

QUEEN ELIZABETH HOSPITAL



PRINCE EDWARD ISLAND

My Guide to Total Knee Replacement

Queen Elizabeth Hospital

Between 2:30 and 3:30 pm the day before your surgery, phone **Same Day Surgery** at **894-2220/894-2245** to find out the time to arrive the day of surgery.

If your surgery is scheduled for a Monday – make the call on the Friday before that date. If the day before your scheduled surgery is a holiday call the last business day (Monday to Friday) before the date.

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Q 57-H-59 (05/20)

Contact Information

Patient Name: _____

Surgery Date: _____

Surgeon: _____

Surgeon's Office Number: _____

Provincial Website <http://www.healthpei.ca/waittimes> for information

Table of Contents

Total Knee Arthroplasty / Replacement	4
• Expectations, Complications	5
Before Your Surgery	6
Admitting	7
What to Bring to Hospital	8
Additional Information	8
Day Before Surgery Instructions	9
• Medication	10
What to Expect the Day of Surgery	11
• Admitting/Tests & Monitoring	11
• Same Day Surgery, Operating Room	11
• Recovery Room	12
What to Expect Following Your Surgery	13
• Pain and Swelling	14
• Walking, weight bearing	14
• Circulation, Deep Breathing and Coughing	15
• Exercises	16
• Before Discharge from hospital	16
Discharge from Hospital	17
• When to contact your surgeon	18
Managing at Home	19
• Exercise, Exercise bike	19
• Getting into & out of Bed	18
• Lying down	19
• Dressing yourself	19
• Using the bathroom	20
• Getting into & out of a car	20
• Bathing independently	21
• Stairs	21
Activity Guidelines After surgery	22
Attached: Exercises	
Equipment Prescription	

Total Knee Arthroplasty/Replacement

If your knee is severely damaged by arthritis or injury, it may be hard for you to perform simple activities, such as walking or climbing stairs. You may even begin to feel pain while you are sitting or lying down.

If nonsurgical treatments such as anti-inflammatory medication, Physiotherapy or walking supports are no longer helpful, you may want to consider total knee replacement surgery. Joint replacement surgery is an effective procedure to relieve pain, correct leg deformity, and help you resume normal activities.

During a knee replacement, the surfaces of the damaged knee are removed and replaced with an artificial knee joint (prosthesis) made of metal and plastic or ceramic and plastic. Your orthopedic surgeon will choose the best prosthesis design for your knee problem.

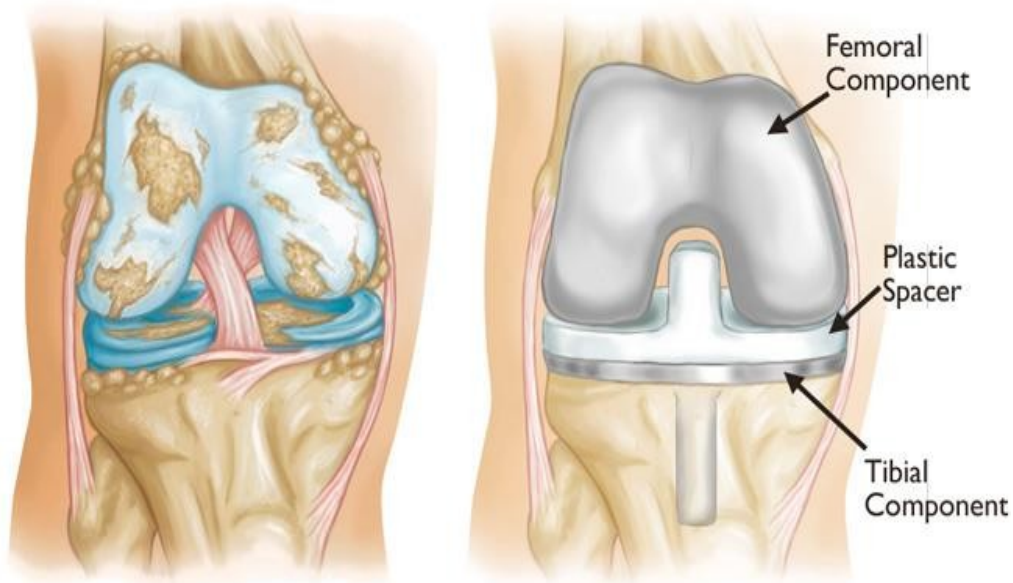


Photo courtesy of American Academy of Orthopedic Surgeons, Ortho info 2015

Expectations

More than 90% of people who have total knee replacement surgery experience a dramatic reduction of knee pain and a significant improvement in the ability to perform common activities of daily living.

With normal use and activity, every knee replacement implant begins to wear in its plastic spacer. Excessive activity or weight may speed up this normal wear and may cause the knee replacement to loosen and become painful. Therefore, most surgeons advise against high-impact activities such as running, jogging, jumping, or other high-impact sports for the rest of your life after surgery.

Realistic activities following total knee replacement include unlimited walking, swimming, golf, driving, light hiking, biking, ballroom dancing, and other low-impact sports.

With appropriate activity modification, knee replacements can last for many years.

There is a recovery period after your total knee arthroplasty where you can expect pain, swelling and stiffness. It settles down considerably within the first 6 weeks, but can persist to a lesser degree for 6 months up to a year. You are able to do activity and ambulate as comfort permits after your surgery.

Complications

Your surgeon will have talked to you about possible complications with total knee arthroplasty. Although the risk of complication is low, some possible complications include:

- Infection
- Blood Clots
- Knee stiffness
- Continued pain
- Neurovascular or other injury
- Implant problems

BEFORE your SURGERY

You need to **arrange for a caregiver** to be accessible to you and check on you for the first **5-7 days after discharge** from hospital.

Your mobility will likely be decreased after surgery after surgery.

- You should prepare meals ahead of time or have the caregiver available to get groceries and prepare meals.
- Be prepared and have your home / discharge location ready for your return

You will need to **arrange a drive home** from the hospital upon discharge. Your discharge date can vary but is usually within the first 3 days from surgery.

You will be taught Knee **Exercises**. Practice and familiarize yourself with the exercises as instructed before coming to hospital.

You will be prescribed walking aids and other assistive equipment for your safety and to enable you to complete tasks independently when you return to your home. You will be shown this equipment in Pre-Surgery Clinic. An Occupational Therapist (OT) and/or Physiotherapist (PT) will review your equipment recommendation.

Pick up the prescribed equipment before surgery and have it ready to use. This may include:

2 wheeled walker	Crutches
Raised Toilet Seat	Cane
Hand-Held Shower	Exercise bike
Bathtub Transfer Bench / shower chair	Grab Bars
	Non-Skid Mat

You can expect to receive **prescriptions** for pain medication and blood clot prevention on discharge. Be sure to have arrangements to have these at home on the day of discharge.

Make an appointment with physiotherapy for 1 week after your surgery date.

You need to stop or cut down on smoking to help decrease breathing problems after surgery. It is recommended that any dental or gum work be completed before your surgery. If you need dental work in the first 3 months after surgery, talk to your dentist and surgeon about whether or not they want you to take antibiotics.

ADMITTING

“Same Day Admission Surgery” means that your surgery is scheduled the same day you are admitted to the hospital.

On the day of your surgery, report to the Admitting Department promptly at the instructed time.

If you become ill before surgery, visit your family physician, or notify your surgeon. If you must cancel your surgery, notify your surgeon at least 48 hours before your surgery date. If you are unable to contact your surgeon, notify the OR Booking office (894-2239) or Pre-Surgery Clinic staff (894-2438)

In the event of a sudden unexpected illness or situation the day before surgery, notify OR Booking (894-2239) before 4:00 pm weekdays; or the Admitting Department (894-2237) during the evening, night, or on weekends.

If you have been a patient in a hospital (or long term care facility) outside of PEI or Canada within one year prior to your surgery date, please inform the Pre-Surgery Clinic Staff and your surgeon.

Between 2:30 and 3:30 pm the day before your surgery, phone **Same Day Surgery** at **894-2220/894-2245** to find out the time to arrive the day of surgery.
If your surgery is scheduled for a Monday – make the call on the Friday before that date. If the day before your scheduled surgery is a holiday call the last business day (Monday to Friday) before the date.

What to Bring to the Hospital Day of Surgery

- Only a small amount of money.
- You PEI Health card and any private insurance cards.
- In a plastic bag please have :
 - Teaching booklet
 - 2 sets of loose fitting clothing to get dressed while in hospital
 - Prescription medication in pharmacy containers, including insulin, eye drops, inhalers and over the counter medication.
 - All personal care items (eyeglass case, shaver)
 - Toiletry items (scent free)
 - Foot wear that has good grips on the bottom, full heel support, closed heel and toe; no high heels or sandals.

Please keep in mind that space is very limited in your room.

The Hospital is not responsible for lost or stolen items. Any belongings (personal items, valuables & electronic devices, etc.) should be given to your family/escort prior to you going to the operating room.

Please leave all personal belongings in your vehicle or with your family until after you have been transferred to your inpatient unit.

Additional Information

- QEH is Smoke Free.
- QEH is Scent Free. Please leave all perfumes/ colognes home.
- Telephones are available at your bedside. Instructions on how to connect and disconnect the telephone are available on the nursing units. You will be billed by Aliant on your home phone bill or billed by mail, if your account is not with Aliant.
- TVs are available for rent on a daily/weekly basis.
- Pastoral/ spiritual care services are available. Ask your nurse for assistance or call 894-2053
- There are three options for food or snacks:
 - Hospital Cafeteria: “Abegweit Room” – 1st Floor
 - Coffee Shop: “Cremacoffee” – Main Floor
 - “The Royal Pantry” – Main Floor

Hours of operation for each are posted at that location

Day before Surgery Instructions

When to Stop Eating and Drinking Before Surgery

- Do NOT eat food after midnight before surgery day
- Do NOT chew gum, eat mints or candy after midnight before surgery day
- Do NOT drink milk or milk products after midnight before surgery day
- Clear fluids can be taken up to 3 hours prior to your scheduled surgery time (this time will be provided to you when you call Same Day surgery the day before surgery) Clear fluids are foods that are easily digested and leaves no residue in the intestinal tract.

Examples of Clear Fluids are:

- water, popsicles, Jell-O, fruit juices without pulp, sport drinks (Gatorade) or carbonated beverages including dark soda (cola), clear tea and black coffee (no milk, no cream, no whitener).
 - Clear fluids DOES NOT include: milk, dairy products, protein drinks or alcoholic beverages.
-
- Avoid smoking, drinking alcohol, or using cannabis or other recreational drugs for at least 24 hours before your operation due to the detrimental effects the substances can cause in combination with anesthesia.
 - As instructed perform the (gentle) 10 minute scrub of your knee and the area around it, the night before, and again the morning of surgery using the brushes which were given to you during your teaching visit. After you do the scrubs, you must wash the area with a damp face cloth or shower/ bath to remove the sticky residue left from the brushes.
 - Do not apply any creams or lotions to your skin. Do not shave your leg during the week preceding surgery to decrease your risk of infection.
 - Remove all makeup and nail polish.
 - Remove and leave at home, all jewelry (including body piercing, etc). **If rings cannot be removed, please have them cut off prior to arriving at the hospital for your surgery. Any rings left on will have to be cut off or your surgery will be cancelled.**

Medications

- Follow all instructions about your medications, herbal supplements, vitamins and over the counter pills given to you by your doctor and/or nurse. Please make sure you are clear on all the instructions about your medications.
- Unless instructed otherwise, prescribed medication usually taken in the morning should be taken on the day of surgery by 6:30 a.m. with a sip of water only.
- Use any inhalers (eg. Atrovent, Ventolin) on a regular routine basis the week before your surgery and the morning of surgery.
- If you are taking
 - “blood thinners”, anticoagulation medication,
 - Diabetic pills or insulin
 - Fluid pills

***Follow the doctor’s orders** for taking or stopping these before your surgery
- If you are started on any new medications, including over the counter medications, before your surgery, please contact the Pre- Surgery Clinic.
- Remember to bring your list of medications and the medications themselves in their original pharmacy containers.

What to Expect the Day of Surgery

Admitting

- Arrive at the hospital at the specified time
- On the day of your surgery, come through the main entrance of the hospital to the Admitting Department, located to your right
- You will be directed to Same Day Surgery, where the nurses will help prepare you for surgery.

Tests & Monitoring

- You will have your temperature, pulse, respiration, blood pressure, and oxygen saturation taken.
- You may have an intravenous (IV) started
- Your chart and necessary paperwork will be prepared

Medications

- You will receive medications if ordered by your surgeon and/or anesthetist.

Same Day Surgery

- You will empty your bladder before going to the Operating Room.
- Your surgeon and anaesthetist will visit you.
- Your surgeon will put a mark/their initials on your operative leg.
- Your family/friends will be directed to a surgery waiting room.
- It takes approximately 1 ½ hours to do your surgery.

The Operating Room

- The surgical team includes: your surgeon, a surgical assistant, the anaesthetist, and 2-3 surgery nurses.
- Anaesthetist: Gives you medications/ anaesthetic during your surgery, and monitors your progress.
- Nurses: prepare the room for your surgery, and assist with your care. The staff will provide support, comfort and information for you

Equipment that May Be Used

- Various IV (intravenous) solutions which are used to replace body fluids lost during surgery and to administer medications.
- Monitors that continually display your heart rate and rhythm on a screen.
- Blood pressure cuff.
- Oxygen Equipment, and oxygen saturation clip.
- Drainage system attached to your incision to drain excess fluid.

The Recovery Room/PACU (Postoperative Anesthetic Care Unit)

After surgery you will be taken to the Recovery Room where you will be cared for by a nurse. You will be in the Recovery Room approximately 1 - 1 ½ hours. As you wake up, noises may sound louder than usual.

You may experience:

- blurred vision
- dry mouth
- chills
- delayed return in sensation and movement in your operated leg

The nurse will:

- frequently check your vital signs (temperature, pulse, respirations, oxygen saturation, and blood pressure)
- remind you to take deep breaths.
- medicate you for pain or burning sensation in your knee, and/or nausea as needed
- frequently check your dressing
- take you to your room on the Nursing Unit when your condition is stable.
- You may have an x-ray of your operative knee while in the Recovery Room or you may have one taken at some point after you return to your room.

What to Expect Following Your Surgery

- You will be guided through a plan of care where the goal is to have you ready to go home within 1-3 days after your surgery. You will go home as soon as your health care providers deem you are medically and functionally able to.
- The length of stay in hospital can be different for each person.
- Depending upon bed availability, you may be in a CO-ED room (meaning in a room with patients of the opposite sex).
- You may have a liquid diet and increase to regular diet as tolerated, depending on how you are feeling after surgery.
- You will be given pain medication as needed. It is important that you take medication regularly to be comfortable. Do not hesitate to ask your nurse for medication.
- Medication for nausea is available if needed. Ask your nurse.
- Your bowels may not move for several days. This is normal after surgery. You will be given medication as necessary.
- You may walk and do activity as tolerated.
- You are expected to increase your activity each day
- Your Intravenous (IV) may be removed if you are able to tolerate liquids/food.
- You will have blood work drawn.

PAIN and SWELLING after surgery

It is normal to have pain and swelling in your knee and can even go down to your foot after surgery. The amount of pain and swelling varies for each person. It settles down considerably within the first 6 weeks, but can persist to a lesser degree for 6 months up to a year. This may cause some people have trouble sleeping for the first 6 weeks. Swelling may make it harder to move, make your pain worse, and cause stiffness in the knee. To minimize pain and swelling you should move frequently, perform your knee exercises, use ICE, take pain medication as needed, perform the circulation exercises listed below, and elevate your lower leg as needed.

Ice knee (frozen peas or corn work well) 10- 15 minutes several times per day. You can place ice packs on top and behind knee. When placing ice pack behind knee, prop your foot so knee is not stuck in a bent position. Ice can be used every hour if needed. It is best to ICE after exercises. You can ask your Therapist or nurse to get it for you while you are in hospital.

WEIGHT BEARING

After surgery you will be told how much weight you can put on your operated knee. For a total knee replacement you are typically allowed to weight bear as tolerated.

WALKING

You are allowed to walk and do activities as to your tolerance. On the day of surgery, you will be asked to sit at the edge of the bed, walk a few steps to a bedside chair, and/or even take a short walk. You will likely use a 2 wheeled walker which will be provided for use during your hospital stay.

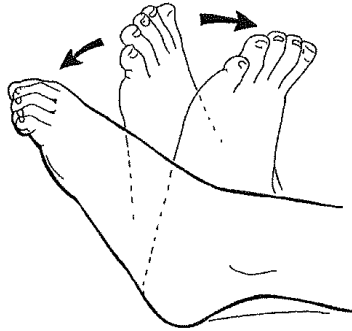
Make sure a nurse or physiotherapist is with you the first few times you get out of bed. Tell the nurse or physiotherapist if you feel weak or dizzy. The physiotherapist will make sure you are walking correctly and will tell you when it is safe for you to walk by yourself using your walking aid.

Take short walks as often as you can, using your walking aid. You should progress the distance and the frequency you walk each day.

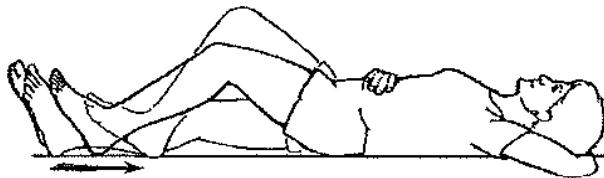
CIRCULATION EXERCISES

Circulation exercises help prevent swelling and blood clots. Continue these exercises until you are up and moving on a regular basis.

Ankle Pumping: Bend ankles up and down, 10 times every hour while you are awake



Knee Bending: Bend and straighten non-operated knee 10 times hourly while awake. You can attempt to do some with the operated leg as well



DEEP BREATHING and COUGHING

Because you will be moving less for some time after surgery, keeping your lungs clear is very important. You should try to do deep breathing and coughing every hour while you are awake. You should start doing deep breathing and coughing exercises as soon as you can after surgery.

- Breathe in deeply for 3-5 seconds through your nose or mouth. If you place your hands on your stomach below your rib cage you should feel your stomach push out against your hands.
- Slowly breathe out through your mouth - do not force.
- Repeat these exercises 5-10 breaths
- After breaths give a strong cough into your elbow

Exercises

You are expected to do knee exercises as indicated after your surgery (see attached sheet). They will help to improve your circulation, mobility, and strength in your knee. Compliance with these will help to optimize your recovery from your knee replacement.

It is normal to experience discomfort during the exercises. You can begin them on the day of your surgery and are expected to do them 3 times per day. The Physiotherapist will be in after your surgery to go through them with you. You are expected to do them on your own as well. You may find it easier to time your pain medications with the exercises.

Before Discharge

You will practice climbing stairs with your Physiotherapist, if you have steps either inside or outside of your home.

During the pre-surgery process, you should have reviewed functional transfers such as getting in and out of a tub and in and out of a car. If you have questions and/or concerns post-operatively, please be sure to discuss with your rehab team.

Discharge from Hospital

- You will be discharged as soon as you are ready after surgery. You need to arrange for a caregiver to be accessible to you and check on you for the first 5-7 days after discharge.
- You may need extra supports depending on your needs and home supports.
- You should have someone available to take you home from hospital when discharged. They should be flexible as to the day of discharge.
- **Discharge time is 11:00 am**, though discharge can occur at any time if discharge goals are met.
- You will receive an appointment time for the Orthopedic Clinic with your surgeon for approximately 2 weeks for staple removal and wound check, and 6 weeks for a follow up appointment, from your surgery date.
- Make an appointment for Physiotherapy either at a private physio clinic or your local hospital for a couple of days after discharge from hospital if you haven't already made one
- You will be given discharge instructions and if any teaching is required, this will be provided prior to discharge (e.g. how to give self-injections, etc.).
- The dressing applied on the day of discharge should be left on until your 2 week follow up appointment
- You should be ready for home when you leave the hospital. The equipment you were prescribed at pre-surgery should be ready at your discharge location
- You will likely receive prescription for pain medication and blood clot prevention. This should have been arranged to have available at your discharge location.

Contact your surgeon if you have

- chills or fever (temperature 38 C/100 F or greater),
- increased redness or swelling in your knee incision,
- severe pain that prescribed medication does not control,
- drainage from your incision,
- pain or swelling in the calf of either leg
- Shortness of breath worse than before surgery

Your surgeon should be notified before any other physician or nurse practitioner prescribes antibiotics for a possible infection related to the surgery.

For immediate concerns, go to the Emergency Department of the nearest hospital.

In the Future

Should you develop an infection at any time (urine, tooth, throat, etc.), contact your family doctor.

Routine dental cleaning should be avoided for at least 3 months following surgery.

If you are scheduling any dental work, notify your dentist that you have had a knee replacement. He/she may wish to give you some antibiotics prior to dental work.

Managing at Home

Exercise

You are expected to continue the knee exercises prescribed to you and ice until your physiotherapist or surgeon indicates not to.

An **exercise bike** can be very useful to optimize your recovery after surgery. You are encouraged to borrow one if you don't have one for the first few weeks after surgery. As soon as you get home, begin by just going back and forth until you are able to do a full revolution. Start with no tension to minimal tension for up to 5 minutes at a time. This can be done 3-4 times per day and you can begin as soon as you get home.

Getting in Bed

- Use a firm bed; avoid low beds
- Sit down on the edge of the bed with your operated leg out in front
- Get in bed leading with the operated leg first, if possible

Getting out of Bed

- If possible, get out of bed toward the non-operated side
- Straighten your operated leg out in front before standing
- Be sure to have your balance before using the walker or crutches

Lying down

- When lying on your back do not put a pillow under your knee. It is ok to put a pillow under your ankle to help elevate your leg.
- When lying on your side put 1-2 pillows between your knees

Dressing Yourself

Sitting on a high firm chair makes dressing easier

- Wear loose clothes
- Wear light shoes with good support

****If you have difficulty dressing yourself, the OT will show you how to use special devices to assist you.**

Using the Bathroom

- Raised toilet seat makes it easier to get on/off toilet
- Extend operated leg in front of you before sitting and standing



Raised toilet seat

Getting In and Out of a Car

- Park away from the curb
- Push the front passenger seat back to provide more leg space
- Place a garbage bag in the seat to allow your body to turn easier
- Back your body up to the car
- Place one hand on the seat and the other hand on the car frame (Note: have someone hold the door to prevent it closing on you)
- Put operated leg out in front of you
- Slowly lower yourself to the seat
- Slide back as far as you can go
- Swing your legs into the car
- * To get out, do the reverse.

Bathing Independently

- For the first 6-8 weeks, a tub transfer bench is recommended, unless you have a shower stall
- Back up to the bench
- Extend operated leg in front of you
- Slowly lower yourself into sitting
- Swing legs into the tub
- Slide over to the center of the bench
- To get out of the tub, do the reverse



Bathtub Transfer Bench

STAIRS

Use a handrail and a cane or crutch:

- Hold the handrail with one hand and the cane in your other hand.
- Stand close to the first stair
- Step up onto the first stair with your good leg first
- Straighten your non-operated knee, and bring the cane and your operated leg up together so that both feet are on the same stair
- Use the handrail and cane for support
- Repeat for each step
- When going down stairs, step down with cane and operated leg first, followed by the good leg

Activity Guidelines after Surgery

You may resume activities as your comfort permits. Ask your health care team if you have any questions

Work

Ask your surgeon when you should go back to work as it depends on your type of work. Recovery typically takes between 6 weeks and 3 months, plan accordingly to be off work for this time. If deemed appropriate with your surgeon and therapist, you may be able to return sooner.

Travel

Do not travel by air until you have met with your surgeon after your surgery. Your surgeon will tell you if you are ready to fly.

Recreation and Leisure:

Low impact activities like walking, biking, swimming (once incision is healed) are generally encouraged. High impact activities such as running and jumping may not be recommended following your surgery. When you can go back to sports and leisure activities depends on your physical condition and the type of activity.

Sex:

It is generally recommended to wait about 6-8 weeks after surgery before having sex. This gives your incision and muscles time to properly heal. When choosing a sexual position, let pain be your guide. Pick positions that feel the most comfortable and pain-free.

Driving:

Check with your health care provider as to when you can drive, most people resume driving 4- 6 weeks after surgery. Your knee must bend enough that you can enter and sit comfortably in your car, and your muscle control must provide adequate reaction time for braking and acceleration and you can no longer be taking narcotics before you will be allowed to drive.

Your insurance company may have stipulations for returning to driving following a total knee replacement.