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## **Safer Together**

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Everyone has a part in making care safe by being an aware, informed, and involved member of the healthcare team. Here are some ways you can work with your healthcare team to make sure your care is safe.

### **Ask, Listen, Talk**

Ask about your healthcare plan. If there's something you don't understand, please ask.

### **Verify Your Personal ID**

Your healthcare team will regularly ask you to verify who you are: They haven't forgotten who you are but are asking as part of providing safe care.

### **Wash Your Hands**

Washing your hands is the best thing you can do to prevent spreading germs. Remind others to wash their hands.

### **Know Your Own Medicine**

Know what you take your medicine for and how to take it. Make a list of all the medicine you take and keep the list with you.

### **Prevent Falls**

Most falls can be prevented. Look around, slow down, hold onto something, ask for help, and be careful.

## **What you need to know about your knee surgery**

Now that you're going to have a knee replacement surgery, it's important to know all you can about it, including:

- why your knee needs to be replaced
- what you will have in place of your knee
- the risks of surgery
- what you can expect before, during, and after surgery
- what you can do to help make your surgery a success

This guide will help answer these questions. Take the time to read it with your family, friends, and buddy, especially those who will be giving you some help. It is important to have a buddy (support person). Your buddy helps you with the things you have to do to get ready for surgery and to have a successful recovery after surgery, including going with you to and from the clinic and the hospital.

Understanding and following the information in this guide is part of being an active member of your healthcare team. Your healthcare team includes health providers such as the surgeon, other doctors, nurses, physical therapists, kinesiologists and occupational therapists. It also includes others that you may or may not see, such as dietitians, spiritual care, and clerks. Your healthcare team will support you while you wait for surgery and as you go through rehabilitation and recovery.

All your appointments before and after surgery will be at the Hip and Knee Replacement Clinic. Your case manager will arrange all of your care, with input from the rest of your healthcare team.

Talk to your case manager if you have any concerns or questions.

**Please bring this guide with you when you visit the Hip and Knee Replacement Clinic, come for therapy, and when you're admitted for surgery.**

## About Knee Replacement Surgery

### Why do I need a knee replacement?

Most people have a knee replacement because the cartilage (or cushioning) between the bones in their knee has worn away. This causes the bones to rub against each other, which then causes pain and stiffness in the knee.

The pain might be keeping you awake at night. It may be causing you to cut back or stop doing your normal, everyday activities. You may have tried other treatments like exercise and medicine, but the pain and stiffness didn't get better or got worse.

A knee replacement means that the damaged knee joint is taken out and replaced with parts made of metal, plastic, or ceramic. The pain should stop or be much less.

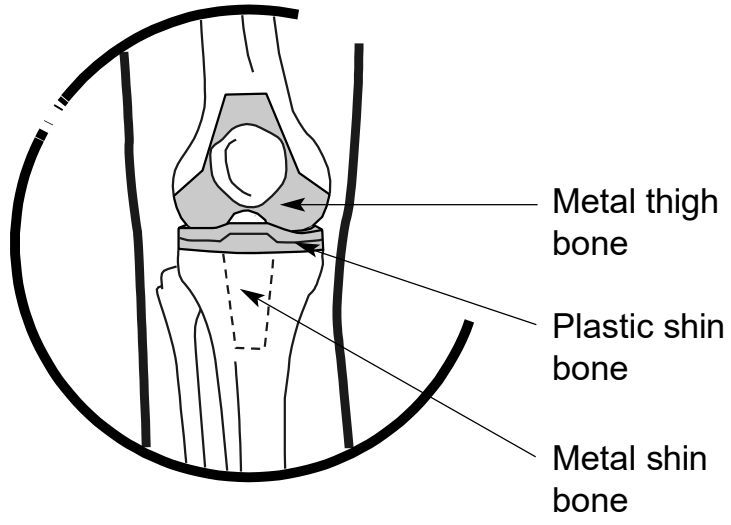
### What types of knee replacement surgery are there?

There are 3 types of knee replacement surgery. Your surgeon will tell you which type you need.

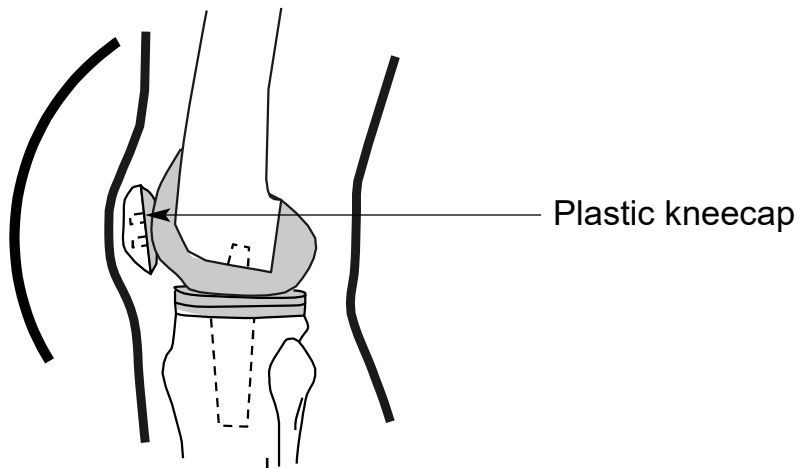
1. *Total knee replacement*: The entire knee joint is taken out and replaced with new parts.
2. *Partial knee replacement*: Only the most diseased or damaged part of the knee is taken out and replaced with new parts.
3. *Knee revision*: The parts used to replace the knee have become damaged or loose and have to be taken out and replaced with new ones.

There are many types of knee replacement parts. The type you need depends on the condition of your knee, your age, weight, and the activities you like to do. Your surgeon will speak with you about the type that is best for you.

### Front View



### Side View



## Does the surgery have risks?

While knee replacements are usually safe, there are some risks. Your surgeon and healthcare team will talk to you about the risks. Some of the risks of surgery and what's done to decrease them are listed below:

- **Infection:** Germs can enter your body from anywhere (e.g., teeth, skin, or throat) and cause an infection. Certain medical conditions and lifestyle choices can put you at a greater risk of surgical infections. Antibiotics are given before and after surgery to prevent infection. Make sure to tell your surgeon or case manager if you have or think you have an infection.
- **Blood clots:** A blood clot happens when blood collects into a clump and can be very serious if it moves to the lungs. You'll be given a blood thinner to help prevent a blood clot. In addition to taking your blood thinners, getting up and moving around as soon as possible after surgery can help prevent a blood clot. Make sure you tell your surgeon or case manager if you've ever had a blood clot.
- **Heart attack, breathing or lung problems, stroke, allergic reaction to medicine, or death:** These are risks with any surgery. You and your healthcare team will work together to lower your risk.
- **A break in the bone around your new joint:** You may need to put less weight on the leg or have another surgery.
- **Nerve damage, bleeding, or injury to a blood vessel:** You may notice a loss of feeling or movement after surgery. Be sure to tell your healthcare team about any changes..
- **Knee stiffness:** It's important to do your exercises to prevent this. You may need another surgery to improve the bend in your knee if it stays stiff.
- **The new knee parts become loose:** Your new knee joint may become loose over time. It's important to go to all your follow-up clinic visits after surgery. Make sure you tell your doctor if you have any new pain in your knee. You may need surgery again if your knee joint becomes too loose.

## While Waiting for Surgery

- Be as healthy as possible:** Eat healthy foods, drink lots of fluids, and get lots of rest, and remember to exercise. Use Eating Well with Canada's Food Guide to choose the type and amount of food you need for good health. Healthy eating before surgery will help you:
  - lower the chance of getting sick, which can delay your surgery
  - build up iron in your blood to give you more energy and help you heal faster
  - reach and stay at a healthy weight
- Quit (or cut down) smoking and vaping:** It takes longer to heal when you smoke. If you need help to quit, call 1-866-710-QUIT or go to [www.albertaquits.ca](http://www.albertaquits.ca).  
**Note:** Smoking is not allowed on hospital property.
- Reduce or stop alcohol or other drug use prior to surgery:** Alcohol 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.
- Look after health problems before surgery:** This especially includes problems with your teeth, eyes, and bladder. Men need to also make sure any problems with their prostate are being managed. Make sure you fill your prescriptions and take them as prescribed.
- Get dental work done:** You must have any problems with your teeth taken care of at least 6 to 8 weeks before surgery to lower your risk of infection after surgery. Get your teeth cleaned. **Your surgery will be delayed if you're having problems with your teeth at the time of surgery.**
- Stay active and do your exercises:** Keep doing your regular activities. Begin right away to build strength in your legs, arms, and stomach by doing the Phase 1 exercises. Doing these exercises before surgery will help you get moving again after surgery.



- Have help when you go home:** You'll likely be in the hospital for 1 to 2 days. Here are some of the ways your support person (buddy), family, or friends can help you once you're home:
  - doing housework, yard work, driving, shopping, and making meals
  - taking you to and from appointments
  - staying with you if you live alone
  - helping with your medications, exercise programs, and treatment plan
  - helping with your bandages
  
- Arrange care:** If someone depends on you for care, arrange for someone else to give the care while you're recovering.
  
- Get your home ready:** Make your home as safe as possible:
  - Arrange items in the kitchen and other areas of your home so you can reach them without any difficulty.
  - Adjust your bed so that the top of the mattress is above your knee crease.
  - Position your furniture so that you have space to move around safely using a walker or crutches.
  - Remove loose mats or clutter that could cause you to trip or slip.
  - Install handrails on stairways inside and outside of your home, or arrange to have your buddy, family, or a friend help you go up and down the stairs when you first get home.
  - Make sure you have the right type of chair (see *Managing at Home*).
  - If you have a tub with a shower door, take off the door and replace it with a shower curtain.
  - Have all of the equipment you'll need for your recovery ready 1 to 2 weeks before surgery (see *Equipment You Need After Surgery*).** Having the equipment ahead of time gives you time to practice with it before surgery.
  
- Have the heavy housework done ahead of time:** Do laundry, vacuuming, and other heavy work around the house before your surgery.
  
- Plan for your food needs:** Stock up on groceries and make frozen meals.

- Arrange a ride:** You could be released from the hospital at any time of the day so make sure your buddy, family, or a friend can pick you up with little notice.
- Ask questions:** Be sure you understand what's being done and what you're agreeing to when you sign the consent form for surgery. Read this guide before going to your Hip and Knee Replacement teaching class and write down your questions or concerns. Make sure you understand the benefits and risks of surgery.

**Don't use any lotions or creams:** Stop using any kind of lotion or cream on your legs starting 5 days before surgery. Do **NOT** shave your legs within 2 weeks of surgery.

## Taking Medicine Before Surgery

Your physicians and case manager will tell you which of your prescription and non-prescription medicine to stop taking before surgery.

Tell your case manager before surgery if:

- you're allergic to any medicine, latex, or metals
- there's a change in your medicine (for example, your dose changes or you start a new medicine)
- your health changes

Make sure your healthcare team knows what pain medicine you take before your surgery.

## Equipment You Need After Surgery

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It's important to use the equipment in the list below to protect your knee and lower your risk of falling after surgery and once you're home. Have the equipment ready **1 to 2 weeks** before surgery so you can practice with it. You may need this equipment below for 3 months after surgery:

- |  |  |
|--|--|
| <input type="checkbox"/> walker, cane, crutches  | <input type="checkbox"/> non-slip bath mat   |
| <input type="checkbox"/> reacher   | <input type="checkbox"/> raised toilet seat  |
| <input type="checkbox"/> chair with armrests   | <input type="checkbox"/> toilet arm rests  |
| <input type="checkbox"/> sock aid, leg lifter, elastic shoe laces, and a long-handled shoehorn | <input type="checkbox"/> long-handled sponge/brush   |
| <input type="checkbox"/> other equipment your healthcare team suggests:<br><hr/>               | <input type="checkbox"/> shower seat for a walk-in shower, tub seat and clamp-on tub bar for metal tubs, transfer bench for fiberglass tub (as per rehab team recommendations) |

You may be able to:

- buy or rent equipment from a pharmacy or medical equipment vendor
- borrow equipment from a medical equipment loan program if there's one in your area
- borrow equipment from friends or family as long as the items are in good working order, safe, and the right type for your height and weight
- borrow equipment from the Community Health Unit or Home Care

## My Checklist Before Surgery

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- I have a buddy (support person) to help me before and after surgery.
- All my dental work has been done.
- I am exercising every day to get ready for surgery.
- I have someone to take me home from the hospital.
- All heavy housekeeping activities (vacuuming, laundry, etc.) have been done ahead of time.
- I have arranged for help after surgery with:
  - housework       driving
  - making meals       other \_\_\_\_\_
  - yard work
- I know what medicine I have to stop taking.
- I have stocked up on groceries.
- I have the equipment and walking aids I will need after surgery.
- I can easily reach the things I need at home.
- I have the space to move around safely with my walker or crutches at home.
- I have a sturdy chair with a firm seat and armrests.
- I have packed a small overnight bag and my name is on all my things.
- I have packed my “When You’re Having a Knee Replacement” booklet.
- Bring any prescription and non-prescription medicine and inhalers packed in their original containers that my healthcare team tells me to.

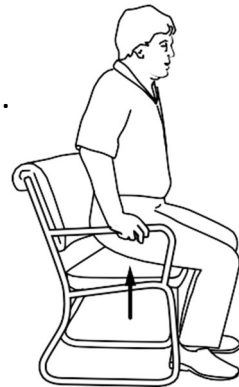
## Phase 1 Exercises to Build Your Strength

**Begin these exercises now and keep doing them after surgery until your case manager or rehab team tells you to start Phase 2 Exercises.** Exercise is part of a successful surgery and getting back to normal, everyday living.

Do them on both legs so both legs are strong. Do all exercises slowly and with control. Repeat each exercise at least 5 times. You can increase the number of times as long as it doesn't hurt too much.

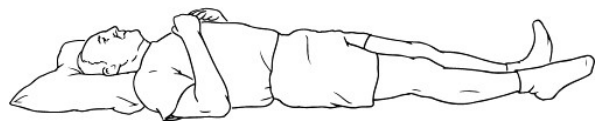
### Exercise #1: Armchair push-ups

1. Sit on a steady chair, with your feet flat on the floor.
2. Push up with both arms to lift yourself a few inches off the seat.
3. Hold for a count of 3 to 5.
4. Slowly lower yourself onto the chair.
5. Repeat at least 5 times.



### Exercise #2: Ankle Pumps

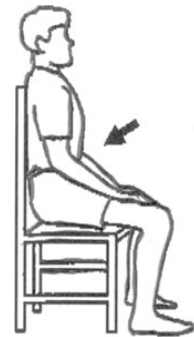
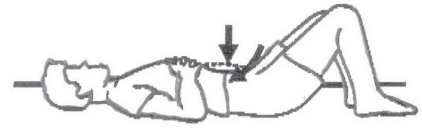
1. This may be done sitting on a steady chair or lying down.
2. Bend ankles to move feet up and down, alternating feet.
3. Repeat at least 10 times (for both feet).



### Exercise #3: Core stability

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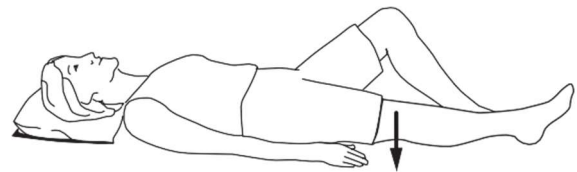
1. Lie or sit with back supported, bend both knees and keep your feet flat.
2. Tighten your lower stomach muscles by pulling your bellybutton down towards your spine.
3. Squeeze pelvic muscles that stop the flow of pee. Ask your physiotherapist to explain.
4. Breathe normally while holding for a count of 3 to 5.
5. Relax.
6. Repeat at least 5 times.



### Exercise #4: Simple thigh squeezes

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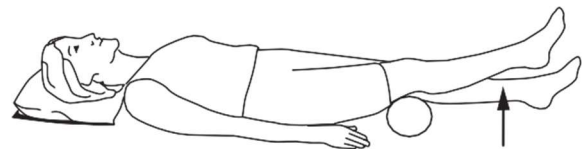
1. Keep kneecap and toes facing ceiling.
2. Pull toes up toward your head.
3. Tighten muscles in front of thigh and push back of knee into bed.
4. Relax.
5. Repeat at least 5 times.



### Exercise #5: Harder thigh squeezes

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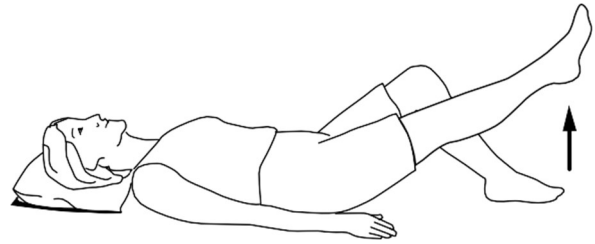
1. Place a firm roll under your knee.
2. Straighten your leg, lifting your foot off the bed.
3. Hold for a count of 3 to 5.
4. Slowly lower your leg.
5. Repeat at least 5 times.



### **Exercise #6: Thigh lifts** (Note: Do this exercise only once you can do Exercise 4)

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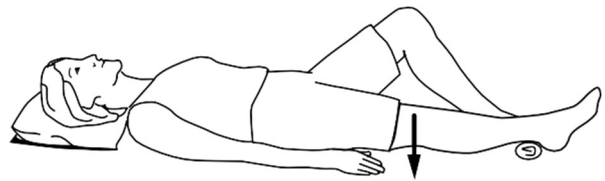
1. With one knee in a comfortable position, tighten your thigh muscles and lift your other leg keeping the knee straight.
2. Hold for a count of 3 to 5.
3. Slowly lower your leg to the bed.
4. Repeat at least 5 times.



### **Exercise #7: Knee straightening**

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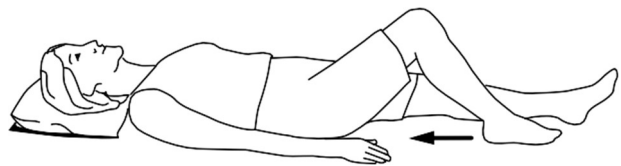
1. Keep kneecap and toes facing ceiling.
2. Place a small roll under one ankle and push the knee down toward the bed.
3. Hold for a count of 30.
4. Relax.
5. Repeat at least 5 times.



### **Exercise #8: Knee bend**

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1. Bend your knee by sliding your heel along bed toward your buttocks (backside).
2. Make sure your knees face the ceiling.
3. Hold for a count of 3 to 5.
4. Slowly straighten your knee by sliding your heel back to your starting position.
5. Repeat at least 5 times.



### **Exercise #9: Sitting-knee bends**

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1. Sit on a steady chair with your feet flat on the floor.
2. Slowly slide your foot back as far as you can.
3. Hold for a count of 3 to 5.
4. Slowly slide your foot back to the starting position.
5. Repeat at least 5 times.



### **Exercise #10: Sitting-knee straightening**

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1. Sit on a steady chair with your thigh supported.
2. Lift your foot and straighten your knee.
3. Hold for a count of 3 to 5.
4. Slowly lower your foot to the floor.
5. Repeat at least 5 times.

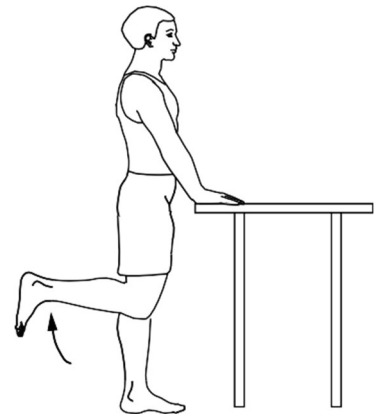


**When doing these exercises, stand straight, tuck in your stomach, and tighten your buttocks.**

### **Exercise #11: Standing knee bends**

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1. Hold on to a table or counter for support.
2. Slowly bend your knee by lifting your heel towards your buttocks.
3. Hold for a count of 3 to 5.
4. Slowly lower your foot to the floor.
5. Repeat at least 5 times.





## Exercise #12: Standing knee lift

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1. Hold on to a table or counter for support.
2. Lift your knee, as if you were going up a step.
3. Hold for a count of 3 to 5.
4. Slowly lower your foot to the floor.
5. Repeat at least 5 times.



## Exercise #13: Mini knee bends

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1. Hold on to a table or counter for support.
2. Stand with your legs shoulder-width apart and your toes pointed forward.
3. Keeping your weight on your heels, slowly bend your knees, keeping your heels on the floor and your knees apart. Don't bend the tips of your knees past your toes at the bottom of the bend.
4. Hold for a count of 3 to 5.
5. Slowly return to your starting position.
6. Repeat at least 5 times.



## What to Bring to the Hospital

There's not much storage space in hospital rooms so please **pack only what you need** in a small overnight bag.

**Alberta Health Services isn't responsible for lost or stolen items. Don't bring anything of value, such as jewelry or credit cards.**

- Your **Alberta Health Care card** and **personal I.D.**
- This book.
- Personal care items like a toothbrush and toothpaste, hair brush, soap and shampoo, deodorant, shaving items.
- Loose-fitting clothing that's easy to put on (e.g., robe, pants, shorts, underwear, and socks).
- Adjustable, non-slip shoes that will give you good support and can be loosened if your feet swell.
- Don't** use your own medicine while you're in the hospital. You'll be given the ones you need to take while in hospital, unless instructed otherwise.
- Walker, crutches, and dressing aids as listed in your surgical agreement.
- If you use a CPAP machine you **MUST** bring it with you.

## Preparing for Surgery

- **It is important to wash and prepare your skin before your surgery.** Your healthcare team may provide you with a wash-kit and instructions to help you disinfect your skin.
- Be sure you have everything you need for your stay in the hospital.
- Go over the surgical patient agreement you signed with your healthcare team.
- Follow the eating and drinking instructions you received from your healthcare team.
- If you have questions, phone the clinic and speak with your case manager.

# The Day of Surgery

## When You Get to the Hospital

A nurse will check you in, make sure that you've followed all instructions you were given, and get you ready for surgery. Tell the nurse or doctor of any changes in your health since your last visit to the clinic.

Before you go into the operating room, an intravenous (IV) will be put into a vein (usually in your hand or arm). Medicine and fluids are given to you through the IV during and after surgery.

You will also meet the surgeon and anesthesiologist who will give you medicine to control pain during surgery.

Someone may stay with you until you go into the operating room.

## In the Operating Room

Once you're in the operating room, you'll see different types of equipment. This equipment is used to closely watch your condition during surgery. This includes a machine to monitor your heart, a cuff to monitor your blood pressure, and a sensor that's attached to your finger to monitor your oxygen level.

You'll be given one of these anesthetics:

1. **Spinal anesthesia:** You won't have any feeling in the lower part of your body. You'll also be given another medicine so that you'll be sleepy during surgery. The feeling in the lower part of your body will start to come back slowly after surgery.
2. **General anesthesia:** Medicine is given to make you sleep during surgery. A tube is passed through your mouth and into your windpipe to help you breathe. The tube is taken out once you're awake and breathing on your own.

## **In the Recovery Room**

You'll go to the recovery room after surgery. Here, a nurse will check the blood flow and feeling in your legs. The nurse will also:

- check your breathing, heart rate, temperature, and blood pressure
- ask about your pain level
- have you take deep breaths

## **In Your Hospital Room**

Once you're in your hospital room, your nurse will check your breathing, heart rate, temperature, blood pressure, and the blood flow in your leg again. You'll still have an IV. Your nurse will show you where the call bell is and how to use it to call for help. If your bed has side rails, they will be up for your safety until the effects of the anesthetic have worn off.

You'll be reminded to breathe deeply and cough often to prevent lung problems after surgery.

**Your nurse or physical therapist will work with you to safely change your position in bed, get out of bed, sit at the edge of the bed, sit in a chair, and begin walking for the first few times after surgery. Don't try to change your position or get out of bed until it is safe to do so on your own.**

**You'll stand and take some steps on the day you have surgery as directed by your physiotherapy and nursing teams.**

You'll be able to have visitors once you're settled into your hospital room.

## After Surgery

### Managing Pain after Surgery

You can expect to have pain after surgery, even if you've been given medicine for pain. It's important that your pain is well managed so that you can stand, walk, and start your physical therapy.

### How You Can Help Manage Your Pain

Tell the nurse when you're feeling pain and discuss which pain management option works best for you. There are many ways to manage your pain, including ice, elevation and pain medicine. If possible, take pain medicine 30 to 45 minutes before your physical therapy sessions, so it has time to work.

Make sure to tell your nurse about your pain management plan before surgery.

Tell your surgeon or nurse if the pain medicine isn't managing your pain or if you think you're having side effects.

Use your ice machine or ask for ice to put on your knee and for pillows to keep your operated leg raised to help lower the pain and swelling.

### Pain Scale

You'll be asked to rate your pain level using this scale. The number you choose helps your nurse or surgeon know how well the pain medicine is working for you.

0    1    2    3    4    5    6    7    8    9    10

No Pain

Worst Pain Possible

Tell your nurse if your pain isn't being helped by the medicine.

Don't wait until the pain is bad.

## **Deep Breathing, Coughing, and Moving after Surgery**

- You'll have to breathe deeply and cough at least once an hour after surgery to clear your lungs.
- You'll be shown foot and ankle exercises to do once every hour to help prevent blood clots.

## **Preventing Blood Clots**

You'll need to take a blood thinner after surgery to lower the chance of getting a blood clot. Your surgeon will decide how long you should be on a blood thinner. You'll be given a prescription for a blood thinner to take for a few weeks after you go home. Most blood thinners are given orally, however if the blood thinner is given by needle, your nurse will show you how to give yourself the injection before you leave the hospital.

## **Replacing Blood Lost during Surgery**

Everyone loses blood during knee replacement surgery. Losing too much blood may leave you feeling dizzy, tired, short of breath, sick to your stomach, and you may have a headache. Losing too much blood can slow your healing and recovery.

## **Diet**

It's important to eat healthy foods and drink lots of fluids after your surgery. After surgery, you'll get fluids by IV until you can eat and drink enough on your own.

Once you're able to eat and drink, you can start eating your regular diet. Follow the guidelines in Canada's Food Guide. If you aren't eating well, ask your healthcare team about taking a nutrition supplement.

Healthy eating after surgery helps you feel better sooner because it:

- helps repair muscles and tissues
- builds up the iron in your blood
- gives you the strength and energy to do activities

## **Managing Your Bathroom Needs**

To prevent constipation:

- drink at least 8 cups (2 litres) of water every day
- eat foods high in fibre
- walk
- do your exercises every day

If you're constipated, a nurse will offer you something to help your stool pass. It's important to tell the nurse when you've had a bowel movement.

## **Washing, Brushing, and Other Personal Needs**

Before you leave, you will be expected to get dressed in your personal clothing and do your personal hygiene on your own. Please ask your nurse if you need help. Make sure all the items you need are within reach before you start.

Ask your healthcare provider about when you'll be allowed to shower after the bandages around the area of surgery are changed for the first time. Don't put any lotions or creams on your operated leg for the first 6 weeks after surgery.

## **Rest and Activity**

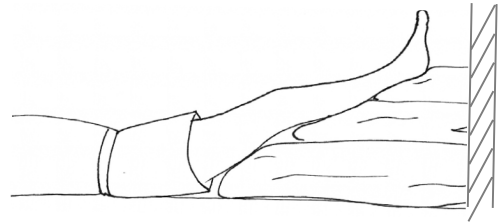
You need both rest and activity to recover. You'll tire easily the first few weeks after surgery. You may find that your normal sleep patterns also change. Let the way you feel be your guide to what you can and can't do.

Stop what you're doing and rest when you begin to feel tired. It's better for you to do shorter activities (like walking) more often, rather than doing one long activity. Remember to do your foot and ankle exercises every hour.

## Leg Swelling

Your leg will swell as you become more active after surgery. It's normal for your knee to be warm and swollen for many weeks after surgery.

- To control the swelling, don't sit for more than 30 minutes at a time.
- Lie on your back, with your operated leg resting on pillows so that your foot is above the level of your heart. Keep your leg as straight as you can. Make sure the pillow isn't under the back of your knee.
- Raise your operated leg this way 3 to 4 times a day for 45 minutes each time.
- Put a cold pack on warm or swollen areas after you're done your exercises. Use crushed ice in a bag, an instant cold pack, or a bag of frozen peas or corn. Make sure you have a thin towel between your skin and the cold pack to protect your skin. Don't leave the cold pack in one place for more than 20 minutes at a time.



**Tell your nurse or surgeon right away if you have pain in your calf or chest.**

## Rehabilitation

You'll be helped to move from your bed to a chair. You may be standing and walking within 4 hours after surgery. Your activity level will go up every day. You'll also begin a program to help improve the flexibility or range of movement in your new knee and make the knee stronger.

- Most people are allowed to put as much weight on the operative leg as they can tolerate. Your healthcare team will let you know if your surgeon wants to limit the amount of weight you can put on the operated leg.
- Your physical therapist will teach you to use a walker. You'll also be shown the exercises you must do. Use your walking aid until your surgeon or physical therapist says you can stop.
- Your healthcare team will check how well you can do the exercises on your own and move around. They will also see if you have the skills you need to manage at home. The team will use the results to recommend when you should leave the hospital and what community services you may need at home.



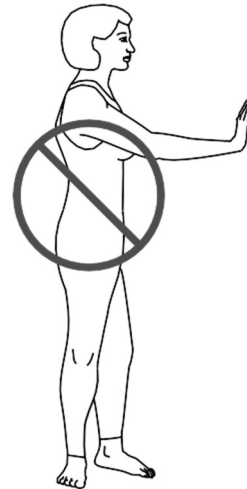
## Movements to Avoid After Surgery

While you should increase your activities after surgery a little at a time, there are some movements you **should not do**.

- **Don't** jar or twist your new knee suddenly. Make sure you don't bend it in an uncontrolled way.
- **Don't** cross your legs.
- **Don't** sleep with a pillow under your knee. It can cause a permanent bend in your knee or put pressure on blood vessels in your leg.

### Twisting and Turning

- Always keep your toes and your upper body facing the same direction.
- Take small steps when turning, instead of twisting or pivoting on your leg.



## Going Home

You'll go home 1 or 2 days after surgery if the doctor thinks you're ready. Before you go home, your healthcare team will check that you've met the goals for your new knee:

- You have arrangements for a ride home.
- You can get into and out of a bed and chair without help.
- You can stand and walk safely with your walker or crutches.
- You can go up and down stairs safely.
- You can walk the distance you will need to walk in your home.
- You can do your home exercises and daily living activities safely.
- You're eating and going to the bathroom normally.
- Your incision is healing. If you have to change your bandage, you and your buddy will be shown how. Note: It's normal to lose some feeling in the skin around the incision. The feeling should be back in a few months.
- Your pain is under control. You'll be given a prescription for pain medicine. If you get constipated, talk to your pharmacist or case manager about over-the-counter stool softeners.

Your healthcare team may decide you need more help before you can go home.

How you do after your surgery depends mainly on you.

- **Do your home exercises regularly**, minimum of 4 times a day. The sooner your leg muscles become strong enough, the sooner you can get back to your normal activities.
- **Take pain medicine** at least 30 to 45 minutes before exercising if you find the exercises make you too sore.
- **Use your walking aids** until your surgeon, physical therapist, or kinesiologist tells you that you are safe to walk on your own.
- **Walk often** but don't go further than you can manage safely and comfortably. Short walks done often are better than a single long walk. Have someone come with you on the first few walks in case you run into a problem. Make sure to bring your cell phone in case you need to call for help.

You may still have some discomfort for a long time after surgery. If so, talk to your case manager about the best way to manage it.

## Managing at Home

You'll learn new ways to do your everyday activities safely while you're recovering. Do a little more at a time, being careful not to do any movements or positions that could hurt your knee.

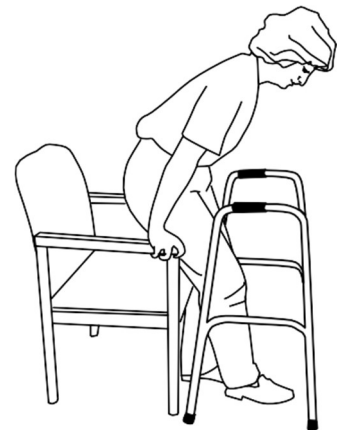
### Sitting in a Chair or on the Toilet

*Chair:* Choose a **sturdy** chair with a firm seat and armrests. You can raise the seat height by adding a firm cushion. Don't sit on low or soft chairs and couches. Don't use chairs that have wheels or that rock or swivel.

*Toilet:* You may need a raised toilet seat and toilet armrests. Make sure the toilet paper is within easy reach.

#### To sit:

1. **Back up** until you feel the chair or toilet seat at the back of your legs.
2. **Slide** your operated leg forward slightly.
3. **Bend** both knees and gently lower yourself onto the chair or toilet, using the armrests, countertop, or sink for support.



**Do the reverse** to stand.

**Don't use your walker** to raise yourself from the chair or toilet. Always push up with your hands from where you're seated.



## Getting In and Out of Bed

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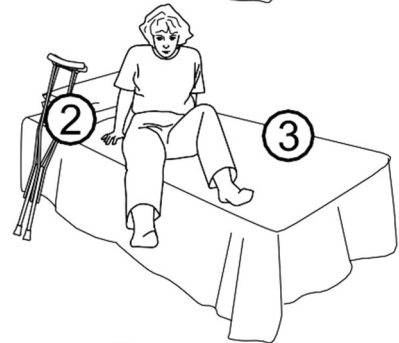
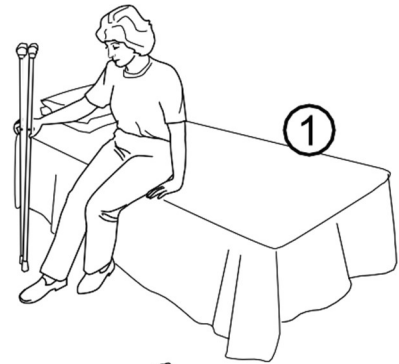
- Make sure the top of your bed is above your knees.
- Don't use soft mattresses

**For comfort, support your operated leg with pillows when lying on your other side.**

### To get into bed:

1. **Sit** on the bed the same way you would sit on a chair.
2. **Slide** your buttocks back until your knees are on the bed.
3. **Pivot** on your buttocks as you lift your legs onto the bed. Remember to keep your legs apart and not to twist.
4. **Use** a pillow to keep your legs apart when lying in bed on your back as needed.

**Do the reverse** to get out of bed.



## Getting Dressed

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You may use special equipment to help dress yourself (for example: a reacher, long-handled shoehorn, dressing stick, elastic shoelaces, or sock aid).

- Choose loose-fitting clothing, including socks.
- Wear low-heeled shoes with elastic laces.
- Dress your **operated leg first** and undress it last.



## Bathing

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You won't be able to sit in the bottom of the tub to bathe for about 3 months.

You should bathe from a sitting position at the sink, in the tub, or in a walk-in shower with a chair for the first 3 months. Have someone help you get in and out of the tub and with showering until you can do this safely on your own.

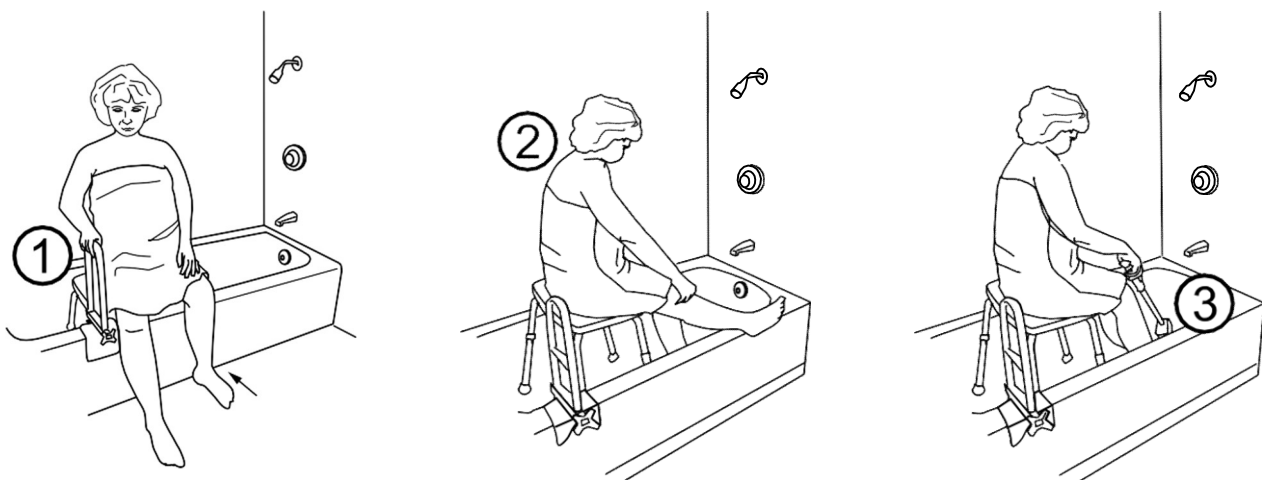
For your safety, you may need help reaching the faucet. Have your buddy, family, or a friend turn the faucet on and off. **If you're steady enough**, you can stand up to turn it on and off yourself.

### To get into the tub:

1. **Back up slowly** and carefully until you can feel the tub against the back of your legs. Hold onto the tub grab bar for support and, with your other hand, reach back for the bath seat, and lower your buttocks onto it.
2. **Pivot** on your buttocks and lift your legs one at a time, up and over the side of the tub.

It may be easier to use a hand-held showerhead, long-handled sponge, or soap-on-a-rope.

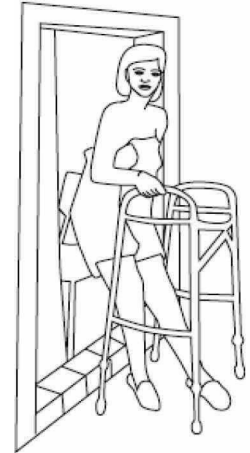
Do the reverse to get out of the tub.



## Showering

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Have your buddy, family, or a friend help you get into the shower and keep your walker steady, if needed. If there's a grab bar on the wall, use it instead of the walker. A grab bar is more stable.



### To get into the shower:

1. **Walk** to the lip of the shower and turn so that you're facing away from the shower stall.
2. **Reach back** with your hand for the back of a seat placed in the shower, leaving your other hand on the walker.
3. **Move** your operated leg forward.
4. **Sit** on the seat.
5. **Lift** your legs over the lip of the shower stall and turn to sit facing the faucet.

**Do the reverse** to get out of the shower.

**Note:** You can stand in the shower if it's too small for a seat and you're steady on your feet. Install grab bars and use a rubber bath mat to prevent slipping.

## Doing Laundry

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- Have someone do laundry for you. If this isn't possible, do smaller loads. Make sure you carry your loads in a plastic bag, backpack, or wheeled cart.
- Use a reacher to get your laundry in or out of front-loading machines.
- Sit on a high stool if ironing.

## Getting In and Out of a Car

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- You may find a higher vehicle easier to get in and out of (depending on your height).
- Sit in the front seat whenever possible. Your therapist will tell you how to do car transfers depending on the car.
- Have your driver park the car about 1 metre (3 feet) away from the curb. Have the driver slide the passenger seat back as far as it will go. You may find that placing a large plastic bag on the seat makes sliding into and out of the car much easier. You can also put a pillow on the seat to make it higher if needed.

### To get in a car:

1. **Back up slowly** and carefully with your walking aid until you can feel the edge of the car against the back of your legs.
2. **Hold** the back of the seat and the car frame for support. Slide your operated leg forward slightly, bend both your knees, and lower yourself onto the car seat. Watch your head!
3. **Slide** your buttocks toward the middle of the car then pivot on your buttocks as you lift your legs one at a time into the car.

**Do the reverse** to get out of the car.



## Driving

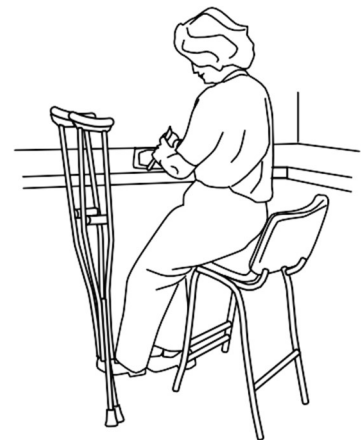
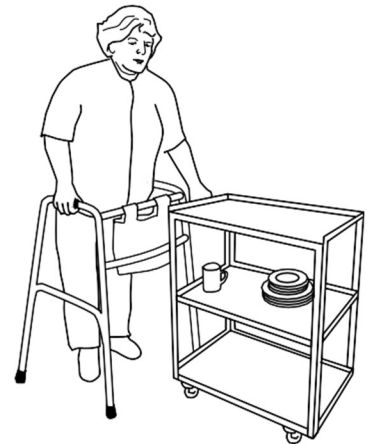
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Your surgeon will tell you when it's safe to start driving again. Most people can drive starting 6 weeks after surgery. Your healthcare team will give you information about transportation services in your area.

## Working in the Kitchen

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- Keep the items you use often within easy reach. Use a long-handled reacher if items are out of reach. Try not to store food on low shelves so you don't have to bend to reach them.
- Use prepared meals, frozen meals, a service like Meals on Wheels, or order in food.
- Use the oven only if you feel comfortable to do so. A microwave or stovetop is best.
- Slide objects along the countertops instead of lifting them.
- Use a wheeled trolley or cart to move items when using your walking aid.
- Carry things in an apron with large pockets, a waist pouch, backpack, or a bag attached to your walker.
- Sit on a high stool when working at the counter.
- Use containers with tight-fitting lids to move foods and liquids (like a Thermos® or thermal mug with lid) to prevent being burned.



## Shopping

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- Have your buddy, family, or a friend help you with shopping.
- Shop at stores that are easily accessible.
- Bring your walking aid with you.
- Bring your reacher to pick up items from the lower shelves.
- Use a backpack to carry the things you buy.
- Buy canned or frozen goods to cut back on the number of times you have to shop.

**Note:** Some grocery stores offer delivery or curbside pickup. Check with the store you shop at.



## **Doing Housework and Yard Work**

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- You should be able to do light housekeeping, such as dusting and washing dishes.
- Have your buddy, family, or a friend help with heavy work, such as vacuuming, washing floors, changing bed sheets, cutting the grass, and shoveling snow.
- Take out small amounts of garbage at a time or have someone take out garbage for you.
- Hire help if possible.

## **Having Dental Work**

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Make sure you speak with your surgeon or case manager about using antibiotics before any dental work.

## **Activities and Sports**

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Some activities and sports are harder on the knees than others. Talk to your surgeon about when you can start doing the ones you enjoy. As a guideline, you should walk every day, beginning with short walks taken often. Increase your distance a little at a time and be careful not to overdo it. Be careful not to fall and injure your knee.

You may feel some stiffness in your new knee, especially when doing activities or sports where you have to bend your knee. One of the goals of surgery is to improve your knee's range of movement, and reduce the stiffness. How much knee movement you have often has to do with how much stiffness you had before surgery.

## **Travel**

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Long air and car travel is not recommended until 3 months after your surgery.

When you do start to travel your new knee may set off the metal detectors at the airport. Before you go through the security check, tell the security agent you had a knee replacement and have metal parts in your knee.

## Activity Guidelines

Ask your surgeon about any sports or other activities you want to do. The following are **only guidelines** for what you may do.

### The First 3 Months after Surgery

- Walking
- Phase 1 exercises
- Phase 2 exercises – start when your healthcare team tells you to.

### After 3 Months

- Swimming and other pool exercises: Careful not to do any twisting motions such as a whip kick.
- Low-impact fitness exercises that **don't** involve jumping, twisting, quick starts or stops, or other movements that put sudden force on your knee.
- Walking on a treadmill.
- Activities like: golfing, dancing, or hiking within your limits.
- Cycling: The seat and handlebars should be high enough for comfort.
- Gardening: Use raised beds or long-handled tools for ease and comfort.

### Activities NOT to Do

- Do not lift and push heavy objects (25 lbs. or 11 kg)
- Do not do any activities involving jumping, twisting, quick starts or stops, or other movements that put sudden force on your knee
- Do not do contact sports

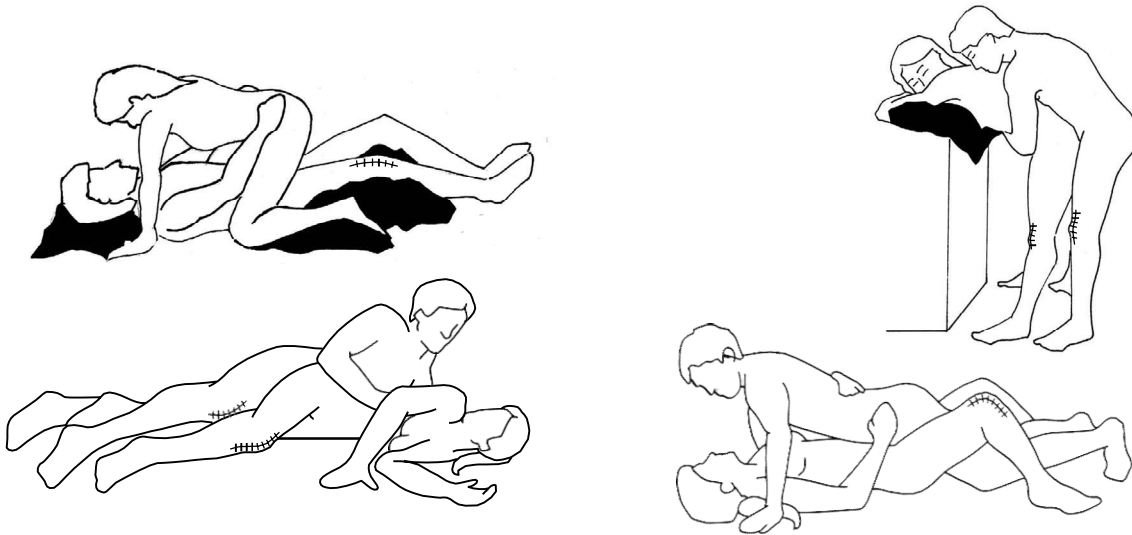
## Safe Sex Positions After Knee Replacement

Many people have questions about intimate relations after a knee replacement. While it's usually safe for your knee joint about 4 to 6 weeks after surgery, you also have to feel ready and be comfortable.

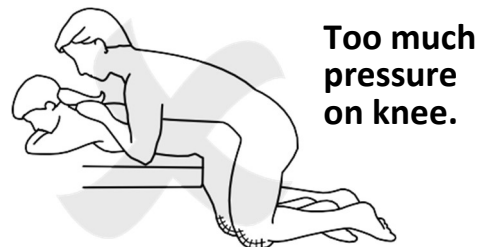
For the first 3 months you have to protect the new joint. These pictures show you the positions that are safe and the ones that aren't safe for your new knee joint.

- Tell your partner what's comfortable or if a position causes pain.
- Make sure you're comfortable before you start. Using pillows may help.
- No sudden movements.
- Make sure your partner doesn't put their full weight on your new knee joint.

### Safe Positions for the Knee Joint



### Positions NOT Safe for the Knee Joint



\*Illustrations from *Returning to Sexual Activity following Joint Replacement Surgery* (Vancouver Coastal Health, 2013) and *Sex after Joint Replacement Surgery* (London Health Sciences Centre, 2013)

## When You Need Medical Help

**Call 911 or have someone take you to the nearest emergency department if you have:**

- **pain in your chest**
- **trouble breathing or are short of breath**

### **Call your case manager if:**

- you have more pain, swelling, and tenderness in your leg (if lying down with your leg raised in a straight position for at least 20 minutes doesn't help)
- you are still taking pain medicine 6 weeks after surgery
- your incision becomes red, hard, hot, and swollen, or is draining
- you have redness or pain in your lower legs, even when resting
- you have a temperature over 38.5 °C or chills
- you have sudden pain, less range of motion in your knee, and difficulty weight-bearing
- you have blood in your stool, urine, or in the fluid you cough up
- you have a nose bleed that won't stop
- you have a lot of bruising that doesn't seem to be going away (bruising is normal above and below the incision for 3 weeks after surgery)

**If you can't reach your case manager or someone else on your healthcare team, call your family doctor or call Health Link at 811.**

### **Call your family doctor if:**

- you have diarrhea that doesn't stop after a few days
- your prescription medicine changes after surgery
- you have any other medical concerns not related to your surgery

**Please make sure you tell your case manager** if you see your family doctor or go to the emergency department about anything related to your knee surgery.

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## Common Questions

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### **How long before I can stop using my walker or crutches?**

You must use your walking aids until your healthcare team says you can stop. Most people need to use walking aids for the first 6 weeks after surgery.

### **Will I need physical therapy once I am home?**

You must keep walking and exercising when you go home. Whether or not you need physical therapy will depend on how well you recover on your own. Your healthcare team will tell you if you need physical therapy after you leave the hospital.

### **Do I need to inform my family doctor and other healthcare providers after surgery?**

Your family doctor will be sent a report about your surgery and your recovery. Be sure to tell your dentist or other healthcare providers that you've had a knee replacement surgery as you may need to take antibiotics before having dental or other medical work done to lower the risk of infection. If you have a concern or problem related to your knee surgery, call your case manager.

### **When can I resume my herbal medication and supplements after surgery?**

Ask your surgeon when you can resume pre-op medications or herbal supplements.

### **When can I drive?**

Most people aren't allowed to drive for 6 weeks after surgery. Your surgeon will tell you when it's safe to drive. To drive safely, your strength and reflexes need to be as good as before your knee surgery. If you're in an accident, your insurance may not cover you if you're not safe to drive.

### **When can I travel?**

You shouldn't travel long distances in the first 3 months after surgery. This is because sitting for too long while travelling increases the risk of blood clots. Speak with your case manager or surgeon about planned or unexpected travel you do in the 3 months after surgery.

### **When can I go back to work?**

When you can go back to work depends on how well and how quickly you heal after surgery and the kind of work you do. Your surgeon will tell you when you can go back to work.

### **I have a click in my operated knee. Should I be worried about it?**

Do not worry about the click unless it hurts. Clicking is quite common and usually lessens or goes away over time.

### **The outside of my knee is numb. Is this normal?**

It is normal to have numbness at first. It should lessen or go away over time.

## **Phase 2 Exercises to Improve Your Recovery After Surgery**

**Start these exercises after you have seen your surgeon or physiotherapist.**

Exercise is important after surgery to make your new knee stronger and more flexible and to help prevent blood clots. The exercises may feel uncomfortable at first, but exercising will help you to get back to your normal everyday activities sooner.

Your healthcare team may suggest you add some or all of the exercises below to the ones you were doing before surgery. Remember to slowly increase the number of times you exercise each day, how often you repeat each exercise, and the amount of pressure you can put on your new knee.

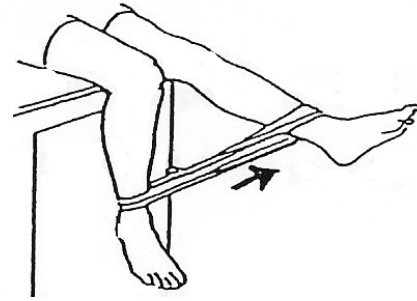
Your team will tell you how often to do the exercises, how many times to repeat each one, and how much force or pressure you can put on your new knee.

Do the exercises on **both legs** to make them equally strong and flexible. Do them slowly and with control. Make sure **not to force your new knee** into a position that causes you pain or discomfort.

### **Exercise #1: Knee straightening with band**

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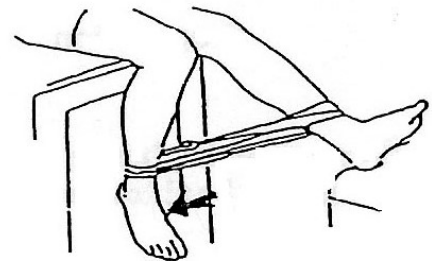
1. Sit in a steady chair and put the elastic loop around both ankles.
2. Lifting one foot, straighten your leg while keeping the other foot on the floor as you stretch the elastic loop.
3. Slowly lower your foot back to the starting position.
4. Repeat at least 5 times.



### **Exercise #2: Knee bending with band**

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1. Sitting in a steady chair, put the elastic around both ankles.
2. Put one foot on a stool and pull the opposite foot back under the chair, stretching the elastic. Keep the other foot steady as you stretch the elastic.
3. Slowly return to the starting position.
4. Repeat at least 5 times.

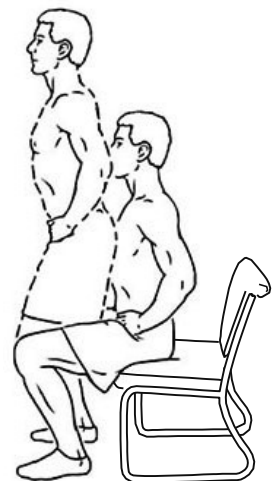


### **Exercise #3: Sit to stand**

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Use a chair with armrests if you need to use your arms at first while you build up strength in your legs. Use a pillow to raise the seat level if it is too low.

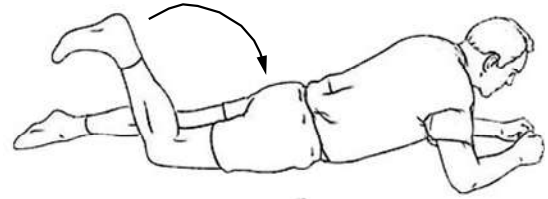
1. Sit on the front edge of a steady chair with your knees shoulder width apart.
2. Make sure your knees are lined up with your feet.
3. Slowly raise and lower yourself from the chair without using your arms.
4. Put equal pressure on your legs. Don't lean forward at the waist.
5. Repeat at least 5 times.



### **Exercise #4: Lying on stomach knee bend**

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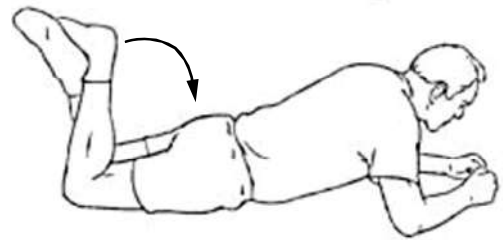
1. Lie on your stomach, with your legs straight.
2. Bend one leg, lifting the heel toward your buttocks.
3. Slowly lower your leg to the starting position.
4. Repeat at least 5 times.



### **Exercise #5: Lying on stomach knee stretch**

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1. Lie on your stomach and bend both legs up toward your buttocks.
2. Cross one leg behind the other at the ankle.
3. Use the heel on the outside leg to **gently push** the inside leg toward your buttocks.
4. Hold for a count of 15.
5. Release and repeat at least 5 times.



### **Exercise #6: Sitting knee stretch**

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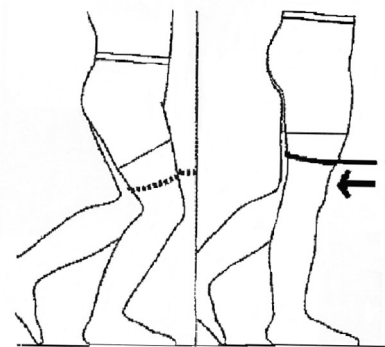
1. Sit with one leg bent and loop a towel around the ankle.
2. Using the towel, gently pull the heel toward your buttocks.
3. Hold for a count of 15.
4. Release and repeat at least 5 times.



### **Exercise #7: Straightening knee with band**

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1. Place one end of an elastic loop around a secure object and the other end around one thigh, keeping the knee bent slightly.
2. Hold onto a table or other steady object.
3. Slowly straighten the leg to stretch the elastic loop, keeping your heel on the floor.
4. Return slowly to the starting position.
5. Repeat at least 5 times.

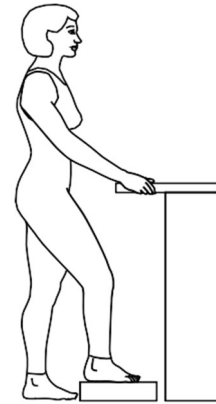




### **Exercise #8: Step up, step down**

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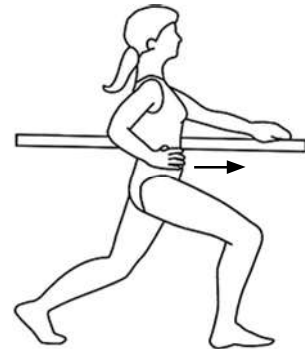
1. Place a solid object 5 to 10 cm (2 to 4 inches) thick on the floor to use as a step.
2. Hold onto a table or counter for balance, and step forward and up onto the object.
3. Slowly step back down.
4. Repeat.



### **Exercise #9: Split squat lunge**

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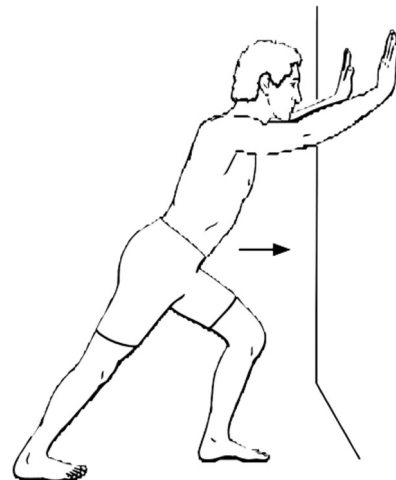
1. Hold onto a table or counter for balance and move one leg forward.
2. Bend the forward leg and lean your upper body over the bent knee.
3. Hold for a count of 3 to 5.
4. Slowly relax and return to a standing position.
5. Repeat.



### **Exercise #10: Calf stretch**

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1. Stand facing a wall and place your hands on the wall.
2. Move one leg forward and bend it while keeping the other leg straight.
3. Slowly lean your hips toward the wall, until you feel a stretch in the back of the straight leg.
4. Hold for a count of 3 to 5.
5. Slowly relax the stretch.
6. Repeat.



## Questions for My Healthcare Team

Question	Answer

## Appointments and Other Information

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## Website Resources

- Alberta Bone and Joint Health Institute: [albertaboneandjoint.com](http://albertaboneandjoint.com)
- Arthritis Society: [arthritis.ca](http://arthritis.ca)
- Canadian Orthopaedic Foundation: <http://whenithurtstomove.org/>
- MyHealth.Alberta.ca

For 24/7 nurse advice or general health information, call **Health Link** at **811**.

## Expectations and Responsibilities of the Healthcare Workforce, Patients, and Families

Alberta Health Services is committed to providing a respectful environment in which everyone is committed to safe, quality care. We believe that when we work together and live our values, we honour our rights and responsibilities.

<b>Anyone who works for or volunteers for AHS is responsible for...</b>	<b>Everyone has the right to...</b>	<b>If you're a patient or family member, you're responsible for...</b>
<ul style="list-style-type: none"> <li>• treating others with respect and dignity</li> <li>• being respectful and understanding</li> <li>• being prepared to hear, listen, and understand</li> </ul>	<ul style="list-style-type: none"> <li>• <b>be treated with respect.</b></li> <li>• <b>be listened to and heard.</b></li> </ul>	<ul style="list-style-type: none"> <li>• treating others with respect and dignity</li> <li>• recognizing that other patients may also need help</li> </ul>
<ul style="list-style-type: none"> <li>• using a calm tone of voice and non-threatening body language</li> <li>• reporting unsafe or potentially unsafe conditions</li> <li>• educating patients and families about their role in safety</li> </ul>	<ul style="list-style-type: none"> <li>• <b>a safe physical, emotional, and psychological environment.</b></li> </ul>	<ul style="list-style-type: none"> <li>• using a calm voice and non-threatening body language</li> <li>• reporting unsafe or possibly unsafe conditions</li> <li>• understanding your role in your safety and how you contribute to ensuring a safe environment</li> </ul>
<ul style="list-style-type: none"> <li>• giving information in simple language, and including patients and families in developing and following the care plan</li> <li>• communicating with your team—which includes the patient and family—by giving feedback and talking about concerns</li> <li>• knowing and respecting each healthcare team member's role and scope of practice</li> </ul>	<ul style="list-style-type: none"> <li>• <b>be part of a healthcare team (patients, families, and healthcare workforce).</b></li> </ul>	<ul style="list-style-type: none"> <li>• understanding your healthcare needs</li> <li>• letting your healthcare team know when you don't understand, asking questions, and talking about concerns</li> <li>• understanding your role in your care plan</li> </ul>
<ul style="list-style-type: none"> <li>• sharing information relevant to patient care</li> <li>• giving timely responses to questions and concerns</li> <li>• maintaining confidentiality</li> </ul>	<ul style="list-style-type: none"> <li>• <b>information to give or receive care.</b></li> <li>• <b>confidentiality.</b></li> </ul>	<ul style="list-style-type: none"> <li>• giving relevant information to your healthcare team</li> <li>• maintaining patient confidentiality</li> </ul>

