

RÉCUPÉRATION
AMÉLIORÉE
APRÈS LA
CHIRURGIE



A guide to your knee replacement surgery

This guide will help you understand, prepare for and recover from your surgery. Bring it with you on the day of your surgery et use it during your recovery.

**Centre intégré
de santé
et de services sociaux
de Lanaudière**

Québec





Important

The information in this guide is for educational purposes. It does not replace the advice, instructions and professional medical care that you will receive. If you have questions about your health, please contact a member of your healthcare team.

This guide is written in plain language, so its content is easy to read, easy to understand and easy to use.

It was also written using inclusive, gender-neutral language and is addressed to everyone, regardless of their gender.

This guide is also available online at www.cisss-lanaudiere.gouv.qc.ca.

We want to thank the Montreal General Hospital Foundation for the financial support that allowed us to produce this guide.

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Your guide to preparing for surgery

You have received this guide because you are going to have knee replacement surgery.

In this guide, we give you all the information you need to prepare for your surgery. We also want to tell you about the role you can play to speed up your recovery after the surgery.

This guide contains a lot of information. But don't worry! You don't have to remember it all. We designed it so you can read it as often as necessary and come back to it whenever needed. We left space for you to take notes and write down important information.

Feel free to make it your own. It's yours to keep. It will be your companion for the next few weeks. Bring it with you on the day of your surgery!

You are engaging on a clinical care pathway

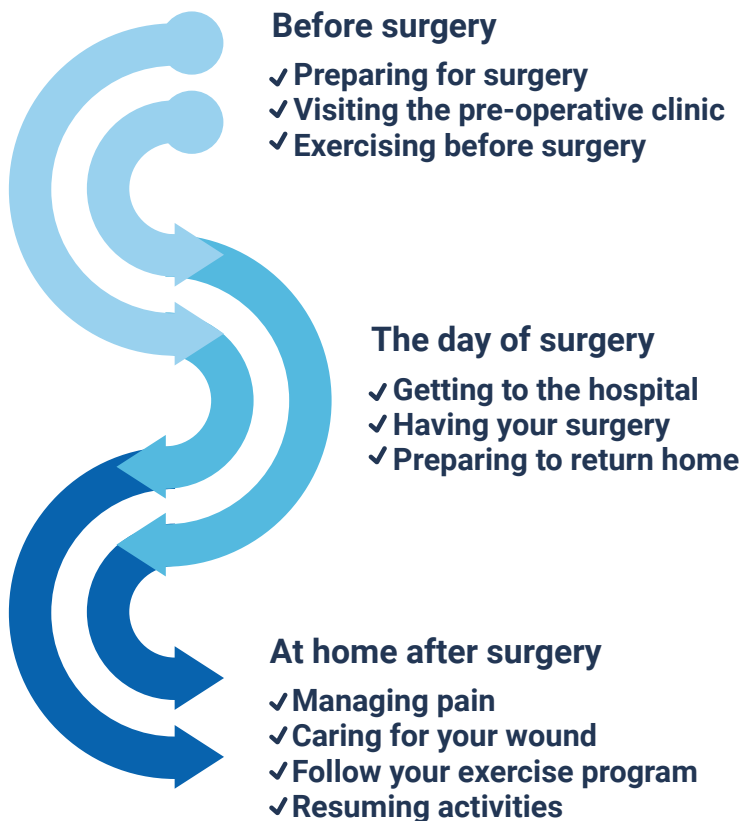
As soon as you start the medical care related to your knee replacement surgery, you are part of what we call a "clinical care pathway." A clinical care pathway, also called, care pathway, is a plan that details the care and the follow-up you will receive from the moment you learn you will have surgery until your recovery.

This clinical care pathway is designed to help you recover quickly and safely from your surgery.

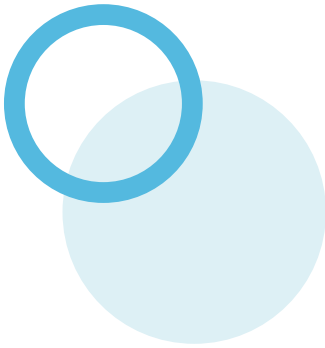
All the members of our healthcare team know this pathway well. All the healthcare professionals you meet during your follow-up are committed to this pathway, whether they are doctors, nurses, surgeons, anesthesiologists, physiotherapists, nutritionists, or patient attendants.

Team up with us! Your active participation in this clinical care pathway is also a key to the success of your surgery.

Your clinical care pathway is carried out in 3 stages



You play an important role in each of these stages to help your recovery.



With this guide, we hope to:

- Help you understand what knee replacement surgery is
- Guide you in your preparations for the surgery
- Explain the important role you play in your recovery
- Help you set goals for the days after your surgery

Research has shown that following the recommendations in this guide helps recover faster. The recommendations we will give you are related to:

- What to eat and drink
- Physical exercise
- Pain management

These recommendations will help you feel better and reduce your pain.

Surgery can be stressful for you and your family, but you don't have to face that alone. We are here to help and support you during your entire stay in the hospital. Please ask us if you have any questions about your care.

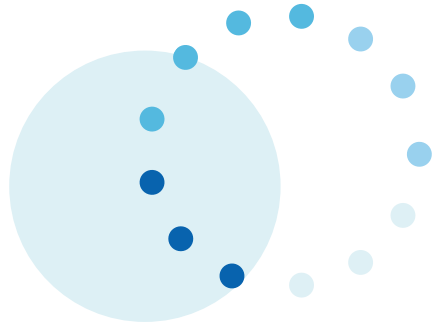
—Your healthcare team

If you have trouble communicating in French or English, we suggest that you bring someone who can translate the information we give you.



Your pain medication checklist

Knee surgery requires you to take medication to prevent and manage pain.



In this guide, we will often refer to “your pain medication.”

This may include:

1. Acetaminophen, such as Tylenol™ brand
2. An anti-inflammatory, usually Celebrex™ brand
3. An opioid, such as morphine, oxycodone and hydromorphone

All these medications will be prescribed to you before you leave the hospital after your surgery.

Even though you can get acetaminophen and some anti-inflammatories at the pharmacy without a prescription, you should use the prescription we give you. This way you can be sure you are taking the right medication in the right dose for effective pain relief.

The right sequence of medications for effective relief

Acetaminophen and anti-inflammatory medication are very effective for relieving pain after surgery if they are taken regularly. They are the foundation of your pain medication.

If you are taking them regularly but you still feel pain, you can take the opioid that has been prescribed to you.

You should know, however, that opioids can have side effects, such as:

- Nausea and dizziness
- Confusion
- Constipation
- Dependency

If you need to use opioids, start with the lowest possible dose, and take them for the shortest possible time.

For questions about to your medications

Your pharmacist can help you if you have questions about the medications you are taking, or the side effects you are experiencing.



Your telephone directory: To find out who to call when

While you are on your clinical care pathway, you may need to speak to someone. This may be because you have questions or concerns or because you need to tell someone about a change in your situation.

When you meet our healthcare team, make sure you always ask who to call if you need to talk to someone.

We suggest that you write down on this page all the names and numbers that we give you that may be useful.

Before your surgery

You have questions or concerns

Who: _____

Phone number: _____

Another number, if required: _____

Note: _____

You have to cancel your surgery

Who: _____

Phone number: _____

Another number, if required: _____

Note: _____

After your surgery

You have questions or concerns

Who: _____

Phone number: _____

Another number, if required: _____

Note: _____

You feel things are not going well

Who: _____

Phone number: _____

Another number, if required: _____

Note: _____

Your surgery

Description of the knee joint

Understanding how knees work will help you understand the surgery you are going to have.

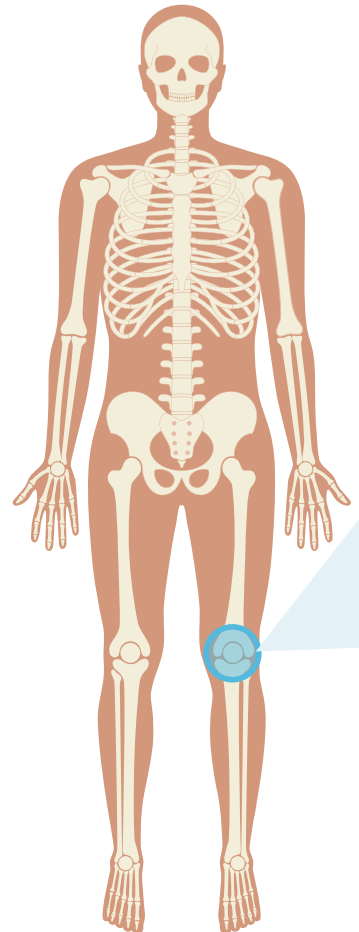
The knee joint is a connection between 3 important leg bones:

- The femur or thigh bone, on the top
- The tibia or shin bone, on the bottom
- The patella or kneecap, in the middle

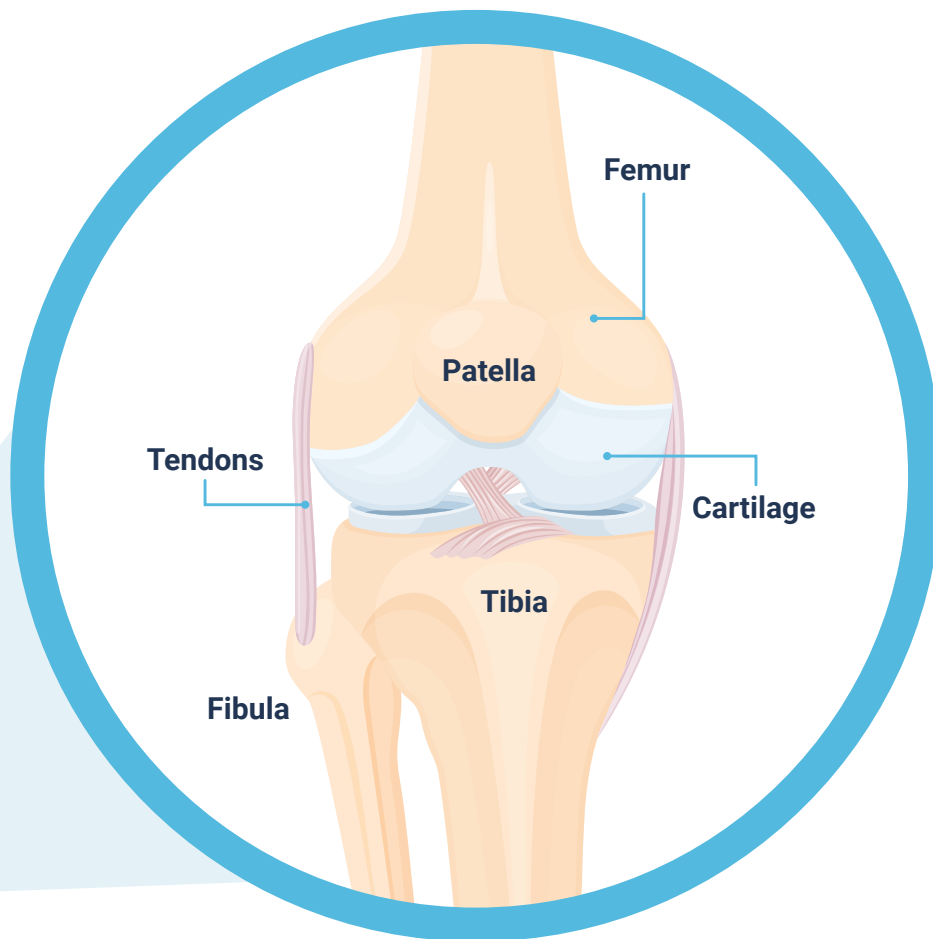
The knee joint is actually made up of two joints. One connects the femur and the tibia. The other connects the femur and the patella.

Together, these 2 joints allow your tibia to move forward and backward on your femur, which allows you to bend and straighten your leg.

The illustration below will help you visualize the way knees work.



Knee joint



The knee is made up of two joints that bend and straighten the leg.

What is knee replacement surgery?

If you need knee replacement surgery, it is because part of your joint is worn out or in poor condition. The pain you feel is caused by this wear and tear. Knee replacement surgery is an operation that will reduce that pain and improve your mobility, that is, your ability to move around.

Science is evolving and, over time, surgery techniques and pain management techniques have improved a lot. These improvements mean that many people do not have to be hospitalized and can leave the hospital the same day as their surgery.

In fact, it is now possible to have knee surgery on an outpatient basis, meaning that the hospital stay, in this case, lasts less than 24 hours. These surgeries are also known as “day surgery.”

Your surgeon will tell you whether your specific situation makes day surgery right for you.

Two possible types of surgery

When the knee joint is worn out or in poor condition, 2 types of surgery are possible:

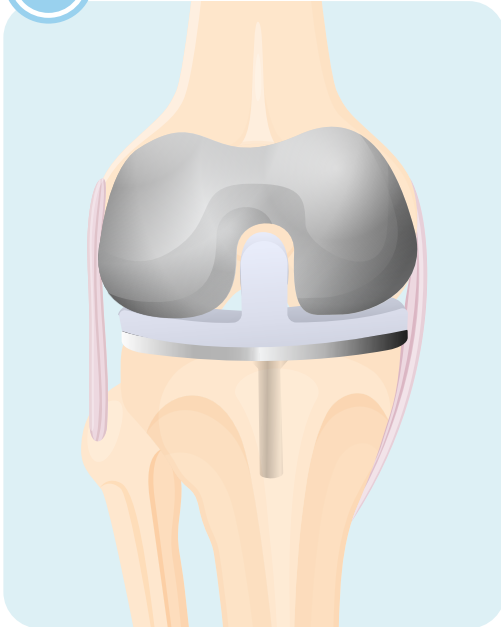
- Total replacement
- Uni-compartmental replacement

Both these types of surgery replace the worn-out parts of the joint with a prosthesis.

You can refer to the illustration to see both these types of knee replacement surgery.

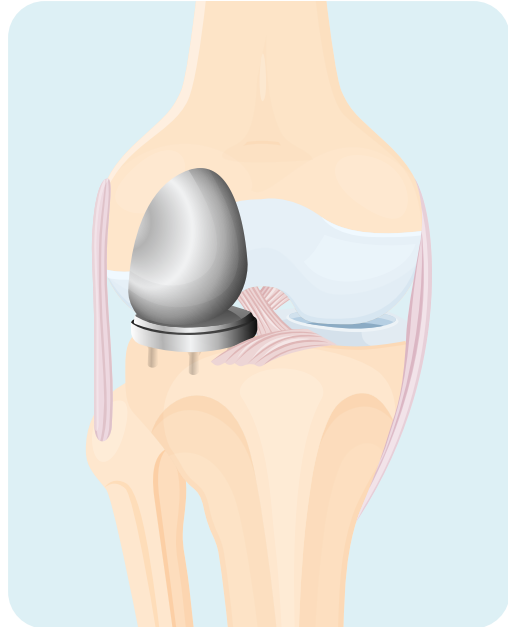
Types of prostheses

The worn-out parts of the knee is replaced by a prosthesis.



Total knee replacement

This surgery replaces the knee cartilage, that is the interior and exterior joint surfaces of the knee. The surface of the kneecap, also called patella, may be replaced too, depending on how worn out it is.



Uni-compartmental knee replacement

This surgery replaces only the worn-out cartilage of one part of the knee, either the interior surface or the exterior surface.



Before your surgery

Preparing for your surgery

In this guide, you will find tips and suggestions that will make your return home and your recovery easier. There are many things you can do to get ready for your surgery.



Preparing to go home

Almost everyone needs help after having knee replacement surgery. It is a good idea to plan your return home and make sure you have someone with you for those first days.

Plan to have help

Some tasks will be hard for you to do, especially in the first days following your surgery. For example, you will need help from family and friends to prepare meals, bathe, do laundry or clean the house.

If you anticipate that it will be difficult to get help with daily tasks when you return home, we advise you to contact the community resources available in your MRC before your surgery to communicate your needs. An internet link is available at the end of this guide on page 74.

Plan your movements inside your home to avoid falling

Before your surgery, you can organize your space to make it easier when you return home. That way, your home will be ready for you when you return.

After your surgery, you will be using a walker or a cane to get around. We suggest that you take a good look at your home to see whether moving a few things will make it easier for you to get around after your surgery. You may need to move certain pieces of furniture so you can walk safely, because a walker is wider than a person.



Here are some suggestions for changes you can make:

- Place items that you use a lot where you can reach them easily.
- Put away carpets in passageways you use.
- Clear the space around your bed, in the hallways, in the kitchen and bathroom so that you can move around freely with your walker.
- Remove electric cords from the floor where you may walk.
- Put 2 good-quality anti-slip bathmats in your bathroom.

Make sure you have well-fitted shoes and slippers with non-slip soles. This will help you avoid falling.

Plan your meals

Stock up the refrigerator and freezer. Buy frozen foods or prepare portions that can be reheated until you feel well enough to cook.

Pick up a few things you will need

You will need certain things when you return home. We suggest that you check whether you already have them and, if not, pick them up:

☐ A walking aid, such as:



☐ A walker adjusted to your height and equipped with a basket or shelf



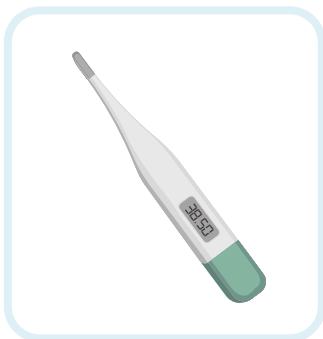
☐ A cane



☐ A chair with armrests



☐ A raised toilet seat with armrests



☐ A thermometer to check your temperature after your surgery



☐ A long-reach grabber for putting on certain clothing items



- ☐ A long-handled shoehorn to help you put on your shoes

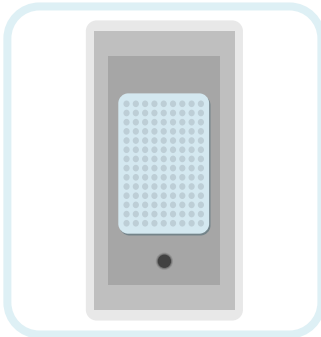


- ☐ Closed-back shoes that are easy to put on

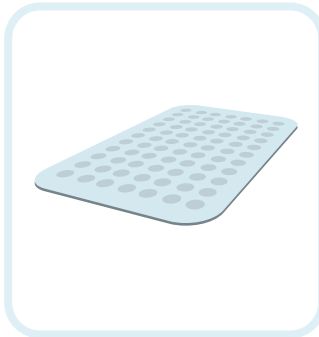


- ☐ An adjustable bath bench

- ☐ Two anti-slip bathmats



- ☐ One mat you can put in the bottom of your shower or bathtub.



- ☐ One mat to put on the bathroom floor.

Non-slip stickers are not enough.

You should also make sure you have ice or something frozen to use to help reduce swelling and manage your pain. You can use ice, a cold gel pack, an ice pack or a bag of frozen peas.

Arrange your transportation

As you will not be able to drive, you will have to arrange transportation to get to the hospital and return home.

If you are having day surgery: We recommend that you plan to have someone take you home at the end of the day. Ask the person who accompanies you to stay on site during the surgery, if possible.

If you are spending the night at the hospital: We will determine the time of discharge based on your condition. Make sure that the person who is going to drive you can be available at any time of the day to take you back home.

Stop smoking and vaping

If you smoke or vape, stopping will significantly improve your health.

Stopping smoking or vaping at least 4 weeks before your surgery may also help you recover faster. Cigarettes can have a negative effect on the surgery. For example, they can increase the risk of lung complications or wound infection.

It's not easy to stop smoking. We suggest that you talk to a member of our team. You can quit smoking even if you have smoked for many years. We are here to help you.

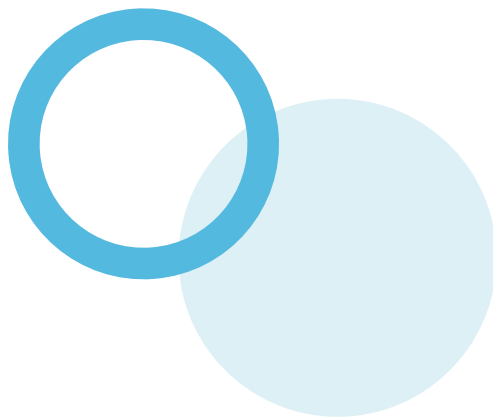
Please look at the information about quitting smoking on the last page of this guide.

Reduce your alcohol use

The amount of alcohol you take can have a negative effect on your surgery. Let us know how much alcohol you drink on a regular basis, so we can adapt our care to your situation. We can also help you try to reduce your alcohol use.

Important information about your surgery

Do not drink alcohol for 24 hours before your surgery, because alcohol can change the effect of certain kinds of medication. This could affect how well you recover.



Exercise before your surgery

Being physically active before your surgery can make a big difference in how you recover. It is also a good way to prepare for the exercise program that we plan for you after your surgery.

If you are already exercising, keep up the good work. If you are not, you can start slowly to do a little exercise every day.

Even if you feel pain in your knee, we recommend that you exercise every day. Adapt your exercise to your condition and the amount of pain you can tolerate. The important thing is to move a little every day.

Types of exercise that can help you

Exercise does not need to be hard to make a difference. Taking a 10-minute walk every day is a good start.

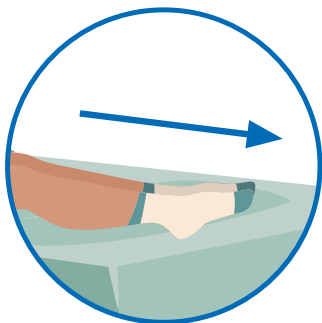
If you feel pain while you are exercising, change the kind of exercise you are doing. Try to do what is called “low-impact exercise,” such as swimming or biking, or upper body activities, such as arm circles or seated biceps curls.

These exercises are important to help strengthen your muscles and speed up your recovery after your surgery.

Another simple exercise that can help you

You can also start doing one of the leg exercises that you will have to do as soon as you wake up after your surgery. This exercise is designed to stimulate blood circulation in your legs.

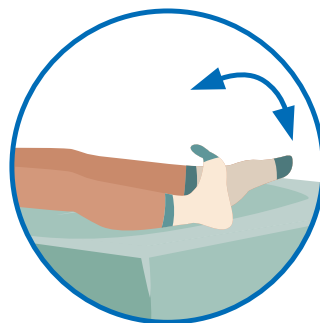
Here is how to do it:



Stretch your legs out straight.



Rotate your feet to the right and left.



Wiggle your toes and move your feet up and down.



Visit to the pre-operative clinic

Before your surgery, you will have to go to the pre-operative clinic. The reason for this visit is to check your health, plan your care and make sure everything is ready for your surgery.

During your visit to the pre-operative clinic, we will tell you everything you need to do to prepare for your surgery. For example, we will tell you what you can eat and drink just before your surgery. We will also explain how to wash in preparation for your surgery.

You may also have some tests to take, such as:

- Blood tests
- ECG, that is an electrocardiogram, to check your heart
- X-ray of your knee

Preparing for your visit to the pre-operative clinic

Your visit to the pre-op clinic is a good time to ask any questions you have about your surgery. To make the most of this visit, we recommend that you write down your questions in advance and bring them with you to your appointment. We will take the time to answer them.

If you are taking any medications, we suggest that you contact your pharmacist to ask for a print-out of all your medications. Bring the list with you when you visit the pre-op clinic.

Meeting with your healthcare team

During your visit, you may meet some of the members of our team, such as the doctor, the nurse and the physiotherapist. Here is a summary of these people's roles.

Doctor

You will meet with a doctor, who will review your medications and ask you questions about your health.

If you have other health problems, you may also need to meet with a specialist before your surgery.

Nurse

You will also meet with a nurse who will explain how to prepare for your surgery.

The nurse will tell you, for example, what you can eat and drink before the surgery. The nurse will also explain how to wash before you come to the hospital.

If you are expected to spend the night in the hospital after your surgery, the nurse will explain what to expect during your hospital stay.

Physiotherapist

Finally, you may meet with a physiotherapist, who will go over the exercises that you will have to do after the surgery. The physiotherapist will talk to you about daily activities, such as getting out of bed, using the bathroom, and getting in and out of a car.

The physiotherapist will also help you improve your movements and strengthen your knee joint after the surgery. This will help you regain your mobility.

For example, the physiotherapist will ask you to practise getting in and out of bed, standing up from a chair, walking and going up and down stairs. The physiotherapist will recommend the exercises that are best for you.

Medication

You may have to stop taking certain medications and natural products before your surgery. The doctor or nurse at the pre-operative clinic will tell you which medications you can continue to take and which you should stop taking.

Who to call in case of need

Between now and your surgery, you may need to talk to someone, either because you have questions or concerns, or because you need to tell us about a change in your situation.

Before the end of your pre-op visit, make sure you know who you can call. You can write down this information in your telephone directory on page xx.



Call from the hospital

The hospital will contact you to tell you the date of your surgery. You will also be given a time to come to the hospital on the day of your surgery, as well as the place to go.

You can write this information down here: _____

Date of your surgery: _____

Time to arrive at the hospital: _____

Where to go: _____

Cancelling your surgery

Sometimes the surgery cannot take place, either because your situation does not allow it, or because you are unable to get to the hospital or because we have to postpone it.

You don't know if you can have your surgery

If you are sick – for example, if you have a fever or a cough – or if you are pregnant, it is really important to tell us. We can assess the risks of undergoing surgery.

Also, if for any reason you cannot get to the hospital, call us as soon as possible.

Call the following 2 numbers:

1. Surgery team office: _____
2. Hospital appointment centre: _____

If you need to leave a message on the answering machine, please give us the following information:

- Your full name
- The date of your surgery
- Your telephone number
- Your hospital card or your health insurance number
- Your surgeon's name
- The reason for cancelling your surgery

We have to postpone your surgery

We may have to postpone or cancel your surgery due to an emergency. If this happens, we will reschedule your surgery as soon as possible.

What to bring to the hospital

Here is a list of things you must bring with you to the hospital:

- ☐ This guide, if you have a paper copy
- ☐ Your hospital card and healthcare card
- ☐ The list of all the medications you are taking at home, including prescribed and over-the-counter medications
- ☐ Loose, comfortable clothing, a bathrobe and pyjamas
- ☐ Non-slip slippers or shoes that are easy to put on
- ☐ Personal items such as your toothbrush, toothpaste, brush or comb, deodorant and facial tissues
- ☐ Information about your private insurance, if you have one

Other items, if needed:

- Glasses, contact lenses, hearing aids, dental prostheses, including their containers, labelled with your name
- CPAP machine, if you have sleep apnea
- Your walking aid, labelled with your name:
 - A walker, adjusted to your height
 - A cane, if you use one

Important

Do not bring anything of value, including credit cards or jewellery. The hospital is not responsible for lost or stolen items.

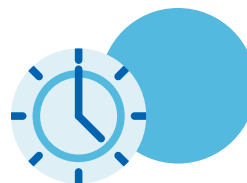


What to drink and eat before your surgery

Eating well will give you the energy you need to recover from surgery.

The pre-operative clinic nurse will explain what to eat and drink before your surgery, especially the day before the surgery and the morning of the surgery.

The following is a brief reminder.



Instructions for the day before your surgery

- ✓ Eat and drink normally up to 6 hours before your surgery.
- ✓ Drink clear liquids up to 2 hours before your surgery. A liquid is clear if you can see through it.

Instructions for the morning of the surgery

- ✓ Do not eat anything.
- ✓ You can continue to drink clear liquids until 2 hours before your surgery.

Exception to these instructions

There is one exception to these instructions. Some people must not drink any liquids after midnight. If this is your situation, we will tell you when you visit the pre-operative clinic.

Examples of clear liquids

Here are a few examples of clear liquids:

- Water
- Pulp-free fruit juices
- Tea or coffee with no milk or cream
- Sports drinks that contain electrolytes
- Popsicles



Hygiene in the days before your surgery

During your visit to the pre-op clinic, we will give you information about hygiene, because before your surgery, you will have to wash with a special chlorhexidine soap.

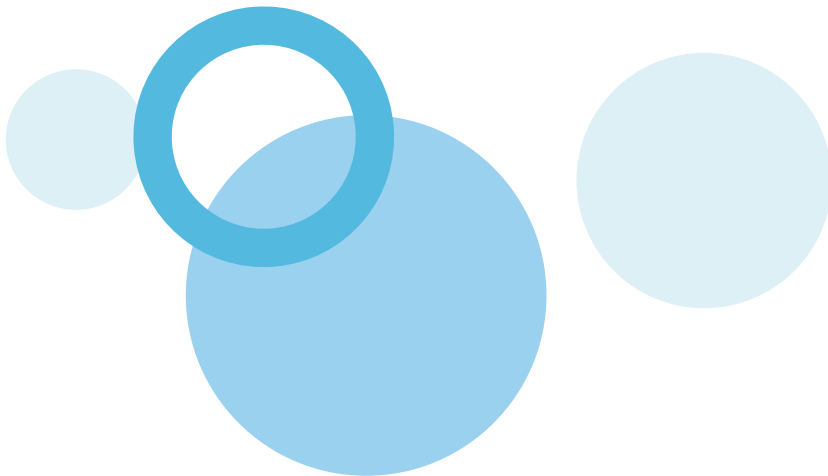
This soap eliminates dirt and bacteria that may cause infections in your wound after the surgery. It comes in different forms: liquid, gel or sponge. At your pre-op appointment, we will tell you how to get it.

Make sure you remove any nail polish you may be wearing. You must not have any on the day of surgery. During surgery, we will monitor the color of your skin and nails.

You will have to use chlorhexidine soap the day before and the morning of your surgery.

Before your surgery, a test may be done to see if your skin carries bacteria that could interfere with the healing of your wound and could even cause an infection. If this is your case, instructions on how to remove the bacteria will be explained to you.

Here are the steps to follow:



The night before your surgery

1. Wash your face and hair using regular soap and shampoo.
2. Take a shower using chlorhexidine soap or regular soap, if you are allergic to chlorhexidine.
3. Wash your body from the neck down, including your belly button and your genital area.
4. Do not shave the area where the surgery will be done.
5. Wear clean clothes to bed.

The morning of your surgery

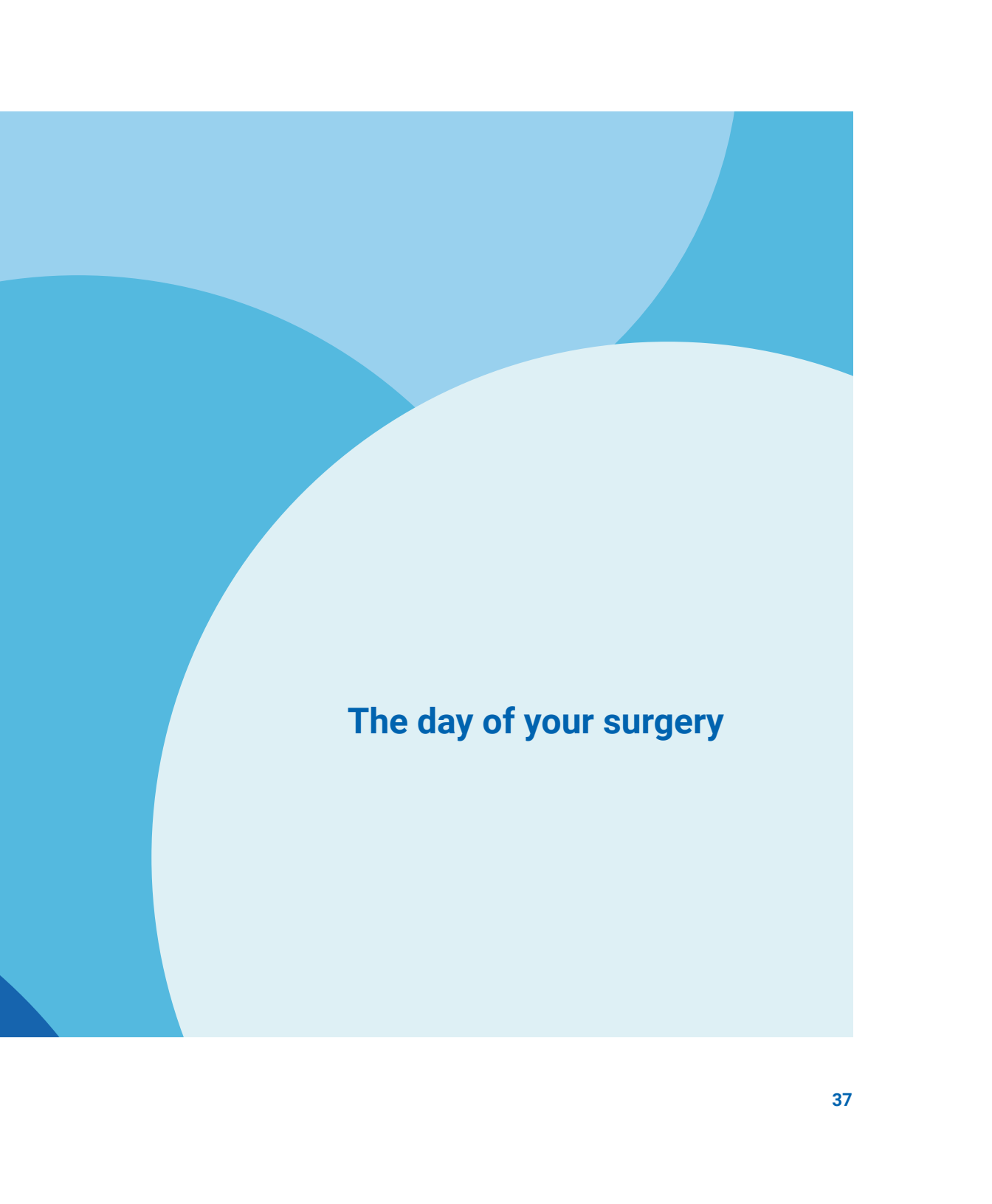
1. Take a shower using chlorhexidine soap or regular soap, if you are allergic to chlorhexidine.
2. Do not shave the area where the surgery will be done.
3. Put on clean, comfortable clothes.

Here are a few more instructions for the morning of the surgery:

- Do not wear contact lenses. Wear your glasses instead.
- Do not put on any cream, lotion, perfume or deodorant.
- Do not wear makeup or nail polish.
- Do not wear any jewellery, including jewellery in piercing







The day of your surgery

When you arrive at the hospital

Go to _____
at the requested time. You will sign an admission form.

If you are expected to spend the night at the hospital after your surgery, you may have to choose the kind of room you prefer.

Once the documents are completed, we will:

- Ask you to put on a hospital gown
- Ask you your name and ask you a few identity verification questions before the surgery
- Make sure that your personal effects are clearly identified with your name and placed in a secure location

In addition, shortly before the surgery, we will give you a few tablets that you will have to take with a little water. These pills will help prevent or reduce pain and nausea after the surgery.

During your surgery

In the operating room

We will take you to the operating room.

In the operating room, you will meet the surgery team and your anesthesiologist. Anesthesiologists are doctors who monitor your condition during surgery and administer and manage medications so you don't feel any pain during the surgery.

You will not feel any pain during the surgery. The anesthesiologist will give you a medication called an anesthetic to reduce or prevent pain.

There are three types of anesthetics:

- Local
- Regional
- General

You can ask your anesthesiologist which type is most suitable for you.

You will be lying on your back during the operation.

In the post-anesthesia care unit (PACU)

After your surgery, we will take you to the post-anesthesia care unit, also called the PACU or the recovery room.

You will stay there as long as necessary so we can monitor your vital signs and stabilize your pain.

During that time, we will check:

- Your pulse and blood pressure
- Your bandages
- If you are well hydrated
- If you are comfortable
- If you feel nauseous
- If you feel pain

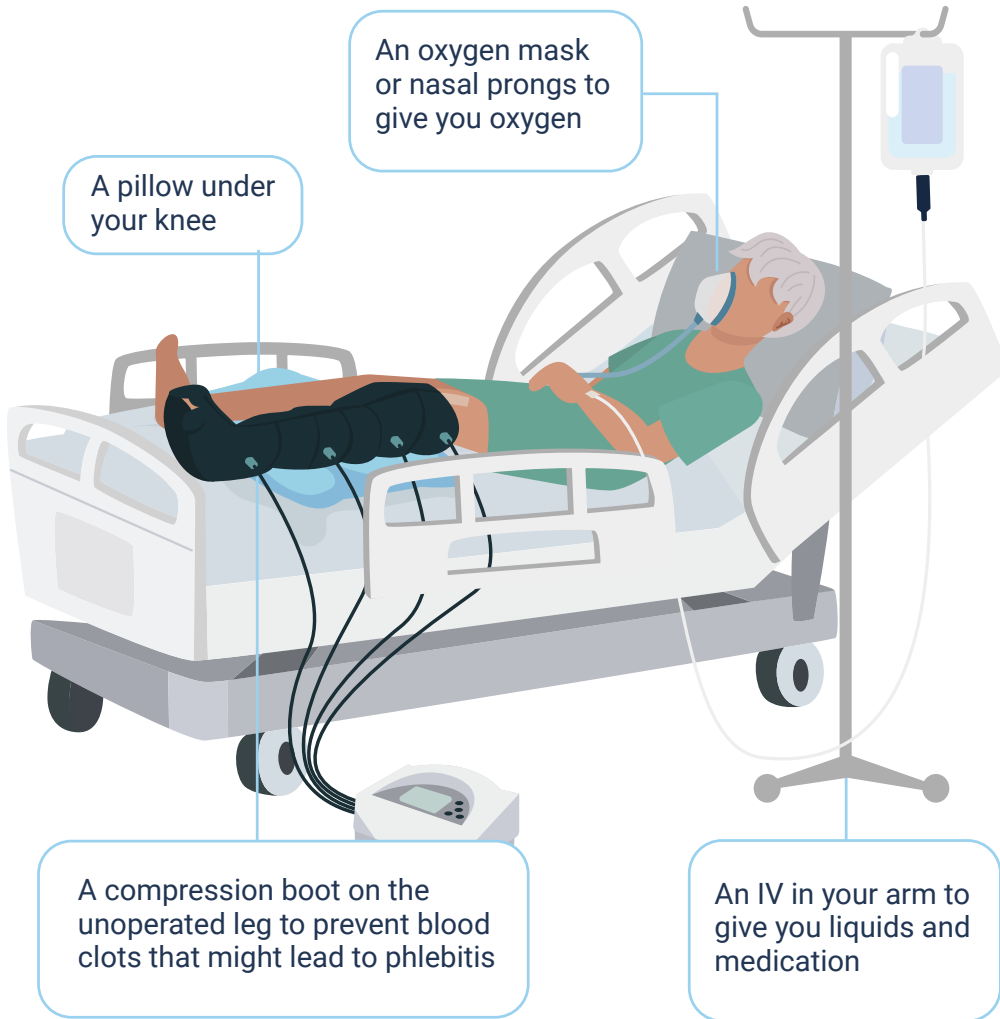
We will also make sure to reduce your pain to the minimum. There are several methods for reducing pain:

- The local anesthetics that you received during the surgery
- Acetaminophen, such as Tylenol™
- Anti-inflammatories, such as Celebrex™
- Opioids, which may be short-acting or long-acting

In the waiting room

Family and friends can wait in the waiting room. Since space is limited, please limit the number of people accompanying you. Some hospital centres only allow one person in the waiting room.

In the post-anesthesia care unit, you may have:



After your surgery, you will spend some time in the post-anesthesia unit. We utilise different devices for your care.

First hours after your surgery

Fairly soon after your surgery, we will ask you to assess your pain and start moving.

Pain management

We will ensure that we keep your pain low so you can:

- Breathe better
- Move more easily
- Eat better
- Sleep better
- Recover faster

Get to know the pain scale

You will have an important role to play in managing your pain. We will ask you to assess it on a scale from 0 to 10.

Zero means you have no pain, and 10 is the worst pain you can imagine.

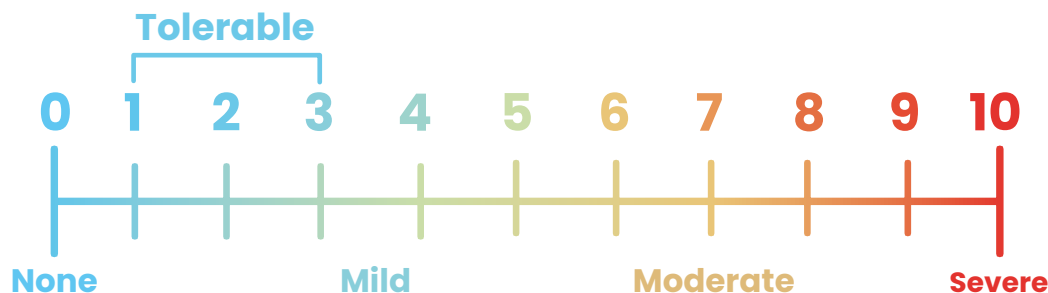
It is normal to feel some pain after knee replacement surgery. A pain level of 1–3, that is, pain you can “tolerate,” is common. In this situation, your pain can be controlled using acetaminophen, such as Tylenol™.

If your pain gets to level 4 or higher, let us know.
You will be helping us manage it better.

For the entire time you are in the hospital, make sure the call bell is within reach.



Pain intensity scale



Pain is hard to control if it rises above level 4. This is why it is important to treat it continually.

Various ways of managing pain

To give you relief from your pain, it is important to treat pain on an ongoing basis. If you wait until the pain is too high, it will be far harder to control. In other words, do not wait for the pain to increase to treat it.

There are a variety of ways to manage pain after surgery: ice, acetaminophen, anti-inflammatories and opioids.

Our goal is to keep your pain level below 4 out of 10. You shouldn't wait until the pain gets too strong before telling us.

Even if you are feeling pain, you will be able to move your knee freely, unless your surgeon tells you not to.

The importance of exercise: move to recover faster

It's important to move after having surgery. Not moving for a long time can have an effect on the entire body and lead to complications, such as pneumonia, blood clots and muscle weakness. Exercise helps prevent these complications and speeds up recovery. So you should take every opportunity to get moving!

We will set up an exercise program suited to your needs. You can start your program as soon as possible after your surgery and continue it, whether you stay in the hospital or leave the hospital the same day.

Preventing blood clots and phlebitis

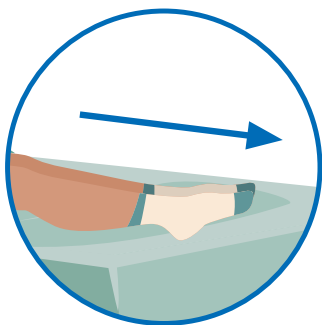
After surgery, there is a greater risk of forming a blood clot in the veins. A blood clot can cause inflammation in a vein and block blood circulation. This is what is called phlebitis or vein thrombosis, a serious complication of surgery that requires immediate medical attention.

To avoid forming blood clots, do your exercises. Get up and move as much as possible after your surgery.

Exercises to do right after surgery

Leg exercises

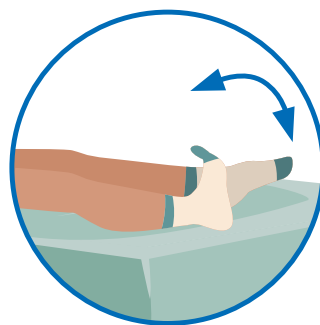
These exercises will stimulate blood circulation in your legs. After your surgery, repeat each exercise whenever you are awake.



Stretch your legs out straight.



Rotate your feet to the right and left.



Wiggle your toes and move your feet up and down.

As soon as possible after your surgery, it is important to do your exercises to stimulate the blood circulation in your legs and prevent blood clots.

Repeat 4 to 5 times every 30 minutes.

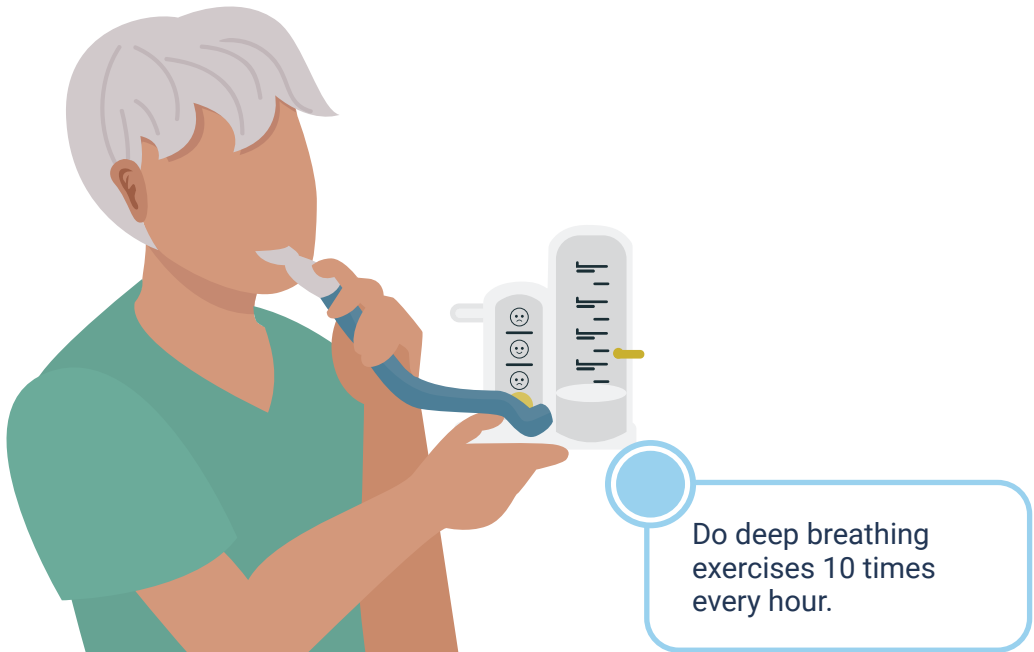
Deep-breathing and coughing exercises

You should do a deep-breathing exercise using a spirometer.

A spirometer is a device that helps you breathe deeply, which helps prevent complications in the lungs after surgery.

To use your spirometer

1. Put your lips around the mouthpiece.
2. Breathe in deeply and try to keep the ball floating near the top of the device for from 2 to 4 seconds.
3. Release the mouthpiece. Breathe out and rest for a few seconds.
4. Take a deep breath and cough. If you have any secretions, cough them up.
5. Repeat this exercise 10 times every hour while you are awake.



When you leave the hospital

Most people will be able to return home the day of their surgery. They will only stay in the hospital for a few hours. Some people, however, will have to stay overnight at the hospital, due to their state of health.

Either way, when you leave the hospital, we will give you a lot of information. Make sure that the person accompanying you also receives this information. This will make it easier for you to remember.

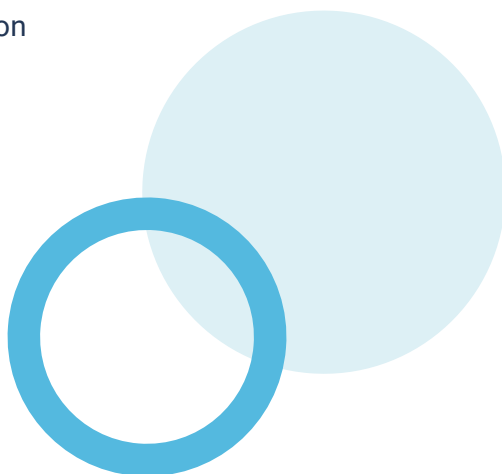
We will set a follow-up appointment

Before you leave, we will make an appointment for you with your surgeon. It will take place between 4 and 8 weeks after your surgery.

We will give you prescriptions

We will also give you prescriptions for medications and equipment you will need at home, such as:

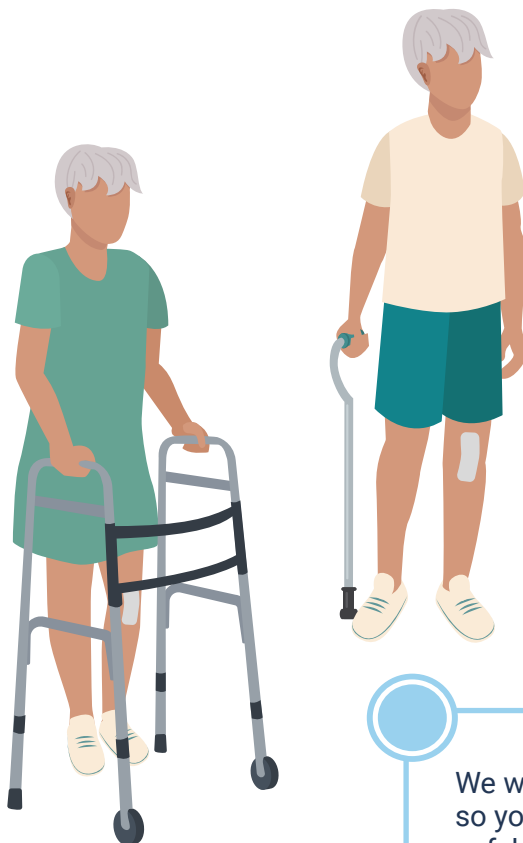
- Various pain medications
- Anticoagulants to prevent phlebitis
- Stool softeners to prevent constipation



We will check your walking aid

After your surgery, you will need a walking aid to walk: a walker or a cane. The walking aid will allow you to move around safely.

We will give you specific instructions about the kind of walking aid to use. We will also explain whether you can put any weight on your operated leg.



If you are using a walker, we will check that it is properly adjusted to your height.

If you are using a cane, we will show you how to use it. There are a few things you need to know, such as that you must use the cane on the opposite side of your operated leg.

We will give you specific instructions so you can learn to move around safely with your walking aid.

We will review your exercise program

Before you leave, we will review your exercise program with you. You can find a description of all the exercises on pages 59 to 64.

We will give you instructions for your return home

We will give you instructions concerning your discharge from the hospital. We will cover the following topics:

- Safe use of your pain medication
- Risk of blood clots leading to phlebitis
- Wound care instructions
- Bathing or showering instructions

Depending on your situation, we may also address the following topics:

- Going back to work
- When you can start driving again

We will answer your questions

If you have any questions or concerns, feel free to share them with us. Before you leave, make sure we have given you the phone number to use if you have questions once you get back home.

About your transportation home

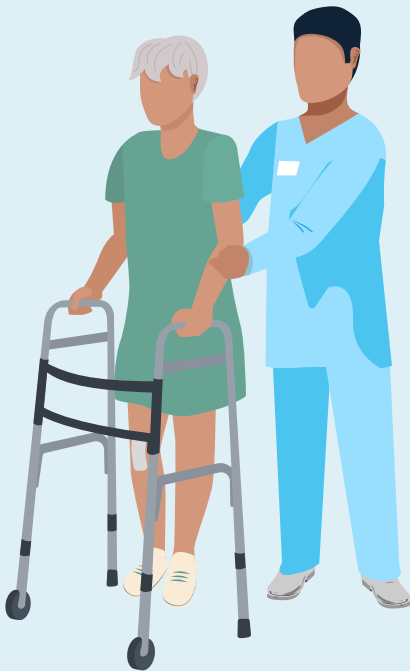
Here are some tips to make the trip back home after your surgery easier.

To make it easier to get into a vehicle, we recommend that you recline the backrest and push the seat as far back as possible. Sit down on the seat with both your legs outside the car. Then turn, pulling in your legs.

Goals to help you recover

We suggest you set goals for the hours and days after your surgery. Setting goals will help you recover faster.

We set some goals for each day following your surgery. The day of your operation is called Day 0. The day after your operation is Day 1, and so forth.



Goals for Day 0: the day of your surgery

The evening of your surgery, continue doing your leg and breathing exercises.

Here are some other goals we recommend for Day 0.

- ✓ Try to get up and walk. We recommend using your walker to move around.
- ✓ Sit down on a chair.
- ✓ Use the toilet instead of the commode or the urinal.

To achieve these goals, you will need help and support. If you are at home, make sure someone is there to help you. If you are in the hospital, we will help you.

Within a few hours after your surgery, set simple goals for yourself. For example, with help, try to stand up and walk.

Pain

If you are at home, take your medication, following the instructions we gave you before you were discharged.

If you are still in the hospital and you feel pain equal to or higher than to 4 out of 10 on the pain scale, tell us.

What to eat and drink

Eat the foods you usually eat. Make sure you drink plenty of liquids.

You may have received specific instructions for your situation. If so, follow them, rather than the instructions in this guide.

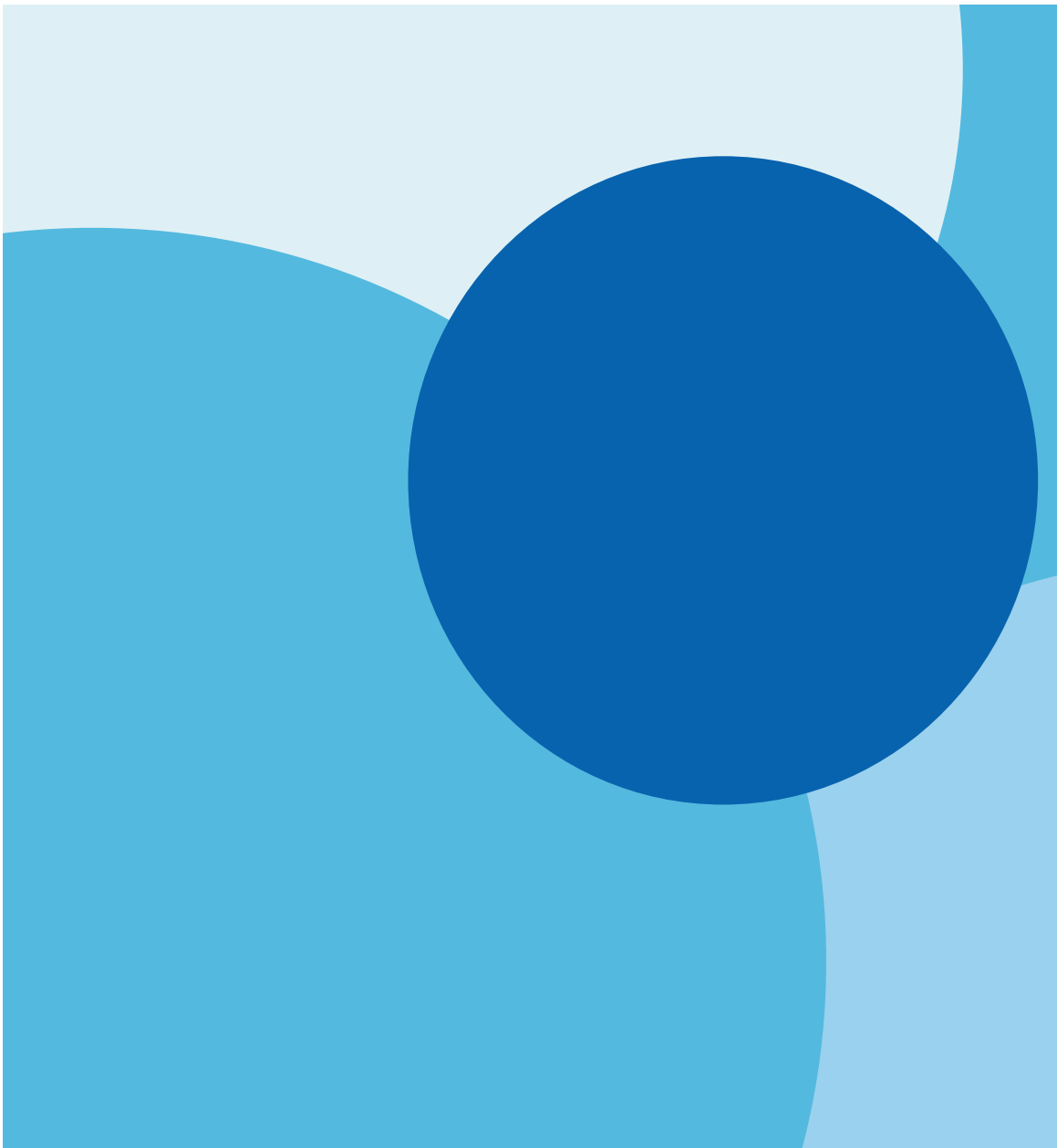
Always take your meals sitting up in a chair. If you are in the hospital, make sure the call bell is within reach.

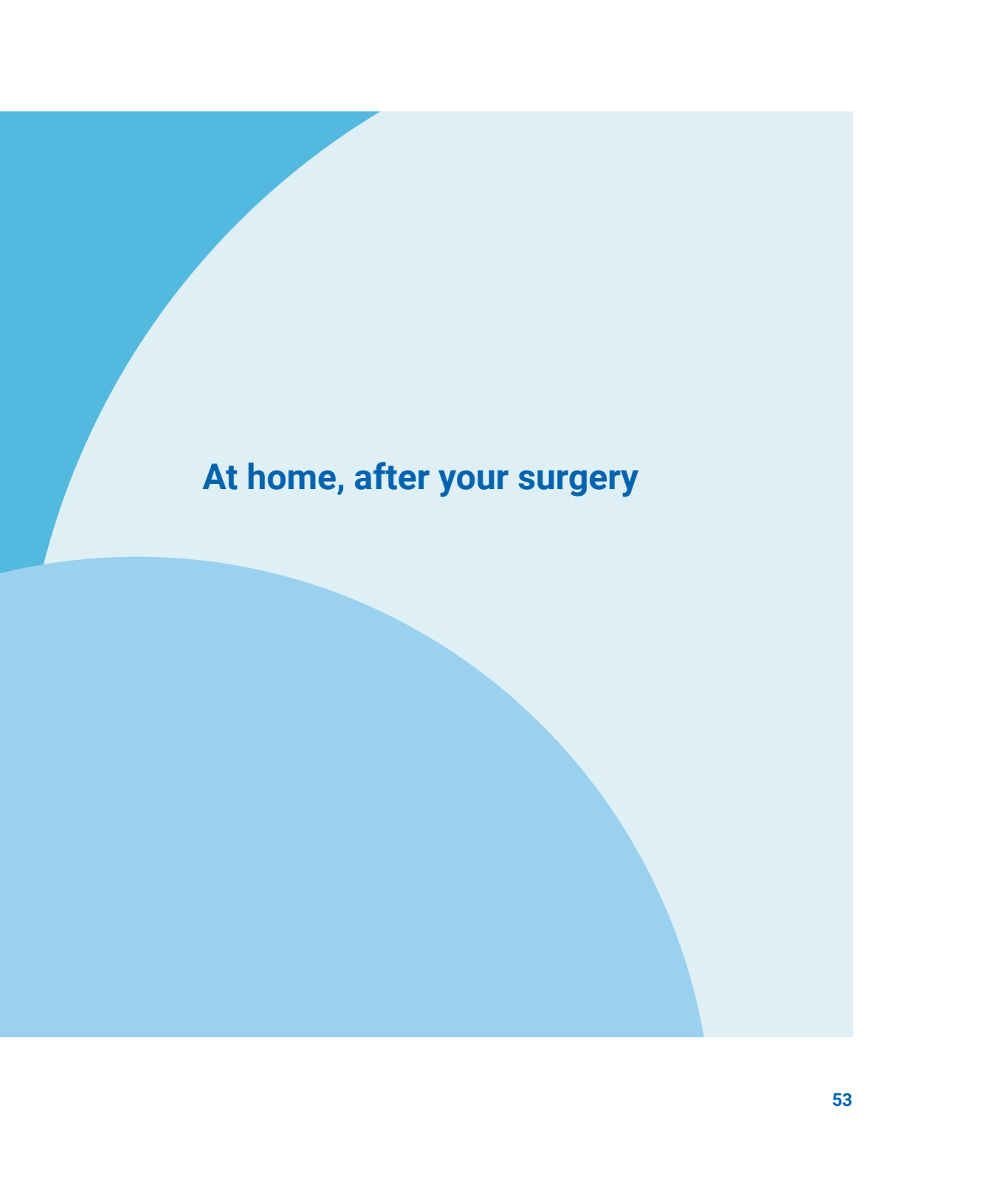
Goals for Day 1 and each day after

These are the goals you can set for Day 1, whether you are at home or in the hospital:

- ✓ Continue to do your breathing exercises at least 10 times every hour while awake.
- ✓ Do your leg exercises when you are in bed.
- ✓ Walk to the bathroom with your walker and avoid using a commode or urinal.
- ✓ Always take your meals sitting up in a chair.

Walking is good exercise and will help you recover. Start with short distances, and as you gain strength, take longer walks. You can take breaks when you need to. We recommend walking several times each day.





At home, after your surgery

Pain management and the use of medication

It's normal to feel some pain and discomfort for a few weeks after your surgery. It will get better over time.

Keeping up your exercise program will help reduce your pain. If pain is preventing you from doing your exercises, try doing them 60 minutes after taking your pain medications, to take full advantage of the pain relief effect.

The medications

Medication to take first

To manage your pain safely, follow the instructions we give you.

Start with acetaminophen, such as Tylenol™, and an anti-inflammatory, such as Celebrex™. These medications can generally relieve mild or moderate pain.

If these medications do not bring relief

If these medications are not enough to relieve your pain, you can take the stronger medication that we prescribed. This will generally be an opioid, such as morphine, oxycodone or hydromorphone.

Opioids are safe if they are used carefully and following a plan. However, if they are used without a specific plan or without a prescription, they can be dangerous, because they can be addictive.

They may also cause nausea, confusion, dizziness and constipation.

If you need to use opioids, take the lowest possible dose for the shortest possible time. You should not need to take this kind of pain medication for more than 2 to 3 weeks.

Use your pain medication well

Here's how you should take your pain medication: continue to take the acetaminophen and the anti-inflammatory medicine on an ongoing basis, even if you are taking opioids.

The goal is to treat the pain non-stop instead of waiting for it to come back. This will provide much more effective relief.

Some pain medication may cause constipation

Opioids may cause constipation. If you are taking opioids, start taking a stool softener right away. Don't wait until you feel constipated to start taking it.

To help your bowels stay regular:

- Drink more liquids.
- Eat more whole grains, fruits and vegetables.
- Exercise regularly. A 10-minute walk is a good start.



If you have questions about your medication

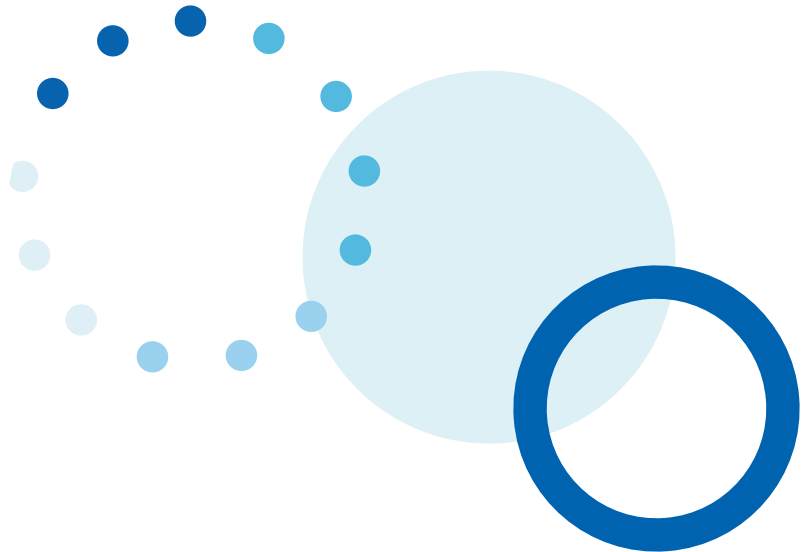
For questions or concerns about your pain medications, contact your pharmacist.

Some tips for relieving pain without medication

Rest assured: your pain will get better over time.

After each exercise session, if you feel pain, put ice or a bag of frozen peas on the operated knee. This will reduce pain and swelling. You can use an ice pack or a cold gel pack that you can get from the pharmacy. If you are using ice, put it in a plastic bag and wrap the bag in a dry cloth. Do not put ice directly on your skin.

You can ice your knee every 2 hours but only for 15 minutes at a time.



What to eat and drink

Eat foods that have protein to help your body heal. Meat, fish, chicken, tofu, beans and dairy products are good sources of protein.

Eat and drink healthy foods that contain fibre, such as fruits, vegetables and whole grains. Drink plenty of liquids to help prevent constipation.

If you get full quickly, try eating less at each meal and add nutritious snacks between meals. You can try high-protein, high-calorie shakes or commercial supplements.

What to do if you feel nauseous

Some people feel nauseous after being under general anesthetic or when taking opioids.

If this happens to you, try drinking liquids and eating small quantities of food in the first 24 hours after surgery. Then gradually return to your usual eating habits.

Your nausea won't go away

If your nausea is not going away and you've not been able to eat for a few days, call the number we gave you.

If you cannot reach anyone, go to the emergency department.

Wound care

Your incision, which is the cut made during surgery, may be slightly red and uncomfortable for 1 to 2 weeks after your surgery.

Your wound may have been closed, either with staples or with glue and self-dissolving stitches.

Your surgeon will determine how to close your wound and the type of dressing needed. Your wound care will depend on the method used.

Before you leave the hospital, we will give you specific instructions concerning how to care for your wound.

- The Demabond® Prineo® skin closure system is a wound dressing that combines a liquid adhesive with a self-adhering mesh. It will be removed in 10-14 days at the CLSC after the wound has been assessed by a health professional.
- A dry dressing, such as Mepilex® or another dressing, protects your wound and covers the staples or stitches. The dressing will be changed via the CLSC or in an outpatient orthopedic clinic every week or more frequently depending on the assessment of a health professional. As for the staples, they will be removed in 10 to 14 days by the CLSC.

Your dressing must not get wet. It is important to wait for approval from your surgeon or a member of the nursing staff before taking a shower or bath.

Bathing after surgery

Instructions for hygiene after surgery may vary. The time to wait before having a shower or bath may not be the same for everyone. The instructions you are given may depend on how your wound was closed, for example. Before you leave the hospital, we will give you specific instructions for your situation.

To prevent falls when showering or bathing, do not lean on a towel rail, soap dish or any other item that is not designed to support you.

Use an adjustable bath bench instead. Here is how to do it safely:

- Sit on the bench.
- Use your hands to slide your legs into the bathtub.
- Keep your knees lower than your hips by stretching your legs.

Your exercise program

Before you leave the hospital, we will prepare an exercise program for you.

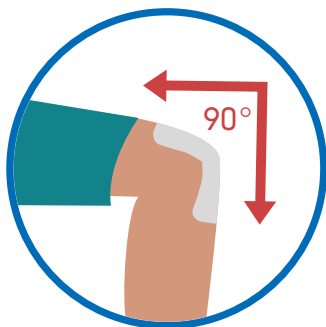
The physiotherapist will choose the exercises that suit you best by putting a ✓ in the boxes below. Doing the recommended exercises is an essential step that plays a very important role in your recovery.

Do the exercises twice a day.

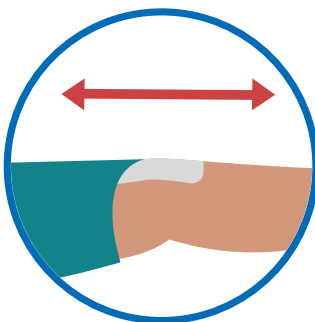
Repeat each exercise at least 10 times, little by little increasing the number of repetitions as you feel able to. Do the exercises slowly and take a break after each exercise.

The goal for the first week is to bend your knee to at least 90 degrees and completely straighten your leg. Although the goal is to reach 90 degrees, you must not push on your knee to achieve this.

For the first week, set the objective to:



Bend your knee to at least 90 degrees.



Completely stretch out your leg.

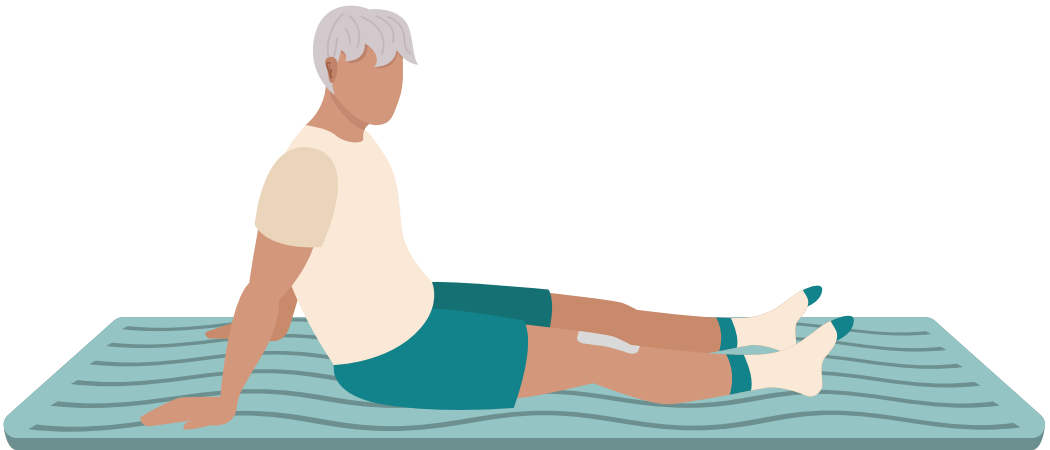
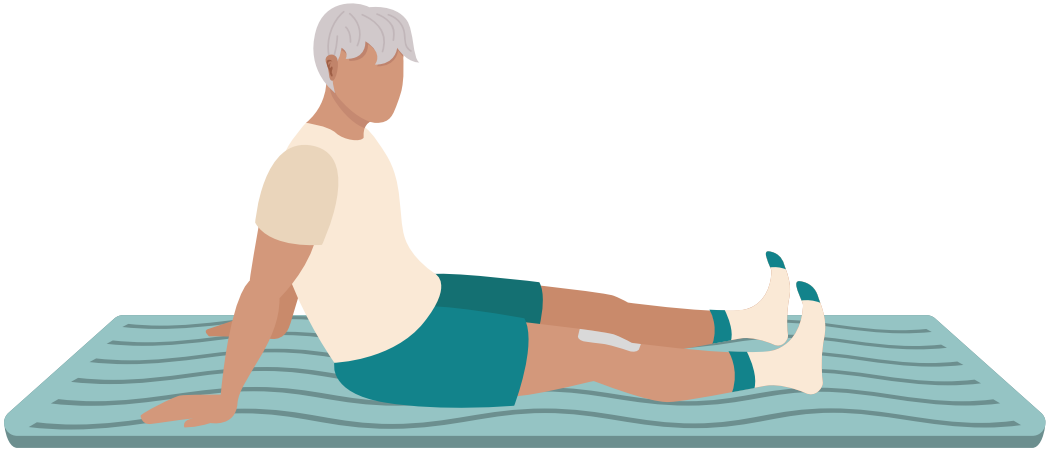
Important

Do not overwork your knee. Avoid jumping and twisting movements.

☐ **Ankle pumping**

With your legs straight and without moving them, raise your toes as far as you can, and then point them downward as far as you can.

Repeat __ times.

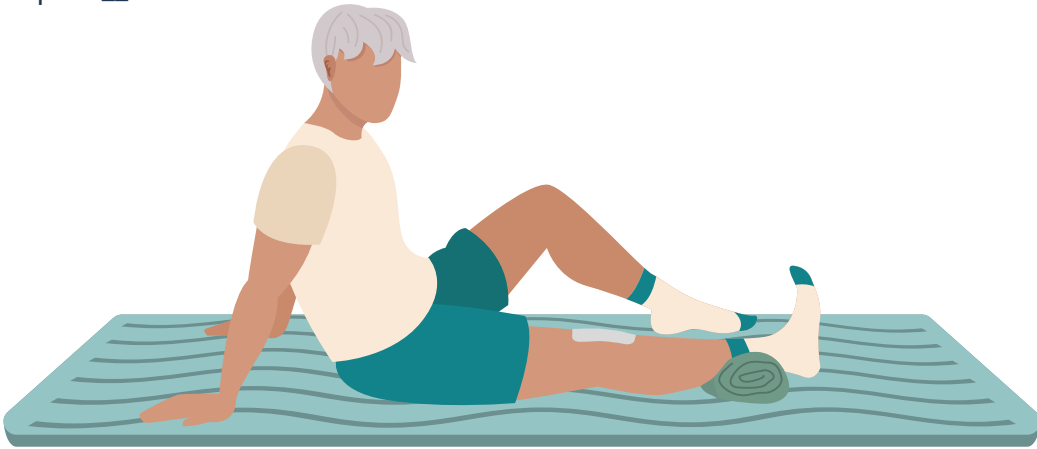


☐ **Thigh strengthening**

Stretch out your operated leg in front of you. Place your ankle on a rolled towel. Pull your toes toward your body while pushing your knee downward.

Hold for 8 seconds and then release.

Repeat __ times.



☐ **Knee extension**

Lying on your back, place a rolled towel under your operated knee. Lift your foot and straighten the bottom part of your leg without lifting your knee off the towel.

Hold for 8 seconds and return to the starting position.

Repeat __ times.



☐ Knee extension – sitting

Sit on a chair with a hard seat.

Stretch out your operated leg in front of you. Lift your lower leg as high as possible without raising your thigh off the seat of the chair.

Hold for 8 seconds.

Repeat __ times.

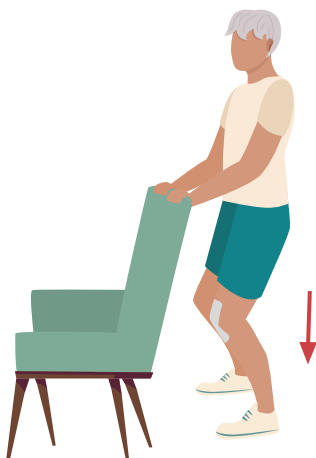


☐ Knee bend – sitting

Sit on a chair. Bend your operated knee and slide your heel backward along the floor. As soon as you feel it start to pull, stop and hold your bent knee in this position for 8 seconds. You can use your other leg to help gently pull your heel backward.

Repeat __ times.





☐ Squat strengthening

Stand up with your hands resting on your walker or the back of a chair to keep your balance.

Place your feet shoulder width apart. Spread your weight evenly between both legs.

Gently bend your knees, leaning forward, and hold the position for 8 seconds. Don't squat too deeply and don't completely crouch.

Repeat __ times.

☐ Preparing to go up stairs

Stand with your hands resting on your walker or the back of a chair to keep your balance.

Raise your knees, one after the other, as if you were walking up a step. Hold for 8 seconds.

Repeat __ times.



☐ **Quadriceps strengthening**

Stand up with your back against the wall, your feet apart and your hands resting on your walker to keep your balance.

Spread your weight evenly between both legs.

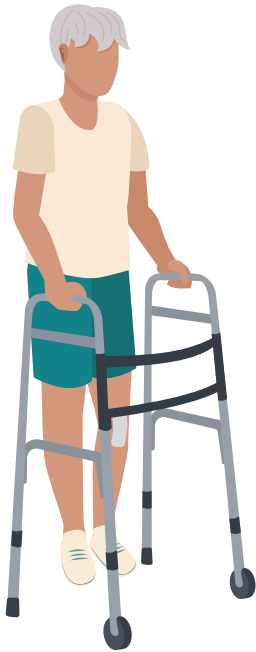
Place a towel behind your operated knee.

Try to push the towel against the wall.

Hold for 8 seconds.

Repeat __ times.





Walking: the ideal exercise

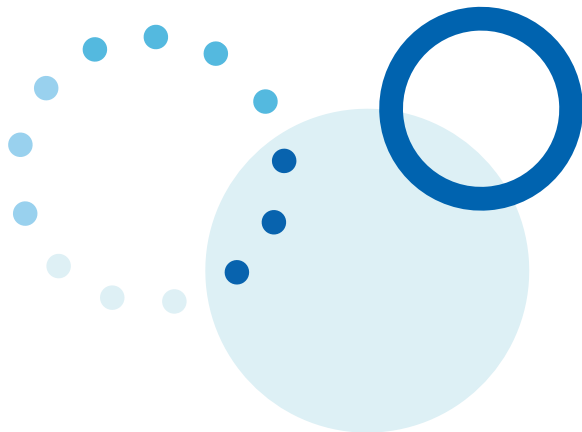
Walking is the best and safest exercise. In fact, walking helps strengthen your knee, improve its flexibility and increase your blood circulation. We advise you to walk every day.

You will start walking on the day of your surgery with help from the hospital staff. Don't worry! Your endurance will slowly increase. Walk short distances several times a day.

Use the support of a walking aid, such as a walker or a cane, until your leg is stronger. As soon as you can hold yourself up, try to divide your weight evenly between both legs.

If you are using a cane, it should be on the opposite side of the operated leg. We will explain this before you leave the hospital.

Walking every day will help you recover faster.



Using stairs

Here are some instructions for going up and down stairs without injuring yourself.



To go up

Put your non-operated leg up on the first step.

Then bring your operated leg and your cane up on to the step at the same time.



To go down

First put your cane and your operated leg and on the step below you.

Then bring your non-operated leg down to the same step.

To go up and down stairs safely, make sure you follow the instruction we gave you.

Sitting down and standing up

We recommend using chairs with armrests. Avoid sitting on low chairs or deep or very soft sofas.

In the bathroom, use a raised toilet seat also with arms.



To sit:

Slide your operated leg forward, while holding on to the armrests.

Lower yourself slowly.

To stand up:

Move closer to the edge of the chair and slide your operated leg forward.

Push with your hands on the armrests and stand up slowly.

After your surgery, it will be easier for you to use a chair with armrests.

Swimming: a good activity for knees

Swimming and aqua therapy are also great activities for after knee surgery. You have to make sure that your wound is fully healed first, though.

Resuming activities of daily living

After your surgery, you can slowly go back to all your usual activities as soon as your wound is healed you feel up to it. Continue to increase the number of activities you do each day.

You may have to make certain adjustments in order to carry out your activities while you recover. We have some tips and suggestions for you on the next few pages.

Support for your daily activities

It is normal to feel tired after surgery. Remember to rest between activities. Make sure you get support from your friends and family to carry out your activities of daily living.

People can help you with:

- Getting around during outings
- Meal preparation
- Grocery shopping
- Cleaning house
- Laundry

Moving around at home

To carry things as you move around inside your home, you can use an apron with big pockets or a backpack, or you can attach a shelf or basket to your walker.

If possible, put your table close to the kitchen counter during your recovery period. This will shorten the distance between your meal preparation area and your table.

Getting dressed

For a few days after your surgery, you can use a long-reached grabber to help you put on some of your clothes and a long-reached shoehorn to make it easier to put on your shoes. You can also wear slip-on shoes that are easy to put on.

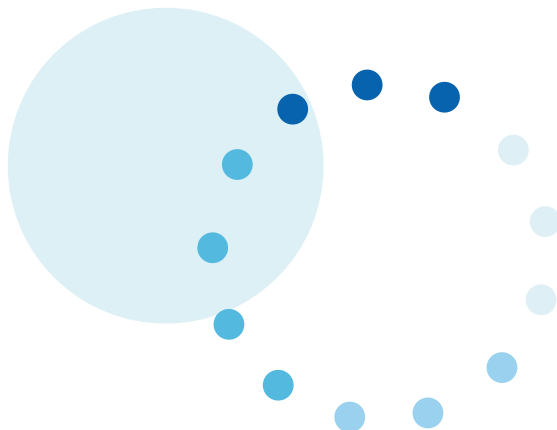
When putting on underwear, put in your operated leg first. When undressing, pull your unoperated leg out of your underwear first.

Going back to work and your sports activities

Generally, you should be able to return to work after 2 to 4 months for sedentary work and 3 to 5 months for physical work.

For the first 3 months after your surgery, you should avoid playing sports on a regular and intense basis.

At your follow-up appointment with your surgeon, you can talk about when to start working or doing sports.



Driving

We will tell you when you can start driving again.

In any case, you should not drive if you are taking opioids to manage your pain. Opioids can cause drowsiness.



How to get into a vehicle without injuring yourself

To make it easier to get into a vehicle, we recommend that you recline the backrest and push the seat as far back as possible.

If you have to travel a long way, we recommend stopping every hour to walk. Walking will help the blood circulation in your legs.

Flying

After your surgery, the risk of a blood clot forming and causing phlebitis increases. This is why, you will have to take anticoagulants to thin your blood. You should not fly until you have finished taking this medication.

You should also be aware that your prosthesis may be detected by airport metal detectors. However, you don't need to present a special note to security or customs.

Resuming sexual activities

You can start engaging in sexual activities as soon as you feel ready. Some of your movements may be restricted, though.

Preventing infection

Preventing infection is important for anyone with a prosthesis.

In fact, any infection in another part of your body, such as your bladder, finger, toe or tooth, can travel through the bloodstream and infect your knee prosthesis. This risk is low, but not zero. If you think you have an infection, it is important to see a healthcare professional and mention that you have a prosthesis.

What's more, from now on, we recommend that you receive preventive treatment with antibiotics before any type of medical intervention.

For example, if you have a colonoscopy or a cystoscopy or have a wound treated or undergo surgery, make sure you always mention that you have a knee prosthesis and that you should receive antibiotics. We recommend that you follow this protocol for your entire life.

Visits to the dentist

For most procedures at the dentist, you will not have to take antibiotics to prevent infection.

In some circumstances, however, you should take them. This is why we also recommend that you tell your dentist that you have a prosthesis. The dentist may give you a prescription if antibiotics are required in your situation.

Be aware of possible complications following surgery

Complications following knee replacement surgery are rare. However, you should be watchful and know how to recognize what is normal and what to keep an eye on.

What is normal after knee surgery

Bruises and hematomas

Bruises and hematomas – that is, very bad bruises – may appear on your leg. These are common and happen due to the blood thinner medication you are taking to prevent blood clots and phlebitis.

Swelling of the leg

Your leg may be swollen for the first few days after the surgery. This is normal. Swelling, also called edema, is common after knee surgery. The swelling will go down over the course of several weeks.

During the night, the swelling should go down and it should be minimal when you get up in the morning. If you notice that your leg is swollen when you get up, call the number we gave you.

Your leg may take time to get back to its normal size. The swelling may last for 6 months or even longer. The more you walk in the days and weeks following your surgery, the more quickly the swelling will go down.

To help reduce the swelling, you can use ice, an ice pack or a bag of frozen peas. You can also raise your leg when you are resting.

When to see a doctor

Surgery can lead to complications such as infection. Another possible complication is a blood clot in one of your legs, which may lead to phlebitis.

After your surgery, you must keep an eye out for certain warning signs that may tell you something is not right.

Call the number we gave you or go to emergency if you see any of the following warning signs.

Monitor your general condition and see a doctor quickly if:

- You feel extremely weak.
- You have trouble breathing.
- You vomit or feel nauseous for more than 2 days.
- Your temperature is higher than 38°C or 100.4°F for more than 2 consecutive days.
- Your pain increases and your pain medication does not provide relief.

Monitor your legs and see a doctor quickly if:

- You notice that one of your legs is red or hot.
- You feel pain in either of your legs.
- You notice that the swelling is increasing in either of your legs.
- Your operated leg is swollen when you get up in the morning.

Monitor your wound and see a doctor quickly if:

- Your wound is hot, red and hard.
- You see pus seeping from your wound.
- Your wound becomes painful when it previously wasn't.

Don't hesitate to see a healthcare professional if you don't feel well.

Helpful websites

The following links might be useful.

Information about knee surgery

If you want to learn more about the surgery, see your institution's website if available. (Insert if possible)

Information about osteoarthritis

If you want to learn more about osteoarthritis, one of the diseases that leads to the need for knee surgery.

Osteoarthritis in Canada

www.canada.ca/en/public-health/services/publications/diseases-conditions/osteoarthritis.html

Osteoarthritis

www.merckmanuals.com/en-ca/home/bone,-joint,-and-muscle-disorders/joint-disorders/osteoarthritis-oa

Information about quitting smoking

If you want help to quit smoking.

Tobacco Free Québec

www.tobaccofreequebec.ca/iquitnow

1-866-527-7383

The services are free.

Centres d'abandon du tabagisme

Ask for information at your CLSC or your community health centre.

Association pulmonaire du Québec

1-888-768-6669

www.poumonquebec.ca/en/

***Centre intégré
de santé
et de services sociaux
de Lanaudière***

Québec 