



Your
pathway to
spine surgery
and recovery



SSMHealth.

Contact information

Contact numbers

Surgeon's office

314-738-2770

Nurses' station

7 North

314-344-6785

Nurse manager

314-447-6645

Clinical nutrition

314-344-7833

Case management

7 North

314-447-5498

Insurance | Billing | Information

1-855-989-6789

Monday - Friday

8 am - 5 pm

Surgery Evaluation Center (SEC)

314-768-2500 (centralized scheduling)

Please call centralized scheduling to plan your pre-surgical testing appointment.

Appointments are scheduled

Monday - Friday, 8 am - 3 pm

The SEC is in the South Medical Building at SSM Health DePaul Hospital, Suite 200. The SEC is the office for **medical evaluation and preoperative testing**.

314-344-7043 (nurse line voicemail)

Day of surgery check-in

On the day of surgery, go to the **Outpatient Surgery Waiting Room** on the second floor of the South Medical Building, Parking Lot 2.

If you have any problems on the day of surgery, please call the ambulatory surgery desk at 314-344-6062.

Bring your patient education booklet with you the day of surgery.



Welcome

Welcome to SSM Health. As you prepare for your spine surgery, we provide the guidance in this booklet to assist in your successful recovery. We are committed to the highest quality clinical outcomes and patient satisfaction.

We have a dedicated team of surgeons, nurses, therapists, and support staff. We will provide education, support, and a comfortable and relaxed environment to help optimize your recovery and rehabilitation.

Our goal is to prepare you to go home where you can return to a healthy and active lifestyle as quickly as possible. This booklet provides an overview of what you need to know about your spine surgery.

Thank you for choosing SSM Health. We look forward to working with you!

ssmhealth.com/spine

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Introduction

Basic anatomy of the spine

Your spine is a column of 24 bones called vertebrae that support the flexibility and movement of your body and protect the nerve-rich spinal cord that extends from the base of the head to the tailbone. The vertebrae are separated by discs of cartilage that cushion the bones against one another and allow for movement. Damage to the vertebrae or discs may occur from arthritis, injury, or another disease process, allowing the bones to rub against each other to cause pain, stiffness, limited movement, and a decrease in normal activities of daily living.

Surgical options

Surgery is generally recommended only after nonsurgical options, such as therapy or steroid/cortisone injections, are tried without success. However, some conditions have no nonsurgical options and surgery is the best and only option. Depending on the location in the spine, the extent of damage to the discs or vertebrae, or the level of pain and disability, your surgeon may recommend surgery.

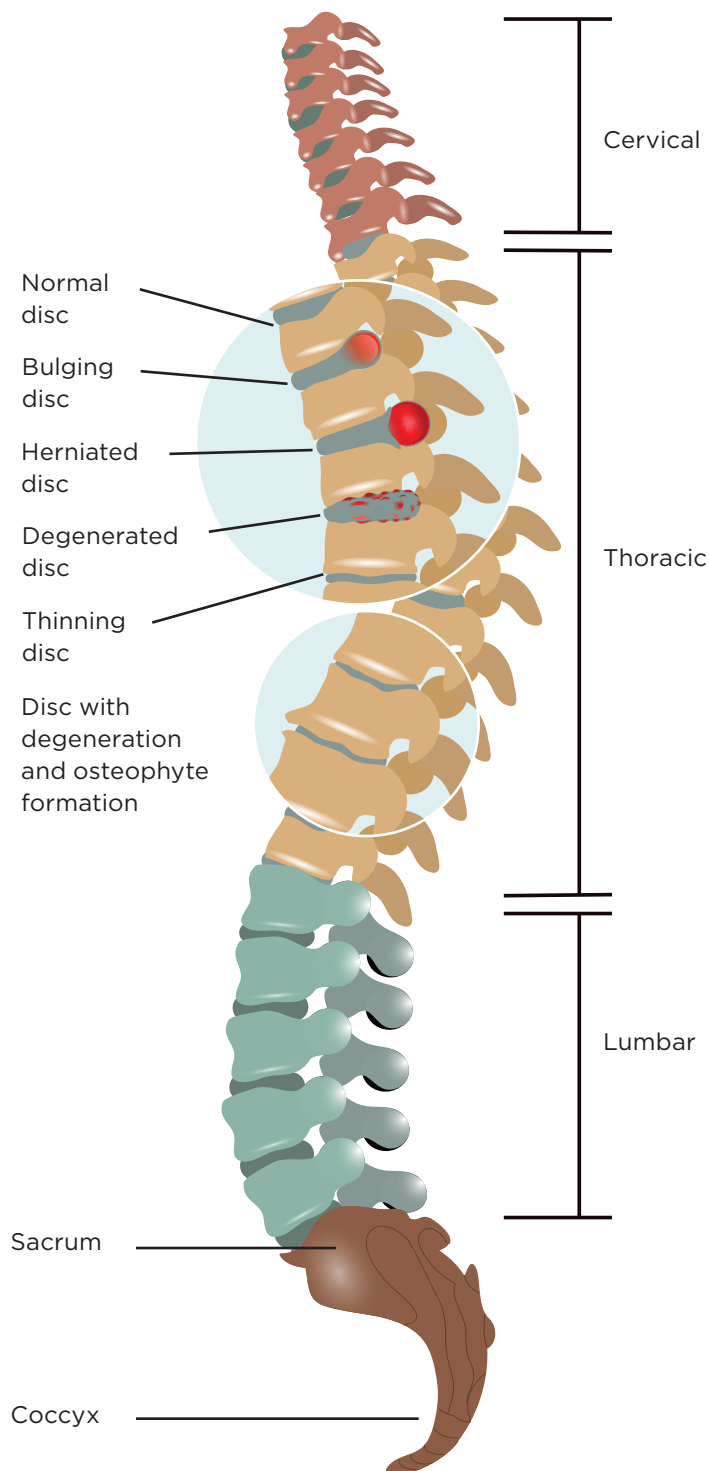
Spine fusion

Vertebrae are fused or locked together with a combination of implanted hardware and bone graft material to prevent motion between the bones. Metal hardware (screws, plates, rods) may be used to support the spine during healing.

Spine decompression

A surgical procedure such as a discectomy, laminotomy, or laminectomy is done to remove a portion of bone or disc to relieve abnormal pressure on the spinal cord or nerve roots that causes pain or neurological dysfunction.

Examples of disc problems



Hospital stay

You will be admitted to the hospital on the day of your surgery. You will stay one or two nights on a hospital surgical unit. Your length of stay will depend on the type of surgery and your recovery goals.

Therapy

The therapy team will help you learn to move with precautions after spine surgery (no “BLTs” – bending, lifting, twisting), and will give you instructions for daily activity and mobility.

- Increasing movement will decrease the pain and stiffness you may experience after surgery.
- The typical walking goal is 1 mile per day by 2 weeks after surgery.

Complications

When considering spine surgery, you should be aware of potential complications associated with the procedure and the precautions that are taken to prevent them.

Infection

- Although risk of infection is low, it can be a major complication of surgery.
- Risk of infection can be higher for people who smoke and for people who have uncontrolled blood sugar levels at the time of surgery.
- Your surgeon recommends that you wait 4-6 weeks after your last steroid injection or oral medication to proceed with surgery. Infection risk can be slightly higher if surgery is scheduled too soon after steroid use.
- Some activities to help prevent infections include presurgical blood screenings, antibacterial soap showers, frequent hand washing by patients, staff, and visitors, following all postoperative instructions from your care team, and proper nutrition.



- Contact your surgeon if you develop a fever, flu/cold-like symptoms, or any open sores or wounds on your skin before the day of surgery.

Blood clots

- Development of blood clots, called deep vein thrombosis (DVT), is another complication, but this risk is small when precautions are taken.
- Precautions may include the use of medications (anticoagulants) to thin the blood, mechanical devices to help circulate blood in your legs, ankle exercises, and physical therapy.
- Regular activity and frequent movement is the best prevention of blood clot formation.

Other complications

- Nerve or vessel damage can occur, but these complications are rare.
- Blood loss during surgery is another complication, but only a small percentage of patients require a blood transfusion after spine surgery.

A successful recovery requires your active participation in therapy, and following all instructions after surgery.

Preparing for surgery

Read this book to help you prepare for your surgery. Research has shown that patients who are educated about their surgery have better results. Please bring this book to the hospital on the day of your surgery.

Health and lifestyle changes before your surgery

Uncontrolled diabetes

If you have been diagnosed with diabetes or you have been told you are prediabetic or borderline diabetic but are not on medication or under medical supervision, your risk of complications increases during and after surgery. Your surgeon may require medical clearance by your physician. You should monitor your blood sugar before and after surgery to maintain an acceptable range to promote optimal healing. If you need assistance with diabetic meal planning, ask your physician for a referral to an outpatient dietitian near you.

Smoking

If you currently use tobacco products, now is the ideal time to stop. Research studies suggest that people who stop smoking at least 6 weeks before surgery have a faster recovery time and heal with fewer complications. Resources are available to help you with a smoking cessation plan. Please talk with your primary care provider or a nurse, or call the free coaching hotline at 1-800-QUIT-NOW.

Long-term use of opioid pain medication

Pain control is one of our top priorities, but people who use narcotics (opioids) for pain before surgery have more difficulty managing postsurgical pain. For people who need spinal surgery, weaning from prescription pain medication is essential. Research has shown that people who take opioid medications for more than 6 months before their surgery may have poorer surgical outcomes.

It is ideal to eliminate opioid medications you currently take before you have surgery. See page 13 for alternative pain control strategies to help reduce medication use.



Nutrition guidelines for healing

Good nutrition is important before and after surgery to support your body's response to surgery and recovery, to maintain lean muscle and strength, and to reduce the risk of complications and hospital readmission. Starting now and for at least 2 weeks before surgery, and 4 weeks after surgery, eat 5-6 small meals with protein in each meal, and with a goal of eating 100 grams of protein every day (unless your doctor restricts high protein).

We recommend a high-protein, anti-inflammatory diet to optimize recovery. See the Nutrition Guidelines for Surgery Recovery sheet in the pocket of this booklet. Some suggestions include:

- Eat fruit and vegetables.
- Snack on nuts every day.
- Choose lean proteins such as fish, poultry, and beans more often than red meat.
- Choose heart healthy fats such as olive oil or avocado oil.
- Use herbs and spices instead of salt.
- Switch to whole grains rather than foods with refined (white) flour.

If you are unable to eat food for a meal, drink a nutritional supplement.

Nutritional supplements

- When you don't feel well, which may happen before or after surgery, it can be difficult to get all the nutrients you need from food.
- Supplements can provide the protein, vitamins, and minerals you need to prepare for surgery. They also can help your body recover after surgery.

- You may wish to try over-the-counter products such as Premier Protein®, Ensure®, Boost®, Carnation Breakfast Essentials®, or store brand versions at a reduced cost.
- Nutritional supplements also may be offered during your hospital stay to help with recovery.

If you have questions, please call the Clinical Nutrition Department listed on the Table of Contents page in the front pocket of this book. If you are on a special diet, check with your primary care physician before making any dietary changes.

Surgery scheduling

The staff at your surgeon's office is responsible for scheduling your surgery. You will receive information from your surgeon about the date and time of your procedure. Someone from the hospital will call you before your surgery to tell you when to arrive at the surgery check-in desk.

PAL program

Your surgeon recommends that you select a **PAL** (your **Personal Assistance Leader**) who is an adult family member or friend and is willing and able to:

- drive you home the day of discharge.
- stay with you at your/their home if needed after discharge.
- help you with meals, errands, and transportation for the first few weeks you are home.
- drive you to your first postoperative clinic appointment.
- be a contact for you during the first 90 days after surgery.

Dental work

- Any necessary minor dental work, routine cleaning, or dental checkup should be completed before your surgery.
- If you need MAJOR dental work, including treatment for an infected or abscessed tooth, please discuss this with your surgeon. Scheduling a date for surgery will be delayed to allow time for sufficient healing.
- It is usually recommended that you avoid routine dental work for at least 3 months after surgery.
- After surgery, please ask your surgeon about taking antibiotics before any major dental work.

Presurgical testing

Your surgeon's office will tell you how to schedule an appointment for testing before surgery.

What to bring

- Driver's license and insurance card
- Medications - it is important that your hospital record includes a current and complete list of your medications. For safety and accuracy, please bring all your current prescription and nonprescription medications in original containers, including herbal medications, prescription eyedrops, and inhalers.
- After a nurse reviews your medications at this visit, all your medications will be returned to you.
- Copy of your living will or advance directive, if you have one.
- If you had bloodwork, EKG, echocardiogram (echo), and/or stress test performed by a doctor outside of the SSM Health network within the past 6 months, please bring a copy of all testing results with you.



Specific brand information if you have an implanted defibrillator or pacemaker.

Living will/advance directive

- A hospital staff member will talk to you about advance medical directives, which are decisions you make about life-support treatments.
- These directives include:
 - **Living Will** (your wishes regarding withdrawal of life support if you are not able to communicate),
 - **Do Not Resuscitate Order** (DNR), and
 - **Durable Power of Attorney** for health care (allows you to appoint someone to make health care decisions for you if you are unable to make these decisions).

If you have a Living Will or advance directive, please bring a copy to the hospital on the day of your presurgical testing appointment or on the day of your admission.

Medications

If you currently take any blood-thinning medications, please call the physician who ordered the medication for specific instructions about how to safely stop before your surgery.

All blood-thinning medications need to be stopped 7-10 days before surgery and for up to 10 days after surgery including, but not limited to: Coumadin® (warfarin), Plavix® (clopidogrel), Pradaxa® (dabigatran), Eliquis® (apixaban), Savaysa® (edoxaban), and Xarelto® (rivaroxaban).

Do **not** take **aspirin** or aspirin-containing products such as Excedrin® for 10 days before or after surgery. If a doctor prescribed the aspirin, please call that doctor for specific instructions about stopping it before surgery.

Your prescribing physician does **not** need to be contacted, but the following medications also thin your blood and should be stopped **10 days** before surgery:

- Prescription anti-inflammatory drugs such as Clinoril® (sulindac), Feldene® (piroxicam), Naprosyn® (naproxen), Arthrotec® (ciclofenac sodium), Celebrex® (celecoxib), and Mobic® (meloxicam), or rheumatoid arthritis medications such as Trexall® (methotraxate)
- All non-prescription anti-inflammatory drugs such as Advil®, Aleve®, ibuprofen, or naproxen
- Glucosamine and chondroitin sulfate
- All herbal medications such as fish oil, flaxseed oil, primrose oil, ginkgo, echinacea, or St. John's wort
- Vitamin E capsules
- Weight-loss medications

You may take **Tylenol®** (acetaminophen) for pain or headache any time before surgery, as long as you are not allergic or sensitive to Tylenol®.

Unless otherwise instructed, all your other prescription medications should not be stopped and should be taken exactly as prescribed until midnight, the night before surgery.



If you take a medication for diabetes, please talk to your primary care physician about whether you will need to adjust your diabetic medication the night before and the morning of your surgery.

You will need to bring your inhaler and prescription eyedrops to the hospital on the day of your surgery. **Unless instructed, do not bring any of your other medications with you to the hospital.** Your doctor will order appropriate home medications to be given to you after surgery.

Avoiding and relieving constipation

Many factors contribute to constipation, including a sedentary lifestyle, use of pain medication, and poor nutrition. Physical activity, hydration, and a diet high in fruits and vegetables that naturally contain fiber and a high water content will assist bowel health.

Pain medications that cause constipation include: Norco® (hydrocodone with Tylenol®), Percocet® (oxycodone with Tylenol®), Oxy-IR® or Oxycontin® (oxycodone), Tylenol® with codeine, Ultram® (tramadol), and Ultracet® (tramadol with Tylenol®).

Signs of constipation

- Bowel movements are less often than normal.
- Stools are small, dry, and hard to pass.
- Prolonged constipation can cause stomach pain, nausea or vomiting, and feelings of confusion. Call your doctor if any of these symptoms occur.

Suggestions to relieve constipation

- Drink plenty of water every day (unless your fluid intake has been restricted by your primary care physician).
- When you feel the urge to use the bathroom, don't hold it.
- Avoid using bulk laxatives (Metamucil®, psyllium).
- Limit/avoid foods with high fat or sugar content.
- Choose foods high in fiber to get 25-30 grams of fiber every day (e.g. black beans, All-Bran® cereal, peas, banana).
- Physical activity such as walking will help.

The following medications are recommended to prevent constipation while you are taking opioid medications:

- Take a stimulant laxative twice daily (Senna S®, dulcolax tablets, milk of magnesia, or cascara with or without Colace®). If diarrhea develops, take only once daily at bedtime.
- Use Miralax® daily at bedtime. If diarrhea develops, use every other day.
- If the above treatments are unsuccessful, try an over-the-counter rectal intervention (first, a glycerin suppository; if unsuccessful, an enema).

To help avoid problems with constipation after surgery, make sure you are not constipated when you arrive for surgery.

Equipment

Your hospital and therapy staff will make arrangements for any equipment needed for your care at home, such as a wheeled walker.

A therapy staff member may evaluate and instruct you about any necessary adaptive equipment to help you with bathing and dressing.

Planning for discharge to home

Before you leave the hospital, the therapy team will help to make sure you are ready and able to take care of yourself. You will be able to go up and down a few steps if you have any at home, go to and from the bathroom, and move around your house (using a walker, if needed).

Most patients are ready to be discharged directly home from the hospital within 1-2 days, and do not require going to a rehabilitation or skilled nursing unit. If you live alone, it is best to make arrangements to have your PAL (or a family member/friend) stay with you for the first 24 hours and assist you with meals, laundry, errands, etc., for at least a few days after you are home.

Very few patients require a short stay at a rehabilitation unit or skilled nursing facility after discharge. Your physician and care team will discuss your discharge plan and make any necessary arrangements. This cannot be arranged before surgery and insurance benefits do not automatically guarantee coverage at these facilities. Unless your physical limitations require inpatient rehabilitation and prevent a safe return to home, our goal is for you to recover at home where risk of infection is lower.



Prepare your home; avoid a fall

Prepare your home **before surgery** to avoid hazards that could cause a fall after surgery.

- Clear walkways, remove throw rugs and floor clutter, fasten loose carpet or flooring, move electrical and phone cords, and make sure you have space to move around your bed and chair.
- A straight-back chair with armrests will be easiest for sitting after surgery. If the seat is low to the ground, use a firm cushion to raise the seat height.

- Make sure lighting is adequate at the entrance to your home and where you will be walking. Light switches should be accessible at room entrances and at the top and bottom of stairs. Replace light bulbs in overhead lights or lamps and place a flashlight near your bed and chair for emergency.
- Check that handrails are sturdy along stairs, and that steps are marked and clearly visible.
- If your toilet seat is low, obtain an elevated toilet seat and make sure toilet paper is within reach. For nighttime, consider using a bedside toilet.
- You may not be able to stand for a shower after surgery. Consider purchasing a sturdy shower chair and place on top of a rubber mat in your tub or shower. If you have grab bars, make sure they are secure. Use a nonskid rug on the bathroom floor.
- Move all needed items to an area between waist and shoulder height so you won't need to bend over, especially in the kitchen and bathroom.
- Prepare frozen meals or buy pre-cooked meals to eat after you return home. Refer to the anti-inflammatory diet and nutrition guidelines and to ensure you eat foods that aid the healing process (page 4).



After surgery, keep the following points in mind to avoid a fall.

- Keep your phone within reach and prepare a list of emergency numbers.
- Avoid sitting in chairs that rock, swivel or roll. If a seat is too low or has a soft cushion, use a firm cushion to raise the seat height. Tall chairs are easiest to stand from.
- Remember, some medications can make you dizzy, drowsy, or unsteady. Take your medications as directed and eat as instructed with medications. When you stand, make sure you are steady before you take a step.
- Wear supportive shoes and use a two-wheeled walker as instructed, if needed. If you do not have a walker and you need one, a therapist will assist with the request. Use a walker basket or a bag to carry items.

Checklist

What to bring to the hospital

Driver's license and medical insurance card

You will need to bring your driver's license for identification and your insurance cards to the hospital to register for your hospital admission. Also bring any co-payment required for your hospital stay.

Clothing

Please bring loose fitting clothes to wear home from the hospital. You may prefer to bring a t-shirt or tank top to wear underneath your brace (if a brace is ordered). If you wear orthotics or custom shoes, please bring them to the hospital to wear while walking.

Miscellaneous items

Place your personal items in a bag or suitcase. You may bring personal hygiene items such as deodorant, makeup, toothbrush, shaving kit, dentures, hearing aids, and glasses/contact lenses. Hearing aids, dentures, and contact lenses will be removed before you go to surgery. The suitcase can be brought to you after you are out of the recovery room and admitted to a hospital room.

CPAP/BiPAP machine

If you use a CPAP or BiPAP machine at home, please have a family member bring your machine to your room in the hospital.

Co-payment for medications at the time of discharge from the hospital

Medication delivery service may be available at the time of discharge. If you wish to use this service, please have a family member bring your insurance co-payment for medications before you are discharged from the hospital.

Medications

Please bring prescription eye drops and inhalers to the hospital on the day of your surgery.

Education booklet

Please bring this education booklet to the hospital. Your nurses and therapists will use it to review information during your hospital stay.

What not to bring to the hospital

No wallet or money except necessary co-payments

Please do **not** bring a wallet, money, or any other valuables with the exception of necessary co-payments for your hospital stay.

No jewelry

Please remove all jewelry including wedding bands and earrings or any other piercings and leave them at home.

No walker

If you have a walker at home, do not bring it to the hospital at the time of surgery. One will be available for you to use during your hospital stay. If you wish to make sure the walker at home is properly fitted for you, have your PAL bring it to the hospital before discharge.

Night before surgery

Do not shave any area of your body the day before and the day of surgery.

Change your bed linens the night before surgery and wear clean clothing to bed.

Presurgery bathing instructions

A bottle of chlorhexidine antibacterial soap may be given to you at your presurgical evaluation appointment, or you may purchase it at your local pharmacy. This soap helps to decrease bacteria on your skin. If you are allergic to chlorhexidine, use liquid Dial® antibacterial soap.

Shower with the chlorhexidine antibacterial soap the **night before** and the **morning of** your surgery.

Please follow these bathing instructions as written:

- Wash your face and genital area with regular soap and rinse.
- Wash your hair as usual with your shampoo.
- Rinse your hair and body thoroughly after you shampoo to remove all shampoo soap.
- Then, turn off the shower.
- Apply chlorhexidine soap with a clean, wet washcloth to your entire body, only from your neck down.
- Do not use this soap on your face, near your eyes or ears, or on your genital area to avoid injury.
- Wash your body thoroughly, but very gently, for five minutes, paying special attention to your surgical site.
- Do not wash with your regular soap after the chlorhexidine soap is used.
- Turn the water back on and rinse your body thoroughly.

- Pat your body dry with a clean, soft towel.
- Do not use lotions, creams, or powders.
- Wear clean clothing.

DO NOT eat anything after midnight the night before surgery. No gum, candy, mints, or lozenges. If you are instructed to take any medications the morning of your surgery, please swallow these with an approved clear liquid.

Clear liquids list

Studies have shown that drinking clear liquids before you leave home for surgery can help your recovery after surgery.

Drink a low-sugar sports hydration drink (at least 20 oz.) and any other drink from the clear liquids list up until 2 hours before you arrive at the hospital.

Approved clear liquids include:

- Low-sugar sports hydration drink such as Gatorade
- Water or noncarbonated flavored water
- Hot or iced tea, unsweetened
- Black coffee, unsweetened

Liquids NOT allowed include:

- Liquids you cannot see through
- **No** milk, cream, creamers, or sugar in coffee
- **No** milk or milk products (no soy or almond milk)
- **No** orange, grapefruit, or tomato juice
- **No** carbonated beverages
- **No** alcoholic beverages

Day of surgery

Check in day of surgery

Please arrive at the hospital at least 2 hours before your scheduled surgery time, as instructed by your surgeon's office.

Preparation

Do not wear makeup, nail polish, artificial nails, or jewelry to the hospital on the day of surgery. If you do, it will be removed as you are prepared for surgery.

If you wear contact lenses, dentures, or hearing aids, you will be asked to remove them before surgery.

Anesthesia

A staff member from the anesthesia department will review your medical history and recommend the best anesthesia medications for you at your presurgical testing appointment, or on the day of your surgery. General anesthesia is used for spine surgery.

General anesthesia is medication administered through your intravenous (IV) site. After you are asleep, a tube is placed in your trachea (windpipe) to assist with your breathing during surgery, then removed before you wake up. Your throat may be slightly sore and you may experience a hoarse voice for a short time following surgery.

Procedure

- Your surgeon will tell you an estimated length of time for your surgical procedure. Your surgeon will talk to your family members or friends in the waiting area after the procedure is over.
- After surgery, you will be taken to the recovery area/Post Anesthesia Care Unit (PACU) to monitor blood pressure and pain and then moved to a hospital room.
- You may experience blurred vision, dry mouth, chills, or nausea when you wake from anesthesia. You also may have a sore throat from the breathing tube placed in your throat.



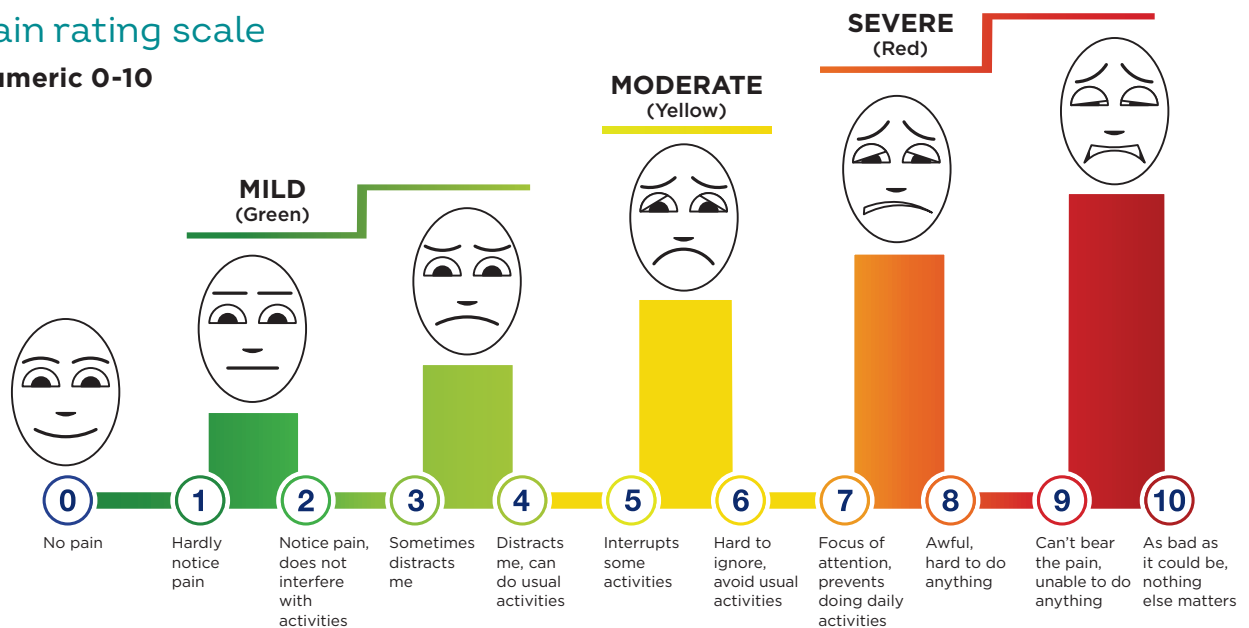
After surgery

Pain medication and pain control

- If you use opioid medication for pain control before surgery, your pain will be more difficult to control after surgery. Please discuss this with your surgeon.
- Your nurse will ask you to describe your pain on a scale of 0-10 using the diagram shown.
- Our goal is to keep your pain at a tolerable level, but you should expect some degree of pain after surgery.
- After surgery your nervous system is more sensitive to pain. Relaxation techniques, cold therapy, and medication reduce this sensitivity.
- Relaxation techniques such as deep breathing and listening to music will help to calm your nervous system and reduce sensitivity to pain.
- Cold therapy is highly effective to reduce pain and swelling after surgery and activity. Use cold therapy at least 20 minutes every hour while you are awake for the first 2 weeks after surgery.
- Other ways to reduce pain include repositioning and movement such as walking. If you feel anxious or worried, your sensitivity to pain will increase. Talk to your PAL or a member of your care team to assist you.
- The amount and intensity of pain that a person feels differs from one person to another since patients respond differently to pain medications.
- Pain medication is best taken before your pain becomes intolerable. Ask your nurse or therapist for help with your pain.
- Different types of medication are given based upon the degree of pain. Please tell your nurse if your pain medication is not providing relief, or if you don't like the way it makes you feel.
- Opioid medications may cause itching, nausea, and confusion. We will try to minimize these normal side effects.

Pain rating scale

Numeric 0-10



From Hockenberry MJ, Wilson D: Wong's Essentials of Pediatric Nursing, ed. 8, St. Louis, 2009, Mosby. Used with permission. © Mosby.

Constipation

- Pain medications and lack of activity may cause constipation after surgery. You will be given medication to help with constipation as needed.
- Drink plenty of fluids and choose foods high in fiber, such as fruits and vegetables during your recovery. Refer to the recommendations on page 6.
- An over-the-counter laxative can be taken for this problem. You may ask a pharmacist for recommendations.
- Sometimes, a suppository or enema may be required to relieve constipation.

Meals

- After your surgery, you will first be given ice chips.
- Once you have been cleared to eat, you may call the dietary department using your bedside phone to order your meals during regular meal times.

Activities

- You will get up and out of bed the day of surgery.
- Your surgeon will determine which activities are best for you. Walking will be your primary exercise.
- For your safety while in the hospital, and to prevent falls, do not get up by yourself without assistance. Ask a unit staff member to assist you.
- You will be encouraged to walk with the walker and assistance, as determined by the therapist, as soon as you are able. You will progress to greater distances each time.
- The typical walking goal is 1 mile per day by 2 weeks after surgery.

Home medications during hospital stay

- Your physician will order appropriate medications for you and these will be obtained through the hospital pharmacy department.
- Sometimes not all of your home medications are given to you during your hospital stay.
- Some medications may not look like the medications you take at home, due to different supply companies.
- Please ask your nurse if you have any questions about your medication.

Deep breathing/ Incentive spirometer

- Your doctor will order breathing exercises with the incentive spirometer for you after surgery.
- Bed rest, drowsiness, anesthesia, and pain can make it more difficult for you to take normal deep breaths.
- It is important for you to breathe deeply to help keep your lungs clear and avoid complications, such as pneumonia.



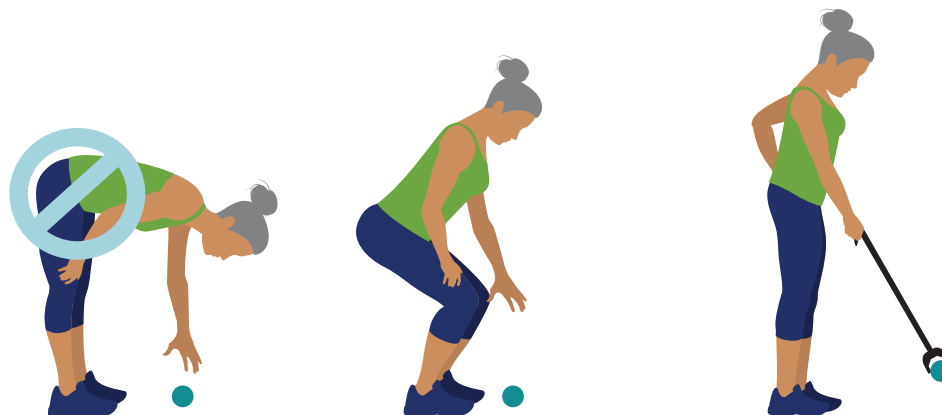
Therapy

Post-operative exercises

Your therapy team will review your precautions during your hospital stay and may make changes to your activities according to your surgeon's preference.

Spinal precautions

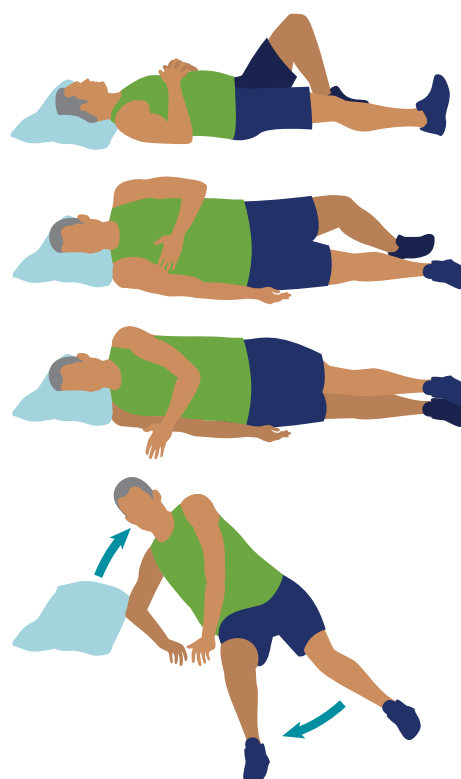
1. **NO bending** – Do NOT bend at your waist. Bend at your knees or hips. You may cross your legs to put on socks, shoes, and pants. If you cannot do these things by yourself, you may need assistance from your PAL. Tools such as a sock aid or reacher may be provided by your therapy team to help you with these tasks.



2. **NO lifting** – Do NOT lift more than your instructions given at the time of discharge (usually nothing heavier than a gallon of milk, or 5-10 pounds). You likely will have lifting restrictions for 4-6 months while fusion and healing occurs. If you had neck surgery, do not raise your arms above shoulder height.



3. **NO twisting** – Do NOT twist at the waist or hips. Use the log roll technique pictured here to safely get in and out of bed.



Walker safety

Physical activity general instructions:

1. When you stand, make sure you are balanced and steady on your feet before you begin to walk.
2. Walk slowly and carefully.
3. Remove loose rugs or other small obstacles from the floor which could cause you to trip or fall.
4. Have someone walk with you until you feel steady on your feet, especially when you go up or down steps or walk on uneven surfaces.
5. Use your walker until you are confident walking without it.

To stand up:

1. Be sure your walker is directly in front of you.
2. Scoot to the front of the surface you are sitting on.
3. Do not pull up with the walker.
4. Push up using an arm rest or surface to stand.
5. Once you rise and are steady on your feet, place your hands on the walker.

To walk:

1. Roll the walker to a comfortable distance in front of you. You do not need to pick up the walker to advance it.



2. If one leg is weaker than the other, take a step with your weaker leg first and then take a step with your stronger leg.

To sit down:

1. Back up until you feel the surface you will sit on at the back of both legs.
2. Reach back for the armrests or surface.
3. Slowly lower to sitting in a controlled manner.

To go up one step forwards:

1. Walk to the step or curb.
2. Lift walker and place all four legs of the walker on the step.
3. Push down on the walker with your arms and step up on the step with your stronger leg. Then, bring your weaker leg up on the step.

To go down one step forwards:

1. Walk with your walker up to the edge of the step.
2. Place all four legs of the walker on the floor in front of the step.
3. Walk your feet up to the edge of the step.
4. Push down on the walker with your arms and step down with your weaker leg and then step down with your stronger leg.

To go up one step backwards:

1. Back yourself up to the step with your walker. Be sure your walker and your heels are touching the step.
2. Push down on the walker with your arms and step up on the step with your stronger leg.

3. Bring your weaker leg up on the step, then bring your walker up on the step.
4. When you reach the top, walk backwards with the walker a few steps and then turn around with the walker.

To go up stairs:

1. Place your feet close to the step.
2. Use assistive devices such as rails, crutches, cane, or gait belt, if needed and available, as instructed by your therapist.
3. Go up one step at a time. Lead or start with your stronger leg first, then bring up the weaker leg to the same step.
4. Proceed with the remaining steps in the same fashion.

To go down stairs:

1. Place your feet close to the edge of the step.
2. Use assistive devices such as hand railings, crutches, cane, or gait belt, if available, as instructed by your therapist.
3. Go down one step at a time starting with your weaker leg first, and then bring down the stronger leg to the same step.
4. Proceed with the remaining steps in the same fashion.

Remember!

“Up with the good, down with the bad.”
Go up with your stronger leg first, and down with the weaker leg first.

Discharge

Discharge instructions

- Someone will need to drive you home from the hospital after you are discharged.
- You will be given an approximate discharge time, discharge instructions, a list of precautions, a prescription for pain medication, and any other prescriptions needed.
- Remember to continue the high-protein, anti-inflammatory diet outlined in the Nutrition Guidelines for Surgery Recovery handout for at least 4 weeks after your surgery.
- Do not smoke. Smoking inhibits fusion and either slows the rate of healing or prevents complete fusion.

Care for your incision

- Your skin incision may be closed with dermabond (surgical glue), steristrips (surgical tape), sutures, or staples. You will receive instructions on how to care for your incision. Do not pick or pull at the glue or tape; it will come off on its own.
- If you have a bandage covering the incision, keep it clean and dry. You will receive instructions for bandage removal and dressing changes, if needed.
- You will be given instructions when to shower after surgery. Once cleared by your surgeon, you should shower daily to prevent infection. **Do not** take a tub bath or enter a swimming pool until instructed by your surgeon.
- Use a clean washcloth and clean towel for the area near your incision each time you shower.

- To avoid infection, **do not** use the same sponge or washcloth on or near your incision that you used to wash the rest of your body.
- **Do not use lotion or ointment on your incision until the incision has healed and your surgeon has given permission.**

Swelling

- Swelling is not expected after you are discharged from the hospital.
- If you notice swelling in your leg or ankle, please call your surgeon's office as it could be an indication of blood clot formation.

Medications

- Patients usually take some kind of prescription pain medication after spine surgery. Every week you should decrease the amount of pain medication used.
- Prescriptions for pain and muscle relaxing medications may be given to you at discharge.
- To help reduce pain or swelling, place a cold pack on the surgical area for 20-30 minutes every hour while you are awake.

Preventing infection

- Do not touch or pick at your surgical dressing. Follow all wound care instructions.
- Use proper hand washing after toileting, after blowing your nose, and before and after eating. This instruction applies to you and your caregivers.
- Do not allow pets near your surgical site or surgical dressing.
- Wear clean clothes and wash your bedding frequently. Replace any soiled clothing or bedding immediately.
- Ask your surgeon about taking antibiotics before any invasive dental work after your surgery.
- Shower as instructed, NO TUB baths.

When to call your doctor

Please contact your surgeon right away if any of the following occurs after surgery:

- Wound concerns:
 - Increase in redness, separation or gap along the edges of the incision
 - Drainage that is increasing, foul smelling, or an unusual color
- Pain, redness, or excessive tenderness in your leg or calf
- Excessive swelling in your foot, ankle, calf, or thigh
- Ankle swelling that does not improve overnight
- Pain that does not improve or go away with medication, ice, and elevation
- Fever greater than 101 degrees
- Blood in the stool or urine

All calls during office hours will be returned as quickly as possible.

If you call after office hours, you will be directed to the exchange or after business hours telephone number. The on-call surgeon who returns your call may not be your surgeon, but he or she will be able to address your concerns.

All medication refills, including pain medication, will only be handled during regular office hours.

Car guidelines

Getting into a car

1. On the passenger side, move the car seat as far back as possible.
2. Also, you may want to recline the seat slightly to give you as much room as possible to lift your legs into the car to prevent twisting.
3. Stand with your back toward the car.
4. Sit on the edge of the seat, slide yourself back. (Sitting on a plastic bag may make it easier to slide.)
5. If you have extra-long legs, be sure to scoot back as far as you can.
6. Lift your legs into the car. You may need someone to help you with this.

Getting out of a car

1. Move the car seat backwards and slightly recline the seat.
2. Scoot to the edge of the car seat.
3. Keeping your hips and shoulders aligned, walk your legs toward the open car door.
4. Do not pull up to a standing position using the car door or walker. With the walker in front of you, push up to a standing position by placing your hands on the dashboard and car seat or the frame of the car.
5. If you have weakness on one side, place your stronger leg further underneath you.
6. When you are balanced and feel steady on your feet, place your hands on the walker.





Return to driving

- Ask your doctor for a release to drive at your follow-up appointment. Depending on the extent of your surgery, most people usually can return to driving 2-4 weeks after surgery.
- Do not drive if you are taking opioid pain medication or do not feel safe.

Exercise

- Exercise is essential for successful recovery and a healthy lifestyle. Walking is the most important and beneficial exercise postoperatively.
- Your surgeon will tell you when you can start or resume any other exercise.

Traveling after spine surgery

- Your surgeon will tell you when it is safe to travel a distance.
- It is recommended that you get up to stretch or walk at least once an hour when taking long trips. This is important to help prevent blood clots in your legs.

When to call 911

A blood clot in the leg can move to the lung, which can be very serious.

Call 911 if you have any of these symptoms:

- Shortness of breath
- Chest pain
- Coughing up blood
- Unexplained anxiety, especially with breathing

Call 911 for any symptom of stroke:

- Sudden numbness or weakness of face, arm, or leg, especially on one side.
 - Sudden confusion or trouble speaking or understanding speech.
 - Sudden trouble seeing in one or both eyes.
 - Sudden trouble walking, dizziness, or loss of balance or coordination.
 - Sudden severe headache with no known cause.
-

Frequently asked questions

Do I need physical therapy?

- Physical therapy is a very important part of your recovery from surgery.
- You will be seen by a member of our therapy staff after surgery.
- The therapist will go over your precautions and instructions for walking to do on your own after you go home.
- Therapy services after discharge are prescribed by your surgeon only if needed.

What is the recovery time?

- Patients heal from surgery at different rates.
- You will gradually return to normal activities of daily living in 4-6 months.

How long will I need to take blood thinning medication?

- Based upon your medical history, your surgeon will determine the type of medication and length of time you need to take blood-thinning medication after surgery, if needed.

How long will I need pain medication?

- It is not unusual to take prescription pain medication after your surgery, with the goal to take less pain medication every week.
- Most patients are able to gradually stop their prescription pain medication and change to an over-the-counter medication such as Tylenol® (acetaminophen). **Do not take over-the-counter anti-inflammatory medications (i.e. ibuprofen, Advil®, etc.) until advised by your surgeon.**
- If you often use opioid pain medication before surgery, your pain may be more difficult to control after surgery.

Should I apply cold or heat for pain?

- Initially, cold therapy is most helpful to reduce postoperative swelling and pain. Do not use ice cubes in an ice pack or bag against the incision. We prefer you use a cold compress or cold gel pack.
- **Do not** apply heat to your back along your incision.
- Heat may be applied to muscles away from the incision as needed to reduce spasm discomfort.

When will I return to work?

- If your work is sedentary, such as an office job, you may return to work about 3-4 weeks after surgery. You should take frequent breaks if you have a desk job to get up and move around.
- If your work requires more time standing, walking or climbing, it may be at least 3 months before you can return to full duty.
- You can discuss a date to return to work with your surgeon at your first postoperative visit.

What are the best positions for my back during recovery?

- It is a good idea to change positions every 30 minutes during the day while you are awake.
- You should spend some time each day walking.
- Choose an upright chair for sitting. For greatest comfort at rest, either lie flat with a pillow beneath your knees, or lie on your side with a pillow between your knees. Keep your spine straight, not bent or twisted.

What activities are permitted after spine surgery?

- You may return to most activities as tolerated, once your surgeon gives you permission.
- Walking is the best activity to help with motion and to build strength.
- You should avoid resistance training, running, jumping, and collision sports.

When can I resume sexual intercourse?

- Your surgeon will tell you when you may resume sexual activity.
- Keep spinal precautions in mind.

Can I drink alcoholic beverages during my recovery?

- If you are taking a blood-thinning medication, you should avoid drinking alcoholic beverages because it can change the effect of this medication.
- You also should avoid alcoholic beverages if you are taking prescription pain medications.

What do I do for muscle spasms?

- Changing position while sitting, lying in bed, or standing may help the spasm/pain to subside.
- Muscle spasms generally diminish as you recover from surgery.
- Your surgeon may prescribe a muscle-relaxing medication at the time of discharge from the hospital. Take only as directed.



I have difficulty sleeping (insomnia). Is this normal?

- Difficulty sleeping is a common complaint after spine surgery.
- Sleep should improve as you recover and learn to move in bed, being mindful of precautions.
- While lying on your back you may find relief by placing a pillow under your knees.
- If you usually sleep on your side, place a pillow between your knees to help maintain spinal alignment and comfort.
- **Do not** take a medication to help you sleep or you risk moving in your sleep without maintaining spinal precautions.

How long do I follow precautions?

- Typically, you should avoid bending, lifting, or twisting for 4-6 months while you are healing.
- Your surgeon will tell you when you are no longer restricted.

I feel depressed, is this normal?

- It is not uncommon to have feelings of depression after surgery.
- Feelings of depression may be caused by a number of things, such as limited mobility, discomfort, increased dependency on others, and medication side effects.
- As you return to regular activities, feelings of depression typically decrease.
- If you feel your depression is not improving, call your primary care physician.
- Call 800-273-TALK (8255) for someone to talk about your feelings of depression.

Remember!

Follow-up appointments with your surgeon after surgery are an important part of a successful surgery.

