



SPINE SURGERY HANDBOOK

ST. JOSEPH'S HEALTH



A Member of Trinity Health

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Welcome

Thank you for choosing St. Joseph's Health for your spine surgery. You are about to become a member of an elite group of people who have received spine surgery from the skilled surgeons of St. Joseph's Health. We are very proud of our reputation in achieving successful outcomes. The care activities you will receive are aimed at achieving these optimal goals

Our team is here to help you achieve the best results from your operation.

The most important person on this team is you.

About this Book:

We encourage you and your family to read this book and refer to it whenever needed. This book will help you:

- Know what to expect
- Prepare for your surgery
- Prepare your home
- Learn about your hospital stay
- Learn exercises and activity
- Prepare for discharge and recovery

Talk to your doctor or other knowledgeable members of your health care team if you have questions or concerns. We hope that the written materials provided will help to answer many of the questions that you may have.



YOUR SPINE SURGERY

Spine surgery has excellent outcomes for improving quality of life, allowing greater independence, and reducing pain.

Your recovery will include the following:

- You will have pain after spine surgery as the tissues heal and muscles regain strength.
- This surgical pain should get better day by day and eventually go away in a few weeks or months.
- You will be discharged as soon as our team determines you are ready, which may be within one day.

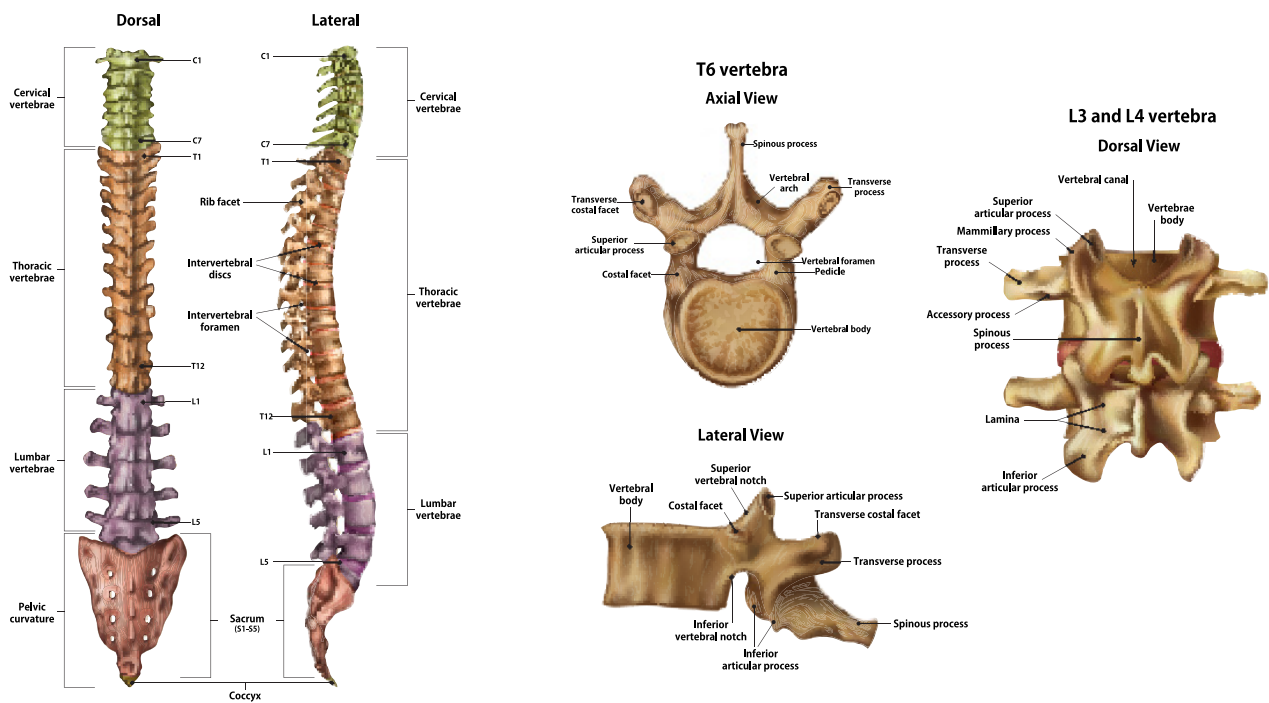
Over time, you may be able to resume some of the activities you once enjoyed such as going on long walks, dancing, golfing, gardening, and riding a bicycle.

INFORMATION ABOUT YOUR SPINAL CONDITION

Low back pain affects 80% of Americans at some point—both men and women equally. More than 15 million people suffer from recurring or long lasting back pain. In fact, after headaches and the common cold, low back pain accounts for the most physical pain and lost work time.

There are numerous causes for low back pain, including:

- Muscle Spasms
- Arthritis
- Herniated Discs
- Deformities
- Infection
- Fractures
- Degenerative Disc Disease
- Stenosis



Anatomy of the Spine

To understand why you need spinal surgery and how to protect your back before and after surgery, you need to learn about your spine and how it functions.

A healthy spine performs two major functions:

- It protects the spinal cord which carries nerves to/from various parts of the body.
- It supports the body while allowing it to move, bend, sit, twist, turn, and lift—all freely and in comfort.

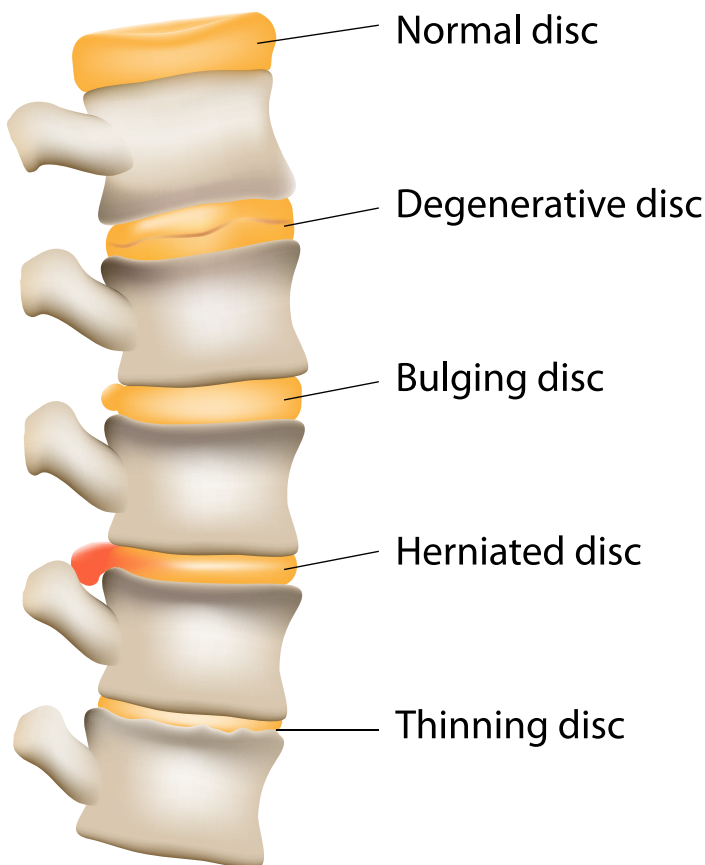
The spinal column is made up of 33 bones. They are connected to each other by discs made of cartilage. Each disc has a soft center (nucleus) surrounded by tough fibrous outer rings. They absorb pressure and allow the vertebrae to move.

The spinal column is made up of the cervical region (7 vertebrae), the thoracic region (12 vertebrae), the lumbar region (5 vertebrae), the sacral region (5 vertebrae), and the coccygeal region (4 vertebrae). When these three curves are in their normal alignment, your body is in a balanced position. Your weight is distributed evenly through the vertebrae and discs so you are less vulnerable to strain and injury.

Disc

A balanced spine is simply “good posture.” To maintain this balanced position you need to support your spine with strong, flexible muscles. Well-conditioned muscles are especially important for your lower back, which supports the weight of your entire upper body. This puts it under constant, concentrated stress regardless of your activities.

Discs are between two vertebrae. With or without well-conditioned back muscles, injury, arthritis or the natural aging process can cause the discs or vertebrae to press on the spinal nerves, causing symptoms such as pain, stiffness, tingling and numbness.



Degenerative Disc Disease

As a disc degenerates and flattens, vertebrae slip back and forth. This irritates the joints and creates or worsens stenosis (narrowing of the spinal canal), irritating the nerve.

Bulging Disc

As a disc degenerates, it loses its ability to bounce back. The nucleus and outer rings of the disc bulge into the nerve, irritating it and causing pain.

Ruptured or Herniated Disc

Pressure causes the outer rings of the disc to rupture and the soft nucleus to squeeze through. This compresses and irritates the spinal nerve root.

Arthritis

Aging, worn vertebrae and discs allow bone spurs to form. This causes or worsens stenosis and irritates the nearby nerve.

TYPES OF SPINE SURGERY

Discectomy

For people with disc problems, the surgeon forms a “window” in a portion of the outer ring of the disc. Then the surgeon removes a portion of the disc nucleus, releasing the pressure on the nerve.

Some surgeons perform a microdiscectomy, which may require removal of only a small portion of the lamina (part of the vertebrae).

Laminectomy

A laminectomy removes the entire lamina. Removal of the lamina allows more room for the nerves of the spine and reduces the irritation and inflammation of the spinal nerves. The lamina does not grow back. Instead, scar tissue grows over the bone, replacing the lamina, and protects the spinal nerves.

Fusion

For people with instability, the surgeon places a bone graft between two or more vertebrae to grow or fuse them together. The bone for the bone graft may be taken from the bones of your pelvis at the time of surgery or from another source. These bones act as the cement that fuses the vertebrae together. Occasionally wire, rods, screws, or plates are used in addition to bone.

Your surgeon can describe your particular spinal surgery to you. Please feel free to ask questions about what your surgery involves.

PART 1: Prepare for Your Surgery

St. Joseph's Health will call you on the evening before your surgery (Monday surgery patients will be called Friday). If you have not received a phone call by 7:30 P.M., please call 315-448-6439 and ask to speak with a nurse. The time of your surgery is not finalized until 5:30 P.M. the business day before and is, up until that point, subject to change. During this phone call you will receive instructions about eating food and drinking liquids on the day of surgery. Please see "Preparing for Surgery Checklist" below.

- On the day of surgery please arrive on time.
- Please arrive at the Laurel Street entrance of the hospital.

Preparing for Surgery Checklist

- Discuss with your Surgeon:
 - What to expect while undergoing your spine surgery
 - If you will need a brace
 - Any special concerns related to your condition
- Primary Care Provider Appointment:
 - Medical/physical examination
 - Review of diagnostic testing
 - Medical clearance for surgery
 - If diabetic, HgA1c <8 is desired
- Follow the instructions discussed on the telephone about eating food and drinking liquids on the day of surgery.
- Stop blood thinners and anti-inflammatory (NSAIDs) medicines if directed to do so (see instructions from Pre-Admission Testing).
- Take medications on the morning of surgery (if instructed to do so).

Please bring the following with you to the hospital; your family will need to hold on to your personal belongings while you are in the operating room:

- Brace if ordered
- X-rays and lab reports if requested
- Health Care Proxy form if you have not already given it to us
- Eye glasses, dentures, hearing aid, personal toiletries if you prefer to use your own

- Supportive rubber soled shoes, or sneakers if you have them, to wear home. No backless footwear. Most of the time you will wear the slipper socks that the hospital supplies
- Loose fitting clothes, shorts, or sweat suit (no jeans)
- A credit card may be needed to purchase equipment for home
- Limit valuables brought to the hospital

Notify the Surgeon's Office

Please notify the surgeons office before your surgery date if you are experiencing any of the following:

- Rash or skin changes to any part of the body
- New or active wounds
- Fever, chills, shortness of breath, chest pain
- Cold symptoms
- Gradual worsening of current health issues
- Any changes in your health since your last visit with the surgeon

Prepare Your Home

Get furniture and equipment ready before you come in for your surgery.

- Be sure all walking areas are free of clutter or anything you could slip or trip on.
 - Take all throw rugs, clutter, and telephone wires out of this path. Make sure this path is not on waxed or slippery floors.
- Plan to keep your dog or cat away from you while you are walking, as they are a trip hazard.
- Freeze prepared meals or buy frozen meals that can be cooked in the microwave. If friends are looking for some ways to help they can bring over meals.
- If you need assistance around the house outside of family and loved ones (cleaning, laundry, food preparation) you will need to set these services up yourself before you come to the hospital.



Prepare Yourself

- Plan on wearing loose fitting clothing and comfortable rubber sole shoes such as sneakers.
- Complete scheduled Pre-Admission Testing (PAT) appointment (about 2 weeks prior to surgery).
- Use Hibiclens soap as directed.
- Attend a Pre-Operative Spine Education Class.
 - You will be given the current class schedule during your PAT appointment.
 - Your surgeon's office will mail you an appointment letter with an assigned Pre-Operative Spine Education Class date and time.
 - If you prefer a different date or have any questions reach out to your RN Patient Navigator at 315-744-1475.
- Control your blood sugar.
- Eat as healthy as possible with the appropriate servings of fruits, vegetables, protein, whole grains, low fat dairy, and iron rich foods.
- Stop smoking at least four weeks before surgery.
 - New York State Smokers' Quitline phone number is 1-866-697-8487 (1-866-NY QUILTS). They also have a website.
- You may have a sore throat after your surgery. You may use throat lozenges such as Cepacol for this if needed.
- Do not take any other medications that are not currently prescribed to you.
- Remember to take frequent, short walks throughout the day with rest periods in between.

Consider Equipment You May Need

- We can provide equipment, such as a walker, if needed. A credit card, or checking account information, will be required at this time.
 - Adapt Health requires a payment plan at time of service. Your payment method will be charged after they receive payment from insurance. You will be notified by e-mail of your responsibility before your account is debited.
- It may be helpful to have a firm, supportive chair, which encourages you to keep your spine properly aligned. It should have arms to help you get up and down. You may need to place a pillow or pad on the seat to make it high enough. This will make it easier to sit down and get up.
- A firm mattress on your bed is recommended.

PART 2: Your Hospital Stay

Day of Surgery

BEFORE SURGERY:

- You will change into a hospital gown.
- An intravenous line (IV) will be inserted into a vein in your hand or arm. This will be connected to IV fluid to keep you hydrated.
- You may receive medicines such as antibiotics, antacids, pain medications, and/or medications for nausea.
- You will be taken to the Operating Room approximately 1 hour before your scheduled time.

THE OPERATING ROOM:

- You will first be brought to the “pre-induction” or “holding area.” Here your Anesthesiologist will talk with you about the type of anesthesia for your surgery. You will receive general anesthesia for sedation.
- You will then be brought to the Operating Room for your surgery.

- After surgery you will be taken to recover in the Post Anesthesia Care Unit (PACU) where you will stay until you are ready to go to your room.
- You may be in these areas for several hours.

EQUIPMENT:

- Oxygen is given through a nasal cannula in your nose, or a mask on your nose and mouth.
- An intravenous line will be placed in your arm with fluid running. We can also use this for pain medication if needed.
- Compression sleeves (PCDs) may be placed on your feet to help circulation and prevent blood clots.
- Compression stockings (TEDs) may be placed on your lower legs to decrease swelling and prevent blood clots.
- Your nurses will explain any additional equipment you may have, such as a urinary catheter or a wound drain.

VISITING HOURS AND SURGICAL WAITING ROOM:

- St. Joseph's Health is committed to the safety of our patients, visitors, and colleagues. Please visit sjhsyr.org for the most up to date visitation guidelines or reach out to your RN Patient Navigator.

Daily Routine at the Hospital

- Use incentive spirometer 10 times every hour while awake to prevent respiratory complications.
- Order meals when you want them through Room Service.
- Drink plenty of fluids.
- Bathe yourself, ask a nurse for assistance as needed.
- Complete oral hygiene care three times a day.
- Use pain management options.
- Walk in the hallways several times a day with staff assistance as needed.
- Wear compression stockings (TEDs) to prevent blood clots and swelling, if ordered.
- Wear compression sleeves (PCDs) while in bed, if ordered.

PHYSICAL THERAPY (PT):

- Walking is very important
- PT is for home safety and is generally the day after surgery
- Stair training with PT, as needed.

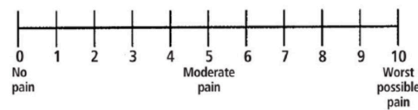
CLINICAL CARE MANAGEMENT (CCM):

- A CCM may visit to discuss your plan for discharge.
- Home Physical Therapy will be arranged, if ordered.
- You will be discharged as soon as our team determines you are ready, which may be within one day.
- Discuss discharge questions or concerns with the healthcare team.

Pain Control

We want you to be as comfortable as possible so you can participate in physical therapy and your daily activities, however, you will not be pain free.

Numeric Pain Rating Scale



Wong-Baker FACES Pain Rating Scale



PAIN CONTROL OPTIONS:

- We use various oral medications.
 - This may be adjusted based on your specific need.
 - Notify your nurse if you have spasms, can't sleep, or have uncontrolled pain. There are more therapies and orders that can be used.
 - Pain medication is given as needed so please utilize your call bell and ask your nurse.
- Mobility
- Complementary Therapies:
 - Music
 - Healing Touch
 - Imagery
 - Pet Therapy
 - Cold Therapy
 - Ice Packs
 - Aromatherapy
 - Cold Therapy Systems

(Please Note: Some options may be available on a limited basis)

PART 3: Activity

Based on the surgery performed and what happens during your surgery, your physician will decide what your activity precautions should be. Some surgeons may recommend activity as tolerated without precautions or restrictions, so it is important to discuss this upon discharge.

GENERAL PRECAUTIONS:

- No Excessive bending, twisting, pushing or pulling.
- No lifting greater than 10 lbs.

This will be based on your surgeon and surgery.

Proper lifting techniques:

Use these images as a guide for lifting objects after your recovery from your spine surgery.



PART 4:

Returning Home After Spine Surgery

You will be discharged as soon as our team determines you are ready, which may be within one day. Your stay is short so you will need a plan for the first few weeks after discharge. We encourage you to recover at home if possible. You are less likely to develop complications if you recover at home.

These instructions provide you with general information on caring for yourself after you leave the hospital. You will receive specific instructions by your surgeon upon discharge titled After Visit Summary (AVS).

DISCHARGE INFORMATION:

- We strive to discharge you in a timely manner to get you home as soon as possible.
- Your continued recovery is very important to us! Please strive to have a family member present and expect to spend at least ten minutes reviewing discharge information.
- It is important that you arrange for someone to assist you with transportation as needed.
- You will have a follow up appointment at your surgeon's office in 2-3 weeks after surgery.
 - Your follow up appointments are very important.

IN HOME PHYSICAL THERAPY:

- If Physical Therapy (PT) in your home is deemed appropriate, the Clinical Case Manager will set this up with your input. This typically lasts one week, then you may begin outpatient PT.

SHORT TERM REHABILITATION AT AN AREA NURSING HOME:

- In special circumstances a short term rehab facility may be appropriate. You must qualify according to Medicare or your insurance company's guidelines

in order to go to short term rehabilitation. Please note, living alone is not enough to qualify for short term rehabilitation. Your insurance company will need to authorize short term rehabilitation depending on your physical needs.

LONG TERM FITNESS:

- Physical activity is encouraged as you recover from your spine surgery. This will help to restore normal function to your spine and allow you to perform everyday activities without pain.
- At your follow-up visit discuss with your surgeon when to return to work and exercise.
 - Do not participate in sports or high impact activities without your doctor's approval.
- Try to stay within a healthy weight range. Excess weight should be avoided.

MEDICATIONS:

- You will have prescriptions sent to your pharmacy for medicines you will need at home if you were not taking them before your surgery.
- The nurses will review your medications with you and instruct you what to take and will discuss which prescriptions are new.
- Start taking any medicines you were taking before surgery unless the discharge instructions say otherwise.
- Do not take any herbal medications until follow up visit (fish oil, glucosamine, etc.), unless otherwise directed.

ACETAMINOPHEN:

- DO NOT take more than a total of 4 grams (4000 milligrams) of acetaminophen (Tylenol) in a 24 hour period. Some pain medications have Tylenol in them, it is important to know this when you are calculating your daily dose of Tylenol. Check with your doctor or pharmacist to be sure.
- Aim to wean off of narcotic pain medication as soon as possible (oxycodone, hydrocodone, etc.). You may combine or supplement narcotics with Tylenol routinely or as needed during your recovery.

ANTICOAGULATION MEDICINES (BLOOD THINNERS):

- Discuss at your follow up visit when to resume.

NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS):

- Do not take any non-steroidal anti-inflammatory drugs (NSAIDs) including ibuprofen (also known as Advil and Motrin) or Naproxen (Aleve) until follow up visit, unless otherwise instructed by your doctor.
- Aspirin and other arthritis medicines are also anticoagulants.
- Two anticoagulants should not be combined without a doctor's approval.

Pain Control

COLD THERAPY:

- Apply ice packs as needed for discomfort or swelling for 20 minutes using a barrier, such as a pillow case or other clean fabric, between the ice pack holder and your skin.

PAIN MEDICATIONS:

- Take pain medication when needed, as prescribed by your surgeon.
- You should feel a little better every day as you get stronger and your body heals.
- Don't wait until the discomfort is intolerable to take medication.
- It may be helpful to keep a written record of when you take your pain medicine (include the time, medication, and amount).
- As you have less discomfort, start to decrease how many pain pills you are taking and how often you are taking them. Eventually, you will no longer need pain medication.
- Do not drink alcohol or drive while taking pain medication.

- If you have new pain or swelling that is different from the pain you had in the hospital, please let your doctor know.

Preventing Complications

CONSTIPATION:

- Pain pills can cause constipation.
- To prevent constipation:
 - Increase fluids
 - Increase fiber (fruits/vegetables/bran)
 - Prunes and/or prune juice
 - Increase walking
- Stool softeners will make it easier to have a bowel movement without the laxative effect.
- You may use an over-the-counter laxative, if needed.

INFECTION:

- Hand washing is the best way to prevent the spread of infection.
 - Wash your hands after using the restroom, coughing, or sneezing and before meals.
- Proper care of your incision can help prevent infection.
- Eating a healthy diet can also help prevent infection and promote healing.
- Use chlorhexidine soap until it is gone.

INCISION CARE:

- It is important to check your dressing/ incision every day.
- You will receive instructions about your dressing on the After Visit Summary (AVS).

- Once your dressing is off:
 - Wash your hands before touching the incision if you have to touch the incision for any reason.
 - Wash around your incision and the skin around it gently with soap and water. Avoid direct water pressure on your incision.
 - Pat incision dry with a clean towel.
 - Do not rub a towel over your incision
 - No tub baths, avoid swimming pools and hot tubs until cleared by your surgeon.
 - Do not use any creams, lotions, ointments, or alcohol on or near your incision.
 - Keep fresh incision covered, if you are going to be around pets or small children.
 - Avoid smoking as it decreases bone growth and increases the risk for infection.
 - If you have diabetes, better management of your blood glucose levels will help with wound healing.

CALL 911 FOR ANY OF THE FOLLOWING:

- Chest pain
- Sudden shortness of breath or inability to breathe
- Stroke like symptoms

CALL YOUR SURGEON FOR ANY OF THE FOLLOWING:

- Temperature > 101° F
- Increased redness, swelling, or drainage from or around your incision
- Pain not relieved by pain medication
- Nausea or vomiting
- Edges of the wound start to separate
- Questions or concerns
- Extreme calf pain

CALL YOUR MEDICAL DOCTOR FOR ANY OF THE FOLLOWING:

- Weight gain
- Cold Symptoms
- Fatigue
- Gradual worsening of existing health issues (i.e. heart, lungs)

QUESTIONS:

It is very important to your physician that you are kept informed. Please bring any questions or concerns to the attention of your nurse or physician assistants so that your concerns can be addressed.

PART 5: **Frequently Asked Questions**

How long will I be in the hospital?

You will be discharged as soon as our team determines you are ready, which may be within one day.

How long will I be in the operative area?

You will first be brought to the “pre-induction” or “holding area” for about one hour. The surgery duration is very specific to the actual procedure. You will be in the Post Anesthesia Care Unit for one to three hours. The total time can be as long as eight hours.

How soon will I be walking?

You will start to walk on the day of your surgery with the help of a physical therapist and/or nurse. Most patients will walk from the stretcher to the bed.

How long do I have to follow spine precautions?

Your surgeon will tell you how long you have to follow your spine precautions.

How should I sleep?

In any position you are comfortable in, other than lying on your stomach.

When can I take a shower?

These instructions will be individualized on your discharge instructions/AVS from surgeon.

How long does it take to recover from spine surgery?

This varies person to person. Short-term recovery takes about 6–12 weeks and long-term recovery could take up to 6 months or longer.

When can I drive?

You should discuss this at your follow up appointment at the surgeon's office.

When can I go back to work?

Your surgeon will discuss this with you at your follow up appointment depending on what your job is.

PART 6: Resources

Phone Numbers:

Pre-Admission Testing: 315-703-5108

St. Joseph's Hospital Main Number: 315-448-5111

Pre-Induction Unit: 315-448-6439

Orthopedic and Spine Care at St. Joseph's Health:

- **Nursing Units 4-1/4-2:** 315-448-5410
- **Nursing Unit 4-7:** 315-448-5470
- **Navigator:** Hali Peter 315-744-1475

Physical Medicine and Rehab

(Physical and Occupational Therapy): 315-448-6251

St. Joseph's Outpatient Physical Therapy:

- **Northeast Medical Center:** 315-329-2550

Smoking Cessation NYS Quitline:

- 1-866-NY QUILTS
- 1-866-697-8487

Websites:**St. Joseph's Health (SJH):**

www.sjhsyr.org

SJH Orthopedic and Spine Care:

www.sjortho.org

SJH Spine Surgery Education:

Hali Peter, RN Patient Navigator

Hali.peter@sjhsyr.org

315-744-1475

Thank you!

Thank you for choosing St. Joseph's Health for your spine surgery needs. We hope that this book serves as a helpful reference for you as you prepare for and recover from your surgery. Please do not hesitate to ask our experienced team of surgeons, physician assistants, nurses, rehabilitation specialists and other team members if you have any additional questions.

Ask to speak to a Nurse Leader or any of our nurses and let us know how we are doing. We welcome your feedback.



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