



Thoracolumbar and Sacral Spine Pre-operative Booklet

*Instructions and Information for
Patients and Caregivers*

Please bring this booklet with you to your
appointments and hospital stay



Pre-op Class



St. Luke's Spine Pre-op Video

Prepare yourself for surgery, recovery, and home

Your spine surgeon strongly recommends watching the St. Luke's Pre-op Spine Video. In this class you will learn:

- Preparations needed at home
- What the hospital stay will look like
- Tips for a successful recovery

Please join us to learn what to expect and how to experience a successful recovery.

"Thank you for this thoughtful and well done class. It was helpful in answering multiple questions I had."

A Joint Commission Spine Center of Excellence Program

For Questions, call (208) 381-9000 or email spine@slhs.org

Need help quitting smoking or vaping before surgery? Call (208) 322-1680

Attend our Pre-Op Spine Class!

*****Include any support members who will participate in your post-operative Spine Care*****

Online:

1. Type into your browser:

www.tinyurl.com/spineprep

2. Watch video

3. Email spine@slhs.org to let us know you watched and we'll let your surgeon know.

"I have watched the video. What a fantastic tool to be well prepared! Thank you."

Introduction

The purpose of this guidebook is to help you have a better understanding of your spine surgery and what to expect after surgery. We believe it is important to empower you with information so you can be an active participant in your own care. Having this information is important to your recovery. Knowing what to expect will reduce anxiety, help make your hospital stay more pleasant, and help prevent complications and ultimately lead to a faster recovery.

This spine surgery guidebook is divided up into sections:

- Causes of back pain
- What to expect prior to surgery
- What to expect at the hospital
- What to expect at home
- Activity after surgery

We hope this book is beneficial and we look forward to caring for you!



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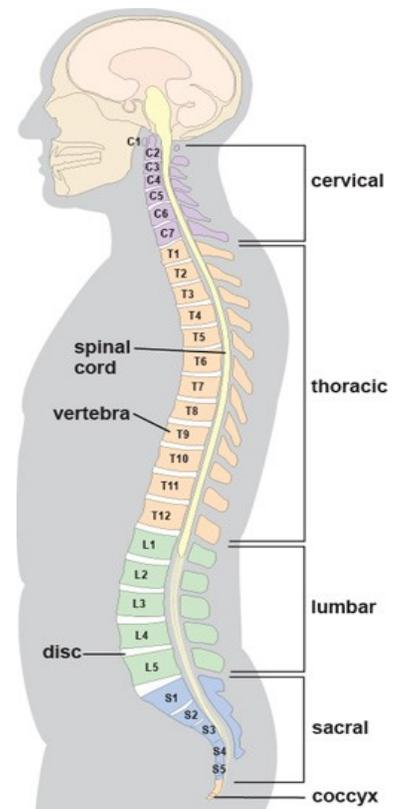
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Your Spine

The spine is one of the most important parts of the human body. It supports much of your body weight and protects your spinal cord from injury.

The spine has 33 bones, called vertebrae. They are numbered based on where they are on the neck, upper back, or lower back. There are 4 parts of the spine:

- **Cervical** (neck) - C1 to C7
- **Thoracic** (middle back) - T1 to T12
- **Lumbar** (lower back) - L1 to L5
- **Sacral** (tailbone area) - S1 to S5



In between each vertebrae is a disc. Discs can get damaged and cause pain.

Each bone in the spine is associated with a nerve. Many times, these nerves are the cause of pain in people who need surgery.

Injury to the **cervical** spine may cause pain in the arms, hands or fingers.

Injury to the **thoracic** spine may cause pain around the ribs, chest or navel.

Injury to the **lumbar** spine may cause pain in the legs or feet.

Injury to the **sacral** spine may cause pain in the buttocks, legs, or may cause problems going to the bathroom.

Your Spine

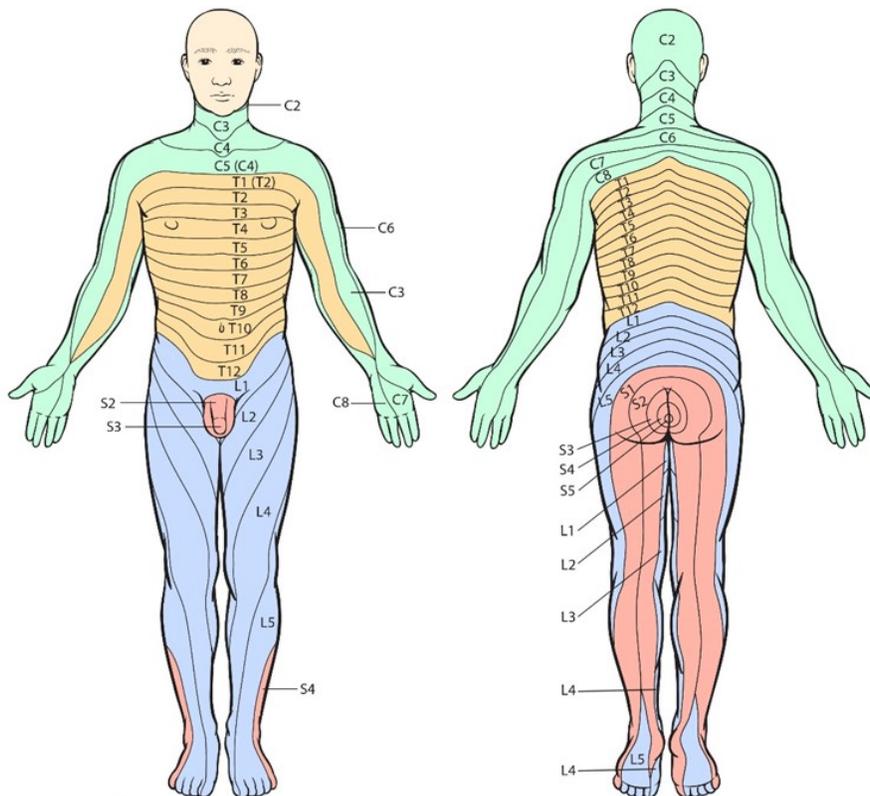
Dermatomes are areas of feeling. A dermatome is an area of skin responsible for the sensation on an area of the body. If there is pressure or damage to a nerve in your back, you may feel pain, numbness, and/or tingling. The location of where you feel these symptoms depends on the location of the nerve.

Cervical (nerves coming from the **neck** region)

Thoracic (nerves coming from the **upper back** region)

Lumbar (nerves coming from the **lower back** region)

Sacral (nerves coming from the **tailbone** region)



Review:

Where do you have pain, numbness, or tingling? Does it match to one of the areas seen here?

Getting Ready for Surgery



Medications your spine surgeon should be aware you are taking:

- Aspirin
- Ibuprofen (Advil, Motrin)
- Naproxen (Aleve)
- Blood thinning medications
- Medications treating rheumatoid arthritis
- Medications treating psoriasis
- Medications treating lupus
- Garlic tablets
- Vitamin E
- Omega-3 (Fish Oil)

Bring a list of **ALL** the medications you take to Pre-Admission Testing and the hospital on the day of your surgery. Please **do not** bring any home medications to the hospital.

Medication Name & Strength	# of pills/tablets	How often
Example: Tylenol (500mg)	2 pills	Every 6 hours
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Getting Ready for Surgery

Around the House

Move items to waist-level:

- Shoes
- Clothing
- Pots/pans
- Food
- Medicine
- Shampoo/soap

Remove tripping hazards:

- Rugs
- Electrical cords

Arrange the bathroom:

- Non-skid bathmat
- Personal items at waist level
- Soap on a rope or liquid soap

If you live alone:

- Prepare some easy meals prior to surgery

Find assistance for:

- Yardwork
- Grocery store trips
- Doctor follow-up appointments
- Caring for pets— especially for active animals needing daily walks
- Dressing changes

Packing for the Hospital

- Slippers or shoes
- Sweatpants
- Button-up shirt
- Underwear
- Toothbrush & toothpaste
- Hearing aids (if needed)
- Spine brace (if already given by surgeon)
- CPAP machine (if needed)
- Pre-op Spine Book

Optional:

- Headphones
- Tablet
- Laptop
- Book



Preventing Surgical Site Infections

Although it is uncommon, infections may happen after surgery and enter the body where the procedure took place. This is called a Surgical Site Infection or SSI.



How can YOU prevent Surgical Site Infections before surgery?

- Use nasal ointment if prescribed before surgery.
- Use Hibiclens (Chlorhexidine Gluconate 4% Solution) as directed, at least two times before surgery (the night before and morning of surgery). Avoid face and genital area.
- Do not shave near your incision site prior to surgery. Your surgeon will carefully remove any hair if needed before surgery.
- Before surgery, lose weight if you are overweight.
- Before surgery, stop smoking or using nicotine.
- Keep your doctor informed if you have diabetes. Keeping your blood sugar under control is important before, during, and after surgery.
- Shower and wash your hair the morning of surgery. Put on clean clothes.
- Do not apply lotions, powders, hair spray, or makeup the day of surgery.



(Hibiclens)



How can YOU can prevent Surgical Site Infections after surgery?

- Choose one person to be your designated “Coach” or “Support Person” following surgery. They should be present when information is given to you about your post operative care, including wound care.
- Wash your hands! Wash your hands before changing your dressing. Avoid touching your wound and change your clothing daily or if it becomes dirty.
- Keep your recovery space clean by changing your linens frequently.
- Keep pets away from your wound and out of your bed/off your furniture.
- Call your surgeon after surgery: if you have a fever over 101° F for more than 6 hours.
- Call your surgeon after surgery: if you notice one of the following: redness, swelling, increased pain, or drainage at your incision site.



Other things you can do to prevent infection:



- Do not remove your bandage unless instructed or necessary.
- Ask everyone (healthcare workers, family, or visitors) to wash their hands or use alcohol based hand sanitizer before coming into contact with you after surgery.
- Have a support person present while receiving information about how to care for your wound and dressings when you leave the hospital.

The Night and Morning Before Surgery

No longer is stopping eating and drinking after midnight the case...here are the new rules for the night before and the morning of surgery.

This new process has shown to prevent constipation, nausea, and help with post-operative

Step #1: No food after midnight

- Continue to drink water and clear liquids (see list below)

Water, Chicken, beef, or vegetable broth; Tea; Jell-O; Popsicle; Sprite or
Ginger ale; Plain black coffee

No cream or milk

Step #2: 4 hours before to your surgery *check in time:*

- Drink** a 12 ounce clear liquid with carbohydrates (see list below)

*Any color 12 oz Gatorade/Powerade (NO diet or zero), regular soda (NO diet or zero), black coffee with sugar only

No cream or milk

Step #3: After finishing your 12 ounce drink:

- Do not eat or drink anything until after your surgery**

If your routine is to take a pain pill in the morning, please do so with a small sip of water.

Tell your surgeon and anesthesiologist the name of the medication and the time taken so they are aware

**Do not take ibuprofen, Aspirin or any other medications which you have been instructed to stop for surgery*

Day of Surgery



Registration

Arrive at least 2 hours prior to surgery start time.

	Boise	Meridian	Twin Falls	Hailey
Check-in Location	Main lobby	2nd Floor	2nd Floor	2nd Floor
Post-Operative Unit	9th Floor	5th Floor	2nd Floor	2nd Floor

You will be in the recovery room for 2-3 hours. A nurse will be monitoring you closely and partnering with your surgeon and anesthesiologist to help manage your pain and any post-op nausea you may have.

Things you will see when you wake up:

Nasal cannula - flows oxygen to your body through your nose.

Oxygen finger sensor - monitors how well you are breathing.

Ice Machine - cooling pad that decreases swelling.

Systematic Compression Device (SCD'S) - also known as "leg squeezers", help with blood flow after surgery.

Things you might see when you wake up:

Drain - helps decrease the pressure in your spine. You *will not* go home with a drain

Urinary catheter - dependent on the length of your surgery. Will be taken out as soon as possible.

Dressing - will be on your back covering your incision.

Daily Goals

Day of Surgery

4 goals for the day:

1. Tolerate food
2. Walk
3. Urinate
4. Pain management

Every Day After

(while in the hospital)

1. Eat meals in a chair
2. Try for what we call Mindful Mobility.
(for example: try to walk 4-7 times per day with someone)
3. Learn about new medications
4. Pain management

At Home

1. Eat meals in a chair
2. Keep up on pain management
3. Continue Mindful Mobility. Get up and move every hour while awake/walk 4-7 times per day
4. Follow bowel care regimen in discharge instructions
5. Prepare questions for follow-up appointment
6. Try to begin weaning off of pain medicine



What to Expect the Day of Discharge

Discharge Instructions

You will receive personalized, written discharge instructions prior to leaving the hospital. Your after visit summary (or AVS) will contain this information.

Going Home

Please arrange for someone to drive you home from the hospital on the day of discharge. You will not be able to drive yourself.

***Discharge goal is typically 12:00 p.m.**

Dressings

You will be given dressings prior to leaving the hospital if needed. Please have the person who will be changing your dressing watch the final dressing change prior to discharge. This will occur between 11 a.m. and noon.

Medications

Your **AVS** will have an updated list of your medications. This list will tell you which medication to start, continue, or stop taking.

Follow-up Appointments

Typically occur within 2 weeks of your discharge date. Call your surgeon's office after surgery if you do not have a follow-up appointment to schedule a date and time.

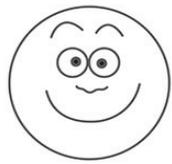


Discharge Checklist: Make sure you know...

- How to change dressing
- How to log roll in and out of bed
- When to call surgeon vs. when to go to emergency room
- How often to walk every day
- Showering instructions
- Equipment use *(if applicable)*
- How to put on brace *(if applicable)*

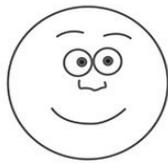
Pain Management

Pain is expected after spine surgery. Our goal is to keep your pain at a tolerable level by monitoring you closely and managing your pain safely. Below are some medications along with their purpose and side effects you will see before and after surgery.



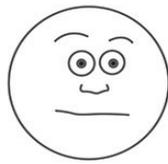
0

No Hurt



2

Hurts Little Bit



4

Hurts Little More



6

Hurts Even More



8

Hurts Whole Lot



10

Hurts Worst

Medication Name	Purpose	Common Side Effects
Acetaminophen (Tylenol) Hydrocodone w/acetaminophen (Norco, Vicodin) Hydromorphone (Dilaudid) Morphine (MS Contin) Oxycodone (Roxicodone) Oxycodone w/ acetaminophen (Percocet) Tramadol (Ultram) ***Get clearance for over the counter pain options from your surgeon (i.e. Tylenol, Ibuprofen, Aspirin, etc.)	Treats pain	Drowsiness Difficulty urinating Nausea Constipation
Cyclobenzaprine (Flexeril) Carisoprodol (Soma) Diazepam (Valium) Methocarbamol (Robaxin)	Relaxes muscles that may be tense after surgery	Drowsiness Constipation Difficulty urinating
Ondansetron (Zofran) Promethazine (Phenergan) Scopolamine patch (Transderm-Scop) Lavender & peppermint aromatherapy	Prevents or treats nausea and/or vomiting	Headache Dizziness
Famotidine (Pepcid) Omeprazole (Prilosec)	Prevents or treats heartburn	Constipation Gas
Cefazolin (Ancef) Ciprofloxacin (Cipro) Vancomycin (Vancocin)	Prevents or treats infections	Diarrhea Rash Ringing in ears
General Anesthesia	Allows you to sleep during surgery	Sore throat Nausea Hoarse voice

Pain Management

Important Info About Your Medicines

Do **NOT** take NSAIDs until your spine surgeon approves.

- Motrin
- Advil
- Ibuprofen

Do **NOT** take Acetaminophen (Tylenol) if taking:

- Hydrocodone (Norco)
- Oxycodone (Percocet)

These medications already contain Acetaminophen. Too much can cause serious harm.

Do **NOT** drive or drink alcohol while taking pain medication.

If prescribed an antibiotic, finish **ALL** of the prescription as directed.

Managing Pain Without Medicine

Movement - make a plan with your team to walk 4-7 times per day in the hospital and 4-7 times per day at home.

Ice - helps to decrease the swelling.

Relaxation - focusing the mind helps decrease stress levels and relaxes the muscles.

Distraction - while in the hospital, free Wi-Fi and cable TV are available. Visitors are preferred between 7am and 9pm.

Music - bringing head phones to listen to music. This can help lower pain levels.

Pet Therapy - while pets should **NOT** sleep in bed with you until your surgeon approves, the love and affection they give reduces stress, lowers blood pressure, and relaxes the mind.



Safely Reducing Pain Medications

Pain medicines and muscle relaxant medicines are not usually addictive if you take them for pain control and for a short time. However, they can lead to addiction if not managed carefully.

To avoid addiction, it is recommended that pain medications and muscle relaxants should only be taken 3-5 days after surgery. After that, it is important to try to reduce them.

Do not stop taking the muscle relaxant or pain medicine all at once. Slowly reduce the amount you are taking until you are off the medicine completely.

If and when you are ready to begin, here's an example you can use:

If you have been taking 2 pills every 4 hours:

Step 1: Decrease the medication dose while staying on the same time intervals your doctor has instructed.

- Take 1 pill every 4 hours for 1-3 days
- Then, take ½ a pill every 4 hours for 1-3 days

Step 2: Increase the amount of time between doses.

- Take ½ a pill every 5-6 hours. Do this for 1-3 days
- Then, take ½ a pill every 7-8 hours. Do this for 1-3 days
- Then stop taking the medication

****Discuss with your surgeon's office other ways to decrease your pain medication if the above does not work for you.*



Some Pain Alleviation Tips:

- Pain medicines take about 45 minutes to start working
- Taking pain medications right before bed can help to get a full night's rest
- If suffering from a stiff/sore back in the morning - set an alarm in the middle of the night to wake up and take pain medication
- Using ice can help decrease pain and swelling
- Changing position and walking often while awake helps decrease muscle stiffness

*****There is not a one size fits all approach to pain control. Please remember that each person will have different pain control needs following surgery.**

Home Bowel Care Regimen



Anesthesia, pain medicine, muscle relaxants, and reduced physical activity all contribute to constipation. Here are some tips for helping prevent constipation after spinal surgery.

Every day while taking pain medications:

In the morning -

- 1 Senna (Senokot) tablet
- 1 scoop of Polyethylene Glycol (MiraLAX) mixed into 8oz non-carbonated drink

At night -

- 1 Senna (Senokot) tablet
- 1 scoop of Polyethylene Glycol (MiraLAX) mixed into 8oz non-carbonated drink

If no bowel movement 3 days after surgery:

At breakfast:

- Drink 1 bottle of Magnesium Citrate

If no bowel movement by noon:

- Insert a Glycerin rectal suppository

If no bowel movement by 2pm or having frequent watery stools, call your surgeon's office

**All of these medications can be purchased over the counter at any pharmacy or retail store*

When to Seek Help



When to Call your Surgeon

- No bowel movement for 3 or more days
- Uncontrolled nausea or vomiting
- Pain not tolerable with pain medication
- Fever of 101° for more than 6 hours
- Redness, swelling, odor, drainage at incision site
- Headaches that go away when lying down or worsen when upright

When to Go to the Emergency Department

- Difficulty breathing or swallowing
- Difficulty moving or increased weakness in legs
- Loss of bowel or bladder control



Wait for surgeon approval to do the following:



No Bending

Do not bend at the waist. Use your knees to lower yourself.

No Lifting

Do not lift objects greater than 10 pounds. For example, a gallon of milk weighs 8.5 pounds

No Twisting

Avoid twisting your torso. Do not reach across your body or reach behind your body.

Do's and Don'ts

Bedroom Tips

Comfortable Bed Positioning



Pillow between legs, head, and neck



Pillow under knees and head

OR

Getting Into and Out of Bed



Getting into bed:

1. Sit on edge of bed. Scoot back until legs are touching bed.
2. Without twisting, lean onto forearm.
- 3 & 4. Bring one leg up at a time onto the bed.
- 5 & 6. Place head on pillow and roll onto back without twisting.

Getting out of bed:

- 6 & 5. Bend knees and roll onto side without twisting.
- 4 & 3. Pushing up on forearm, move legs onto ground.
2. Push upper body into upright position.
1. Sit on edge of bed and pause before standing to ensure no dizziness.

Do's and Don'ts

Self-Care Tips

Using the Restroom

- Avoid reaching across body when wiping.
 - Use toilet aid if needed to prevent twisting.
- Turn entire body towards toilet when flushing and lowering toilet seat.



OR



NOT



Showering

- Follow discharge instructions for how to care for incision after showering.
- Move shampoo and soap to waist level.
- Use long-handled bath brush or luffa to avoid bending and twisting.

Showering in Bathtub with a Chair Seat

1. Place towel on chair seat.
2. Back up until legs touch tub frame.
3. Reach back for shower chair and lower self onto seat, scooting back as far as possible.
4. Lift one leg over at a time, spinning on bottom, making sure not to twist neck and back.



Do's and Don'ts

Household Activity Tips

Getting Dressed

- Sit in supportive chair when dressing.
 - Do NOT sit on edge of bed.
- To put on pants, socks, or shoes, either:
 - Cross legs.
 - Use Reacher, sock-aid or shoe horn.



Hip Height & Lower Tasks

- For example, for front load washer/dryers
 - Squat or kneel to reach for clothes.
 - Use Reacher to reach for clothes.
- For example, for top load washers:
 - Bend at hips to reach for clothes.

Sit to Stand

1. Slide forward in chair.
2. Tip forward with chest lifted up while keeping back straight.
3. Use arms of chair to push self upwards.

Stand to Sit

1. Back up until legs touching chair and reach back to find arms of chair.
2. Slowly sit down keeping neck and back straight.

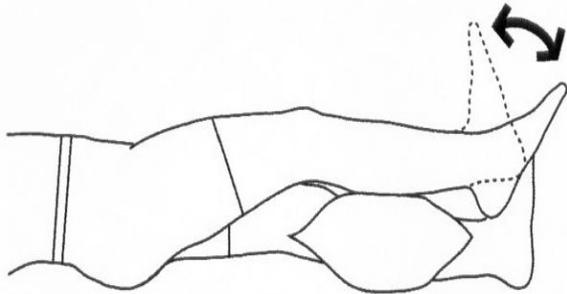


Chair Rules

- Sit in chairs for 20 minutes or less.
- Chair must have back support.
- No time limit for sitting reclined in a recliner.

Pre- & Post-operative Exercises

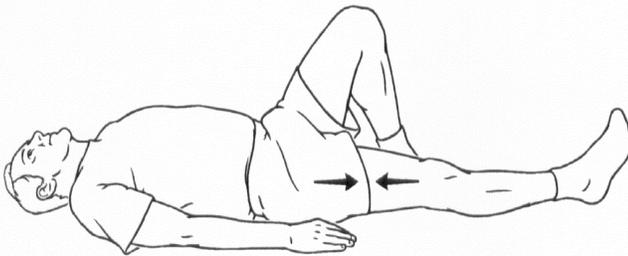
The below exercises can be practiced before surgery and should be performed everyday after surgery until your follow-up appointment. These exercises are designed to promote blood circulation and help prepare your body for activity.



Ankle Pumps

- Lie on back, pillow is optional
- Move feet up and down, pumping the ankle

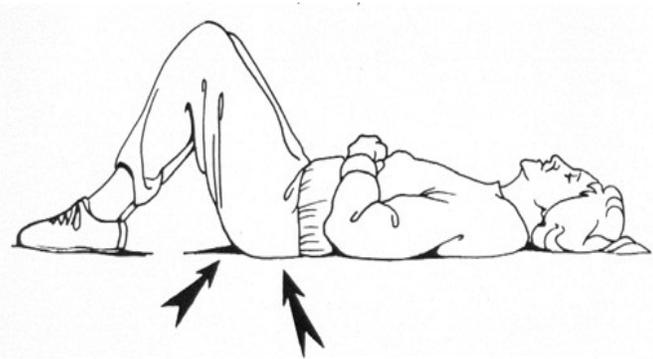
Complete 1 set of 10 repetitions, hourly



Quad Sets

- Lie on back or sit supported with pillows at back
- Tighten thigh muscles on front of leg by pushing back of knee down
- Hold 2-3 seconds

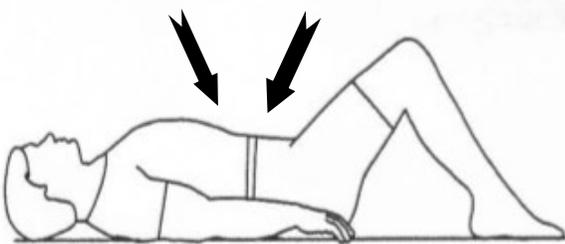
Complete 1 set of 10 repetitions, hourly



Gluteal Sets

- Lie on back with legs slightly bent.
- Squeeze buttocks together
- Hold 2-3 seconds and repeat

Complete 1 set of 10 repetitions, hourly



Abdominal Set

- Lie on back with knees bent
- Gently contract lower abdominal muscles by bringing belly button towards your spine
- Do not arch back and do not hold your breath
- Hold 5 seconds and repeat

Complete 1 set of 10 reps, 3 times a day

Activity Log

Remember: Mindful mobility. Get up and move every hour while you are awake. A walk to the bathroom or to get a drink counts! This is recommended until your follow-up appointment. This can be increased to longer periods of movement as you feel comfortable. Below is a schedule to help you keep track of these activities.

****If walking alone outside, please take a cell phone with you in case assistance is needed****

At home day #1 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #2 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #3 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #4 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #5 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #6 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #7 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #8 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #9 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



At home day #10 Date: _____

- Get up and move every hour while awake
- Longer periods of activity (walking):



Bracing

Not all spine surgeries require a brace after surgery. A lot of times it depends on what the surgeon sees while they are operating. If you do need a brace, you will be given one prior to leaving the hospital. Here are instructions on how to wear it properly.

Lumbar Sacral Orthosis (LSO) Brace



Video for how to adjust brace: www.tinyurl.com/spinebraceLSO

- **Initial adjustments:** Minute 2:08 - 3:20
- **Placement on body:** Minute 3:30 – 4:17



Front View:

- Letters are right side up
- Front panels cross over each other
- Center of brace is in front of belly button
- The brace sits just above hip bones



Back View:

- Letters are right side up
- The bottom of brace is at tailbone

To clean brace:

Wash foam pads and straps with mild soap and air dry. Do not place pads or straps into a mechanical dryer.

Bracing

Thoracic Lumbar Sacral Orthosis (TLSO) Brace



Video on how to adjust brace: www.tinyurl.com/spinebrace

Initial adjustments: Minute 2:58 – 4:04

Placement on body: Minute 6:30 – 7:40

A: Bracing for males

B: Bracing for females



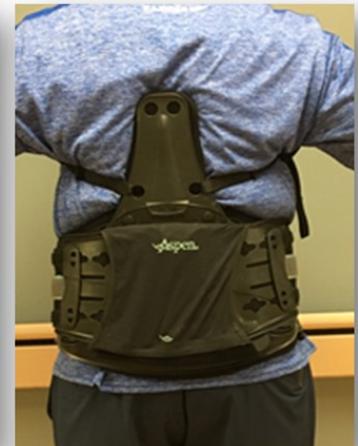
Front View

- Letters are right side up
- Chest piece is below collarbone
- Straps are under arms
- Front panels cross over each other
- Center of the brace is in front of belly button
- Brace sits just above hip bones



Back View

- Letters are right side up
- Pointed end is up, towards head
- Straps are under arms
 - A:** Straps on lower attachment for males
 - B:** Straps on middle attachment for females
- Bottom of brace is positioned at your waist.



To clean brace:

Wash foam pads and straps with mild soap and air dry. Do not place pads or straps into a mechanical dryer.

Overnight Accommodations

St. Luke's Boise

The Heritage House: (208) 381-3055

The Ronald McDonald House: (208) 336-5478

On-campus RV Parking: (208) 381-1495

Local Hotels:

- Holiday Inn Express: (208) 345-2002

- Candlewood Suites - Boise: (208) 322-4300

- Fairfield Inn Marriott: (208) 331-5656

- Springhill Suites - ParkCenter: (208) 342-1044



St. Luke's Meridian

Local Hotels:

- Candlewood Suites: Meridian: (208) 888-5121

- LaQuinta Inn & Suites: (208) 288-2100



St. Luke's Magic Valley

Local Hotels:

- LaQuinta Inn & Suites: (208) 734-7494



St. Luke's Wood River

Local Hotels:

- Americinn Lodge & Suites: (208) 788-7950

