organizations can help you adjust to your new life. For example, you can go to www.amputeecoalitioncanada.org and www.amputee.ca for information and support.

Your doctor will tell you how much of your leg should be removed. He or she will leave enough healthy skin to cover the remaining part of your leg (residual limb). You may get an artificial leg. This is called a prosthesis. If you get one, your doctor will shape your residual limb for the best possible fit.

Your residual limb may heal as soon as 4 to 8 weeks after surgery. But it may take longer. You will need physical rehab. The rehab can sometimes start within 48 hours of your surgery. It may last as long as 1 year.

How do you prepare for surgery?

Surgery can be stressful. This information will help you understand what you can expect. And it will help you safely prepare for surgery.



Preparing for surgery

- Be sure you have someone to take you home. Anesthesia and pain medicine will make it unsafe for you to drive or get home on your own.
- If you take aspirin or some other blood thinner, ask your doctor if you should stop taking it before your surgery. Make sure that you understand exactly what your doctor wants you to do. These medicines increase the risk of bleeding.

- Tell your doctor ALL the medicines and natural health products you take. Some may increase the risk of problems during your surgery. Your doctor will tell you if you should stop taking any of them before the surgery and how soon to do it.
- Make sure your doctor and the hospital have a copy of your Goals of care plan. It lets others know your health care wishes. It's a good thing to have before any type of surgery or procedure.

Surgery can be stressful. This information will help you understand what you can expect. And it will help you safely prepare for your surgery.

What happens on the day of surgery?

- If your doctor told you to take your medicines on the day of surgery, take them with only a sip of water.
- Follow your doctor's instructions about when to bathe or shower before your surgery. Do not apply lotions, perfumes, deodorants, or nail polish.
- Do not shave the surgical site yourself.
- Take off all jewelry and piercings. And take out contact lenses, if you wear them.



At the hospital

- Bring a picture ID health card
- The area for surgery is often marked to make sure there are no errors.
- You will be kept comfortable and safe by your anesthesia provider.
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When should you call your doctor?

- You have questions or concerns.
- You don't understand how to prepare for your surgery.
- You become ill before the surgery (such as fever, flu, or a cold).
- You need to reschedule or have changed your mind about having the surgery.

Below-the-Knee Leg Amputation: What to Expect at Home

Your Recovery

After the surgery, you will probably have bandages, a rigid dressing, or a cast over the remaining part of your leg (remaining limb). The leg may be swollen for at least 4 weeks after your surgery. If you have elastic bandages, your doctor will tell you how to change them.

You may have pain in your remaining limb. You also may think you have feeling or pain where your leg was. This is called phantom pain. It is common and may come and go for a year or longer. Your doctor can give you medicine for both types of pain.

You may have already started a rehabilitation program (rehab). You will continue this under the guidance of your doctor or physiotherapist. You will need to do a lot of work to recondition your muscles and relearn activities, balance, and coordination. The rehab can last as long as a year.

You may have been fitted with a temporary artificial leg while you were still in the hospital. If this is the case, your doctor will teach you how to care for it. If you are getting an artificial leg, you may need to get used to it before you go back to work and your other activities. You will probably not wear it all the time, so you will need to learn how to use a wheelchair, crutches, or other device. You will have to make changes in your home. Your workplace may be able to make allowances for you.

How can you care for yourself at home?



Activity

- Be active. Talk to your doctor about what you can do. If you are active and use your remaining limb, it will heal faster.
- You may shower. Wash the remaining limb with soap and water, and pat it dry. You may need help doing this at first.
- You may need to adapt your car to your situation before you drive.



Diet

- Start off with light food such as soup, toast and tea. Avoid dairy and fatty foods as this might cause stomach upset
- You may notice that your bowel movements are not regular right after your surgery. This is common. Try to avoid constipation and straining with bowel movements. Take a fibre supplement every day. If you have not had a bowel movement after a couple of days, ask your doctor about taking a mild laxative.



Medicines

- Your doctor will tell you if and when you can restart your medicines. He or she will also give you instructions about taking any new medicines.
- If you take aspirin or some other blood thinner, ask your doctor if and when to start taking it again. Make sure that you understand exactly what your doctor wants you to do.
- Be safe with medicines. Take pain medicines exactly as directed.
 - If the doctor gave you a prescription medicine for pain, take it as prescribed.
- If your doctor prescribed antibiotics, take them as directed. Do not stop taking them just because you feel better. You need to take the full course of antibiotics.



Remaining limb care

- You will have bandages. Your nurse will tell you how to take care of it. Depending on your dressing and the doctor's instructions:
 - Check your remaining limb daily for irritation, skin breaks, and redness. Tell your doctor about any problems you see.
 - Wash your remaining limb with mild soap and warm water every night. Pat it dry.
- If you have a temporary artificial leg, remove it before you go to sleep.



Exercise

- Rehabilitation is a series of exercises you do after your surgery. This helps you learn to use your remaining limb and artificial leg. You will work with your doctor and physiotherapist to plan this exercise program. To get the best results, you need to do the exercises correctly and as often and as long as your doctor tells you. Your rehab program will give you a number of exercises to do. Always do them as your therapist tells you.



Other instructions

- Preventing contractures is very important. A contracture occurs when a joint becomes stuck in one position. If this happens, it may be hard or impossible to straighten your remaining limb and use an artificial leg.
 - Make sure you put equal weight on both hips when you sit. Use firm chairs, and sit up straight.
 - Keep your remaining limb flat with your knees straight and your legs together while you are lying on your back.

- Lie on your stomach as much as possible to stretch your hip joint.
- Do not sit for more than an hour or two. Stand, or lie on your stomach now and then.
- Do not put pillows under your hips or knees or between your thighs.
- Do not rest your remaining limb on crutch handles or a wheelchair.

Follow-up care is a key part of your treatment and safety. Be sure to make and go to all appointments, and call your doctor if you are having problems. It's also a good idea to know your test results and keep a list of the medicines you take.



When should you call for help?

Call 911 anytime you think you may need emergency care. For example, call if:

- You passed out (lost consciousness).
- You have chest pain, are short of breath

Call your doctor or seek immediate medical care if:

- You have loose stitches, or your incision comes open.
- You have signs of a blood clot in your leg (called a deep vein thrombosis), such as:
 - Pain in your calf, back of the knee, thigh, or groin.
 - Redness or swelling in your leg.
- You have signs of infection, such as:
 - Increased pain, swelling, warmth, or redness.
 - Red streaks leading from the incision.
 - Pus draining from the incision.
 - A fever.
- You bleed through your bandage.

Plan Ahead

- **Plan a ride home.** Ask a family member or friend to bring you home after your hospital stay.
- **Plan for meals.** Good nutrition is important for your recovery, but cooking may be harder to do right after you get home. Prepare and freeze meals before your surgery or ask friends and family to help you cook or shop for groceries.
- **Get help with chores.** After you get home you may need help. For a short time after your surgery, you may be told to avoid certain physical activities. Plan ahead and arrange to have some help with chores after your surgery.
- **Buy gum or hard candies.** Chewing gum and sucking on hard candies may help get your bowels moving after surgery.

Be as healthy as possible

- **Be active.** Being active before surgery will make it easier for you to be active after surgery. If you're normally active, keep doing your regular activities up to the day of your surgery. If you aren't used to exercising, start slowly. You can start by going for 15 minute walks.
- **Eat healthy.** Eating healthy foods will give your body the nutrients it needs to prepare for and handle the surgery. Eat healthy foods and drink enough fluids in the weeks before your surgery. Your healthcare team will tell you how long before surgery that you need to stop eating and drinking.
- **Manage your medical conditions.** If you have other medical conditions, such as anemia or high or low blood sugar, ask your healthcare team what you need to do to prepare for surgery.
- **Quit tobacco.** You can heal faster and prevent lung problems after surgery if you quit tobacco. Aim to quit smoking and using tobacco and tobacco-like products at least 4 weeks before surgery. Talk to your healthcare team about ways to quit or cut back. Visit AlbertaQuits.ca for helpful tips and support.
- **Don't drink alcohol 24 hours before surgery.** Alcohol, cannabis, and other drugs may interact with medicines you take before and after surgery. Talk to your healthcare team if you need help stopping or cutting back on alcohol, cannabis, or other drugs.

Do the following before your surgery to help you feel better sooner and recover faster.

The day before surgery

- Know the time of your surgery, when you need to be at the hospital, and where you need to go when you get there.
- Follow any instructions the healthcare team or your surgeon gave you for your medicines (including herbal or complementary medicines).
- Don't drink alcohol 24 hours before your surgery.



- **Stop eating 8 hours before surgery. This is very important!**

Carbohydrate Loading

Pre-surgical carbohydrate loading has been proven safe and an effective way of helping the body heal faster, and assisting in the prevention of post-operative infection.



Stop eating and drinking all non-clear fluids 8 hours before surgery. This is very important

- You may DRINK CLEAR FLUIDS ONLY up to 3 hours before surgery. This includes BLACK coffee, tea, Gatorade, apple juice and water.

Morning of surgery

Plan to arrive at the hospital on time.

- Follow any instructions provided
- Bring all of the things you packed for your hospital stay **if** you are being admitted.
- Follow **all** other instructions the healthcare team gave you to prepare for surgery.
- Bring your CPAP if you use one



Discharge

How you may feel after your operation

- You may feel nauseated, light headed dizzy or sleepy for up to 24 hours after your surgery
- You may have a slight temperature for 2 days
- You may feel tired for a few days after your surgery

For 24 hours after your surgery do not....

- Drive a vehicle
- Operate heavy equipment
- Drink alcohol or smoke
- Make any important or legal decisions

At Home

You may need some help once you are home. It may take up to a few months before you fully recover. Talk to your healthcare team if you have any concerns about your recovery.

Your ERAS Care Pathway doesn't stop when you leave the hospital. To help your recovery at home:

- Slowly get more active.
- Eat healthy and drink fluids as you did before surgery (unless your healthcare team gives you other instructions).
- Drink oral nutritional supplements (like Ensure Protein Max) for the first month after surgery to give you extra protein and help you heal faster.
- Take less pain medicine as your pain gets better.
- Take your blood thinner and other medicines as you were told.

What is anesthesia?

Anesthesia controls pain. And it keeps all your organs working normally during surgery or another kind of procedure.

Anesthesia can relax you. It can also make you sleepy or forgetful. Or it may make you unconscious. It depends on what kind you get.

Your anesthesia provider (anesthesiologist) will make sure you are comfortable and safe during the procedure or surgery.

There are different types of anesthesia.

- **Local anesthesia.** This type numbs a small part of the body. Doctors use it for simple procedures.
 - You get a shot in the area the doctor will work on.
 - You will feel some pressure during the procedure.
 - You may stay awake. Or you may get medicine to help you relax or sleep.
- **Regional anesthesia.** This type blocks pain to a larger area of the body. It can also help relieve pain right after surgery. And it may reduce your need for other pain medicine after surgery. There are different types. They include:
 - Peripheral nerve block. This is a shot near a specific nerve or group of nerves. It blocks pain in the part of the body supplied by the nerve. This is often used for procedures on the hands, arms, feet, legs, or face.
 - Epidural and spinal anesthesia. This is a shot near the spinal cord and the nerves around it. It blocks pain from an entire area of the body, such as the belly, hips, or legs.
- **General anesthesia.** This type affects the brain and the whole body. You may get it through a small tube placed in a vein (IV). You are unconscious and will not feel pain. During the surgery, you will be comfortable. Later, you will not remember much about the surgery.

What type will you have?

The type of anesthesia you have depends on many things, such as:

- The type of surgery or procedure and the reason you are having it.
- Test results, such as blood tests.
- How worried you feel about the surgery.
- Your health. Your doctor and nurses will ask you about any past surgeries. They will ask about any health problems you may have, such as diabetes, lung or heart disease, or a history of stroke. They will want to know if you take medicine, such as blood thinners. Your doctor may also ask if any family members have had any problems with anesthesia.

You will talk with your anesthesia provider about your options. In many cases, you may be able to choose the type of anesthesia you have.

What can you expect after having anesthesia?

Right after the surgery, you will be in the recovery room. Nurses will make sure you are comfortable. As the anesthesia wears off, you may feel some pain and discomfort from your surgery.

Tell someone if you have pain. Pain medicine works better if you take it before the pain gets bad.

You may feel some of the effects of anesthesia for a while. It takes time for the effects of the medicine to completely wear off.

- If you had local or regional anesthesia you may feel numb and have less feeling in part of your body. It may also take a few hours for you to be able to move and control your muscles as usual.
- When you first wake up from general anesthesia, you may be confused. Or it may be hard to think clearly. This is normal.
- Don't do anything for 24 hours that requires attention to detail. This includes going to work, making important decisions, or signing any legal documents.

Other common side effects of anesthesia include:

- Nausea and vomiting. This does not usually last long. It can be treated with medicine.
- A slight drop in body temperature. You may feel cold and shiver when you first wake up.
- A sore throat, if you had general anesthesia.
- Muscle aches or weakness.
- Feeling tired.

You may go home the same day of surgery or you may stay in the hospital. Your doctor will check on your recovery from the anesthesia. He or she will answer any questions you may have.

For answers to frequently asked questions about your anesthetic, please visit <https://www.cas.ca/en/about-cas/advocacy/anesthesia-faq>