



Guide to Total Joint Replacement



Welcome,

Thank you for choosing Front Range Orthopedic Surgery Center for your total joint surgery. You are a very important member of our health care team and we are committed to providing excellent care for you during your entire experience. This guidebook is designed to answer questions and provide information to help you plan for your surgery, recovery, and beyond. Our goal is to enable you to undergo the surgical experience with confidence and resume an active lifestyle upon rehabilitation of your joint.

We ask that you keep this guidebook with you, as it will serve you well throughout your journey to a new joint replacement.

Bring it with you to:

- Pre-surgical interview and instructions
- Pre-operative doctor visit
- Pre-surgical Total Joint Class
- Surgery center on day of surgery
- Doctor visits after surgery

Thank you for choosing Front Range Orthopedic Surgery Center and Front Range Orthopedics & Spine.

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Preparing for Your Total Joint Surgery

Orthopedic surgeon: _____ Phone: 303-772-1600
Front Range Orthopedics & Spine

Primary care physician (PCP): _____ Phone: _____
Date of last appointment with PCP: _____
___ Not applicable

Cardiologist: _____ Phone: _____
___ Not applicable

Endocrinologist: _____ Phone: _____
___ Not applicable

Pulmonologist: _____ Phone: _____
___ Not applicable

Physical Therapy: Phone: 720-494-4750

Surgery Center: Phone: 720-494-3200

Surgical Patient Appointments

Surgery date: _____ Surgeon: _____

Your Pre-Surgery Visit Nurse: _____

Before Surgery

Attend a Total Joint Class

Classes will be offered the second Wednesday and last Friday of each month. Please bring your walker to the class for sizing.

Date: _____ Time: _____

Call 720-494-3200 after 8 a.m. the day prior to your surgery to receive your surgery arrival time.

Surgery Date: _____ Time: _____

After Surgery

You have an appointment with _____ on Date: _____

Time: _____ Place: _____

You have a Physical Therapy appointment with _____ on Date: _____

Time: _____ Place: 1610 Dry Creek Drive (1st floor North), Longmont, CO 80503

It is important that you make your first couple of physical therapy appointments before your surgery day.

Important Surgical Instructions

- Do NOT shave operative limb for 5 days prior to surgery
- Do NOT eat anything after midnight the day before surgery.
- You may have water or Gatorade in the morning up to four hours prior to **arrival** and then nothing to eat or drink.
- On the morning of your surgery, take only these medications with a sip of water: _____

- Stop taking the following medications at the indicated day prior to surgery: _____

- Please shower the night before and the morning of surgery with the Hibiclens given to you. The Hibiclens should be used on your entire body, but you should gently wash the surgical limb for 5 minutes. Do not scrub your skin.
- Do not wear lotions, perfume, powder, nail polish or makeup.
- Bring a case for your eyeglasses, hearing aids, dentures, etc. Please do not wear your contact lenses.
- Please leave jewelry and valuables at home. All piercings need to be removed prior to arrival.
- Wear comfortable clothes that are easily removed and wear comfortable nonskid rubber soled shoes - no flip-flops.

Please call the surgery center if you have any questions, 720-494-3200.



What to bring with you on the day of surgery:

- Caregiver (please do not bring small children as they are not permitted in patient care areas)
- Assistive devices – walker and any other immobilizers provided at your pre-op appointment
- Medications, including pain medication
- CPAP/BiPAP
- Snacks if you are gluten intolerant or have specific dietary needs
- Cold therapy unit for knee patients (unless purchasing day of surgery)

Pre-surgery Checklist

Please use this checklist to help prepare for your surgery. It is necessary to complete the entire list prior to surgery.

___ Dental check-up

If you have not had an appointment within 6 months, please make an appointment with your dentist as soon as possible. Any necessary dental work must be completed at least 2 weeks prior to surgery. Your mouth must have a clean bill of health. Do not schedule a routine dental appointment within 3 months following your surgery. **Your dentist will need to be aware that you have an artificial joint. You will require an antibiotic before dental exams/procedures after your joint replacement.**

___ Pre-operative appointment with orthopedic surgeon: 303-772-1600

Please make an appointment with your surgeon for at least 2 weeks before surgery. This will allow you to ask questions and review your medications with your doctor. Please bring a list of your current medications, including any vitamins you may take. You will also be asked to see a nurse at the surgery center and a physical therapist during this visit. **Allow for 3-4 hours to complete** all of these appointments.

Bring your caregiver with you to this appointment.

Pre-operative appointment date: _____

___ Pre-operative appointment with surgery center nurse: 720-494-3200

This appointment is very important and allows the nurse to review your medical history, medications and provide important instructions. This appointment may also include scheduling necessary laboratory tests and an EKG (electrical recording of your heart), this will be scheduled unless previously completed within the last 6 months. Your anesthesiologist will review your record and determine if you need to see your primary care physician (PCP) or cardiologist prior to your surgery. The nurse will notify your cardiologist or PCP if this is the case. Your medications will be reviewed; we do this to make sure that none of the medications you are taking will interfere with anesthesia or any of the medications you will receive in the surgery center post-operatively. Please be sure to bring a complete list of the medications you are taking.

___ Physical Therapy: 720-494-4750

It is very important to get started with physical therapy as soon as possible following your discharge.

Please call and schedule your physical therapy NOW, PRIOR to your surgery. Our goal is that you would start physical therapy one to four days after surgery.

___ Exercises

To help you recover post-operatively we recommend that you do the exercises outlined in this booklet. These exercises will help you to be stronger before your surgery and will be part of your therapy after surgery.

- Knee replacement, page 25
- Hip replacement, page 30

___ Obtain needed equipment

On page 9, there is a list for borrowing equipment from loaner agencies. All total knee and hip replacement patients will need a front-wheeled walker. You may also need a shower bench or chair as well as a raised toilet seat. The equipment should be obtained prior to surgery. Please bring your walker to the surgery center to have the height adjusted by a nurse or physical therapist prior to discharge.

___ Practice using adaptive equipment one week before surgery

Make sure you are able to get on/off the toilet seat using only your non-surgical leg.

Caregiver

Please arrange for a caregiver that can be available to help you. It is beneficial for the person you select to be a second set of eyes and ears to help with questions that may arise during the recovery process.

A caregiver must accompany you to the pre-operative appointments and be available to assist you at home for at least the first five to seven days after discharge.

Complete the Home Preparation Checklist, page 8

Disability/FMLA paperwork

Please contact your human resources department if you need FMLA paperwork completed and bring the necessary forms with you to your pre-operative appointment.

It is important that you are healthy to go into surgery

If you have a cold, start running a fever or have an infection please call us immediately (720-494-3200).

What to have at home prior to surgery:

Aspirin 81 mg

Stool softener and/or laxative. See page 16 for detailed information

Tylenol 500 mg (acetaminophen)

Nutritious meals and snacks readily available

Medication Use Before Surgery

It is very important to make a complete list of medications and supplements you are currently taking. This should include prescriptions (pills, inhalers, eye drops), over-the-counter medicines and herbal products.

Please keep this list with you in case of an emergency.

Patients should continue to take all their regular medications on the day of surgery until directed otherwise. **Do not stop any medication on your own without talking to your physician.**

Home Preparation Checklist

It is important to prepare your home before you have surgery. Please take the time to go through this checklist. We recommend starting this approximately **4 weeks** before your surgery so you have time to move furniture, purchase or borrow needed equipment and do basic home improvements. Your therapy team may also make additional recommendations based on how you do after your surgery.

- Be aware of uneven surfaces inside and outside your home. These are trip hazards.
- Remove throw rugs and secure extension cords so they are not in your walking path.
- Ensure you have access to a cordless or cell phone so you are not rushed to answer it. Make sure the charger is located near your bed so you can charge the phone at night and carry it with you at all times during the day.
- Arrange for your pets to be kept in a safe place (separate room or kennel) while you are walking around your home. Pets can be a trip hazard.
- Install night lights in the hallways and bathrooms so you have adequate lighting. Replace light bulbs throughout your home.
- Keep your bed linens off of your floor. They can easily become tangled in the legs of walkers and canes.
- Install safety rails in the tub/shower area if needed.
- Check to make sure the handrails on your stairs are fastened securely. Install handrails if you don't have them.
- Purchase or borrow and install a raised toilet seat or commode frame in your bathroom(s) if recommended by Physical Therapy.
- Apply nonskid surfaces in your tub/shower area. Wet floors can become slippery.
- Purchase footwear with nonskid soles that stays securely on your feet. You may want to purchase elastic shoelaces as well.
- Use firm chairs with arm rests or place pillows on chairs to raise the seat height. Try to keep your hips higher than your knees by one to two inches when you are sitting. Do not use chairs that have wheels.
- Arrange shelves in the kitchen and other areas so that frequently used items are easy to reach. Limit unsafe reaching and bending. Consider arranging your clothing items for dressing as well.
- Have simple meals prepared ahead of time.
- Use water bottles to avoid spilling liquids while you are using a walker or a cane.
- Clear clutter from the paths you walk so you can negotiate a walker in your home easily.
- Check the rubber tips on your walker and/or cane. Replace them if they are worn out.
- Have ice packs and/or bags available.

Adaptive Equipment Options

Loaner Contacts: All equipment must be picked up by family or responsible party. Please call ahead to make an appointment to select your equipment.

Longmont

American Legion Auxiliary

720-771-2676 Marilyn
303-961-2233 Dee
303-506-4171 Linda

Elks Lodge (Mon-Sat)

303-776-1055
306 Coffman St.

Moose Lodge (Mon-Sun)

303-776-4911
2200 Pratt St.

Boulder

West Boulder Senior Center

303-441-3148 (Mon-Fri)
909 Arapahoe Ave.

American Legion

303-442-9551 (Mon-Sun)
4760 28th St.

Elks Lodge

303-442-5003 (Tues-Fri)
3975 28th St.

Loveland

Disabled Resource Services

970-667-0816
118 E. 29th St. #C

Good Health Will

970-624-6002
2003 W. 8th St.

Greeley

Good Health Will

970-515-6935
2611 W. 11th Rd.

Equipment items you may need for discharge

These can be obtained from loaner lists above or other local resources.

- Leg lifter
- Shower/bath chair
- Raised toilet seat
- Long-handled shoe horn
- Front-wheeled walker
- Long-handled sponge
- Hand-held shower head
- 4-wheeled walker
- Reacher
- Cane
- Bathtub bench

Other local resources

Wal-Mart, Sam's Club, Walgreens, Costco and

Home Depot: Carry reachers, sock-aids, walkers and other bathroom equipment, some can be located in the pharmacy area of certain stores.

AgeWell: 303-651-5080

Longmont Senior Center: 303-651-8411

Care Connections: 303-772-2262

Provider for handyman work, grocery shopping and transportation to doctors appointments, small fees apply.

Consider grocery delivery

Accessible Systems, Inc.: 303-693-7787

Home adaptations and renovations, free estimates.

Major Medical: 303-651-6400, 1649 Main St., Longmont, Purchase/rental of medical equipment.

Good Day Pharmacy: 303-776-0709, 1749 Main St., Suite B, Longmont, Has adaptive equipment hip kit.

Using adaptive equipment

It will be important to be familiar with some equipment and exercises before you have surgery. This will make your transition back home easier. Your therapist will help you learn to use the equipment. Please practice the last exercise for two to four weeks prior to surgery. If the exercise causes pain, please discontinue.



Reachers

A reacher can be used for dressing, lifting clothes from the washing machine, getting small items out of the cupboards and lifting objects from the floor.

Reachers come in different lengths. A 26" length is the most commonly used.



Putting on socks with a sock aid

When reaching the feet is not possible a sock aid is helpful.

Pull the sock on the aid until the sole of the sock is level. The sock must not be pulled over the top of the sock aid. Take hold of the string and drop the sock aid onto the floor. Insert your foot into the opening, point your toes and pull the sock onto your foot. Remove the sock aid.



Putting on the pants with an aid

When leg movement is restricted, a dressing stick or reacher can be used to help in putting on pants.

In a sitting position, lay the pants on the floor with waistband facing upwards. First put the weaker foot into the pant leg and pull it up to the ankle using the stick or reacher. Do the same with the other pant leg. Hold the front of the waistband with the reacher and pull each pant leg upwards in turn until it is in position.



Long-handled shoe horn

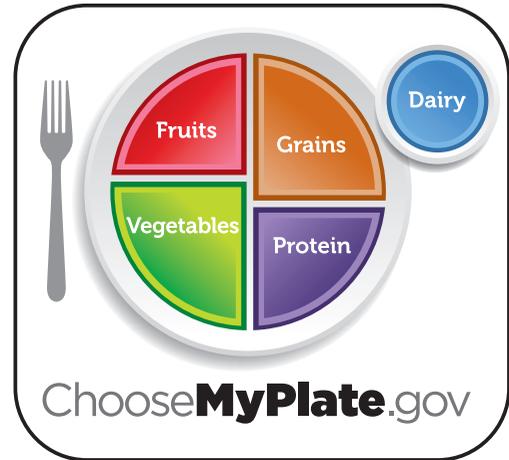
Position the shoe horn so that when you push your foot into the shoe, your heel is guided into the shoe by the shoe horn.

Using elastic laces or wearing slip-on shoes is recommended.

Nutritional Needs for Joint Surgery

1. Good nutrition is important both before and after surgery

Use the “Quality Plate” guidelines from the USDA as a model of a healthy diet. Go to ChooseMyPlate.gov to review further. Eating healthy foods and a variety of foods prior to and after surgery will help you heal faster. If you are a diabetic, make sure your blood glucose is well controlled prior to surgery.



2. Plan ahead for surgery with easy to prepare meals:

- Cook/freeze meals ahead of time
- Buy frozen meals
- Have nutritious snacks and finger foods on hand
- Supplements like Boost, Ensure, protein shakes

Use this grocery list to help you shop before surgery

- | | |
|--|---|
| <input type="checkbox"/> Milk | <input type="checkbox"/> Cereal |
| <input type="checkbox"/> Cheese | <input type="checkbox"/> Oatmeal |
| <input type="checkbox"/> Yogurt | <input type="checkbox"/> Granola |
| <input type="checkbox"/> Cottage cheese | <input type="checkbox"/> Fruit (berries, apples, grapes, oranges, bananas) |
| <input type="checkbox"/> Whole grain bread | <input type="checkbox"/> Nuts |
| <input type="checkbox"/> Tortillas | <input type="checkbox"/> Nut butters |
| <input type="checkbox"/> Crackers | <input type="checkbox"/> Veggies (carrots, snap peas, peppers, broccoli, tomatoes, spinach) |
| <input type="checkbox"/> Ensure | <input type="checkbox"/> Frozen meals (Lean Cuisine, Healthy Choice, Amy’s Organic) |
| <input type="checkbox"/> Boost | |
| <input type="checkbox"/> Carnation Instant Breakfast | |

3. Special nutrition needs

If you have special nutrition needs, **please bring foods you can tolerate along with you to the surgery center.**

4. Increase fiber

Increase your fiber, especially **insoluble fiber**, after surgery to help with constipation. Common sources of insoluble fiber are wheat bran, vegetables and whole grains. An intake of between 25-35 grams of fiber per day has been shown to be beneficial for healthy adults. Consider sipping on “Smooth Move” tea. Since fiber attracts water into your intestines, it is important to **drink enough liquids** at the same time you add fiber to your diet. This prevents constipation. Aim for at least eight glasses per day.

5. Increase Liquids

Increase your liquid intake of any non-caffeinated beverages. Water is the best with the goal to stay well hydrated.

Nutritional Needs for Incision Healing

A balanced diet is essential for incision healing. You may need more calories and other nutrients during healing than you ordinarily would. Include sources of these nutrients in your diet every day.

Nutrients Food sources

Proteins*	Milk, cheese, meat, fish, poultry, nuts, dried beans
Carbohydrates	Grains, fruits, vegetables, legume-type beans
Fats	Butter, oils (preferably monounsaturated), nuts, olives, avocados
Vitamin C*	Citrus fruits, cabbage, strawberries, potatoes, bell peppers, kiwi, cantaloupe, cauliflower
Vitamin A	Yellow and green vegetables, egg yolks, butter, cheese, dark leafy greens
Calcium	Dairy products, fortified fruit juice, collard greens, kale, soybeans, broccoli, figs, oranges, salmon
Zinc*	Whole grains, milk, liver, beef, lamb, sesame and pumpkin seeds, shellfish, legumes, eggs, quinoa
Iron	Liver, lean meats, eggs, green vegetables, dried fruits, dried beans, shellfish, poultry
Thiamin	Pork, milk, dried beans, enriched flour products, green vegetables
Magnesium	Bananas, whole grains, dried beans, dark green vegetables, nuts, meat

**These are especially helpful for healing of your incision.*





What to Expect On Your Surgery Day

- When you leave the Pre-operative area for the operating room, your caregiver will be directed to the surgery waiting area. This is where your surgeon will come after the surgery to find your caregiver to go to a private room to discuss your surgery. The operating room (OR) nurse will provide updates for your caregiver if your procedure is lengthy. Your caregiver will need to be at the surgery center before and after surgery.
- Procedure times vary, but will generally take between 1.5 to 2.5 hours, depending on your specific situation, surgeon and other variables.
- You will be moved to the recovery area after surgery where you will be monitored closely until your anesthesia begins to wear off, your body temperature is stable, your oxygen needs are acceptable and your pain and nausea are controlled. The average recovery time spent at the surgery center is 3 to 5 hours. Your anesthesiologist and your surgeon will visit you in the recovery area although you may not remember seeing them.
- You will continue to be monitored closely. You will have an Intravenous Catheter (IV) for fluids, pain and nausea medications and any other medications ordered by your surgeon or physician assistant (PA).
- Solid foods will be offered when you are awake and stable. We encourage you to eat solid foods as long as you are not nauseous.
- While you are in the surgery center, a compression device will be used on your legs to aid in blood circulation and to reduce the risk of blood clots.
- Ice will be applied to the surgical area to reduce swelling, inflammation and help with pain control. For total knee surgery, you will use a knee wrap connected to a cold water therapy unit (brought from home or purchased from us). For total hip surgery, an ice bag will be used.
- A physical therapist or nurse will evaluate you and assist you to sit on the edge of bed. You will progress to walking with assistance from your physical therapist and/or your nurse. **Please never get out of bed without assistance.** You will be at high risk for falling. **Always call for assistance.**
- Managing your pain is very important for your progress and recovery. Pain is a normal part of total joint replacement surgery. Our goal is to work with you and your healthcare team to develop a pain management plan that effectively keeps your pain at a tolerable level while minimizing the potential side effects. Please actively communicate with our nurses and therapists about your pain level.

Pain Control and Comfort Options

Benefits of controlled pain

When your pain is controlled, you:

- Heal faster
- Get your strength back faster
- Feel better faster

Options for pain control

Both medical and nonmedical treatments can be successful in helping to prevent and control pain. The most common methods of pain control are described below. You and your doctors and nurses will decide which ones are right for you. Many people combine two or more methods to get better relief. To more easily track your medication use, there are medication tables included in the pocket of this guide.

Pain control methods

- **Oral:** pain medicines are taken by mouth in pill or liquid form or by placing the medicine under the tongue.
- **Injection:** a “shot” of medicine is given, usually into an intravenous (IV) tube, sometimes into a muscle.

Other methods to control your pain at home

- Movement (repositioning, walk, shower, stretching)
- Relaxation techniques, music therapy, prayer, quiet time
- Visits (family, friends)
- Comfort items (heat, ice, pillows, moisture, aromatherapy, food/drink, sleep mask, ear plugs)
- Distractions (TV, games, cards, crafts, puzzles, notebook, books/magazines, phone)

What you can do to keep your pain under control

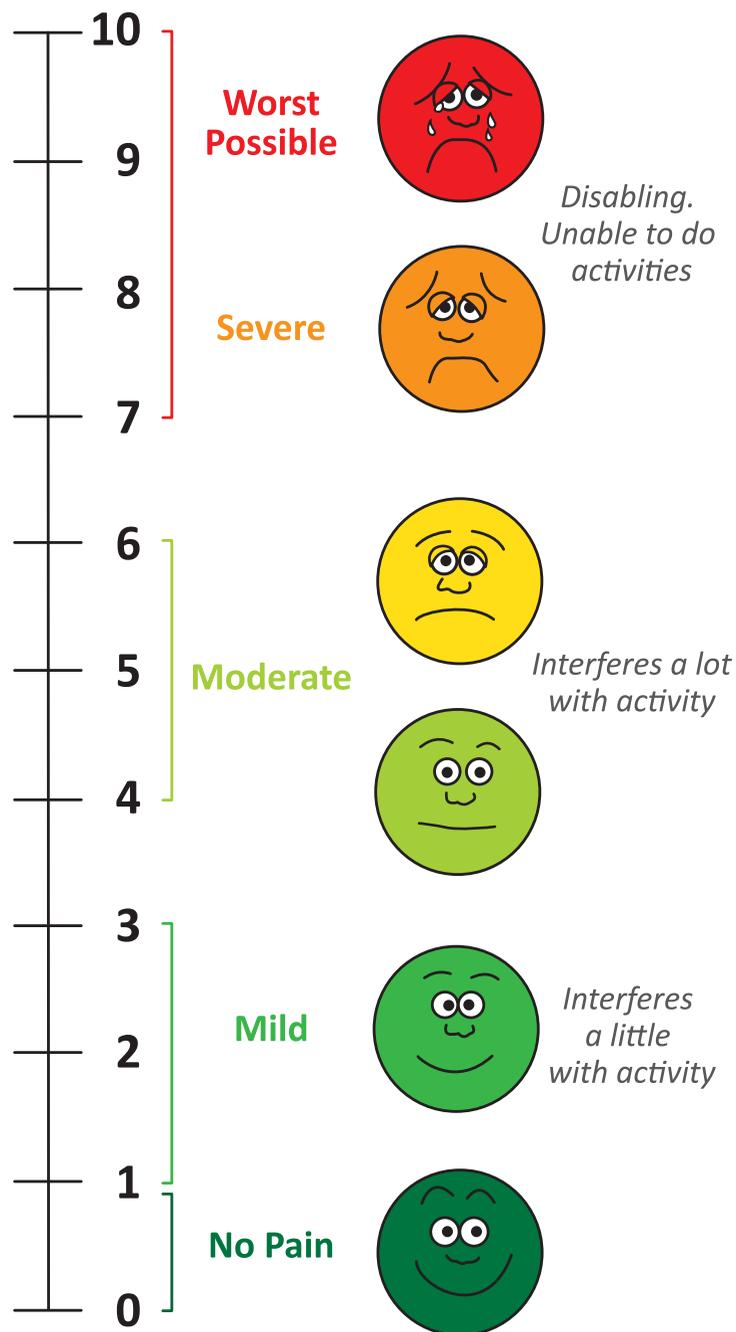
- Talk with your doctors and nurses about pain control methods that have worked well or not so well before.
- Talk with your doctors and nurses about any concerns you may have about pain medicines.
- Talk to your doctors and nurses about any allergies you may have to medicines.
- Ask your doctor or nurse what to expect: Will there be much pain? Where will it occur and how long is it likely to last?
- Take your pain medicine when the pain starts. Keeping ahead of the pain is a key step in proper pain control.
- Take pain medicine prior to getting out of bed, walking, or going to physical therapy, if those activities worsen your pain. It is harder to ease pain once it has started.
- Take pain medicine on a regular schedule as prescribed the first week to avoid excessive pain on waking.

Important reminders

- Do not drive, operate machinery or make important decisions while on pain medicine.
- Do not consume alcohol or marijuana products while on pain medicine.

How to communicate your pain level

We ask that you help our care team to determine what an acceptable pain goal would be for you. They will ask you to **rate your pain on a scale of 0-10** that best describes your pain level. Reporting your pain as a number helps us know and document how well your treatment is working and whether to make any changes in your pain management. Don't worry about being a bother. Pain can be a sign of problems and the nurses and doctors want and need to know about it. Use the scale on this page to help evaluate and communicate your pain level.



Constipation

Medications for constipation (stool softeners and laxatives)

What is opioid induced constipation? Constipation (infrequent or painful bowel movements) is a common side effect of taking opioid (Pronounced: oh-pee-oyd) medications to control pain. Examples of opioids are hydrocodone – acetaminophen (Vicodin or Norco), oxycodone – acetaminophen (Percocet) and hydromorphone (Dilaudid).

It is important to prevent this constipation before it leads to more serious problems.

What can I do to minimize problems with constipation after surgery?

- **Get moving:** Walking is the best exercise after your surgery. Try to take short walks every hour during the day. Try to start light exercise as soon as possible after your surgery. Consult with your surgical team before starting any new exercise.
- **Pain medication:** Take your pain medications as needed. As your pain decreases and improves, it is OK to take less pain medications. Taking less pain medications will decrease the side effect of constipation.
- **Diet:** Eating healthy foods is important after surgery. You will improve recovery time and experience less constipation. Foods high in fiber will help prevent constipation. Examples: Fiber One, Raisin Bran, beans, sweet potatoes with skins, whole wheat pasta, peas, raspberries and yogurt.
- **Water:** Drink plenty of water. We recommend 6-8 glasses of water a day.
- **Stool Softeners and Laxatives:** You may be sent home with instructions to buy a stool softener, a laxative or a combination of both. You can buy these over the counter at your pharmacy. Stool softeners and laxatives work together to soften stools and stimulate the bowels. Most people need both.
An example of a stool softener is Docusate (Colace). Other brand names include Dulcolax stool softener, Sof-Lax. An example of a laxative is Senna. Other brand names are Ex-Lax, Geri-kot, Senno and Senokot. Examples of medications with both Senna and Ducosate in one pill are Senokot-S, Peri-colace, Senna Plus and SennaLax-S.
 - Take 1-2 tablets twice a day of both stool softener and laxative. These can be taken as separate pills or one combination pill.
- **Additional laxatives:** If you have not had a bowel movement in 3-4 days after surgery take an additional laxative. These can also be purchased at your pharmacy. Some examples of additional laxatives are: Milk of Magnesia, Miralax and Dulcolax Suppository.
- **What if this causes diarrhea (frequent, loose stools)?** Stop taking Senna and Docusate until the diarrhea stops. Once the diarrhea has stopped, you may restart Senna and Docusate. If you were taking 2 tables twice a day, decrease to 1 tablet twice a day. If you were taking 1 tablet twice a day, decrease to taking 1 tablet every evening before bed.



Infection Prevention

- Do not remove bandaging/dressing unless instructed to by your surgeon.
- Always wash your hands before and after caring for your surgical site. Ask your healthcare team if they have cleaned their hands before caring for you. It is very important that you speak up for your care!
- Family and friends that visit you should be healthy.
- Family and friends that visit you should not touch the surgical site or dressings.
- Family and friends should clean their hands with soap and water or an alcohol-based hand rub before and after visiting you. If you do not see them clean their hands, ask them to clean their hands.
- Protect your surgical site from contact with pets, water and contaminants. If your bandaging or incision becomes contaminated please contact your surgeon's office.
- Follow your surgeon's directions for dressing changes and if in doubt, call your surgeon prior to removing your dressing or allowing anyone else to remove your dressing.

Common Complaints and Suggestions to Alleviate Discomfort and Fears

Swelling

It is normal to have some swelling and bruising in your extremities after surgery and this can be present for several weeks.

Fatigue

Continue with normal diet and drink lots of fluids. Continue to take your iron or a multivitamin with iron.

Nausea

Be sure to eat before taking medications. Eat light foods, no heavy or greasy foods. If the nausea is caused by your pain medication and does not get better you may change the pain medication prescribed. Please call your doctor.

Constipation

See page 16 for detailed information.

Loss of appetite

Continue to eat small, healthy meals more frequently. Pain medication can decrease your appetite so always try to eat when taking them.

Emotional ups and downs

It is normal to have some good days and some bad days. Know that this improves as you progress and heal. Engage in activities that make you feel good and allow yourself this time to recover.

Sexual relations

Normally patients are able to resume sexual activity a few weeks after surgery when they feel comfortable to do so. A side lying position with affected arm supported or bottom position will be most safe as your incision, muscles and ligaments are still healing.

Call your physician if you experience any of the following:

- Chills or fever over 101.5 degrees, a low grade fever is normal for the first week. If you have a fever after 7 to 10 days, call your physician.
- New numbness or weakness. It is normal to have temporary or sometimes permanent numbness along your incision.
- Vomiting or worsening abdominal pain.
- Signs or symptoms of a blood clot including, redness, warmth, swellings in calves or thighs or pain in your calf when pulling your foot up towards your knee.
- Drainage from the wound that saturates bandaging, increasing redness or swelling of the skin.
- Call 911 if you experience chest pain or shortness of breath.



Total Knee Replacement Surgery

Anesthesia and Pain Management On the Day of Surgery

On the day of surgery you will meet your anesthesiologist prior to surgery. At that time he/she will answer any additional questions and finalize anesthesia plans. The anesthesiologist is a specialized physician who has training and experience in providing anesthesia care. All of the anesthesiologists at Front Range Orthopedic Surgery Center are board certified by the American Board of Anesthesia and are experienced anesthesia providers.

After an interview with the anesthesiologist and OR nurse, you will be given some light sedation and then given an adductor canal block (ACB). The ACB is an injection of local anesthetic into the front part of your thigh to decrease sensation and minimize pain in the front of your knee for approximately 24 hours after surgery. Please inform your nurse if you would like to meet with your surgeon prior to your procedure.

After the ACB you will be taken to the operating room and given general anesthesia.

Your anesthesiologist will stay with you during surgery and will visit you in the recovery area after surgery. They are there to assess side effects, if any, related to the anesthesia and to evaluate and assist with your pain management post-operatively.

Anesthesia Questions and Answers

1. What kind of anesthesia will I be given?

An anesthesiologist will discuss with you the form of anesthesia to best use for your procedure. The day of surgery the anesthesiologist will perform a pre-anesthetic assessment and further discuss your anesthetic options. Typically you will receive general anesthesia. This type of anesthesia involves breathing anesthetic agents. During the procedure you will not be aware of your surroundings or feel any pain. In addition, you will typically receive a nerve block (called an adductor canal block) that will help to numb the nerve to the front of your knee. After the surgery you should have minimal pain in the front part of your knee due to the adductor canal block (ACB). The ACB lasts for approximately 18-24 hours but does not affect the back part of your knee or your thigh. Therefore you may have some pain in the back of your knee or above your knee in your thigh. The surgeon will typically inject additional numbing medicine into these areas during your surgery.

2. Are there side effects of the adductor canal block (ACB)?

The most common side effect of an ACB is thigh muscle weakness. This is uncommon (about one in 10) and typically minor. It usually does not interfere your ability to put weight on your foot or participate in physical therapy. Your physical therapist and orthopedic team will assess your strength and ensure you are strong enough to participate in physical therapy. If you experience any weakness, it will resolve when the block wears off, approximately 24 hours after the block was placed. We recommend always having a family member at your side when you get up for the first 24 hours and while on opioids.

3. Are there other medicines to help control my pain after surgery

Yes. Our goal is to have you as comfortable as possible after surgery to allow you to rehab as effectively as possible. In the pre-operative area, you will receive oral medications to help alleviate post-operative pain. While you are in surgery, your orthopedic surgeon will inject local anesthetic directly into the surgical site. This will help with pain in addition to the ACB. These two measures may not eliminate 100% of the pain, but they should be enough to markedly reduce your opioids intake, allowing you to be more successful at rehab. As these measures wear off, you will need additional pain medicines. In general, the higher the intensity of the pain, the stronger the pain medicine that will be administered. Bear in mind, however, that all opioids tend to lower your respiratory drive, make you a bit groggy and might make you nauseated. So we will want to use them judiciously. If they will help you with your rehab, then they should be taken as needed to optimize your therapy. Typically, you will receive oral medication for less severe pain or spasms and IV medicine for more severe pain.

My questions for the Anesthesiologist

Discharge Instructions

Knee precautions

- **DO NOT lie in bed with a pillow under your knee.** This could make it difficult to straighten your knee and getting your knee straight again is just as important as getting it to bend.
- **DO NOT twist or pivot on your knee while you are healing.** This might make your pain worse. Instead, pick up your foot as you turn.
- **DO be consistent with your exercises.** You need to work on your range of motion and your strength daily to get back to your life!
- **DO use ice regularly to help decrease the pain and swelling.** Follow the instructions from your doctors and therapists on how often and how long to ice your knee.
- **Avoid quick position changes when getting out of bed or a chair.** Stand for a moment before you start walking to make sure you are not dizzy.
- **Place a pillow between your knees while sleeping on your side** for positioning of the joint and for comfort.

Activity

- Progress weight bearing as tolerated
- Walk with a walker for 10-20 minutes at least 4 times per day
- Increase walking and home exercise as tolerated
- Driving is NOT permitted for 4 weeks or until directed by your surgeon
- No lifting more than 20 pounds for 4-6 weeks.
- Work hard on ROM (range of motion) 3-5 times per day for a minimum of 30 minutes at a time.
When in a chair, work on bending knee beyond 90 degrees
 - Two week ROM goal = 90 degrees of flexion
 - Final ROM goal = 120 degrees of flexion
- Maintain full extension (ability to keep your knee straight) when in bed place pillow under foot, nothing under knee, to push the leg into full extension. While awake allow your knee to straighten every hour.
- Work on quadriceps strengthening exercises every time you work on range of motion

Incision care

- Continue with ice packs or cold therapy unit on incision using a clean barrier between the ice pack and your incision, 20 minutes at a time for pain or before therapy.
- No soaking or submerging under water until cleared by surgeon (typically 3-4 weeks).
- Showering: Check with your discharge instructions for specific guidelines.
- Follow your surgeon's directions for dressing changes and if in doubt, call your surgeon prior to removing your dressing or allowing anyone else to remove your dressing.

Pain medication

- Take your pain medication exactly as prescribed. Most pain medications are to be taken as needed, but the first few days you will want to take it as prescribed. Take pain medications before bed to allow you to get good sleep and also in the morning with your breakfast. **(Doctor's office WILL NOT refill medications after regular business hours or during the weekend so please plan ahead if you need more pain medication).**
- You may take Tylenol (acetaminophen) between your doses of pain medication or as a substitute. Do not take more than 3 grams (3000 mg) of acetaminophen in one day (24 hours). Your pain medication may contain acetaminophen so ask your pharmacist to help determine the total number of pills you can take in a day.
- Take your usual medications unless otherwise instructed.
- Avoid over-the-counter medication unless first approved by your physician.
- Do not consume alcohol or marijuana products while on pain medicine.

Aspirin (Blood Thinner Medication)

Begin taking 81 mg of aspirin twice a day for 4 weeks to prevent blood clots. Start taking the aspirin in the evening on your surgery day. If you take a baby aspirin, please resume after the four week period.

Diet

- Resume a healthy diet post-operatively.
- You may take a multivitamin but do not take herbs unless cleared by your Surgeon.
- Maintain an ideal body weight to help avoid unnecessary stress on your new joint.

Follow up

Please see page 4 for all appointment information.

Cold therapy unit

For total knee replacement surgery your surgeon has recommended that you use a cold therapy unit for cooling your knee as you recover after surgery. The surgery center has units available for purchase at the time of surgery, but you are also welcome to bring your own. If you are bringing in a unit that has previously been used we ask that you please run a solution of bleach and water through unit prior to the day of your surgery to assure that unit is clean and does not leak. The pad must also be clean as it is a risk for infection to place a contaminated pad on a new surgical site. Replacement pads for most units can be found on-line.

Call your physician if you experience any of the following:

- Chills or fever over 101.5 degrees, a low grade fever is normal for the first week, IF you have a fever after 7 to 10 days, call your physician.
- New numbness or weakness; It is normal to have temporary or sometimes permanent numbness along your incision.
- Vomiting or worsening abdominal pain.
- Signs or symptoms of a blood clot including, redness, warmth, swellings in calves or thighs or pain in your calf when pulling your foot up towards your knee.
- Call 911 if you experience chest pain or shortness of breath.
- Drainage from the wound that saturates bandaging, increasing redness or swelling of the skin.

Physical Therapy

Our philosophy

Front Range Orthopedics & Spine Physical Therapy is dedicated to offering the finest therapy with skilled and caring clinicians. Our goal is to help people reach their highest level of independence by including them in developing a plan of care and providing compassionate, quality care.

Our services for total knee replacement post-surgical rehabilitation

Our physical therapists will evaluate you and begin instruction for exercises to improve strength and your range of motion. You will be taught to use a walker and how to safely go up and down stairs.

Other important safety items

- When standing up from a chair or bed, do not pull up on your walker. Keep your surgical leg out in front of you when standing up. Scoot forward to the edge of the seat and use your arms to push up off the chair. Once you are up, hold onto the walker.
- Keep your feet and shoulders pointing forward during all activities. Do not pivot.

Physical therapy services

Your doctor may recommend physical therapy to further address muscle weakness, range of motion loss, balance, walking and functional safety. Please consider our services if you are being referred for physical treatment. Call us at **720-494-4750** with questions.

Exercises Before and After Total Knee Replacement

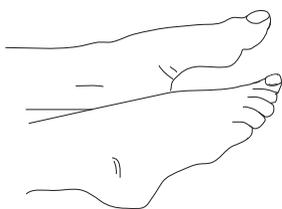
It will be important to get your muscles ready for surgery. Transferring and walking will be much easier if you have more strength and flexibility to help you. The Physical Therapists recommend you perform these exercises for at least two to four weeks before your scheduled surgery. **If any of the exercises cause pain, please discontinue.**

Day 0

- You will work with physical therapy before leaving the facility. You will walk with a walker into your home and to use the restroom.
- Perform 10 ankle pumps (see below) every 30-60 minutes while awake.
- Other than these activities you should focus on resting, relaxing, and recovering.

Day 1-10

- Walk with your walker as much as possible. Do not begin walking with a cane until you are given permission by your Physical Therapist.
- Continue to perform at least 10 ankle pumps every 30-60 minutes while awake.
- Perform your Range of Motion (ROM) and strengthening exercises as outlined below.



Ankle pumps

- Lying on your back or sitting, bend and straighten your ankle briskly.

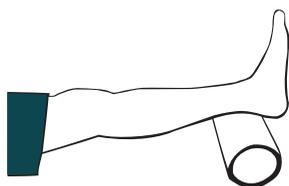
Range of Motion Exercises

Perform each Range of Motion (ROM) exercise below 5-8 times a day for 5-10 minutes at a time. Perform however many reps you can tolerate of each exercise within the time frame.



Supine Heel Slides

While lying on your back place a belt, towel, strap or bed sheet around your foot and start by pulling with your arms to bend your knee into a bent position. Then allow your knee to straighten back out to starting position and repeat.



Heel Prop

Sit with leg propped (using a large towel, books, rollers, etc), relax letting the leg straighten into extension.

*Can also assist by placing your hand just above the knee and gently pressing down toward the floor.

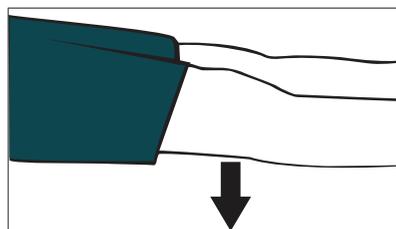


Seated Hamstring Stretch

While seated, rest your heel on the floor with your knee straight and gently lean forward until a stretch is felt behind your knee/thigh.

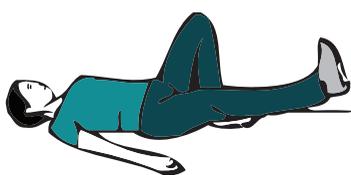
Strengthening Exercises

In addition to your ROM exercises, your Physical Therapist wants you to begin the process of strengthening the muscles that support your knee. Perform the following exercises as tolerated.



Quad sets

With your leg fully extended tighten your thigh muscle as you attempt to press the back of your knee downward. Repeat up to 30 times every hour while awake.



Straight leg raises

Gradually work up to 20 a day. You do not need to do 20 reps at one time. It is fine to do a few reps several times a day.

- Lie on your back with one leg straight and the other leg bent.
- Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg six to eight inches off the bed. Hold five seconds, slowly relax.

These exercises are meant as a guide. Your physical therapist will work with you to personalize your rehabilitation program. Continue to do these exercises until you get your staples out. As your rehab progresses, your physical therapist will provide you with guidance on additional exercises depending on your needs.



Total Hip Replacement Surgery

Anesthesia and Pain Management On the Day of Surgery

On the day of surgery you will meet your anesthesiologist prior to surgery. At that time he/she will answer any additional questions and finalize anesthesia plans. The anesthesiologist is a specialized physician who has experience in providing anesthesia care. All of the anesthesiologists at Front Range Orthopedic Surgery Center are board certified by the American Board of Anesthesia and are experienced anesthesia providers.

After an interview with your surgeon, anesthesiologist and OR nurse you will be given some light sedation and then taken to the operating room.

Your procedure will take around 2 to 3 hours and you will be transported to the recovery room once your surgery is finished. Your recovery time varies depending on how well you tolerated the procedure and whether you're having any side effects related to your procedure.

Your anesthesiologist will stay with you during your surgery and will visit you after surgery. They are there to assess side effects, if any, related to the anesthesia, evaluate and assist with your pain management post-operatively.

Discharge Instructions

Protecting your new hip

You will learn how to move or position yourself to protect your new hip. Your therapist/nurse will teach you “hip precautions” that will allow soft tissue healing around the hip and prevent the hip from sliding out of place (dislocation). You need to maintain these, hip precautions, until your muscles heal and you are strong. This may take up to 6 to 8 weeks after your surgery. Ask your doctor how long you should follow these precautions.

Hip precautions

- **DO sit with your hips higher than your knees.** This prevents stress on the new hip joint.
- **DO NOT cross your legs at the knees or ankles.**
- **DO NOT allow your surgical leg to turn inward or your toes to turn inward.**
- **DO NOT bend forward so your upper body is lower than your waist.** Keep your knees below the level of your hips at all times.
- These precautions are necessary for 6 weeks following your surgery.

Activity

Full weight bearing

Partial weight bearing _____%

Toe touch weight bearing

Nonweight bearing

- Walk with a walker for 10-20 minutes at least 4 times per day
- Increase walking and home exercise as tolerated
- Driving is not allowed while still taking pain medications. Your surgeon will instruct you when it is safe to drive depending on you mobility and strength. (Usually 4 weeks after surgery).
- No lifting more than 20 pounds for 4 to 6 weeks.

Incision care

- Continue with ice packs on incision using a clean barrier between the ice pack and your incision, 20 minutes at a time for pain or before therapy.
- No soaking or submerging under water until cleared by surgeon.
- Showering: Check with your discharge instructions for specific guidelines.
- Follow your surgeon’s directions for dressing changes and if in doubt, call your surgeon prior to removing your dressing or allowing anyone else to remove your dressing.

Pain medication

- Take your pain medication exactly as prescribed. Most pain medications are to be taken as needed, but the first few days you will want to take it as prescribed. We recommend you keep your pain level at a 5 or lower so it does not get out of control. Take pain medications before bed to allow you to get good sleep and also in the morning with your breakfast. **(Doctor's office WILL NOT refill medications after regular business hours or during the weekend so please plan ahead if you need more pain medication).**
- You may take Tylenol (acetaminophen) between your doses of pain medication or as a substitute. Do not take more than 3 grams (3000 mg) of acetaminophen in 1 day (24 hours). Your pain medication may contain acetaminophen so ask your pharmacist to help determine the total number of pills you can take in a day.
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- Avoid over-the-counter medication unless first approved by your physician.
- Do not consume alcohol or marijuana products while on pain medicine.

Aspirin (Blood Thinner Medication)

Begin taking 81 mg of aspirin twice a day for 4 weeks to prevent blood clots. Start taking the aspirin the evening of your surgery day. If you take a baby aspirin, please resume after the 4 week period.

Diet

- Resume a healthy diet post-operatively.
- You may take a multivitamin but do not take herbs while on a blood thinner.
- Maintain an ideal body weight to help avoid unnecessary stress on your new joint.

Follow up

Please see page 4 for all appointment information.

Call your physician if you experience any of the following:

- Chills or fever over 101.5 degrees, a low grade fever is normal for the first week, IF you have a fever after 7 to 10 days, call your physician.
- New numbness or weakness; It is normal to have temporary or sometimes permanent numbness along your incision.
- Vomiting or worsening abdominal pain.
- Signs or symptoms of a blood clot including, redness, warmth, swellings in calves or thighs or pain in your calf when pulling your foot up towards your knee.
- Call 911 if you experience chest pain or shortness of breath.
- Drainage from the wound that saturates bandaging, increasing redness or swelling of the skin.

TOTAL HIP REPLACEMENT

Exercises Before and After Total Hip Replacement

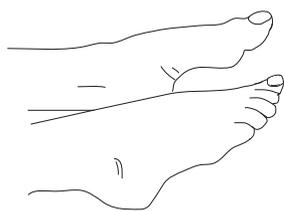
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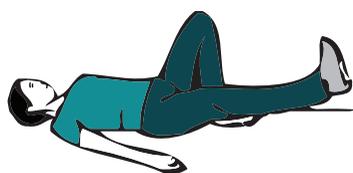
Day 1-10

- Walk with your walker as much as possible. Do not begin walking with a cane until you are given permission by your Physical Therapist.
- Continue to perform at least 10 ankle pumps every 30-60 minutes while awake.
- Begin straight leg raises. This will be difficult at first and may require assistance from your caregiver or physical therapist.



Ankle pumps

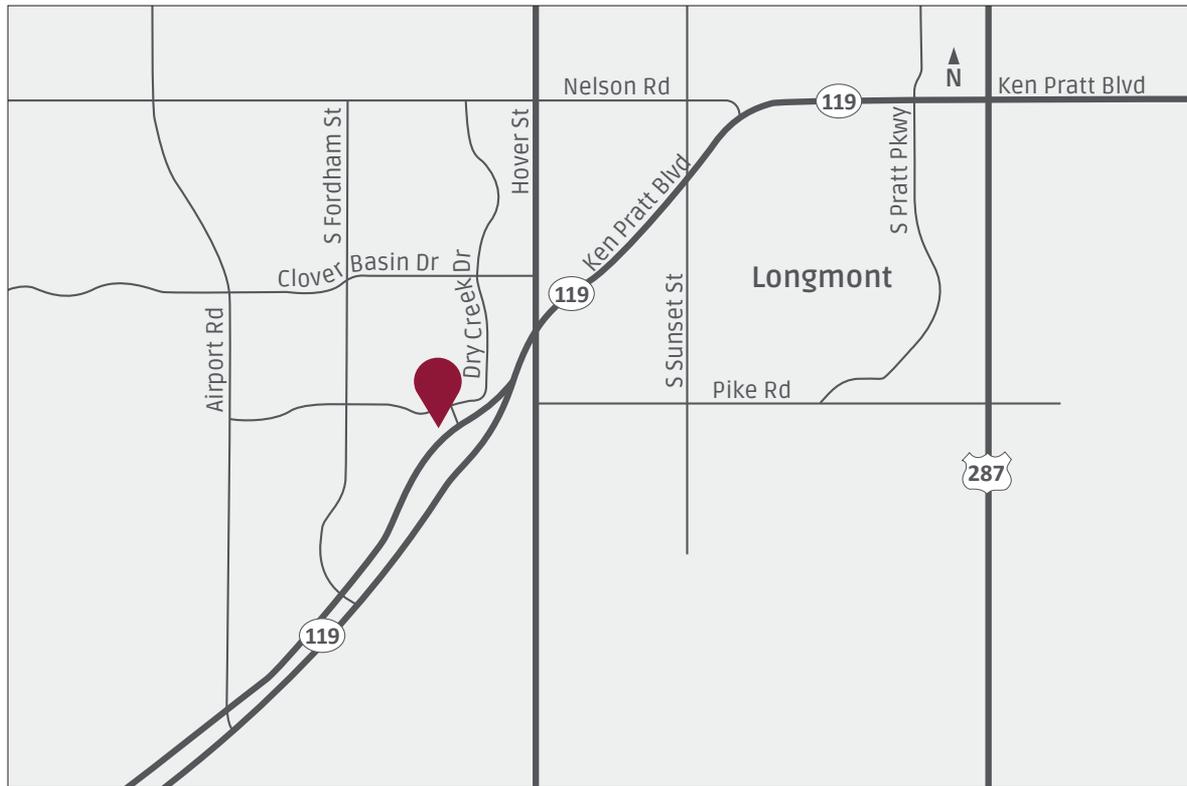
- Lying on your back or sitting, bend and straighten your ankle briskly.



Straight leg raises

- Lie on your back with one leg straight and the other leg bent.
- Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg six to eight inches off the bed. Hold five seconds, slowly relax.

These exercises are meant as a guide. Your physical therapist will work with you to personalize your rehabilitation program. Continue to do these exercises until you get your staples out. As your rehab progresses, your physical therapist will provide you with guidance on additional exercises depending on your needs.



Surgery Center Directions

From Hover: Turn west onto Clover Basin Drive, go one block and turn left onto Dry Creek Drive. The entrance to our orthopedic center will be on your left after you pass the hotels.



Front Range Orthopedic Surgery Center
1610 Dry Creek Drive, Suite 100
Longmont, Colorado 80503
Phone: 720-494-3200