Before, During and After
Hip and Knee Replacement Surgery
A PATIENT’S GUIDE
Acknowledgments

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- Canadian Orthopedic Foundation

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Contents

Hip & Knee Surgery
  • Hip Joint ............................................. 7
  • Hip Disease ........................................ 7
  • Total Hip Replacement Surgery .......... 8
  • Hip Revision (Repeat) ......................... 8
  • Knee Anatomy .................................... 9
  • Knee Disease ..................................... 9
  • Total Knee Replacement ...................... 10
  • Double (Bilateral) Knee Replacement .... 10
  • Partial Knee Replacement ..................... 10
  • Knee Revision (Repeat) ....................... 10

Joint Precautions
  • Hip Precautions .................................. 13
  • Knee Precautions ............................... 13
  • Things You Can Do ............................ 15
  • Set Up Your Home ............................. 16
  • Set up your Bathroom ........................ 17
  • Set Up Your Seating ........................... 18
  • Equipment List ................................. 19
  • Where to Get Equipment ..................... 20

Preparing for Surgery
  • Exercise .......................................... 23
  • Nutrition and Weight Management .... 24
  • Education Before Surgery ................. 26
  • Staying Healthy .................................. 26
  • Pre-Admission Clinic Appointment ... 27
  • Day Before Surgery: A Final Checklist 28
  • Morning of Surgery ............................ 29
  • At the hospital .................................. 30
    - continued on next page
After Surgery

• In the Recovery Room.......................... 32
• In the Surgical Unit............................. 33
• Length of Hospital Stay....................... 34
• Mobility ............................................ 35
• Controlling Pain................................ 36
• Preventing Blood Clots....................... 37
• Going Home..................................... 37

Recovery at Home

• Controlling Pain................................. 41
• Physiotherapy .................................... 44
• Transportation ................................... 45
• Everyday Activities ............................ 47
• Dental Work and Medical Procedures 51
• Returning to Work .............................. 51
• Possible Problems .............................. 52

Resources ........................................... 60
In this section, you will learn about:

- Hip Joint
- Hip Disease
- Total Hip Replacement Surgery
- Hip Revision (Repeat)
- Knee Joint
- Knee Disease
- Total Knee Replacement
- Double (Bilateral) Knee Replacement
- Partial Knee Replacement
- Knee Revision (Repeat)
Hip and Knee Joint

Normal Hip Joint

The hip joint is a ball and socket joint – that’s why you can move your hip in many directions. The ball is the round head of the thigh bone (femur). It moves in the socket of your pelvis (acetabulum). Muscles and ligaments support and strengthen the joint.

Hip Disease

The most common reason for joint replacement surgery is OSTEOSTRHTIS. It happens when the cartilage on the end of the bones wears down over time. It usually appears in joints that carry your body weight, such as hips and knees. Osteoarthritis can cause joint pain and stiffness. When the damage to the joint is severe, the joint can be replaced.

Other health conditions can also damage the joint and need a joint replacement. Examples: rheumatoid arthritis, bone infection, or a reduced blood flow to the bone.

Talk to your doctor or nurse practitioner if you have questions about your joint health.
Total Hip Replacement

In this surgery, the surgeon replaces the diseased joint with an artificial joint (prosthesis).

- First, the surgeon cuts down through the skin (the incision) and moves the muscles and ligaments away from the hip joint.
- The damaged end of the thigh bone is replaced with an artificial ball and stem.
- The pelvic socket is smoothed and lined with an artificial or prosthetic cup.
- The ball is fitted into the cup and the joint is put back together.
- Once the new joint is in place, the muscles and ligaments are repaired.
- Your skin is closed with sutures or staples.

This surgery takes about 2 hours.

Today, many people who have a hip replacement can move their joint more easily, have less pain, and are able to walk more comfortably for up to 25 years after surgery.

Hip Revision (Repeat)

Some people who have had a hip replacement need another surgery because:

- the joint has dislocated
- the joint is loose or worn out
- there has been bone loss or an infection in the joint

These surgeries can be more complex and you might need more rehabilitation afterwards. Compared to your first surgery, you might not be able to put as much weight on your new joint while you recover.
Knee Anatomy

The knee joint is where the thigh bone (femur) meets the shin bone (tibia). The knee is a hinge joint that allows you to bend and straighten your leg.

Knee Disease

The most common reason for joint replacement surgery is OSTEOPHATRITIS. It happens when the cartilage on the end of the bones wears down over time. It usually appears in the joints that carry your body weight, such as hips and knees. Osteoarthritis can cause joint pain and stiffness. When the damage to the joint is severe, the joint can be replaced.

Other health conditions can also damage the joint and need a joint replacement. Examples: rheumatoid arthritis or an injury to the joint.

Talk to your doctor or nurse practitioner if you have questions about your joint health.

Total Knee Replacement

In total knee replacement surgery, the surgeon replaces the diseased joint with an artificial joint (prosthesis).

• First, the surgeon cuts down through the skin (the incision) and moves the muscles and ligaments away from the knee joint.

• The damaged bones are shaped to fit the artificial joint.

• The ends of the thigh bone (femur) and shin bone (tibia) are covered with metal shells (prosthetics), separated by a plastic liner. If the kneecap (patella) is damaged, it might be lined with a plastic disc.

• Once the new joint is in place, the muscles and ligaments are repaired.

• Your skin is closed with sutures or staples.

This surgery takes about 2 hours.

Today, many people who have a knee replacement can move their joint better, have less pain, and are able to walk more comfortably for up to 25 years after surgery.
Double (Bilateral) Knee Replacement

In some cases, a surgeon might decide that both knees need to be replaced at the same time. This depends on a number of things including your overall health, joint damage, and lifestyle. The surgery is the same as a total knee replacement. Your hospital stay could be longer and you might need more rehabilitation after surgery to help you get back to your daily activities.

Partial Knee Replacement

If you only have bone damage on one side of your knee, your surgeon might decide that you are a suitable candidate for partial knee replacement surgery. As with total knee replacement surgery, the surgeon reshapes the damaged parts of the bone to fit the artificial joint (prosthesis). The hospital stay is shorter and the recovery is often quicker compared to a total knee replacement.

Knee Revision (Repeat)

Some people who have had a knee replacement need another surgery because:

- the joint is loose or worn out
- there has been bone loss or an infection in the joint

These surgeries can be more complex and you might need more rehabilitation afterwards. Compared to your first surgery, you might not be able to put as much weight on your new joint while you recover.
In this section, you will learn about:

- Hip Precautions
- Knee Precautions
- Things You Can Do
- Set Up Your Home
- Set up your Bathroom
- Set Up Your Seating
- Equipment List
- Where to Get Equipment
You will need to follow **Joint Precautions for up to 3 months**, as directed by your surgeon.

**Hip Precautions**

These precautions help your hip joint to heal. The precautions also help reduce the chance of your hip accidentally popping out of the socket (dislocating).

*Shaded leg is the operated leg.*

**DO NOT bend your hip past 90 degrees**
A right angle is a 90-degree angle (an ‘L’ shape, as shown above). Lifting your knee or bending forward narrows the angle.

**DO NOT cross your legs at the ankles or knees**

**DO NOT twist your body or legs**

Additional notes for hip precautions:

________________________________________________________________________

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________________________________________________________________________
Knee Precautions

These precautions help your knee joint to heal. The precautions also help keep the new joint from getting stiff.

*Shaded leg is the operated leg.*

**DO NOT** put a pillow behind your knee. Your knee may become stiff if you keep it bent.

**DO NOT** kneel on your new knee joint.

**DO NOT** do deep squats (squatting down to the floor.)

Additional notes for knee precautions:

________________________________________________________________________

________________________________________________________________________

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________________________________________________________________________
Things you CAN DO:

**DO sit on a raised chair or use a cushion.**
It is easier to get on and off higher surfaces after surgery.
Consider using a raised toilet seat.

**DO use long-handled aids to help you get dressed or pick up items.**
Examples: long-handled shoehorn, reacher or grabber

**DO sleep with pillows between your legs (at least for the first 3 months).**
You might need help placing the pillows or you can use an extra-long pillow.
Set Up Your Home

It is important to set up your home before joint surgery. When your home is set-up:

✓ It allows you to easily move around your home with your walker or crutches after surgery.
✓ It lessens the chances of you falling.
✓ It helps you keep to your hip or knee precautions.

• Make sure hallways and rooms are free of clutter and tripping hazards (such as scatter rugs, footstools, etc.).
• Add non-slip surfaces to outside stairs and walkways.
• Install stair railings both inside and outside.
• Set up a firm chair with armrests for yourself. See page 18 for more information on seating heights.
• Arrange for extra help with household tasks if needed (such as vacuuming, laundry).
• Move household items that you use often to counter height (such as pots and pans).
• Stock your freezer/pantry with healthy foods and snacks.
  If needed and available, arrange for private food or meal delivery services.
• Keep an ice pack in your freezer for possible joint swelling after surgery.
  You can use a bag of frozen peas but do not eat the peas.
• Have a thermometer at home to check your temperature if needed.
Set up your Bathroom

- Install a raised toilet seat with armrests to help you get on and off the toilet.
- If your raised toilet seat does not have armrests, install a toilet safety frame.
- If you get up to the bathroom often at night, you might want to get a bedside commode.
- Remove sliding doors from your bathtub and replace with a shower curtain.
- Set up a tub transfer bench (in the bathtub) or a shower chair (in a shower stall). See page 19.
- Use a non-slip bathmat both inside and outside the bathtub or shower.
- Install a hand-held shower hose.
- Install grab bars in the bathtub/shower stall and by the toilet. Removable grab bars are available.

**Never** use towels racks or toilet paper holders to help you to stand or sit – they will pull out of the wall.
Set Up Your Seating

Everything you sit on must be 2 inches (5 cm) above your knee
- Includes chairs, beds, and toilets

For hips, this is to help you keep your hip precautions. For knees, this is because your new knee will not have enough bend to get on and off of low surfaces.
- To raise a chair’s height, use a high-density foam cushion or bed blocks. Plan to take your foam cushion with you to put on chairs when outside the home.
- To raise a bed’s height, either put the frame on bed blocks or add another mattress.
**Equipment List**

*Have all your equipment set up before coming to the hospital.*
Check with your hospital to see if you need to bring your equipment there, or if they have equipment there you can use.

<table>
<thead>
<tr>
<th>Bring to HOSPITAL – unless otherwise told</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2-wheeled walker</td>
</tr>
<tr>
<td>• Crutches</td>
</tr>
<tr>
<td>• High density (firm) foam cushion*</td>
</tr>
<tr>
<td>• at least 4 inches thick, 16 inches wide, 18 inches long</td>
</tr>
<tr>
<td>• needed for going home</td>
</tr>
<tr>
<td>• Dressing equipment*</td>
</tr>
<tr>
<td>(long handled reacher, long handled shoe horn, and sock aid)</td>
</tr>
<tr>
<td>* Must have for hip surgery. Recommended for knee surgery.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment for HOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depending on your home set up, you might need some or all of these items:</td>
</tr>
<tr>
<td>• 4 to 6 inch raised toilet seat with armrests (or with a toilet safety frame) or commode chair</td>
</tr>
<tr>
<td>• A shower chair for a walk-in shower, or tub transfer bench or raised shower board for a bathtub</td>
</tr>
<tr>
<td>• Removable tub clamp or installed grab bars</td>
</tr>
<tr>
<td>• Hand-held shower hose</td>
</tr>
<tr>
<td>• 24-inch long-handled sponge, for washing your feet</td>
</tr>
<tr>
<td>• Non-slip bathmats for inside and outside the bathtub/shower</td>
</tr>
<tr>
<td>• Elastic shoe laces (or use slip on shoes with an closed heel)</td>
</tr>
</tbody>
</table>
Where to Get Equipment

Medical Supply Store
• Equipment for rent and/or purchase
• Might deliver to your home and/or install
• Costs could be covered by extended health plans – check your plan

Government Agencies
• Veterans Affairs Canada (VAC)

Friends/Family
• Check with friends and family who may have equipment you can borrow

Other options
If you do not have a way or the means to get equipment for yourself, your family doctor or other health provider in your area can help you get some equipment from the Red Cross Health Equipment Loan Program (HELP) or from the health authority Medical Equipment Provision Program. You do need a signed equipment request form.
Preparing for Surgery

In this section, you will learn about:

- Exercise
- Nutrition and Weight Management
- Education Before Surgery
- Staying Healthy
- Pre-Admission Clinic Appointment
- Day Before Surgery: A Final Checklist
- Morning of Surgery
- At the hospital
Exercise

Exercising before surgery helps you to:

✓ Make your muscles stronger
✓ Keep your joint moving
✓ Stay active for longer periods of time.

Choose activities that put less stress on your joint.

Try things like:

• exercises in water, such as swimming or water walking
• cycling
• Nordic pole walking
• gentle stretching and strengthening
• balance exercises (helps prevent falls)
• specific exercises suggested by a physiotherapist

Be sure to strengthen your arm muscles as well.

Strong arms will make it easier to use your walking aid, get in and out of bed and get on and off a chair.

If you don’t know which exercises to do, talk to a physiotherapist or call 8-1-1 (HealthLinkBC) to speak to an exercise professional.

REMEMBER

After surgery, exercising every day will be an important part of your recovery for many months.
Nutrition and Weight Management

Maintaining a healthy weight is not only good for your health, it can also make it easier for you to move around as you recover. Talk to a dietitian if you are worried about being overweight or underweight before surgery.

Good nutrition helps you to recover from surgery. It also can help lessen the chance of you getting an infection after surgery. Important nutrients to have in your diet before and after surgery include protein, vitamins, fibre, and water.

Protein
Your body needs extra protein to heal. Try to have a good source of protein at each meal.

Foods that are high in protein include fish, poultry, meat, eggs, beans, lentils, tofu, nuts, seeds, milk, soy milk, cheese, and yogurt.

Vitamins and Minerals
Taking a basic multivitamin each day can help with healing. You don’t need to take a high dose of any one nutrient.

If you have anemia because of low levels of iron, B6, or B12 in your body, talk to your doctor, pharmacist, or dietitian at least 2 to 3 months before your surgery about ways to get more of these in your diet and taking supplements to raise your levels.

Calcium and Vitamin D
Calcium and Vitamin D are important for strong bones. Talk to your doctor, pharmacist, or dietitian about your calcium and Vitamin D needs.

Try to have milk, milk alternatives, or other high calcium foods each day. Aim for about 1200 to 1500mg calcium each day. Try to get more calcium through food and take a calcium supplement as a top-up to food.

Vitamin D helps your body use calcium. Since few foods are sources of Vitamin D, you should take a Vitamin D supplement. If you are over 50 years old, take at least 800IU Vitamin D supplement. Do not take more than 4000IU of Vitamin D each day.
**Fibre and Water**

It’s important to have a regular bowel habit before your surgery. Constipation can be a problem after surgery. To lessen the chances of getting constipated include fibre at every meal, such as vegetables, fresh fruits, dried fruits (especially prunes), beans, lentils, whole grains, bran, and flaxseed. There is no fibre in foods from animals. Drink at least 8 glasses of liquid a day (unless you have been told something different because of a medical condition). Some people find that warm or hot liquids helps to get their bowels moving. Water is a good choice.

For more information on nutrition or specific nutrients:

- HealthLinkBC [Call 8-1-1 to speak to a dietitian](healthlinkbc.ca)
- Canada’s Food Guide [food-guide.canada.ca](food-guide.canada.ca)
- Dietitians of Canada [dietitians.ca](dietitians.ca)
Education Before Surgery

A number of hospitals offer a Pre-Surgery Joint Replacement Class. In the class, you learn more about your surgery, what to expect while you are in hospital, and what you need to prepare at home. Some hospitals give this information during your Pre-Admission Clinic appointment instead.

If your hospital offers classes, they call you to register you. Choose a date well before your surgery date. It is a good idea to bring a family member or support person with you to the class.

Staying Healthy

Do what you can to protect yourself from getting sick before surgery. If you get sick before surgery, call your surgeon. Your surgery might be cancelled if you have:

- an active infection anywhere in your body
- a skin infection over the joint
- a cold or the flu
Pre-Admission Clinic Appointment

The Pre-Admission Clinic calls you to come in for an appointment (a few days to weeks before your surgery). This appointment can last a few hours.

During your appointment, the nurse reviews your general health and the medications you take. You are also given instructions for how to get ready for your surgery (when to stop eating and drinking, how to clean your skin) and what to expect while in the hospital.

We might send you for:
- blood work
- x-rays
- electrocardiogram (ECG)
- breathing test (oximetry)

You might also meet with an anesthesiologist. During surgery, this doctor monitors you and gives you medication to keep you asleep and comfortable (anesthesia). *Bring any questions about your anesthesia to your appointment.*

What to bring to your appointment
- Your BC Services Card/BC Care Card (personal health number)
- Photo Identification (such as a driver’s license)
- The medicines you are currently taking in their original containers. This includes prescription medications, medicines you buy off the shelf in the pharmacy (or over the internet), vitamins, and herbal supplements.
- A support person if you wish (to help you remember what is said).
- An interpreter
  If you don’t speak or understand English well enough for medical conversations, you can either ask us to arrange a medical interpreter for your visit or bring someone with you as your interpreter.
Day Before Surgery: A FINAL Checklist

By now, you should have picked up your medical equipment and set up your home.

Here is a final checklist of things you need to do before coming to the hospital:

- Label all of your equipment with your name if you are bringing these items to the hospital (walker, crutches, dressing equipment).
- Arrange a ride to and from the hospital.
- Arrange for an adult to stay with you or be nearby for 24 to 48 hours after leaving the hospital, if possible.
- Clean your skin as instructed by the Pre-Admission Clinic nurse.
- Pack a small bag with:
  - Toiletry items (toothbrush, toothpaste, hair brush, shaving supplies, etc.)
  - Loose fitting clothes to exercise in and wear home
  - Comfortable, closed toe and heel shoes/slippers with non-slip soles (Your shoes should be roomy since your feet will have some swelling)
  - Eye glasses, eye glass case, and reading materials
  - Hearing aid(s), case, and spare battery(s)

**REMEMBER:** The hospital is a public building. Valuables can go missing. Leave valuables at home.
Morning of Surgery

- Clean your skin as instructed by the Pre-Admission Clinic nurse.
- Remove all jewellery and piercings.
- Dress in clean, loose-fitting clothes.
  
  **Remember** - Do not put any products on your skin (such as deodorant, lotion, make-up, or cologne/perfume).
- Brush your teeth (or dentures), tongue, and roof of your mouth.
- Take your morning medications with a sip of water as instructed from the Pre-Admission Clinic.

What to bring to the hospital

- This booklet
- Your BC Services Card/BC Care Card (personal health number) and Photo Identification (such as a driver’s license)
- Hospital Identification bracelet (if you got one from the laboratory).
- Any medicines that the Pre-Admission Clinic asked you to bring
- If you have diabetes, your diabetes pills or insulin
- If you use a breathing machine (CPAP machine) or dental device, label it and bring it with you.

Ask a family member or friend to bring your overnight bag and labelled equipment to you **after the surgery**, unless instructed differently. If this is not possible, take it with you to the hospital.
At the hospital

- Check in at the hospital, as directed by the Pre-Admission Clinic.
- We prepare you for surgery, including starting an intravenous and giving you some medication.
- You meet your anesthesiologist. Each hospital manages your anesthesia differently. You could have one of these anesthetics:
  
  **Spinal anesthetic** is like the freezing you get at the dentist, except this freezing goes into your back and makes you numb from the chest down and stops you from feeling pain. The anesthesiologist makes sure you are comfortable throughout the surgery, giving you medicine through your intravenous that makes you relaxed and sleepy. You will not be able to move your legs for up to 4 hours after surgery.

  **General anesthetic** is a combination of medications that put you in a very deep sleep and unconscious during the surgery. The anesthesiologist reverses this by stopping the medications at the end of the surgery.

  **Nerve Block** is when medication is injected around a specific nerve or group of nerves to numb a specific part of the body, such as a leg. The area will be numb for up to 12 hours. A nerve block can be used as the main anesthetic, or along with a general or spinal anesthetic.

- When ready, we move you to the operating room.
- Once in the Operating Room, we ask you to remove your glasses, dentures, and finally, your hearing aid(s). These are returned to you after your surgery.
After Surgery

In this section, you will learn about:

- In the Recovery Room
- In the Surgical Unit
- Length of Hospital Stay
- Mobility
- Controlling Pain
- Preventing Blood Clots
- Going Home
In the Recovery Room

We move you from the operating room to the recovery room. Expect the nurses to:

• Check your blood pressure, pulse, and temperature regularly.
• Ask you about your pain and give you pain medicine as needed. **Tell your nurse if you are in pain.**
• Ask you to do some deep breathing.

Some people have compression devices placed on their lower legs. Compression devices gently squeeze your calf muscle to help your blood circulate. This helps prevent blood clots.

Expect to stay in the recovery room for around 1 to 3 hours.

In the Surgical Unit

• You might have an intravenous line (IV) for medicine.
• We ask you regularly about pain and if you feel sick to your stomach (nauseated).
• Your surgeon decides how much weight you can put on your new joint (called weight bearing). This can be different for each person. Most often people are told to weight bear as tolerated.
• When you are allowed to stand, we help you in the beginning to make sure you are safe.
• When you need to go to the bathroom, we help you to walk to the bathroom or use a commode at the side of the bed.

If you have trouble peeing (urinating), we might need to put a catheter in for a short time to help empty your bladder.
• We teach you exercises to help reduce chances of any problems (such as blood clots or pneumonia) after surgery. Examples:
  - deep breathing and coughing every hour to keep your lungs clear
  - pumping your ankles to keep blood flowing in your legs
• After knee surgery, you might have a drain coming from your knee to collect any blood and other fluid from the area.
How long will you stay in the hospital?

Your time in the hospital is short.
We work with you to make sure you can do daily tasks and personal care at home. People are usually ready to go when they can move around safely, their pain is well controlled, their vital signs are within normal range, and the doctor has cleared them to leave.

Before surgery, remember to arrange for someone to pick you up from the hospital when going home.

Note: You might go home sooner than expected. Make sure your travel arrangements are flexible.

**Estimate time in hospital**

- Total Joint Replacement, Hips and Knees: From 8 hours to 2 days
- Partial Knee Replacement: From 8 hours to overnight
- Bilateral (both): Possible longer stay with more rehabilitation
- Joint Revision: Can vary
Mobility

- **Physical activity is a very important part of your recovery.** Not only does it help to improve the function of your joint, but it also helps clear your lungs, reduces the risk of blood clots in your legs, reduces pain, and starts your bowels moving.

- The physiotherapist works with you during your stay and teaches you how to:
  - walk with a walker and/or crutches
  - do your daily exercises
  - use the stairs safely

- If you have any concerns about how you will manage every day activities, you might also see the occupational therapist.
Controlling Pain

Expect to have some pain or discomfort after surgery which should ease day by day.

To help manage your pain:
- Take your pain medicines when offered.
- Move around, change your position often, and do your exercises.
- Breathe slowly in to the count of 3 then slowly breathe out to the count of 3.
  Repeat this 3 times. This helps you to relax.

*Be sure to tell your nurse if you are having pain.*
*Do not wait until the pain is bad.*

We ask you often about your pain level. To help us know how much pain you are having, we use a pain scale like this one here. These faces show how much something can hurt (not what your face looks like when in pain). From left to right, the faces show more and more pain. You can point to the face that shows how much you hurt, or tell how much you hurt using words or a number from 0 to 10.¹

If it is easier, you can also describe your pain as ‘small’, ‘medium’, or ‘large’.

A combination of medicines will be used to control your pain after surgery. This can include acetaminophen (Tylenol), an anti-inflammatory (i.e. NSAID) and/or narcotic (i.e. hydromorphone). The stronger medication might be in a pill or given to you through an intravenous. We need you to have enough pain medicine so that you can rest, walk, sit in a chair, do your exercises, and get up to the bathroom.

Preventing Blood Clots

After surgery, blood clots are possible (see ‘Possible Problems’, page 52). Many people are given a medicine after surgery to keep clots from forming.

- The medicine could be either:
  - a pill you take 1 or 2 times a day for up to 6 weeks, or
  - an injection you give yourself 1 time each day for up to 5 weeks
- Your surgeon decides which medicine is right for you. We explain how to take the medicine before you leave the hospital.
- Fill your prescription at a pharmacy near the hospital, in case your local pharmacy does not carry the medicine.
- It is important to take the medicine exactly as prescribed.

Getting Ready to Go Home

Most people go from the hospital to home, not a rehabilitation facility. Before leaving the hospital, make sure you either have appointments or a plan to make appointments with the following people:

<table>
<thead>
<tr>
<th>Medical Appointments</th>
<th>Usual time period</th>
</tr>
</thead>
<tbody>
<tr>
<td>The person who will remove your staples (your family doctor, nurse practitioner or physiotherapist)</td>
<td>7 to 14 days after surgery</td>
</tr>
<tr>
<td>Your surgeon</td>
<td>Around 6 weeks after surgery</td>
</tr>
<tr>
<td>Your physiotherapist (if recommended by your surgeon)</td>
<td>Within 2 weeks of going home</td>
</tr>
<tr>
<td>Your family doctor or nurse practitioner to review your general health</td>
<td>3 to 6 months</td>
</tr>
</tbody>
</table>
Recovery at Home

In this section, you will learn about:

- Controlling Pain
- Physiotherapy
- Transportation
- Everyday Activities
- Dental Work and Medical Procedures
- Returning to Work
Controlling Pain

Most people have less and less pain over the next 6 to 12 weeks. If pain is preventing you from caring for yourself, sleeping and/or exercising, talk to your physiotherapist or doctor.

Ways to manage your pain:

• **Take pain medicine** as directed. It is normal to have more pain or discomfort during and after exercises, activity, or physiotherapy sessions. For the first few weeks, try taking your pain medicine 1 or 2 hours before you do your exercises or before your physiotherapy appointment. It is better to take medicine before the pain is severe.

• **Ice** can reduce pain and swelling. It is particularly useful for people who have had knee replacement surgery. Place an ice pack wrapped in a towel on your joint as directed by your physiotherapist.

• **Pace yourself.** Do not push yourself. Regular rest is an important part of your healing process.

• **Relax.** Use relaxation techniques such as breathing exercises or progressive muscle relaxation (where you tighten and relax each part of your body, starting with the toes and working up to your neck).

• **Distract yourself** - listen to music, visit with friends, watch TV.

• **Think positively.** You will become more and more comfortable as you recover from your surgery.
About pain medicines

**Non-prescription pain medicines** (also called ‘over-the-counter’ medicines) – You buy them at the pharmacy without a prescription. You might only need to take this type of medicine if you don’t have much pain after surgery.

Examples of non-prescription medicines (and brand names):
- acetaminophen (Tylenol®
- acetylsalicylic acid or ASA (Aspirin®
- non-steroidal anti-inflammatory drugs (NSAIDs)
  Examples: ibuprofen (Advil®, Motrin®)*
  naproxen (Naprosyn, Aleve®)*

*Note: Take only 1 type of NSAID at a time.
Do not take other medicines that also have an NSAID with it.

**NSAIDs are not for everyone after surgery.** If you have (or have had) health problems such as stomach ulcers, kidney disease, or a heart condition, check with your surgeon or family practitioner before using NSAIDs.

If your surgery was done because of broken bones:
- **Do not take** ibuprofen (Advil®, Motrin®) or naproxen (Naprosyn, Aleve®) for 6 weeks after surgery.
- Only take acetylsalicylic acid or ASA (Aspirin®) if approved by your doctor or surgeon.

**Opioid (narcotic) pain medicines** – You might get a small number of pills for severe pain.
They are only meant to be taken for a short time. Take only as much as you need to allow you to do daily activities.

Examples of opioid pain medicines:
- Tramacet® (tramadol and acetaminophen)*
- Tylenol #3® (codeine and acetaminophen)*
- Oxycocet®/Percocet® (oxycodone and acetaminophen)*
- tramadol, hydromorphone, morphine, oxycodone

*Note: These medications also have 300 to 325mg acetaminophen in each tablet.
All total, **do not** take more than 4000mg of acetaminophen in 24 hours (too much can harm your liver).

When taking non-prescription pain medicines as well, most people need to take a lower amount of the opioid or take the opioid less often.
Safe use of opioid pain medicines

If you are using any medicines with opioids (narcotics) in them, we want you to do so safely. However, serious problems can happen. Take note of the following safety information.

Before taking opioids:

• Tell your surgeon if you have sleep apnea. Opioids can make your sleep apnea worse.

Safely taking opioids:

• Your pain should lessen over the first week. You should not need to take opioid pain medicine for more than 1 week after hip surgery and 2 to 3 weeks after knee surgery.
• Always use the least amount possible for the shortest amount of time.
• Common side effects include constipation, feeling sick to your stomach (nausea), a dry mouth, sweating, dizziness, and feeling drowsy.
• Do not crush, cut, break, chew, or dissolve opioids before taking. Doing this could cause serious harm, even death.
• While taking opioid pain medicines: Do not drive or drink alcohol. Do not take any sleeping pills unless your doctor has said you can.

Safely storing opioids:

• Store opioid medicines in a secure place.
• Keep out of sight and out of reach of children, teens, and pets.
• Never share your opioid medicine with anyone else.

Safely disposing of unused opioids:

• Take any unused opioid medicines back to your pharmacy to be safely disposed. Do not keep unused medicines at home.
Physiotherapy

The hospital physiotherapist explains how and where to arrange physiotherapy in your community. Depending on your needs, where you live and local services, your appointment could be at a private physiotherapy clinic, outpatient services in a hospital, rehabilitation facility, or in your home through a home health program.

In physiotherapy sessions, you learn to do exercises that stretch and strengthen your legs and improve your walking and balance. As you recover, the exercises get harder.

People who do their exercises regularly for at least 1 year have a greater overall recovery and enjoy a better quality of life.

Talk to your physiotherapist if you have questions about your exercises or concerns about your progress.
Transportation

Getting in and out of cars

It can be challenging to protect your joint getting into some cars, particularly after hip surgery. Talk to a physiotherapist or occupational therapist if you have questions about car travel.

1. Ask for the car to be parked a short way away from the curb so you can enter from a level surface.

2. Make sure the passenger seat as far back as possible, with the seat reclined.

3. Stand facing away from the car, making sure you can feel the seat behind both knees.

4. Place one hand on the upper back of the seat. Place the other hand on the dashboard. Never use the car door for support.

5. Straighten your operated leg in front of you.

6. Slowly lower yourself onto the seat.

7. Once seated, slide back until you can lift your legs into the car.
   If you have had hip surgery, do not bend more than 90 degrees.
   If you are not ready to lift your operated leg by yourself, ask for help.

You can try a device called a ‘handybar’ to help you get in and out of vehicles. This can be purchased at medical supply stores.

*Shaded leg is the operated leg*
Driving

You are not allowed to drive after knee or hip surgery. There are a number of things that can impact your ability to safely drive. These include limited movement of your leg, using mobility aids, and taking prescription pain medicines.

Most people return to driving within 6 to 12 weeks after surgery. Talk to your doctor or physiotherapist if you are not sure if you should be driving.

There are different ways to get around after surgery.

Here are some options:

• Friends/family
• Taxi
• Temporary disabled parking pass (SPARC)*
• HandyDART* (if available in your community) transit service for those who cannot use the regular bus service. HandyDART picks you up and drops you off at appointments such as doctor or physiotherapy appointments.
• Travel Assistance Program (TAP)* – helps with costs for out-of-town medical travel
*Talk to your healthcare provider about completing the forms for these services before surgery (see ‘Resources’, page 61).

Travel by air

You might have some extra challenges travelling by air. Be sure to give yourself extra time when flying. Your new joint might set off metal detectors at the airport.

If you are flying within 3 months of having hip surgery, bring your high-density foam cushion to raise the height of your seat. During the flight, do foot pumping exercises every hour to help reduce the chances of blood clots.

If you need to fly home after your surgery, check with your air carrier to see if you need any special medical documents.
Everyday Activities

Walking
Expect to use a walking aid (such as a walker, crutches, or cane) for up to 3 months after surgery. Around 4 to 6 weeks after your surgery, you should be able to walk longer distances with more confidence.

Stairs
You will practice the stairs before leaving the hospital with the help of the physiotherapist.

Always use your crutches and a handrail (if available) on the stairs.

Going UP the stairs:
• Step UP with your good (non-operated) leg first.
• Follow with your operated leg and crutch, one stair at a time.

Going DOWN the stairs:
• Place your crutch on the step below.
• Step DOWN with your operated leg first.
• Follow with your good (non-operated) leg, one stair at a time.

Shaded leg is the operated leg
Getting into bed
• Sit at the side of the bed.
• Slide back across the bed using your arms for support.
• Lift your operated leg into bed or use a ‘leg lifter’ if needed. (This could be the belt from your housecoat, or a crutch turned upside down, placed under your foot so you lift the leg using your arms.)

Getting out of bed
• Slide your body to the edge of the bed.
• Use your arms to push yourself to a sitting position. (If you have had hip surgery, remember your hip precautions!)
• Slide your operated leg off the bed.
• Bring your body to a sitting position at the bedside.

Sitting down
• Use a firm chair with arm rests.
• Back up to the chair until you feel the edge behind your knees.
• Move your operated leg forward and reach back for the arm rests.
• Slowly lower yourself into the chair.

Getting dressed
• Sit on a raised chair or bed.
• Dress your operated leg first, and undress it last.
• Use aids to help protect your new joint, such as a long-handled reacher, sock aid, and shoehorn to:
  › reach the foot of your operated leg
  › put on underwear, socks, pants, shoes
Bathing/Showering

- Use a hand-held shower hose. It allows you to bathe more easily.
- Use long-handled aids to clean your feet and other hard-to-reach places.
- Sit while bathing/showering.
  - Use a tub transfer bench in the bathtub.
    You will not be able to step over the edge.
    Do not try to sit on the bottom of the tub.
  - Use a shower chair in a shower stall.
- Your transfer bench or shower chair should be 2 inches above your standing knee height.
- To get into the bathtub using the transfer bench:
  - Sit down as you would in a chair (see page 48).
  - Slide back as far as you can on the seat.
  - Lift your legs over the edge of the tub.
  - If you have had hip surgery, remember your hip precautions.
- To get into the shower using the shower chair:
  - Walk into the shower using your walking aid.
  - Sit down as you would in a chair (see page 48).
  - Place your walking aid outside the shower.
Caring for your incision

You will have a cut (incision) at the site of your surgery. We teach you how to care for your incision at home.

It is normal to have some redness and clear drainage from your incision for the first 3 to 5 days. This will slowly stop and the incision should stay dry. As you care for your incision, look for signs of infection (see page 54).

Your incision might be held together with stitches (sutures), staples, and/or white skin tapes (called steri-strips).

- Sutures Removed 7 to 14 days after surgery by your family doctor or other healthcare provider
- Staples
- Steri-strips Leave in place – will fall off on their own

Keep the bandage covering your incision dry. You might have a waterproof bandage over your incision.

- If you have a waterproof bandage, you can shower.
- If the bandage is not waterproof, take sponge baths until the bandage and staples are removed.
Having sex after joint replacement

- You can return to sexual activity when you feel ready and comfortable.
- Remember to maintain joint precautions during sexual activity for up to 3 months, or as instructed by your surgeon.
- Think about how you will maintain your joint precautions:
  - For the hip - no twisting, crossing, or bending more than 90 degrees
  - For the knee – no kneeling, squatting or twisting
- You and your partner might need to plan ahead and consider trying some new positions.
- If you have questions or concerns about how to protect your new joint during sexual activity, talk to your occupational therapist, physiotherapist, or surgeon.
- To look at different sexual positions, ask for a copy of ‘Returning to Sexual Activity following Joint Replacement Surgery’ or go online to vch.eduhealth.ca and search ‘GA.130.S491’

Having dental work and medical procedures

Tell healthcare professionals that you have had joint replacement surgery before having dental work or medical procedures (including procedures with the bladder, prostate, lung or colon). You might need to take antibiotics to prevent any infection from moving through your bloodstream to your new joint. Talk to your dentist or doctor about what is right for you.

Returning to Work

Give yourself time to recover from surgery. Take time to focus on your rehabilitation before returning to work.

Some people return to some form of work soon after surgery but other people need a longer time to heal and recover. It depends on factors such as your health before and after surgery, and the type of work you do. Talk to a healthcare professional, such as your doctor or an occupational therapist, about what is right for you.
Possible Problems

After surgery, a few people have problems (or complications) and need more medical treatment.

Possible problems/complications:
- swelling
- short-term confusion
- constipation
- trouble urinating
- infection
- blood clot
- low blood count (anemia)
- joint loosening
- hip joint dislocation

Swelling

It is normal to have some swelling in your operated leg. You might notice more swelling as you become more active. To help reduce swelling:
- Point and flex your feet every hour while you are awake.
- When resting, lie down with your legs raised on pillows.
- Take short walks. Take your time. Walk a few steps. Rest. Repeat.
- Place an ice pack wrapped in a towel on your joint. Try to ice for 10-15 minutes, at least 3 times/day. To learn more about how best to use ice, talk to your physiotherapist.
- For some people with a knee replacement, you might be asked to use a cryotherapy machine. This is a type of ice pack and compression device.
Short-term confusion

A small number of people can become confused after surgery. We call this ‘delirium’. It can happen quite quickly. The person might have trouble thinking clearly or trouble understanding the world around them. It is temporary and often gets better in a few days.

This short-term confusion can be caused by medications, lack of sleep, pain, other medical conditions, or withdrawing from a substance such as alcohol, drugs, or nicotine. If you use a substance each day, we encourage you to try and cut back on how much you use. Make sure you tell your surgeon that you use a substance so that we can take actions to limit the effects of withdrawing.

Constipation

You can get constipated because you are less active, eating less fibre, or taking opioid pain medication.

To prevent constipation:

• Drink at least 1½ to 2 litres (6 to 8 cups) of liquid each day (unless you have been told differently because of a medical condition). Drink liquids throughout the day. Water is a good choice.
• Eat a high fibre food at each meal. Examples of high fibre foods: bran, prunes, beans, lentils, vegetables, and fruit.
• Move around as much as you can – do your exercises!

If you continue to be constipated, talk with a pharmacist or family doctor about taking a laxative. Constipation can be serious so do not ignore it.

If you have questions or want advice on how to keep from getting constipated, call HealthLinkBC at 8-1-1 and ask to speak to a dietitian.
Trouble urinating

A few people have trouble urinating (going pee) after a joint replacement.
Tell your nurse if you have problems urinating while in hospital.

Infection

Rarely (less than 1% of the time), an infection can get into the new joint. People who get a joint infection need antibiotics and, on rare occasions, further surgery.

**Call your surgeon or family doctor if you notice any signs of infection.**

**Infection of the surgery site (incision)**

Always wash your hands before and after touching around your incision. Keep your incision clean and dry. Do not pick at your stitches or the incision.

Signs of incision infection:

- More redness, pain, or swelling around your incision, and the redness is spreading
- pus (yellow/green fluid) coming from the incision area
- a fever over 38°C (101°F)
Urinary Tract Infection

The urinary tract includes the kidneys, ureters (the tubes that connect the kidneys to the bladder), bladder, and urethra (urine leaves the body through this tube).

Some people have a urinary catheter (a tube into their bladder) to drain urine (pee) for a short time after surgery. They are more likely to get a urinary tract infection.

Signs of a urinary tract infection:
• burning or pain when you urinate (go pee)
• urinating often or feel the urgent need to urinate
• urine smells bad
• blood in your urine
• a fever over 38°C (101°F)

Sore Throat and/or Lung Infection

Wash your hands often. Cover your mouth and nose when coughing or sneezing. Ask others to do the same. Do your deep breathing and coughing exercises.

Signs of a throat or chest infection:
• swollen neck glands
• pain when you swallow
• frequent cough
• coughing up yellow or green mucous
• shortness of breath, especially when doing activities
• a fever over 38°C (101°F)
**Blood Clots**

A small number of people can get blood clots after surgery. Blood clots usually form in the deep veins in the legs. People who have problems with their circulation and/or do not move around much are more likely to get a blood clot.

To reduce the chances of a blood clot:

- Take the blood thinner medicine as directed by your surgeon.
- Walk short distances at least 1 time each hour while awake.
- When sitting or lying down, pump your ankles and flex your leg muscles.

**Call your family doctor or surgeon right away if you notice any of the following:**

- pain, aching, heat, or redness in your calf or lower leg
- increasing swelling of your operated leg

**Call 9-1-1 right away if you have any of the following:**

- trouble breathing or very short of breath
- sudden chest pain

**Anemia (low blood count)**

If you have signs of anemia, see your family doctor. You might need an iron supplement.

Signs of anemia:

- feeling dizzy or faint
- feeling very tired all the time
- short of breath, especially when doing activities
- fast heart beat
Joint Loosening

Over many years, the bond between the joint replacement and your bone could loosen. To reduce the chances of this happening, try not to do activities that impact the joint such as running and contact sports.

If you notice increased pain or find it harder to move in your artificial joint, talk to your family doctor as soon as possible.

Hip Joint Dislocation

Call 9-1-1 if your operated leg:
• is suddenly extremely painful,
• shorter than your other leg, and
• the operated hip cannot be moved

We hope you found the information in this booklet useful.
We wish you a speedy recovery and many happy years with your new joint.
Do you still have questions about joint replacement surgery? Want to talk to someone who has gone through the surgery? If so, Ortho Connect is for you!

It is a program through the Canadian Orthopedic Foundation that will connect you with a volunteer who has gone through a similar surgical treatment. You will be able to ask the volunteer questions about what to expect through this experience and get useful tips on how to cope.

More information is available at: whenithurtstomove.org

Click on the Ortho Connect icon to talk to someone who has been there
Arthritis & Surgery Information
OASIS Program; Osteoarthritis Service Integration System
Vancouver Coastal Health
oasis.vch.ca
Vancouver: 604-875-4544
Richmond: 604-244-5377
Coastal: 604-904-6177

The Arthritis Society
arthritis.ca
Email: info@arthritis.ca
Arthritis Answers Line: 1-800-321-1433

Canadian Orthopedic Association
coa-aco.org

Canadian Orthopedic Foundation and Ortho Connect
whenithurtstomove.org

Surgical or Orthopedic Information
American Academy of Orthopaedic Surgeons
orthoinfo.aaos.org

Managing Pain
Pain BC
painbc.ca
People in Pain Network
pipain.com

Home Safety
Home Safety Renovations (low income seniors)
cmhc-schl.gc.ca
1-800-639-3938

Health Professionals
HealthLinkBC
8-1-1
healthlinkbc.ca
Non-emergency health information provided by a nurse, pharmacist or dietitian.

Dietitians of Canada
dietitians.ca

Physiotherapy Association of British Columbia (PABC) – to find a physiotherapist in your area
bcphysio.org

Equipment
Veterans Affairs Canada
www.veterans.gc.ca
1-866-522-2122

Red Cross
redcross.ca/in-your-community/british-columbia-and-yukon
1-800-565-8000
or check local listings for phone number

Transportation
HandyDART
translink.ca/Rider-Guide/Accessible-Transit/HandyDART.aspx
Provided by local bus services throughout BC (check your local listings for phone numbers)
In Lower Mainland: 604-575-6600

SPARC – disabled parking pass
sparc.bc.ca
604-718-7744

TAP (Travel Assistance Program)
health.gov.bc.ca/tapbc
1-800-661-2668
When to get medical help

CALL 9-1-1 if you notice:
• Sudden, severe pain in your operated leg
• Not able to move your operated leg
• The operated leg is suddenly shorter
• Feel short of breath and it this new for you
• Chest pain that does not go away

CALL your surgeon or family doctor if you notice:
• More redness, swelling around the incision
• Pus (yellow or green fluid) draining from the incision
• Fever over 38°C (101°F)
• Extreme tiredness (fatigue)
• Dizziness
• Redness, tenderness, or pain in your calf or lower leg

This information does not replace the advice given to you by your healthcare provider.

For more copies:
• Vancouver Coastal Health/Providence Health Care
  Catalogue # FB.130.B393 - order at vch.eduhealth.ca or email phem@vch.ca
• Fraser Health
  Catalogue # 266178 - order at patienteduc.fraerhealth.ca

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