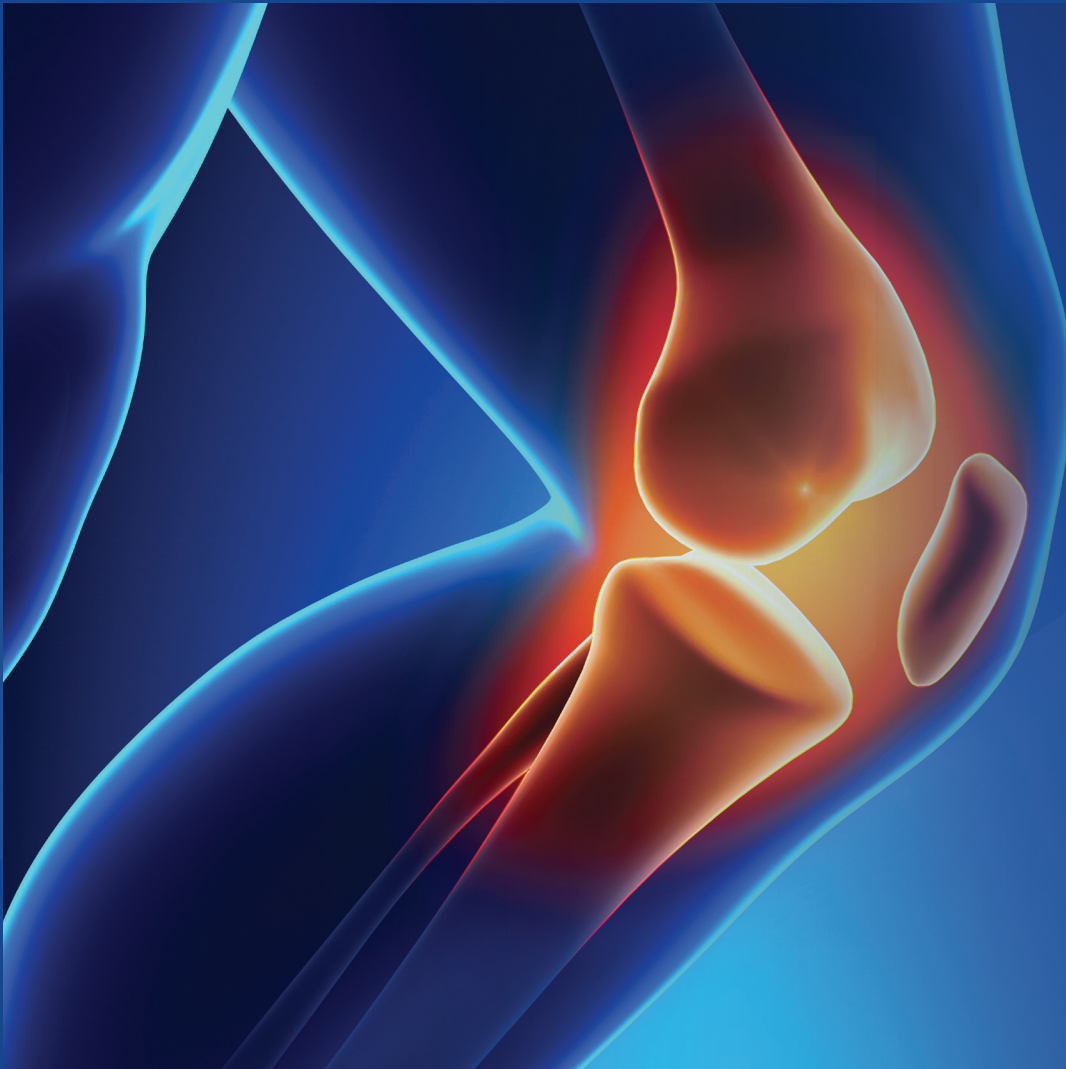


# A patient's guide to total knee replacement surgery



BON SECOURS  
MARY IMMACULATE HOSPITAL





# Table of contents

- Welcome to Mary Immaculate Hospital ..... 1**
- Read this book and watch the joint replacement seminar ..... 2**
  - How to access the seminar ..... 2
- Learn about your knee replacement ..... 5**
  - Parts of your knee ..... 5
  - The causes of knee problems ..... 5
  - What is total knee replacement surgery? ..... 6
  - What is partial (unicompartmental) knee replacement surgery? ..... 6
  - Ask your surgeon ..... 6
  - Risks of surgery ..... 7
  - Goal of a joint replacement ..... 7
  - Start exercising now ..... 7
- Complete pre-anesthesia testing (PAT) ..... 8**
  - Pre-operative testing ..... 8
  - Pre-operative physical exam ..... 8
  - Nursing interview ..... 9
- Medications before surgery ..... 10**
  - Stop these medications ..... 10
  - Keep taking these medications ..... 10
  - Vaccination ..... 10
- Do these things before surgery ..... 11**
  - Get a coach ..... 11
  - Eat healthy ..... 11
  - Exercise before surgery ..... 11
  - Make your home safe ..... 11
  - Purchase or borrow medical equipment ..... 11
  - Stop drinking alcohol ..... 12
  - Stop smoking ..... 12
  - Visit your dentist ..... 12

<b>Bathing before surgery</b> .....	<b>13</b>
Caution .....	13
Special instructions .....	13
<b>The day of surgery</b> .....	<b>15</b>
Bring these items labeled .....	15
Checking in for surgery .....	15
Pre-op area .....	15
Holding area .....	15
Peripheral nerve block.....	16
Family waiting area .....	16
Surgery.....	16
Post-anesthesia care unit (PACU) .....	16
After PACU .....	16
<b>Understand anesthesia</b> .....	<b>17</b>
General anesthesia .....	17
Spinal anesthesia.....	17
<b>Post-surgery</b> .....	<b>19</b>
Bathing and dressing .....	19
Bruising .....	19
Elevation .....	19
Ice .....	19
Incentive spirometer .....	19
Managing pain .....	20
Sleeping .....	20
Stay active .....	20
Steps and walking .....	21
Support hose .....	21
<b>How to prevent complications</b> .....	<b>22</b>
Blood clots .....	22
Constipation .....	22
Infection .....	22
Nausea .....	23
Pneumonia .....	23



<b>Understanding medications after surgery .....</b>	<b>24</b>
Acetaminophen (Tylenol®) .....	24
Anti-coagulant (blood thinner).....	24
Antibiotic .....	24
Anti-inflammatory (NSAID) .....	25
Daily medications .....	25
Narcotic pain medication .....	25
Stool softener .....	25
Medication side effects sheet .....	26
<b>Understanding care after discharge .....</b>	<b>27</b>
Home health .....	27
Surgical incision care .....	27
When to shower .....	27
Eat healthy .....	28
How many grams of protein you need to heal .....	28
<b>Physical therapy exercises .....</b>	<b>29</b>
Ankle circles .....	29
Knee press downs .....	29
Heel slides .....	30
Seated marching .....	30
Seated kickout without assist .....	30
<b>How to: .....</b>	<b>31</b>
Use a front wheeled walker .....	31
Get out of bed .....	31
Sit down and stand up .....	32
Sleeping.....	32
Get into a car .....	33
Go up and down stairs.....	33







# Welcome to Mary Immaculate Hospital

Thank you for choosing Mary Immaculate Hospital to help restore you to a higher quality of life after your joint replacement. This is an *elective surgery*, which means you and your surgeon have decided this is the best way to fix your knee issues. It also means you have time to get ready for surgery and plan your recovery at home.

You play a key role in having a successful surgery. Studies show that patients who participate in pre-operative education have less anxiety, a better surgical experience and smoother recovery. **Start getting ready now** by following the steps in this book.

The team at Mary Immaculate Hospital is here to help. Here are some phone numbers that you may need as you get ready for your surgery.

We look forward to being a part of your journey.

*Mary Immaculate Orthopedic Team*

Main Hospital	757-886-6000
Surgical Pavilion Reception	757-886-6300
Pre-anesthesia Testing Department	757-886-6411
Registration Department	757-886-6651
Business Office	877-342-1500
MyChart Access	866-385-7060
Debbi Boudet, Surgical Navigator	757-886-6640
Felicia Harris, Nurse Director Surgical Unit	757-866-6138

## WELCOME

Mary Immaculate Hospital

A patient's guide to total knee replacement surgery

# Read this book and watch the joint replacement seminar

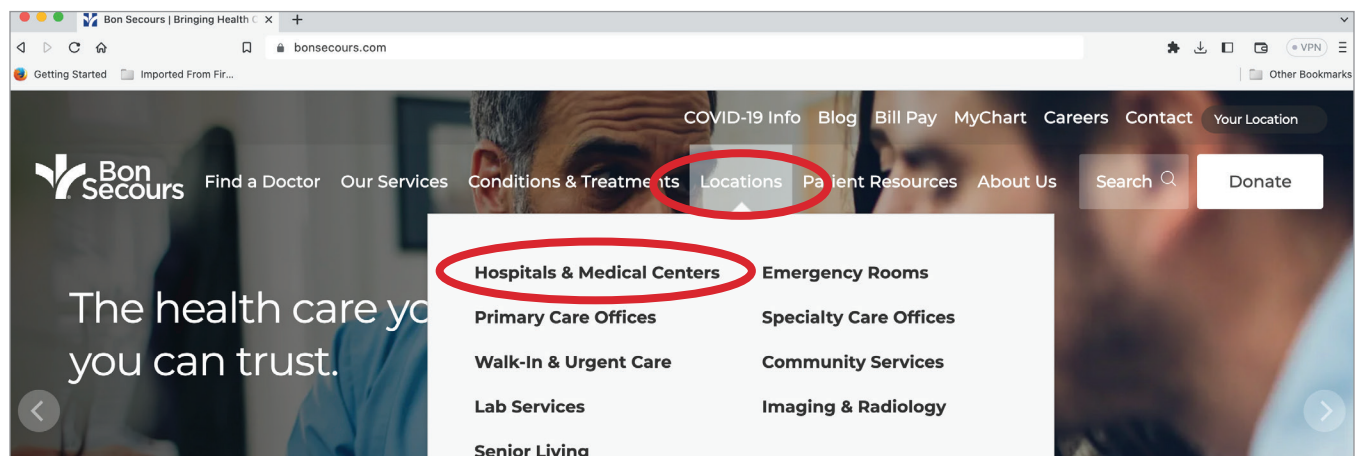
## How to access the seminar

**Step 1:** Enter this website into your browser:

[bonsecours.com/locations/hospitals-medical-centers/hampton-roads/bon-secours-mary-immaculate-hospital/pre-operation-education](https://bonsecours.com/locations/hospitals-medical-centers/hampton-roads/bon-secours-mary-immaculate-hospital/pre-operation-education)

You can also go to [bonsecours.com](https://bonsecours.com).

Select **LOCATIONS** in the ribbon at the top of the page.  
Then select **HOSPITAL & MEDICAL CENTERS**



**Step 2:** Select **LEARN MORE** under Hampton Roads

### Hampton Roads

Bon Secours has a large variety of hospitals and medical centers in the Hampton Roads and surrounding areas, including Mary Immaculate Hospital - the only faith-based hospital on the Peninsula.

[Learn More](#)



**Step 3:** Select **BON SECOURS MARY IMMACULATE HOSPITAL**

**HAMPTON ROADS**

**Bon Secours – Southampton Medical Center**

**Bon Secours Health Center at Harbour View**

**Bon Secours Mary Immaculate Hospital**

**Bon Secours Maryview Medical Center**

**Step 4:** Select Bon Secours Mary Immaculate Hospital **PRE OPERATIVE EDUCATION**

**BON SECOURS MARY  
IMMACULATE HOSPITAL**

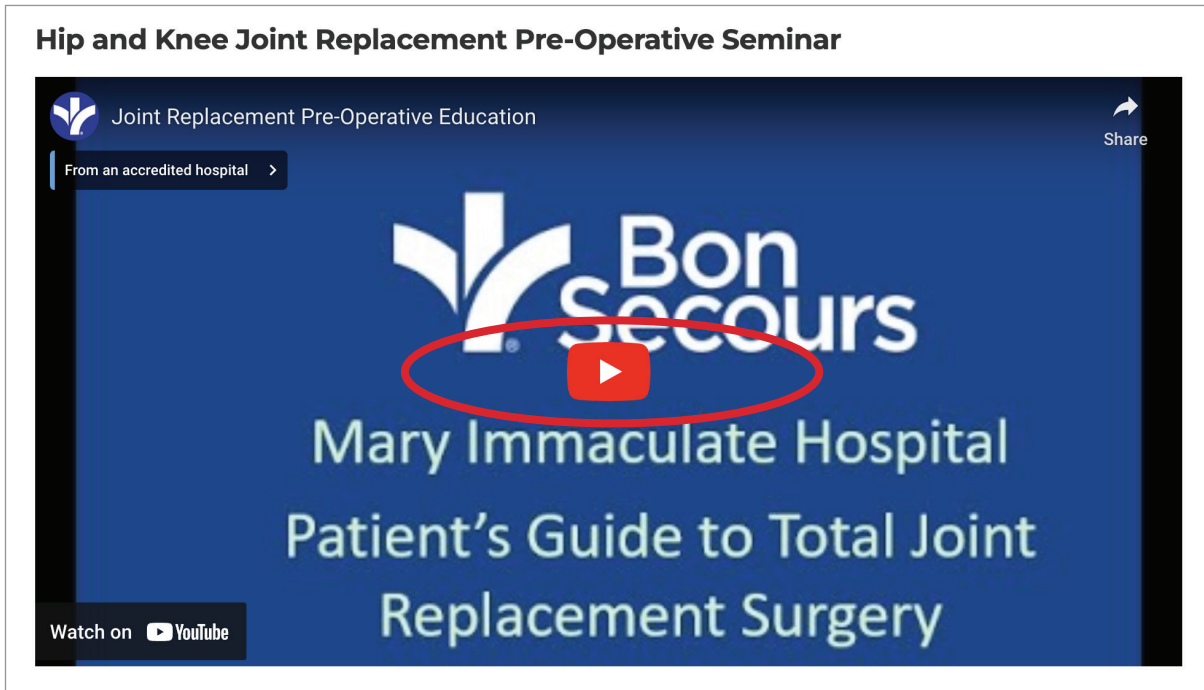
**Patient Information**

**Visitor Information**

**Pre-Op Education**

**Annual Reports**

**Step 5:** Click on the arrow to play the **HIP AND KNEE PRE-OPERATIVE SEMINAR.**



**Step 6:** Please select **COMPLETE THE SURVEY** located above the Hip and Knee Replacement Seminar and fill it out.

**\*\*Once you've watched the video below, you must fill out a brief survey to receive credit for completing the course.\*\***

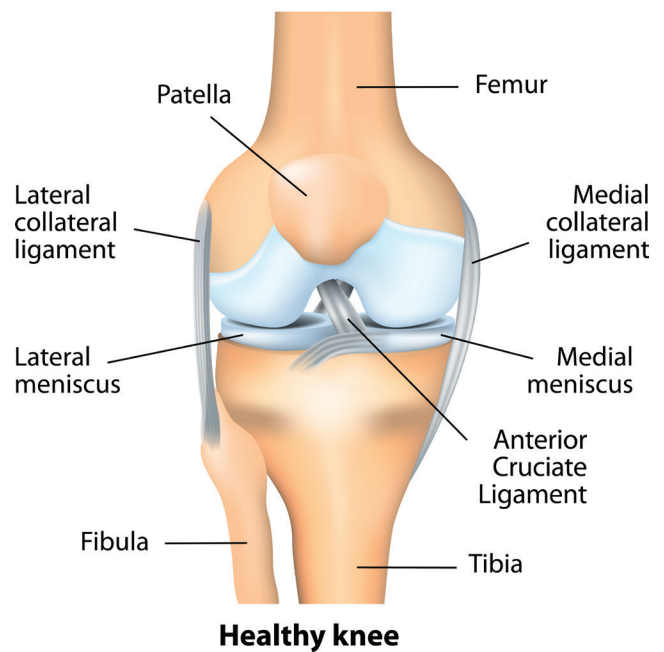
[Complete the Survey](#)

# Learn about your knee replacement

## Parts of your knee

The knee is made up of four bones. The femur (thigh bone) is connected to the knee. Below the knee, the tibia (shin bone) connects the knee to the ankle. The fibula bone is the small bone that sits beside the tibia bone. The kneecap (patella) is a small bone that sits on the front of the knee.

Smooth cartilage covers the end of the bones and stops them from rubbing against each other during movement. When the cartilage wears away, the bones rub against each other, causing pain and swelling.

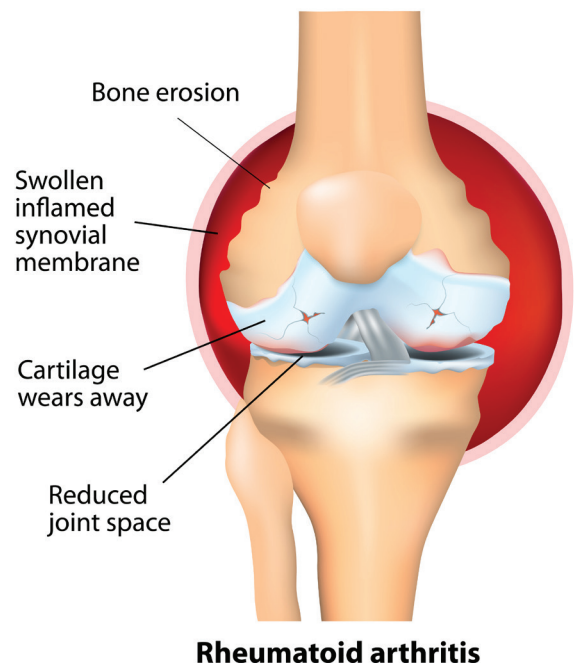


## The causes of knee problems

**Osteoarthritis** is the most common type of arthritis. Osteoarthritis is caused by wear and tear of the joint over years. It is most common after age 50. Family history, obesity or previous knee surgery can also increase the risk for osteoarthritis.

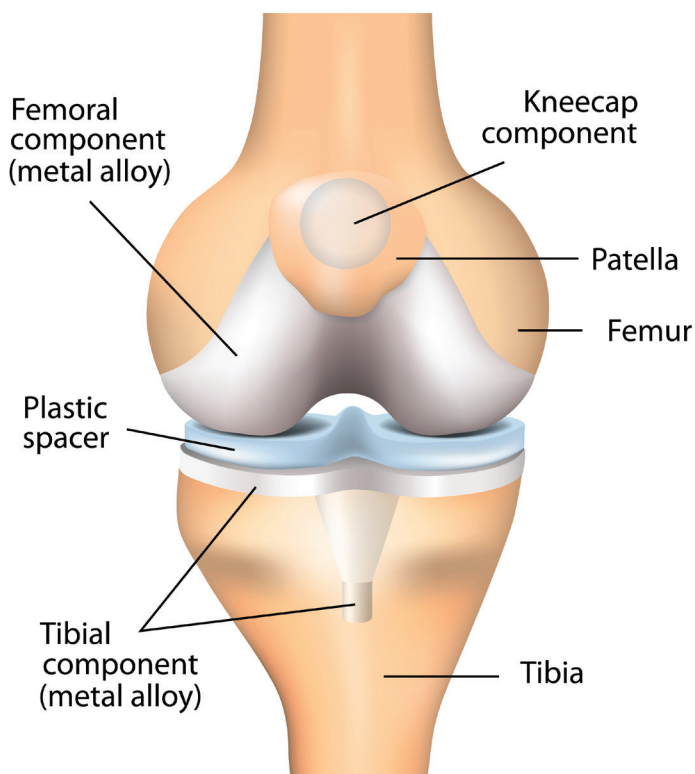
**Rheumatoid arthritis** is an autoimmune disease where the body makes cells that damage the joint, leading to loss of the cartilage. This type of arthritis happens in all age groups.

**Avascular necrosis** is a disease causing death (necrosis) to the cells in your bones due to lack of blood supply. Without blood, the bone tissue dies and the bone collapses.

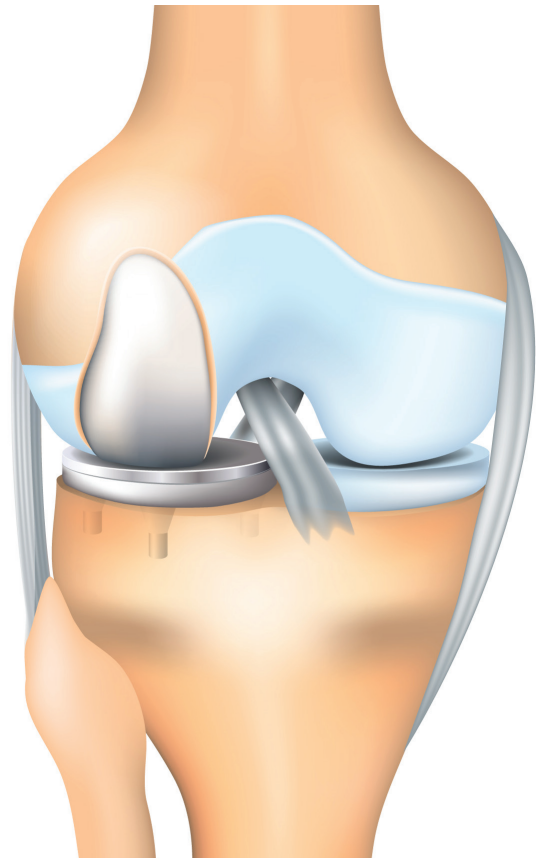


## What is total knee replacement surgery?

Your surgeon will cut out the damaged bone (arthritis) and put in new smooth parts. A plastic spacer is placed between the metal parts and sometimes on the back of your kneecap. The bone on bone pain will be gone. Your new knee will move better, and you should no longer be bow-legged or knock-kneed.



## Partial (unicompartmental) knee replacement



## What is a partial (unicompartmental) knee replacement surgery?

In some cases, arthritis causes damage to only one side of the knee joint. Your surgeon will only replace the side of your knee with arthritis.

## Ask your surgeon

Talk to your surgeon about how your surgery will be performed and what type of implant will be used.

## Risks of surgery

Your surgeon will go over the risks of surgery in the office. Some of these risks may include problems with anesthesia, infection, surgical bleeding, blood clots, damage to nerves or blood vessels and dislocation. These complications are rare, but possible.

## Goal of a joint replacement

The goal is for you to get back to enjoying your life and being more active. The pain from arthritis is gone and deformities are fixed. Your success depends on your hard work, age, weight and activity level. Long-term success rates vary from 10 to 30 years.

## Start exercising now

Do the exercises listed in the back of the book. The stronger and looser your muscles are before surgery will make your recovery easier.

### Did you know:

After joint replacement, the arthritis is gone, so no more bone on bone pain.

You can put full weight on your new knee and not damage it.

The recovery is muscle recovery. Your leg muscles will be stiff, tight, swollen and sore. All the exercises are to stretch and strengthen your leg muscles. It is just as important to get your knee straight as it is to bend it.

# Complete pre-anesthesia testing (PAT)

## Pre-operative testing

Your surgeon and anesthesia specialist decide what pre-operative testing you will need before surgery.

- Pre-operative tests must be completed **within 30 days** of surgery.
- Lab work is good for 90 days.
- You **don't need an appointment** to come to Mary Immaculate for testing.
- Come to the Medical Pavilion Mon.–Fri. between 6:30 a.m.–5 p.m. (if you need an EKG, you must come between 8 a.m.–3 p.m.).
- Bring a photo ID, COVID-19 vaccination card and insurance card to the Registration Department located in the Medical Pavilion.
- Results of your testing will be sent to your surgeon. You will be contacted if test results are abnormal.
- Use **MyChart** to see all your medical information, test results, appointments and surgical information. If you need help signing up, please call **833-691-4357**.



## Pre-operative physical exam

- If you have any high-risk medical conditions or see a specialty doctor, you may need surgical clearance from these physicians (such as a cardiologist or pulmonologist).
- Your surgeon's care team will let you know if you need to get clearance.
- Set up the appointment for surgical clearance ASAP.
- Call your surgeon's office or our PAT nurses if you are having trouble getting an appointment for surgical clearance.

## Nursing interview

You will get a phone call about 2 weeks before surgery to set up your phone appointment with a PAT nurse. **This is a mandatory anesthesia interview.**

During your 30-minute call with the PAT nurse, you will be asked about your:

- Medical and surgical history
- Allergies (food and medication)
- Medications (including vitamins, herbals and anything over the counter)
- Medication name, dosage and how often you take them must be provided.
- Email address

Have a pen and paper handy during this interview to write down what medications you are told to stop. It's easy to forget what the nurse tells you.

If you've had a nursing interview that is **older than 30 days**, you must have another interview.

**Call our PAT department at  
757-886-6411 or 757-886-6300  
if you need to change  
your appointment  
or have any questions.**

# Medications before surgery

## Stop these medications:

### Anticoagulants (blood thinners)

**These must be stopped before surgery.**

Ask your surgeon and prescribing physician when to stop these medications.

*Examples include Aspirin®, Coumadin®, Effient®, Eliquis, Plavix®, Pradaxa®, Xarelto®.*

### Diabetes medications

Tell the doctor who treats your diabetes, you are having surgery. Diabetic medication will need to be adjusted or held before surgery.

*Examples include Insulin Glargine (Lantus®), Dulaglutide (Trulicity®), Empagliflozin (Jardiance®), Metformin, Pioglitazone (Actos®)*

### Herbal supplements, vitamins and over-the-counter medications

**Stop** 14 days before surgery.

### Nonsteroidal anti-inflammatory (NSAIDS)

**Stop** 7 days before surgery (including creams). Your surgery may be postponed if you don't stop NSAIDS.

*Examples include Advil®, Aleve®, Celebrex®, Mobic®, Motrin®, Naproxen®, Toradol®, Vytorin®.*

### Weight loss medication

**Stop** Phentermine 7 days before surgery.

## Keep taking these medications

### Prescription pain medication

You may keep taking them as prescribed. Cutting back on the amount you take before surgery will help the narcotic work better after surgery.

*Examples include Tylenol® (Acetaminophen), Roxicodone®, Percocet®, Oxycodone w/Acetaminophen, Tramadol, Norco®, Vicodin®, Hydrocodone w/Acetaminophen, Gabapentin, Neurontin®.*

You can continue taking **Gabapentin or Neurontin** as prescribed.

### Vaccination

You may get your COVID-19 and flu vaccine prior to surgery. Call your surgeon about any other vaccinations.



# Do these things before surgery

## Get a coach

Arrange for family or friends to help you for the first few days after surgery.

## Eat healthy

- Eat healthy foods now, so your body will be ready to heal itself after surgery.
- Fix and freeze (or buy) healthy meals for times you may be alone.

## Exercise before surgery

Exercise your leg muscles before surgery **(see back of book for exercises)**. The stronger and looser your muscles are, the easier your recovery will be.

Do 10–15 repetitions of each exercise 2 times a day on both legs.

Muscle soreness is normal. Stop the exercise if your joint becomes too painful.

## Make your home safe

- Remove loose rugs around the house.
- Secure stairway handrails.
- Get a bedside commode or raised toilet seat before surgery if you have a low toilet.
- Put night lights in dark hallways and bathrooms.
- Plan for someone to care for your pet.



## Purchase or borrow medical equipment

Get your medical equipment before surgery. Mary Immaculate Hospital **does not** provide this medical equipment.

- **Front wheeled walker:** You are not allowed to use a roll aider, crutches or canes.
- **3-in-1 bedside commode:** This fits over your toilet seat to make it higher. It is important if your toilet seat is low.
- **Ice machine** (example: Polar Ice)
- **Portable compression device** if required by your surgeon. (example: VenoPro)

Call your surgeon's office if you need help getting any medical equipment.



## Stop drinking alcohol

- Don't drink 2 weeks before surgery, or at least limit yourself to 1 serving of wine, beer or liquor each day.
- Don't drink alcohol while taking pain medication or Tylenol/Acetaminophen.
- Check with your doctor before resuming alcohol.

## Stop smoking

- Smoking damages the lungs and other organs, and hurts wound healing.
- Smoking increases your risk of getting an infection and pneumonia.
- Quitting 4 weeks before surgery decreases post-operative complications by 20%-30%.

## Visit your dentist

Unhealthy teeth and gums lead to a bacteria buildup in your mouth. This bacteria can enter your bloodstream causing an infection in your surgical site.

- Brush and floss your teeth twice a day.
- Visit a dentist if you have any problems with your teeth or gums before surgery.
- Complete any ongoing dental work before surgery.
- Check with your surgeon to see how close to your surgery date you may have dental work.

# Bathing before surgery

Our skin is covered with bacteria. Bacteria on our skin helps us to stay healthy. However, if you get a cut or surgical incision, bacteria enters the body through an opening, increasing the chance of getting an infection. Cleaning your skin before surgery can lower the risk of an infection in your new knee.

Our registration department will give you a kit that has a liquid antiseptic solution called Chlorhexidine Gluconate (CHG) and three sponges when you come in for pre-anesthesia testing.

## Caution

- Don't use CHG if you are allergic to it. Instead, use antibacterial soap.
- Don't put the CHG solution on your face, head and genitals. Use your regular soap in these areas.



## Special instructions

- **Stop** shaving 3 days before surgery. Only facial hair is allowed to be removed with an electric shaver. Shaving can cause cuts in the skin that may lead to an infection.
- **Don't** put any lotion, powder, sprays or deodorant on your skin after using the CHG solution.
- Take a shower with antibacterial soap **2 hours** before surgery.

## The first shower

- Only use 1/3 of the solution with each shower.
- Take a shower and wash your entire body, including your hair and genitals, using your normal soap and shampoo.
- Turn the shower water off or step away from under the water flow.
- While your skin is still wet, use 1 of the sponges in the StartClean kit and pour 1/3 of the solution onto the sponge.
  - Wash from the neck down.
  - Don't use on your face or ears.
  - Don't use on your genitals (private parts) or anus area.
- The solution does not lather. Wash without scrubbing your skin.
- Let the CHG solution stay on your skin for **1 minute** before you rinse it off.

- Wash both arms and legs. Pay special attention to underarms and groin.
- Wash your back (you may need to ask someone to help you).
- Wash your buttocks.
- Rinse your body very thoroughly.
- Use a newly washed, clean towel to dry your body.
- Use newly washed clean clothes, sheets and pillowcases after showering.

**If you have any questions,  
call 757-886-6411 or 757-886-6300  
8 a.m.–5 p.m., Mon.–Fri.**

### **The second shower**

Repeat the shower process as described using 1/3 of the solution.

### **The third shower**

Repeat the shower process as described using 1/3 of the solution.

Thank you for helping us to prevent surgical site infections.

# The day of surgery

## Bring these items labeled

- Picture ID and insurance card
- CPAP
- Front wheeled walker
- List of changes to medications, medical history, allergies or contact information.
- Money for prescription copay (if you have one).
- Tricare patients will have to use an outside pharmacy for prescriptions.

## Checking in for surgery

Come to the 1st floor of the Surgical Pavilion located across from the Emergency Department **unless your surgeon's office tells you to go to the main entrance off Denbigh Street.**

## Pre-op area

You will be taken to the pre-operative preparation area, where your care team will:

- Help you clean your skin with CHG wipes.
- Swab your nostrils with an antiseptic to prevent infection.
- Review your medical information.
- Put in an Intravenous (IV) tube and give you IV fluids for hydration.

**One family member or friend** will be allowed to sit with you once you are ready.

## Holding area

- Your surgeon will mark the joint you are having replaced.
- Your anesthesiologist will talk with you about your anesthesia plan.



## Peripheral nerve block

Peripheral nerve block will be done by anesthesia to help with pain for 12–24 hours after surgery.

**Step 1:** Medication is put into your IV to make you sleepy and relaxed before the block.

**Step 2:** An ultrasound machine is used to find the spot for the block.

**Step 3:** Medication is injected into the muscle above your knee.

It is normal for your leg to feel heavy or numb, but you will still be able to walk.

## Family waiting area

During surgery, your coach will wait in the surgical waiting room. When your surgery is done, your coach will be updated.

## Surgery

The average length of time for surgery is **1–2 hours**. Revisions may take longer.

## Post-Anesthesia Care Unit (PACU)

After surgery, you will wake up in the PACU, also called the recovery room. It is normal to feel sleepy, dizzy or confused as you wake up from anesthesia.

## After PACU

You will be taken to outpatient discharge unit if you are going home the day of surgery or the inpatient unit if staying overnight. This is where you will see your family.

# Understanding anesthesia

Your anesthesiologist will talk to you about your anesthesia and answer your questions.

## General anesthesia

A combination of anesthetic gases and IV medications is used.

### How general anesthesia works:

**Step 1:** A mask is placed over your mouth and nose for you to breathe oxygen before you are put to sleep.

**Step 2:** You are given medication in your IV that puts you to sleep.

**Step 3:** Once you are asleep, a breathing tube is put in your mouth to give you oxygen and anesthesia gases that help keep you asleep and manage your breathing during surgery.

**Step 4:** IV medication is used to keep you asleep and manage your pain during surgery.

**Step 5:** Your anesthesia team will monitor you to make sure you stay asleep during surgery.

**Step 6:** After surgery, the breathing tube will be removed before you wake up.

**Step 7:** You will slowly wake up.

## What to expect after general anesthesia:

- You will feel groggy and tired for the rest of the day.
- You will feel dizzy and lightheaded.
- You will have a lower blood pressure.
- Some patients have nausea that can be managed with medication.
- Some patients have a sore throat from the breathing tube.

## Spinal anesthesia

A combination of IV medication and spinal medication are used. Spinal anesthesia is used instead of general anesthesia.

### How spinal anesthesia is done:

**Step 1:** You are given relaxing medication in your IV.

**Step 2:** A short acting numbing medication is injected into your lower back, causing you to lose feeling from your waist to your toes.

**Step 3:** IV medication is given during surgery, so you stay relaxed and asleep.

- You don't need a breathing tube. You will not remember the surgery.
- You are less likely to have nausea and vomiting after spinal anesthesia.
- You wake up quicker from surgery and feel less drowsy.



## What to expect after spinal anesthesia

Your legs may feel numb when you first wake up. Numbness goes away as the spinal medication wears off.

Some patients have short term loss of bladder control. For some patients, this causes leakage or trouble emptying their bladder. This resolves as the medication wears off.



# Post-surgery

## Bathing and dressing

An occupational therapist will see you, as needed, to assess your ability to perform daily activities. They will give you assistive devices to help if you need them (such as a sock-aid, reacher or long handle sponge).

## Bruising

Expect to see bruising as you recover from surgery. You will be taking a blood thinner medication. The bruising gets worse over the first two weeks as you recover.



## Elevation

This lowers muscle swelling and eases pain.

- Elevate your leg with your toes above your nose.
- Keep your knee straight when elevating.
- Elevate as much as possible.
- Elevate for as long as you have swelling.

## Ice

This lowers muscle swelling and eases pain.

- Apply gel ice packs to any sore, swollen or tender muscle.
- Use ice for 30 minutes every hour when not walking or exercising.

**Swelling and bruising can be a problem for weeks after surgery. Keep icing and elevating.**

## Incentive spirometer

This device prevents fluid from settling in your lungs.

- Use this device **10 times** each hour you are awake.
- If you don't have an incentive spirometer, take a deep breath, hold the breath and cough 10 times each hour you are awake.



## Managing pain

**Don't expect to be pain free. Pain is a part of recovery.** The goal is to ease the pain so you can walk and exercise. Remember, pain is from muscle soreness, stiffness, tightness and throbbing. Muscle pain slowly gets better as you work on stretching, moving and strengthening the leg muscles.

### Tips for managing pain:

- **Deep breathing:** Take a slow, deep breath for 5 seconds. Slowly blow the air out. Repeat often.
- **Distraction:** Listen to music, read, watch TV or talk to family and friends.
- **Ice:** Use ice 30 minutes on and off as much as possible for as long as you have swelling.
- **Elevation:** Raise your leg when you are not sitting or walking as long as you have swelling. Remember, toes above your nose. Keep the knee straight.
- **Medication:** Different kinds of medications are prescribed to help manage pain.
  - *Examples: Tylenol (Acetaminophen), anti-inflammatories and narcotics.*
  - Medication refill: Call your surgeon's office 48 hours before you run out.



## Sleeping

Trouble sleeping is normal after surgery. The pain is usually worse at night.

### Tips to help you sleep:

- Stay active during the day and evening.
- Limit caffeine and fluids after dinner.
- Cut back on screen time 1 hour before bedtime.
- Take Melatonin or Benadryl (12.5 mg–25 mg)
- **Don't take sleep aids and narcotic pain medication at the same time.**

## Stay active

Moving your muscles will help them loosen so they are less stiff and tight. Walk every hour you are awake.



## Steps and walking

Movement is lotion to the body. It prevents scar tissue build up, decreases post-operative complications and lessens muscle aching, stiffness and soreness

**A physical therapist** or our nursing team will work with you before you go home to teach you how to safely walk using the front wheeled walker and take steps. Once you safely walk and can take steps, you will be discharged home with your support person.

### At home:

- Walk and move your leg every hour you are awake.
- Eat all your meals sitting in a chair.

- Bathe and get dressed every day.
- Do your therapy exercises 2–3 times each day.
- Move both feet 10 times every hour you're awake to circulate the blood in your legs.

## Support hose

Support hose promote circulation and decrease swelling. You will be given a pair before you go home if your surgeon wants you to wear them.

Wear shoes or socks with traction, so you don't slip and fall. Don't roll the hose down if they hurt or bother your legs. This can cut off the blood flow in your legs.

### Putting hose on:

Use a sock aid if you have one to help you get your hose on.

### Helpful hint:

- Place a Ziploc bag over your toes and foot arch.
- Slide the hose over the Ziploc bag.
- Once you get the hose over the heel, pull the Ziploc bag out from the opening near the toes.

### Clean the hose:

Hand-wash with soap and water. Hang them up to air dry.

# How to prevent complications

## Blood clots

Blood clots happens when blood is not circulating (moving). You can get a blood clot in either leg after joint replacement surgery.

### To prevent a blood clot:

- Do ankle pumps 10 times every hour.
- Walk once an hour (while awake) at home.
- Move your legs each hour when sitting or lying down (while you are awake).
- Take your blood thinner as prescribed.

### Signs of a blood clot:

- Calf pain, redness and swelling in either leg that does not get better after using ice, elevation and pain medication. **Call your surgeon or home health agency.**
- Sudden chest pain or shortness of breath when resting. **Call 911.**

When a blood clot goes untreated, it can break away from the vein and travel to the heart (heart attack), lung (pulmonary embolism) or brain (stroke).

## Constipation

Constipation is a side effect of narcotic pain medication and anesthesia. When constipation goes untreated, it can lead to bowel blockage.

### To prevent constipation:

- Take Colace® (stool softener) daily and/or a mild laxative (MiraLAX®) if needed.
- Take a laxative if your bowels don't move within 2 days of surgery.
- Get up and move every hour.
- Drink 8 glasses of water every day.

### Signs of constipation:

- No bowel movement within 2–3 days of surgery
- Unable to pass gas
- Abdominal cramping
- Stomach bloating
- Nausea and vomiting

## Infection

### To prevent infection:

- Keep your incision clean and dry.
- Clean your skin daily using antibacterial soap.
- Eat for healing.
- Don't smoke.

## Signs of infection:

- Fever: Oral temperature is greater than 100.5 degrees that doesn't get better taking Tylenol, using the incentive spirometer and walking.
- Shaking and/or chills
- Developing flu-like symptoms.
- Your wound has:
  - Increased redness, tenderness or swelling
  - Change in color or the amount of drainage
  - Foul odor (bad smell)

## Nausea

Narcotic pain medication, anti-inflammatories and antibiotics can cause nausea and vomiting.

### To prevent nausea:

- Always eat before taking any medication (even in the middle of the night).
- Keep food in your stomach.
- Drink or eat things with ginger and peppermint.
- Take any prescription or over-the-counter medication used to lower stomach acid buildup.

## Pneumonia

You are at risk of fluid buildup in the lungs after surgery if you move less and don't take deep breaths. This fluid build-up can cause pneumonia.

### To prevent pneumonia:

- Walk every hour while awake.
- Don't smoke.
- Use your incentive spirometer 10 times an hour while awake.
- Take a deep breath, hold it and exhale 10 times an hour if you don't have your incentive spirometer.

### Signs of pneumonia:

- Gradual trouble breathing and shortness of breath when resting.
- Coughing up colored mucus (green or yellow).
- Running a fever of 100.5 degrees or higher that does not get better after taking Tylenol/Acetaminophen).

# Understanding medications after surgery

## Acetaminophen (Tylenol®)

- Controls pain differently than narcotics (opioids).
- Can be taken with narcotics and anti-inflammatory medication.
- Decreases narcotic use.
- You can take 3000 mg each day.
- Be sure to count any Acetaminophen in your narcotic toward your daily 3000 mg.

### These narcotics have Acetaminophen:

Hydrocodone w/Acetaminophen, Vicodin®, Norco®, Oxycodone w/Acetaminophen or Percocet®).

### How to take Tylenol/Acetaminophen on a schedule

**Extra Strength Tylenol®/Acetaminophen (500mg):** 2 pills 3 times a day.

**Tylenol® Arthritis (650 mg):** 1 pill 4 times a day.

### Don't take Tylenol/Acetaminophen if:

- You have liver damage or disease
- You are allergic to Tylenol/Acetaminophen
- Your surgeon or care provider instructed you not to take it.



## Anticoagulant (blood thinner)

This prevents blood clots.

- Take as prescribed by your surgeon.
- Don't skip a dose.
- Don't stop taking until your surgeon tells you to stop.

## Antibiotics

These prevent infections.

- You may be prescribed an antibiotic to take at home.
- Take as prescribed and finish the prescription.
- Eat before taking to prevent upset stomach or stomach pain.
- Eat yogurt and probiotics.

## Anti-inflammatory (NSAID)

These decrease swelling and ease pain.

- Take if prescribed by your surgeon.
- Don't take an NSAID without talking to your surgeon.
- Eat before taking to prevent stomach pain and nausea.
- Drink lots of water to prevent kidney damage.
- Stop taking and call your surgeon if you have bleeding from your wound.

*Examples of NSAIDS include Celebrex, Meloxicam, Mobic, Vytolin, Aleve, Advil and Motrin.*

## Daily medications

Routine medications are often restarted after surgery.

- Your surgeon will let you know if there are medications you should not restart.
- Look at your discharge paperwork or ask your care team if you have questions.
- Check your blood pressure before taking blood pressure medication.
- Don't take your blood pressure medication if your blood pressure is low.
- Diabetics should check their blood sugar at home before taking medication.
- Call your doctor with any questions about your routine medications.

## Narcotic pain medication

These provide pain tolerance. Don't expect to be pain free.

- Take as needed.
- Don't take more than prescribed.
- Eat before taking to prevent nausea, dizziness or passing out.
- Stop taking or wean yourself off as soon as possible.
- Call your surgeon if you need a refill.

**Remember the goal is pain tolerance. This means you will have pain. The medication is to help ease the pain enough so you can do your exercises and move.**

## Stool softener

This prevents constipation caused by narcotics and anesthesia.

- Untreated constipation causes a bowel blockage.
- Take an over-the-counter stool softener twice a day while taking your narcotic.

*Examples include Colace®, Senakot® or MiraLAX®.*

- Take an over-the-counter laxative if your bowels don't move **within 2-3 days of surgery.**

*Examples include Milk of Magnesia®, Dulcolax® or Fleet Enema.*

## Medication side effects

MEDICATION TYPE/USE		MEDICATION NAMES	SIDE EFFECTS
<b>PAIN TOLERANCE</b>			
Non-narcotics	So you can walk, do your exercises and take care of yourself	Acetaminophen (Tylenol®) Do not take more than 3,000 mg every 24 hours	Upset stomach Rash Headache Dark urine Liver problem
Narcotics		Hydrocodone/Acetaminophen (Norco®, Lortab®) Hydromorphone (Dilaudid®) Oxycodone (Roxicodone®) Oxycodone/Acetaminophen (Percocet®)	Upset stomach Drowsiness Itching Dry mouth Constipation Trouble urinating
NSAID/Non-steroidal anti-inflammatories: Helps with swelling and pain		Celecoxib (Celebrex®)	Upset stomach Reflux Diarrhea High blood pressure Liver problems
Nerve pain medications: Can help with neuropathic pain		Gabapentin Pregabalin (Lyrica®)	Drowsy Dizziness Dry mouth Upset stomach Weight gain
<b>STOP THE CLOT</b>			
Blood thinners: Helps you not get a blood clot		Aspirin Apixaban (Eliquis®) Enoxaparin (Lovenox®) Rivaroxaban (Xarelto®) Warfarin (Coumadin®)	Bruising Bleeding (nose, urine, stool) Dizziness Upset stomach Tired
<b>CONSTIPATION</b>			
Stool softener: Makes stool soft		Docusate (Colace®)	Stomach cramps Nausea Diarrhea
Laxatives: Makes bowels move		Milk of Magnesia (MOM) Polyethylene Glycol (MiraLAX®) Senna (Senokot®)	Diarrhea Cramping Upset stomach Burping
<b>UPSET STOMACH</b>			
Medications or over-the-counter products: Used to prevent or treat nausea or throwing up		Ondansertron (Zofran®)	Dry mouth Dizziness Headache
		Ginger ale Ginger tea Peppermint candy Peppermint essential oil	None



# Understanding care after discharge

## Home health

Your surgeon's office will arrange for home health services or outpatient therapy.

### If your plan is home health:

- Write down the name and phone number of the agency when they call you. If you don't hear from your agency within 24 hours of getting home, give them a call.
- The first visit will be 24–48 hours after you get home.
- A physical therapist will come to your home 3 days a week.
- You **may not** have a nurse visit. If your surgeon doesn't think you need one. If you don't have a home health nurse, your home therapist will check your dressing and change it when it is time.
- Your physical therapist can help you manage your dressing and change it if you don't have a nurse.

### If your plan is outpatient therapy:

- Expect your first appointment to be within 48 hours after surgery.
- Call to **reschedule your appointment ASAP** if you miss it.
- Follow your surgeon's instructions on how to manage your dressing at home.
- Call your surgeon if the dressing comes loose, fills with drainage or gets wet.

## Surgical incision care

Follow your surgeon's instructions on how to manage your dressing. The information will be written in your discharge paperwork. If you are not sure what to do, ask your home health agency or call your surgeon's office.

Your incision will be covered with a dressing. Underneath your dressing you will have staples, sutures or dissolvable stitches covered with a skin glue or mesh.

- Don't remove the glue or mesh.
- Don't use any lotions, creams, ointments, or powders on or near your incision.
- Call your surgeon's office if your bandage is soaked with blood or drainage.

## When to shower

Follow your surgeon's written instructions for showering after surgery.

- Clean your skin daily to prevent infection.
- Use antibacterial soap like Dial® until the wound is healed.
- Cover the dressing with 2 layers of cling wrap or saran wrap once you are allowed to shower.
- Don't put your new joint under water (bathtub, swimming pool or hot tub) until the wound is fully healed.



## Eat healthy

Eating a healthy diet before and after surgery is important for healing and gives you energy.

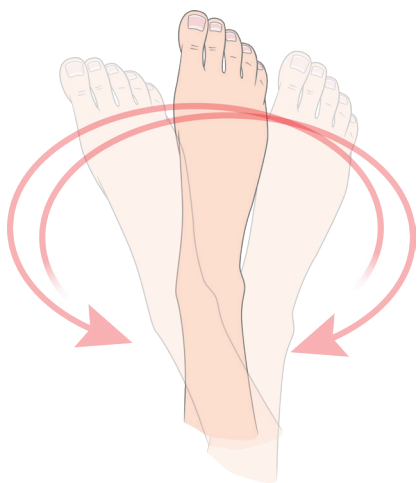
- Drink 8 glasses of water a day (1 glass = 8 ounces)
- **Don't skip meals.** It is normal not to be hungry after surgery.
- Eat high-fiber foods such as fruits, vegetables and beans.
- Eat protein such as chicken, turkey and beans at each meal to help your muscles heal.

## How many grams of protein you need to heal

Find your weight in the chart below. Next to your weight is the grams of protein you need to eat every day to heal. If you are not hungry, add a protein drink or bar to help.

Weight (lbs.)	Grams of protein
110 lbs.	40-50 g
120 lbs.	44-55 g
130 lbs.	47-59 g
140 lbs.	50-64 g
150 lbs.	55-68 g
160 lbs.	58-72 g
170 lbs.	62-77 g
180 lbs.	65-82 g
190 lbs.	69-87 g
200 lbs.	73-91 g
210 lbs.	76-95 g
220 lbs.	80-100 g
230 lbs.	84-105 g
240 lbs.	87-109 g
250 lbs.	91-114 g
260 lbs.	95-118 g
270 lbs.	98-123 g
280 lbs.	102-107 g
290 lbs.	105-132 g

# Physical therapy exercises



## Ankle circles

- Move your ankle around slowly in large circles.
- Repeat in the opposite direction.
- Do 10–15 repetitions, 3 times per day.



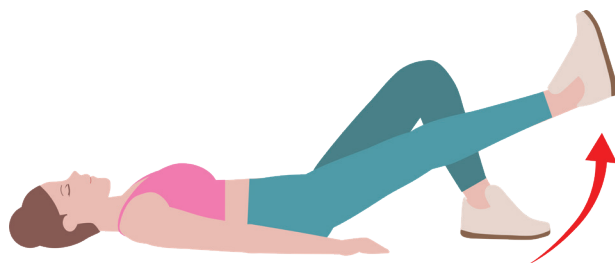
## Knee press downs

- Lie flat on your back.
- Press the back of your knee down toward the bed.
- Hold for 5 seconds. Relax.
- Do 15–20 repetitions, 3 times per day.



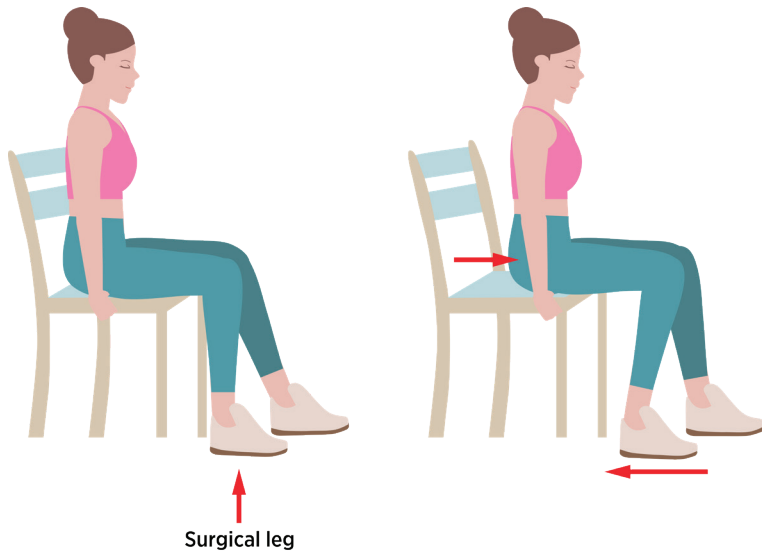
## Heel slides

- Lie flat on your back.
- Slide your heel toward your buttocks, bending the surgical knee.
- Hold 3 seconds and slowly lower.
- Do 10–15 repetitions, 3 times per day.



## Straight Leg Raise

- Lie on your back
- Bend your nonsurgical knee and flatten your foot.
- Lift your surgical leg up while keeping your surgical knee straight and toes pointed up to the ceiling.
- Hold 5 seconds then slowly lower the leg.
- Do 10–15 repetitions, 3 times per day.



## Knee Flexion

- Sit on edge of bed or chair.
- Put your surgical leg foot flat on the ground.
- Bend your surgical knee as far as comfortable while keeping foot on the floor.
- Scoot forward in the chair a little to bend your knee more.
- Hold 5 seconds and slowly lower.
- Do 10–15 repetitions, 3 times a day

## Seated marching

- Sit in a chair with knees bent.
- Bend surgical leg to lift foot off the floor.
- Hold 5 seconds and slowly relax.
- Do 10–15 repetitions, 3 times a day.

Don't flex the hip beyond what is comfortable. This should not be painful.



## Seated kickout without assist

- Sit on edge of bed or chair.
- Straighten knee fully.
- Hold 3 seconds and slowly lower.
- Do 10–15 repetitions, 3 times a day.



# How to:

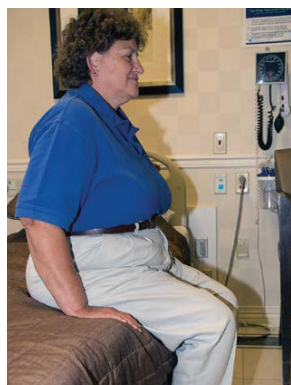


## Use a front wheeled walker

- Roll the walker forward with both arms holding on to the walker.
- Step forward on your surgical leg.
- Use your arms to support your surgical leg as you step.
- Next bring your good leg forward.
- Never let go of the walker to carry anything or reach for anything (you can fall).

## Get out of bed

- Get out of bed on the same side as your surgical leg.
- Scoot to the edge of the bed.



- Try not to twist your leg or turn your toes in or out too far.
- Use your arms and good leg to scoot, turn and sit on the side of the bed.
- Rest for a few minutes before you stand up.
- Push up with one hand on the bed and the other hand on the walker.



## Sit down and stand up

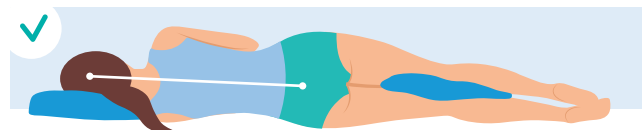
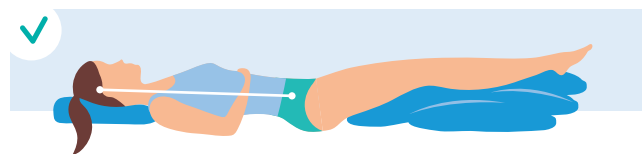
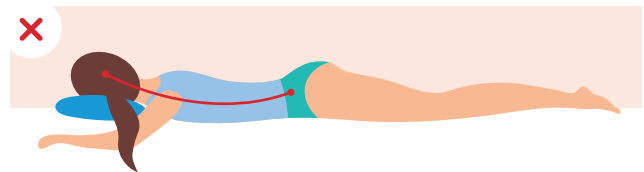
- Step back on your non-surgical leg first.
- Next, use your front wheeled walker to move your surgical leg back.
- Step back until you feel the chair or toilet behind your legs.
- Reach back to grab the arm rest with one hand, then the other.
- Use your arms to slowly lower yourself to the chair.
- Stretch out your surgical leg as you sit down.
- Reverse these directions for standing.

## Sleep

**Don't sleep on your stomach.**

**Back sleeping:** Keep your knee straight but elevate your foot when lying on your back.

**Side sleeping:** Place a pillow between your knees and lie on the non-surgical side.



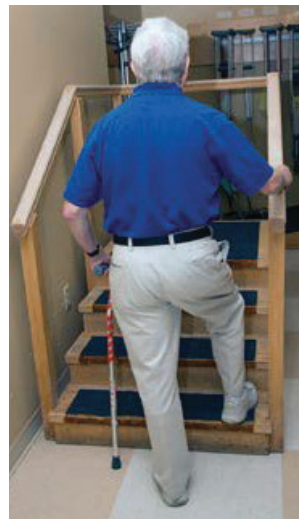


## Get into a car

- Move the seat back as far as it goes and recline it slightly.
- Back up close to the seat. Place one hand on the back of the seat, and one hand on the walker for support.
- **Don't hold onto the door.**
- Sit down slowly, keeping your surgical leg straight.
- Slide your hips back as far as you can go.
- Swing your legs into the car while bending your knees.

## Go up and down stairs

- Go up the step with your non-surgical leg first.
- Go down the step with your surgical leg first.
- Take 1 step at a time.
- Hold onto the railing to support your surgical leg.
- Stop to rest on each step until your surgical leg gets strong.



**Surgical leg**



