

Hôpital de Montréal
pour enfants
Centre universitaire
de santé McGill



Montreal Children's
Hospital
McGill University
Health Centre



Hôpitaux Shriners
pour enfants®
Shriners Hospitals
for Children®

Canada



Guide to preparing for **Scoliosis surgery**

This guide will help you understand, prepare for and recover from your surgery. Bring it with you on the day of your surgery and use it during the recovery period.

RÉCUPÉRATION
AMÉLIORÉE
APRÈS LA
CHIRURGIE





We would like to thank the Montreal General Hospital Foundation for its financial support, which made the production of this guide possible.



Important

The information contained in this guide is provided for educational purposes. It is not intended to replace the professional medical advice, guidance and care you will receive. If you have any questions about your health, please contact a member of your healthcare team.

This guide is also available online on the website
<https://precare.ca/e-book/>

It is written in plain language so that its content is easy to read, easy to understand and easy to use.

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Introduction

We are giving you this guide because you will be having scoliosis surgery.

In this guide, we will provide you with all the information you need to prepare for your surgery. We also want to explain the role you can play in your recovery from surgery.

There is a lot of information in this guide. But don't worry! You will not need to memorize it all. We have designed it so you can refer to it as often as you need, and come back to it as you wish. We have left plenty of room for you to make notes or record important information.

Feel free to make it your own. It is yours to keep. It will be your companion for the next few weeks. Bring it with you on the day of your surgery!



Introduction

What is a care pathway?

From the very start of your medical management for scoliosis surgery, you will be part of what we call a “care pathway”. A care pathway is a protocol of care designed to help you recover quickly and safely from your surgery.

All members of our health care team are familiar with this pathway. In other words, all the healthcare professionals you will meet during your care will adhere to this pathway, whether they are physicians, nurses, surgeons, anesthesiologists, physiotherapists, nutritionists, or orderlies.

With this guide, we aim to:

- Help you understand what scoliosis surgery is all about.
- Guide you in preparing for surgery.
- Explain the important role you play in your recovery.
- Help you set goals to achieve every day after your surgery.

Research has shown that following the recommendations in this guide will help you recover more quickly. The recommendations we will be making include :

- Diet
- Exercise
- Pain management

These recommendations will help you feel better and help reduce your pain.

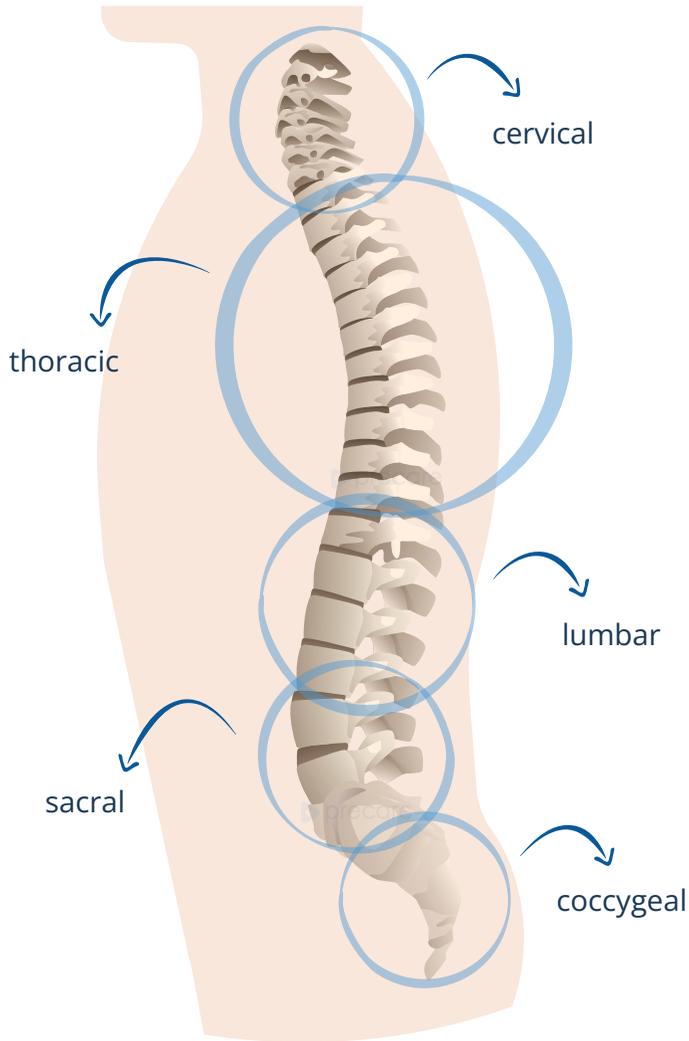
Surgery can be a stressful event for you and those around you. But, fortunately, we do not leave you to your own devices. We are here to help and support you throughout your hospital stay. If you have any questions about your care, do not hesitate to ask us.

If you find it difficult to communicate in English or French, we suggest you bring along someone who can translate the information we give you.

Introduction

What is the spine?

Your spine, also called your backbone, is a bony structure that supports your body. Your spine connects different parts of your body including many muscles and bones. Your spine gives you support to sit, stand up, walk, bend over, and twist your body.



Introduction

Your spine is made up of:

Vertebrae: 33 individual bones, stacked one on top of the other

Disks: act as cushions between the vertebrae

The spine has 5 parts. They are:

Cervical spine:

- Supports the weight of the head
- 7 vertebrae: C1 to C7

Thoracic spine (mid back):

- Supports your upper body
- Protects the heart and lungs
- 12 vertebrae: T1 to T12

Lumbar Spine (lower back):

- Supports the weight of the body
- 5 vertebrae: L1 to L5

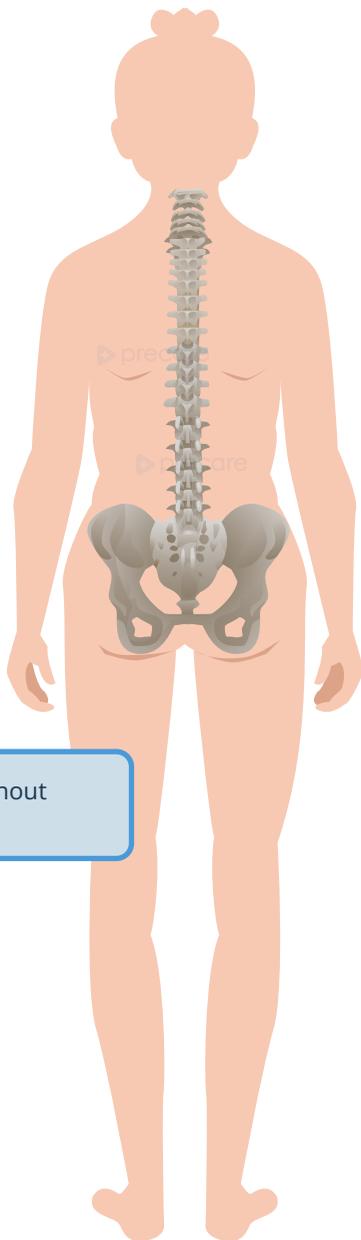
Sacral spine:

- Connects the spine to the hip bones
- 5 sacral vertebrae that are fused together: S1 to S5

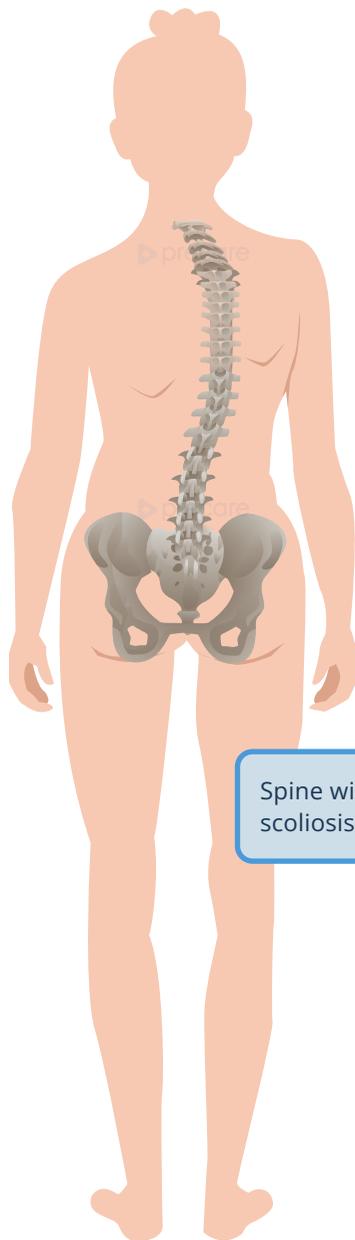
Coccyx (tailbone):

- Connects the muscles and ligaments in the pelvic floor
- 4 fused bones

Introduction



Spine without scoliosis



Spine with scoliosis

Introduction

What is scoliosis?

The spine should be in a straight line with the vertebrae stacked one on top of the other. Scoliosis is a condition where the spine is curved, causing an abnormal S-shape or C-shape. Although small curves do not usually cause health problems, some curves can grow larger over time.

Larger scoliosis curves can cause health problems with breathing, moving, and pain.

There are 3 main types of scoliosis: idiopathic, congenital, and neuromuscular.

1. Idiopathic:

The most common type of scoliosis. Idiopathic means it has no known cause. This type is usually noticed during adolescence, between the ages of 10 and 19.

2. Neuromuscular:

The second most common type of scoliosis, where the spine develops abnormal curves caused by disorders of the brain, spine, and muscular system. With neuromuscular scoliosis, the spine's abnormal curve is more likely to continue to progress as children age.

3. Congenital:

The least common type of scoliosis, due to the vertebrae forming abnormally before birth. The spinal curve may be present at birth or develop later.

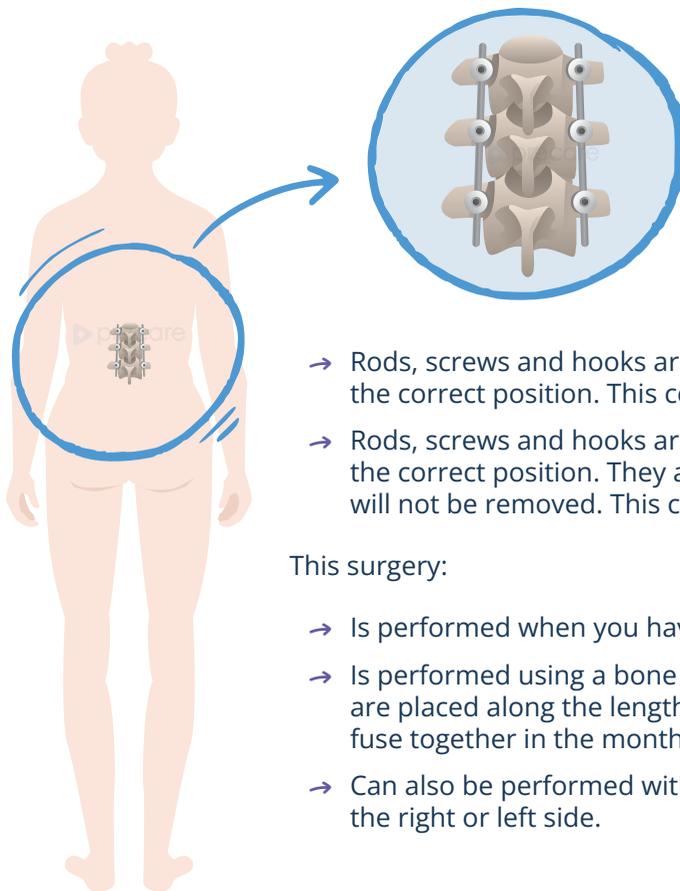
Treatments to help manage scoliosis include back braces, physiotherapy, or surgery to correct the curve of the spine.

Introduction

What is scoliosis surgery?

Your orthopedic surgeon will determine which surgery is best for your condition.

This guide explains 3 surgeries: spinal fusion, modulation or growth rods, and cranial halo traction and placement.



Spinal fusion

Fusion means that certain vertebrae are joined together. The fused region becomes a single unit. This reduces the flexibility of the spine.

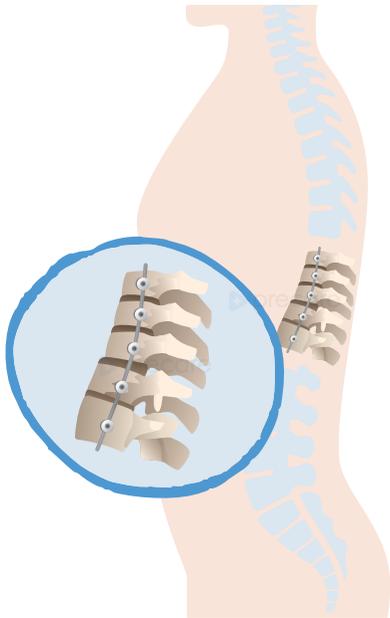
- Rods, screws and hooks are used to hold the spine in the correct position. This corrects the spinal curvature.
- Rods, screws and hooks are used to hold the spine in the correct position. They are permanently installed and will not be removed. This corrects the spinal curvature.

This surgery:

- Is performed when you have finished growing.
- Is performed using a bone graft. Small pieces of bone are placed along the length of the spine. The pieces will fuse together in the months following surgery.
- Can also be performed with a 2nd incision in the ribs on the right or left side.

Introduction

Vertebral tethering or growth rods



Vertebral tethering or growth rods are surgeries to correct scoliosis without a fusion.

- These surgeries are performed when growth is underway.
- For vertebral tethering, the surgeon installs screws on the vertebrae causing the scoliosis and attaches them with a cable. A small incision is made in your ribs.
- To install the growth rods, the surgeon begins with a cut along the back. He installs screws on a few vertebrae at the top and bottom of the spine. The surgeon connects the screws with rods. No fusion is created. As you grow, the rods may need to be changed with further surgery.
- The cable or rods straighten the spine as you grow.

Halo traction and placement

If you suffer from severe scoliosis, your surgeon may opt to add halo traction.

- Traction is installed in the operating room before or during surgery, but sometimes it remains in place for a few weeks.
- The halo is a crown-shaped device screwed to the skull, to which a weighted wire is attached.
- The weight exerts tension on your spine, straightening it. This is known as traction.



Child with halo traction

Introduction



Desired results after scoliosis surgery

- The abnormal curvature of your spine will be reduced.
- Your spine will be straightened. The curve of the spine will stop progressing.
- If a spinal fusion is performed, the flexibility of the spine will be reduced at the fused vertebrae. You may then gain a few centimetres in height. You will therefore be a little taller.

Risks associated with surgery, anesthesia, and transfusions

The risks associated with surgery, anesthesia and transfusions will be explained to you by the surgeon and anesthesiologist when you meet with them.

What happens during the surgery?

A few minutes after you arrive in the operating room, a doctor called an anesthesiologist will give you medication to put you to sleep during surgery. You will not feel anything, and you will not remember the surgery.

Once you are asleep, a team of professionals will prepare you for surgery. You will be placed on your stomach for the duration of your surgery. A small plastic tube, also called an IV, will be placed in your arm, stickers will be placed on your chest and a urinary catheter will be inserted.

When you are asleep and on your stomach, the surgeon will make a cut or incision to attach the implants to your vertebrae. The next step is to connect the spinal implants with 2 rods or cables to help straighten the spine and hold it in place during healing.

The surgeon will clean the cuts and the team will give antibiotics during surgery to prevent infection. The surgeon will then close the cut with sutures that will melt. The cut will be cut with a bandage, and you will go to the recovery room.

Healing after surgery can take up to a year. The first 3 months are the most important. You won't be able to do certain activities after surgery. You will be allowed to slowly resume the activities you did before surgery.

If the fused vertebrae do not heal properly, you may experience pain, the curve may return, or the rods or screws may break.

Introduction

What to do if you decide to have the surgery

Who do I contact?

Contact your orthopedic care coordinator at the Shriners Hospital and let them know you would like to have the surgery.

What's next?

You will receive a questionnaire to fill out about your health. Answer the questionnaire honestly to help us understand how we can best plan your surgery and recovery. Return the questionnaire to the surgical team or nurse so we can move on to the next steps.



Before surgery

Getting ready for your surgery

Be active!

Exercise every day! Your fitness level before surgery can make a difference in how you recover from surgery. Studies show that the patients who exercise before surgery are the ones who recover faster! If you are already exercising regularly, keep up the good work! If not, start slowly adding exercise into your day. Exercising does not have to be hard to make a difference. Even a 10-minute walk is a good place to start.



Stay active doing exercise like dancing, playing soccer, weight training, and swimming

Before surgery

Eat well and stay hydrated

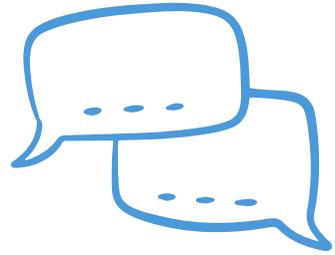
It's important to give your body enough energy throughout the day. Eating well before your surgery can help you recover more quickly. Good nutrition means eating 3 meals a day containing protein, fruit and vegetables. Before surgery, drink enough water. Staying hydrated will help your body function better.



Before surgery

Talk to someone

Talk about your surgery and ask questions. Talk to your friends, family, siblings, and any support groups. Talk to your surgical team and let us know how we can make you feel more comfortable. Contact your school and let them know you will be having surgery. They can help you plan your homework and suggest ways to make it easier when you return.



Plan ahead

To prepare for your surgery, you and your family may need to:

- Get help with making meals, doing laundry, cleaning your home, or babysitting during or after your surgery.
- Fill your fridge and freezer with food that is easy to reheat so that your family can care for everyone at home.



Stop smoking or vaping (nicotine or cannabis)

Smoking and second-hand smoke can cause lung problems and can slow down your recovery after surgery. Nicotine and other chemicals in cigarettes, as well as vaping cartridges can also slow down or stop bone healing. Stop smoking as soon as possible before your surgery. If someone around you smokes, avoid second-hand smoke. Ask your doctor or nurse for help in quitting smoking.

Before surgery



Avoid alcohol and other recreational drugs

Do not drink alcohol or use recreational drugs at least 24 hours before your surgery. Alcohol and drugs can affect how some medications work and slow down your recovery after surgery. You need to tell us if you are taking recreational drugs, as we will need to adjust your treatment to ensure proper pain management.

Both prescription and non-prescription drugs can cause a drug interaction. A drug interaction is when you take more than one drug at a time and one drug changes how another one works. This can be dangerous as the medicine we give you may not do what we expect it to do. The drug can be too strong, or it may not work as well.

Pre-operative clinic visit

Montreal Children's Hospital Pre-Operative Clinic

Room B 03.3103 (Block B, 3rd floor)

Shriners Hospital Pre-Operative Clinic

Room 4.67 (4th floor, room 67)

The admissions department will contact you to tell you where and when to go for your pre-operative clinic appointment. A member of our team may contact you to schedule any tests or visits with specialists you may need before your surgery. Tests will be scheduled either before or during your appointment at the preoperative clinic. If any tests have been performed outside the Shriners Hospital or the Montreal Children's Hospital, please ensure that a copy is on file and bring another copy to your appointment, just in case.

Before surgery

Some tests may include

- Pulmonary function tests for your lungs
- An X-ray of the spine, magnetic resonance imaging (MRI) or CT scan
- An electrocardiogram, also known as an ECG. This is a test that looks at the functioning of the heart
- Blood tests
- Urine tests

The specialists you may need to see before your surgery are :

- A cardiologist - to check how well your heart is working
- A respirologist - to check your respiratory system
- A hematologist - to check your blood
- A nutritionist - to help with your diet

At your pre-operative clinic visit, we will:

- Check your general health
- Make sure you are ready for surgery
- Plan your care
- Perform blood and urine tests if needed
- Answer all your questions about surgery

Bring this booklet with you to your pre-operative appointment and on the day of surgery.

Before surgery



At the pre-operative clinic, you will meet the healthcare team: a pre-op nurse, a pediatrician, and an anesthesiologist.

A pre-operative clinic nurse will explain how to get ready for surgery and what to expect after.

The nurse will check:

- Your height and weight
- Your vital signs: your temperature, your blood pressure, your pulse, and your breathing
- What medications or other products you take

Are you taking any prescription or non-prescription medicine, including herbal products? Are you smoking, taking any alcohol or drugs? Tell us! We need to know about all the medicine you take to ensure a safe surgery.

Before your surgery, we will explain what medications you should:

Keep taking _____
(continue asthma medication, seizure medication, etc.)

Stop taking before surgery _____
(stop herbal or natural supplements)

A pediatrician will ask you questions about your health. They will also do a physical exam. If you have any health issues, you might see another specialist before surgery.

The anesthesiologist is the doctor that will put your body to sleep for your surgery to make sure you are comfortable, and you do not wake up during the surgery. The anesthesiologist will also explain how they will control your pain during and after surgery.

Before surgery

Other team members you might see at your pre-operative clinic appointment:

A child life specialist:

- Can help you if you feel anxious about surgery
- Can also come with you on the day of surgery

A physiotherapist:

- May help teach you exercises for before and after surgery
- Answer questions about moving after your surgery

A social worker:

- May meet with you and your family if you need financial support
- May meet with you and your family if you need help with accommodations before or after surgery



Your visit to the pre-operative clinic is a good time to ask questions if you have any.

Do you have questions? Write them down here.

Five horizontal light blue rounded rectangular boxes for writing questions.

Before surgery

Questions before surgery

If you have any questions before your surgery, contact:

The Montreal Children's Hospital

The pre-operative clinic nurses at 514 412-4312

Monday to Friday, 7:30 a.m. to 3:30 p.m.

The Shriners Hospital

The info nurse at 514 282-6972

Monday to Friday, 8 a.m. to 4 p.m.

Confirming the surgery

Date of surgery: _____

Time of arrival: _____

The Montreal Children's Hospital:

After your pre-operative clinic visit, the Montreal Children's Hospital admitting department will call you to confirm the date and time for your surgery. They will ask you to arrive 2 hours before your planned surgery time.

★ Exception: If your surgery is at 7:30 a.m., arrive between 6-6:30 a.m.

The Shriners Hospital:

The booking department will call 1-2 weeks before your surgery. They will also schedule your pre-operative clinic visit.

Before surgery

Cancelling your surgery

If you are sick, we may have to postpone your surgery for safety reasons.

You will have to cancel your surgery if you have :

- Fever
- Runny nose
- Cough
- Congestion

Symptoms of a cold may worsen after waking up from surgery, or you may have difficulty breathing during or after surgery.

If you need to cancel your surgery, call us.

The Montreal Children's Hospital

Call the pre-operative clinic: 514 412-4312 or
514 934-1934, extension 24458 or 24312

The Shriners Hospital

Call the general number: 514 842-4464

They will transfer your call to the Operating Room (OR) department.

Your surgery may be delayed or cancelled because of an emergency.

If this happens, your surgeon will rebook your surgery as soon as possible.

Bowel preparation

Before your surgery, you may need to take some medicine called a laxative to help empty your intestines. This will help your intestines get ready for the recovery time after surgery and help prevent constipation.

The nurse at the pre-operative clinic will give you a prescription and explain how to take the laxative. The nurse will also explain what to eat and drink before your surgery.

Before surgery

Washing

The night before your surgery:

- Wash your hair, face and body with regular soap and shampoo, rinse well and dry off with a clean towel.
- You will be provided with 4% chlorhexidine gluconate skin cleansing wipes. Use them to wipe your entire body and hair – not your face. Ask for help if you cannot reach your back. Do not rinse.
- Do not use lotion or oils.
- Remove nail polish or false nails.
- Wear clean clothes.

The morning of surgery:

- Using new 4% chlorhexidine gluconate skin cleansing wipes, wipe your entire body a second time. Not your face or hair. Do not rinse.
- Do not wear lotions, perfume, makeup, jewelry, or piercings.
- Do not shave the area where we are doing the surgery.
- Put on clean comfortable clothes.
- Remove contact lenses if you wear them. Wear your glasses instead.
- If you have long hair, braid it, or tie it back with an elastic band. Make sure there is no metal on the elastic band.
- If you have your period, use a pad. Do not use a tampon or menstrual cup.
- Do not wear false eyelashes.



Before surgery

Diet

What can I eat and drink?

The day before surgery:

- Eat and drink as normal until midnight.

The morning before surgery:

- ★ Do not eat any food.
- ★ Do not drink any dairy products, non-dairy milks (oat, soy, nut, or coconut) or juice with pulp.
- ★ Do not chew gum or candy.



Before leaving home or up to 1 hour before your surgery:

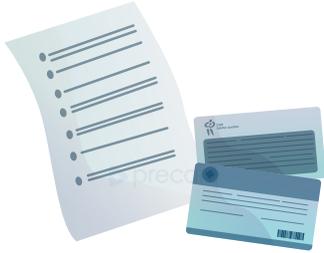
Drink clear sugary drinks. Here are some suggestions:

Apple juice, Gatorade, cranberry cocktail, store-bought iced tea, or lemonade without pulp. You can also drink water, black coffee (no milk or cream) and clear tea.

Did you know?

Drinking sugary clear fluids up to 1 hour before surgery helps prevent nausea and helps you recover faster after your surgery.

Before surgery



What to bring to the hospital

- This booklet
- Medicare and hospital cards
- X-rays or other diagnostic images or reports if they were done at another location
- A list of medication that you take at home (ask your pharmacist)
- Bathrobe, non-slip slippers, pyjamas, loose comfortable clothing for going home
- Toiletries: Toothbrush, toothpaste, mouthwash, comb or hairbrush, deodorant, soap, shaving supplies if needed, tissues and earplugs if needed, sanitary pads if needed
- Stuffed animal, cozy blanket, and a pillow
- A “distraction kit” to keep your mind off any pain. For example: music, movies, electronic games, or drawing materials
- Glasses, contact lenses, hearing aids, and their storage containers labelled with your name, if needed
- Your back brace, if needed
- Diapers if needed
- CPAP mask only - if needed overnight (not the machine)
- Sleep mask (optional)

Do not bring anything of value. If you do, always keep valuable items with you or leave them with a parent or family member. The hospital is not responsible for lost or stolen items.

Day of surgery



At the hospital

Register and check in on time.

Arrive at the time we gave you.

The Montreal Children's Hospital:

Go in through the main entrance of the Montreal Children's Hospital. Take the first set of elevators to the 3rd floor. Register at the same location as the pre-operative clinic, block B, level 3 (B 03. 3103).

The Shriners Hospital:

Enter the building through the Shriners Hospital main entrance. Go to the reception desk on RC level. You will get an identification sticker with your picture. Next, we will send you to register at the admission office.

After registration

We will show you where to go. At both hospitals, the surgical area is on the 3rd floor. We will ask you to give a cell phone number so the recovery room can contact your family. You and your parent(s) or legal guardian(s) will get a hospital bracelet.

Day of surgery

Before your surgery, you will see:

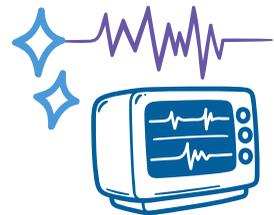
- A nurse who will:
 - Verify your bracelet and confirm your identification information is correct
 - Ask you to change into a hospital gown
 - Make sure your personal belongings are in a safe place
 - Complete a pre-operative checklist, review the medication you take, and confirm any allergies you may have
 - Check your height and weight
 - Ask you to go to the bathroom to empty your bladder
- The surgical team
- The anesthesiology team (the doctor who will put you to sleep)
 - The anesthesiologist will give you pain medicine. This may be acetaminophen, also known as Tylenol™. If needed, they will also give you a medicine to help you relax.
- A child life specialist, if needed

Signing consent forms

You or your parents or legal guardians will sign consent forms. If you are 14 years or older, you can sign your own consent forms.

Wait until we call you into the operating room

When the operating room is ready, a member of the surgical team will bring you there. In the operating room, you will be asleep and will not feel any pain during your surgery.



Day of surgery

Waiting room for your family

Once you've left for your surgery, your family can wait for you in the waiting room. Space is limited. We ask you to limit the number of people accompanying you.

Waiting rooms are located :

At the Montreal Children's Hospital: Block B, level 3

At the Shriners Hospital: Family room, 3rd floor.

Speak with the health care team to find out about visiting.

Internet access

The Montreal Children's Hospital

Network: CUSM-MUHC-PUBLIC

Username: public

Password: wifi

The Shriners Hospital

Network: PFA

No username or password is needed. You must read and accept internet rules and conditions.

Other resources:

Cafeteria:

- Glen site: Level S1, adult atrium
- Shriners Hospital: 6th floor

Vending machines:

- Glen site: Level S1, block B and block C
- Shriners Hospital: in the cafeteria on the 6th floor

Day of surgery

At the MUHC

Restaurants and stores:

On the ground floor (RC) between the Montreal Children's Hospital and the Royal Victoria Hospital (adult side) and in the adult atrium

Bank machines:

Glen site: Block C and block D on the ground floor (RC), and block B on S1 level

Children's library:

National Bank Family Resource Center, ground floor (RC), block A, room 1107 (A RC.1107)

Library:

McConnell Resource Centre: ground floor (RC), block B, room 0078 (B RC.0078)

Prayer and meditation room:

Montreal Children's Hospital: 2nd floor, block A, room 0045 (A 02.0045)

Royal Victoria Hospital: 2nd floor, between block C and block D in room 1178 (C 02.1178)



After your surgery

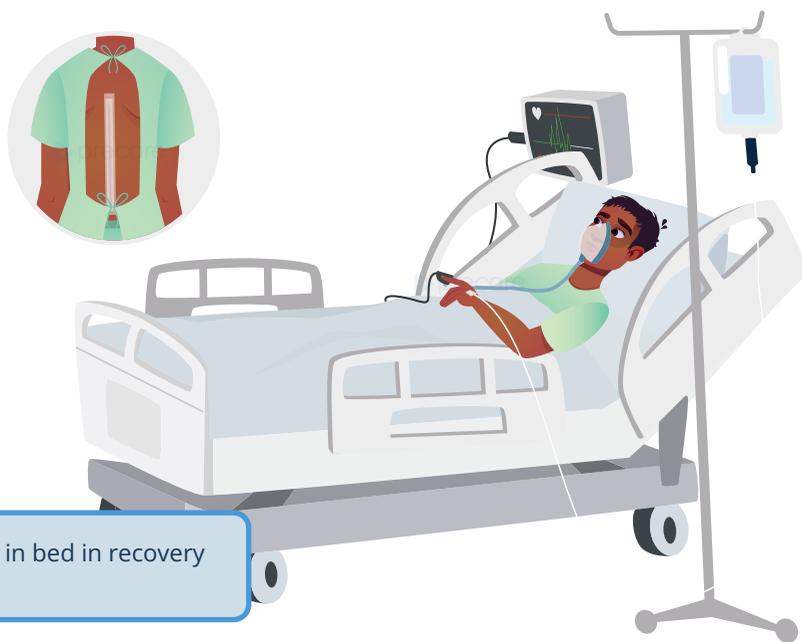
In the Post-Anesthesia Care Unit (PACU)

After your surgery you will wake up in the post-anesthesia care unit, also called the recovery room or PACU. This is an area where we watch patients closely as they wake up from surgery.

The PACU staff will contact your parents or legal guardians on their cell phone or go see them in the waiting room. Your family may visit you once you are awake. Only 2 people are allowed in the PACU at a time. Visitors must be 14 years or older.

Your nurse in the PACU will:

- Check your heart rate and blood pressure often
- Check you bandage(s)
- Make sure you are comfortable



After your surgery

Medications

In the hospital

For the first 2 days you will have Patient Controlled Analgesia, also called a PCA pump, or a Nurse Controlled Analgesia, also called and NCA pump. This is a small machine that can give you a dose of pain medication when you or a nurse press the button. These are usually opioids such as morphine.

Other pain medications include acetaminophen, also known as Tylenol™, and anti-inflammatories such as Advil™ to reduce inflammation or swelling. You may also take other medications for muscle spasms and to prevent constipation.

Pain after surgery

You will feel some discomfort after this surgery, which is normal. Your discomfort will slowly go away over time.

Your job is to let us know where, when, and how it hurts.

Our job is to help control your pain.

Everyone feels pain differently, so we cannot know exactly how you feel just by looking at you. By letting us know how you feel, we can provide pain relief when you need it.

Why is pain relief so important?

Pain relief helps you:

- Breathe easily
- Move easily
- Sleep better
- Eat better
- Recover faster

Remember – do not hide your pain. Having pain can make you not want to move around. Good pain control speeds up your recovery.

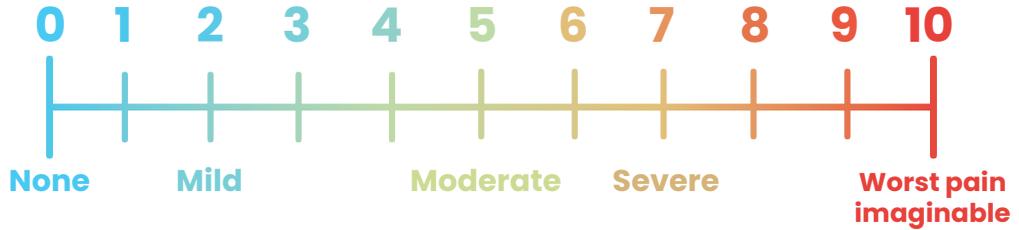
After your surgery

Questions we will ask you about your pain

These questions will help the healthcare team keep you the most comfortable after your surgery.

Using the numeric pain rating scale, tell us how uncomfortable you are.

0 means no pain and 10 is the worst pain you can imagine.



You can also use the Faces Pain Scale.



Point to the face that shows how much pain you are in.

After your surgery

What type of pain are you having?

Describe your pain with words, such as pressure, throbbing, sharp, pulling, or burning. You may come up with your own words to describe what you are feeling. This helps us give you the right medication for the type of discomfort you are having.



Pressure



Throbbing



Sensation of a sharp cut



Pulling feeling



Burning feeling

When does it start to hurt?

Tell us when it hurts. For example, does it hurt when you move, when you take a deep breath, all the time?

What makes it better or worse?

For example, an afternoon nap or shower may help, or not. Let us know.

What can you do when it starts to hurt?

- Move around or change positions. You should start moving as early as possible, while following the instructions we give you after surgery. Move often, even if it feels uncomfortable at first. Moving can help loosen your muscles and stop the pain from getting worse.
- Try ice or a warm pack wrapped in a cloth or paper towel on the painful area. Ice helps with the swelling, and heat helps with muscle spasms.
- Distract yourself or keep yourself busy. TV, music, and even coloring can help to keep your mind off the pain.
- If the pain does not get better after you tried moving, using cold or heat, or distracting yourself, tell your healthcare team, or your parents or legal guardians. Your nurse can give you medicine to make you more comfortable.

After your surgery

Exercises

Leg and arm exercises

You must move around after your surgery. Moving will help prevent blood clots, muscle weakness, and lung problems. Start with these exercises when you wake up and continue them while you are in the hospital. These exercises will help with blood flow in your arms and legs, and help you recover faster.



Legs

Rotate or make circles with your feet to the right and to the left.



Wiggle your toes and move your feet up and down.



Stretch your legs out straight.



Arms

Lift your arms up and reach above your head.

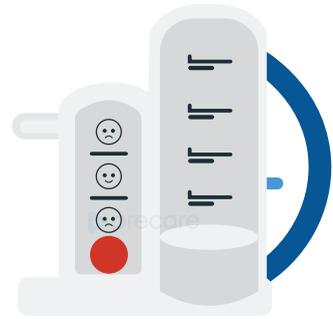
After your surgery

Deep breathing exercises

Using your inspirimeter

An inspirimeter is a small machine that helps you breathe deeply and prevent lung problems.

- To use your inspirimeter put your lips around the mouthpiece.
- Breathe in deeply and try to hold the red ball up for 2 to 4 seconds.
- Take out the mouthpiece.
- Breathe out and rest for a few seconds.
- Repeat this exercise 10 times every hour while you are awake.

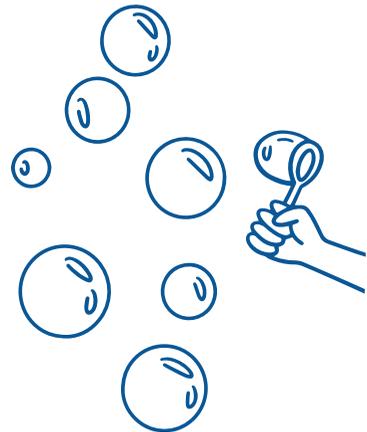


Take out the mouthpiece. Breathe out and rest for a few seconds.

Blowing bubbles

Blowing bubbles helps mimic the same deep breathing exercises as the inspirimeter.

- To blow bubbles, get the wand out. Make sure the circle has liquid on it.
- Take in a deep breath and try to blow as many bubbles as possible out in one breath.
- Rest for a few seconds.
- Repeat this exercise 10 times every hour while you are awake.



After your surgery

Goals for day 0 after surgery

Deep breathing exercises

Do deep breathing exercises once every hour when you are awake. Use your spirometer or blow bubbles (see page 37).

Diet

Drink clear fluids as much as you can, including ice chips.

Tubes and drains

When you wake up in the PACU, you will have a few tubes and drains attached to your body.

- An intravenous or IV, is a small tube in your hand or arm to help keep you hydrated and give you medications.
- A urinary catheter to help you urinate.
- A PCA or NCA pump connected to your IV for pain medication.

The nurse will check all these tubes and drains every hour to make sure they are working properly.

Activity and exercises

- Log roll every 2 hours, with help or by yourself, no twisting at the spine.
- Progressively raise the head of the bed to 45 degrees.
- Arm and leg exercises (page 36) 10 times every hour while awake, with help or by yourself until you leave the hospital.
- Sit on the edge of your bed and stand, if possible, with help from your nurse.
- Stand or walk, if possible, with help from your nurse.

After your surgery

Goals for day 1 after surgery

Deep breathing exercises

Do deep breathing exercises once every hour when you are awake. Use your inspirimeter or blow bubbles (see page 37).

Diet

Move to a light diet. Continue to stay hydrated by drinking enough water.

Tubes and drains

The nurse will continue to check all your tubes and drains every hour to make sure they are working properly. You may still have:

- An IV in your hand or arm to help keep you hydrated and give you medications.
- A urinary catheter to help you urinate.

Activity and exercises

- Little by little, raise the head of the bed to at least 60 degrees before physiotherapy. Keep that height while awake.
- Arm and leg exercises 10 times every hour while awake, with help or by yourself until you leave the hospital.
- Go from bed to chair 3 times a day. Slowly increase the number of times every day.
- Walk 3 times a day.

After your surgery

Goals for Day 2 after surgery

Deep breathing exercises

Practice deep breathing exercises once every hour when you are awake. Use your spirometer or blow bubbles (see page 37).

Diet

Move to a normal diet as much as you can. Continue to stay hydrated by drinking water.

Tubes and drains

The nurse will stop your PCA or NCA in the morning to see if your pain may be controlled with oral medications.

If you can move to taking oral medications, your nurse may remove your urinary catheter.

If you are eating and drinking well, your nurse will disconnect you from the IV line. Your IV will stay in until you leave the hospital.

Activity and exercises

- Keep the head of bed up during the day, except for short periods of rest.
- Arm and leg exercises 10 times every hour while awake, with help or by yourself until you leave the hospital.
- Walk without help 3 times a day.
- Sit in a chair 3 times a day.

After your surgery

▶ Goals for day 3: Going home

Before going home:

Deep breathing exercises

You should be comfortable using your inspirimeter or blowing bubbles to continue practicing deep breathing exercises.

Diet

You should be eating a regular diet and drink enough to keep hydrated.

Tubes and drains

Your nurse will remove any remaining IVs before you go home.

Activity and exercises

- You should feel comfortable getting in and out of bed safely.
- You should be walking and moving around regularly in and out of your room.
- You should be comfortable to sit in a chair while eating and slowly be able to sit up for longer amounts of time.
- You should practice going up and down the stairs with the physiotherapist.



At home

Medications

You will be prescribed one or more of the following for pain:

- Acetaminophen (Tylenol™)
- Anti-inflammatories (e.g., ibuprofen/Advil™)
- Morphine or hydromorphone



Follow your doctor's and nurse's instructions for pain management.

Ensure to take all your medications exactly as prescribed.

We recommend taking acetaminophen and anti-inflammatories regularly for the first few days after surgery. If your pain is not controlled, you can add morphine or hydromorphone as needed—but continue taking acetaminophen and anti-inflammatories, as they work together for better pain relief.

Constipation is common with morphine or hydromorphone. Constipation means that your stools may become hard and difficult to pass, causing increased pain and nausea. You will be prescribed laxatives to help prevent this, take them regularly.

Let us know if you experience constipation, itching, nausea, or vomiting from these medications. We can adjust your treatment.

If anti-inflammatories cause stomach pain or burning, contact your surgeon or orthopedic care coordinator.

If your pain is severe and not improving with medication, call your orthopedic care coordinator or go to the emergency room.

At home

Caring for your cuts (incisions)

You will go home with a dry bandage over your cut.

Under your dry bandage you may have staples or stiches that breakdown on their own.

For staples:

You will get an appointment between 7 and 14 days after your surgery to remove the staples. The staples will be removed by the CLSC or at the hospital, depending on what your doctor decides.

After removing the staples, small white bandages called Steri-strips™ will cover your cut to help it heal. Do not remove them, they will fall off by themselves. If they have not fallen off in 2 weeks, remove them yourself. You may start showering 3-5 days after removing the staples if the incision is completely closed.

For stitches:

They will break down on their own. For this, you will not need an appointment to remove them. In this case, you should remove your dry bandage in the shower 10 days after surgery. You will already have Steri-strips™ over your incision.

Do not scrub your cuts, only let the water run softly over them and wash the area gently.

At home

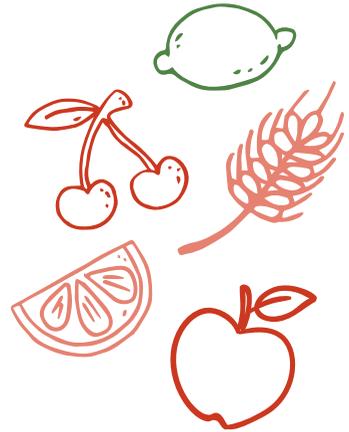
Diet

After surgery, you can eat anything you want, unless advised otherwise.

To help your body heal, be sure to eat a lot of protein throughout the day at each meal. Your body uses protein to help you heal faster. Meat, fish, poultry, tofu, legumes, and dairy products are good sources of protein.

If you find it hard to eat enough, try eating smaller amounts at each meal. Add nutritious snacks between meals, like:

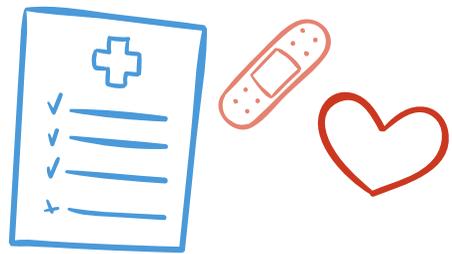
- Fruits and cheese
- Yogurt and granola
- Whole grain crackers and hard-boiled egg
- Trail mix (nuts and dried fruits)
- Muffin and cow's milk or soy milk



At home

Activities

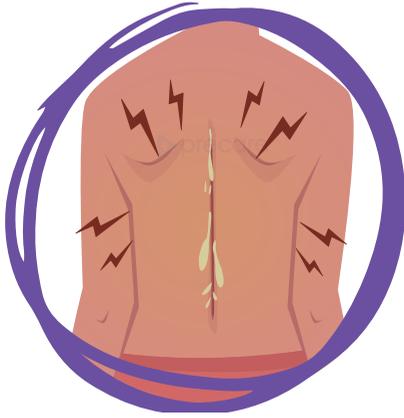
- Shower when you get home unless your surgeon told you not to. Have someone help you shower, until you can do it safely on your own.
- Continue getting in and out of bed as you learned in the hospital.
- Walk several times a day and slowly get to walking for longer periods of time. Walking is great exercise.
- No other physical activity except walking is allowed during the first 6 weeks at home.
- Ask someone to walk beside you on the stairs until you feel you are ready to do this by yourself.
- Remove objects from the floor that could make you trip or fall.
- Go back to school 3 to 4 weeks after surgery.
- Spend a few hours every day sitting in a chair and slowly try to sit for longer periods, instead of lying down.
- Try eating all meals sitting in a chair.



At home

When to call us

Call the hospital if you have any of these problems:



- You still have pain even after taking your prescribed pain medication
- There is redness, drainage (liquid), pain, or swelling at the incision site
- You have constant nausea and vomiting or weight loss
- You have not had stool for 5 days since surgery
- Symptoms of a urinary tract infection including burning, pain when you pee, having a hard time peeing, sudden urges to urinate (pee), and pee that smells bad, or pee that looks cloudy
- Other general questions

Monday to Friday, 8 a.m. to 4 p.m.

You may contact the info nurse at the Shriners Hospital

514 282-6972

or

Your Care Coordinator

If you need to speak to someone during evenings or weekends you can call the Montreal Children's Hospital:

514 412-4400, extension 23333 (Locating department)

Ask the person to page the orthopedic surgeon for pediatrics on call.

At home



Go to the emergency room if you have any of these problems:

- Paralysis or not being able to move, numbness or weakness in your arms or legs. It is normal to have numbness around your cut
- Any loss of bladder or bowel control, such as not being able to hold in your urine or stool
- A dull, aching, or throbbing headache, which gets worse when sitting or standing accompanied with; abnormal sensitivity to light, a change in your vision or nausea and vomiting
- A fever with a temperature higher than 37.8° C taken by mouth
- Symptoms of a blood clot in your leg such as: pain in your calf, back of the knee, thigh, or groin with redness and swelling in the leg or groin
- You have difficulty breathing

At home

Follow-up

You will have a follow-up appointment with your surgeon 6 weeks after your surgery. This may be in-person or a telehealth visit that you can attend from home using your phone, tablet, or computer. We will give you information about your next appointment before you leave the hospital.

If you have any questions, contact your care coordinator at the Shriners Hospital.

My surgeon is:

My care coordinator is:

Their contact information:

Resources and websites of interest

Scoliosis Research Society

www.srs.org/

Resources to help you stop smoking

Quit line: 1-866-527-7383 (free) or www.iqitnow.qc.ca

Quit Smoking centres, ask your CLSC for information

MUHC Libraries – patient portal

www.muclibraries.ca/patients/

Montreal Children’s Hospital parking information:

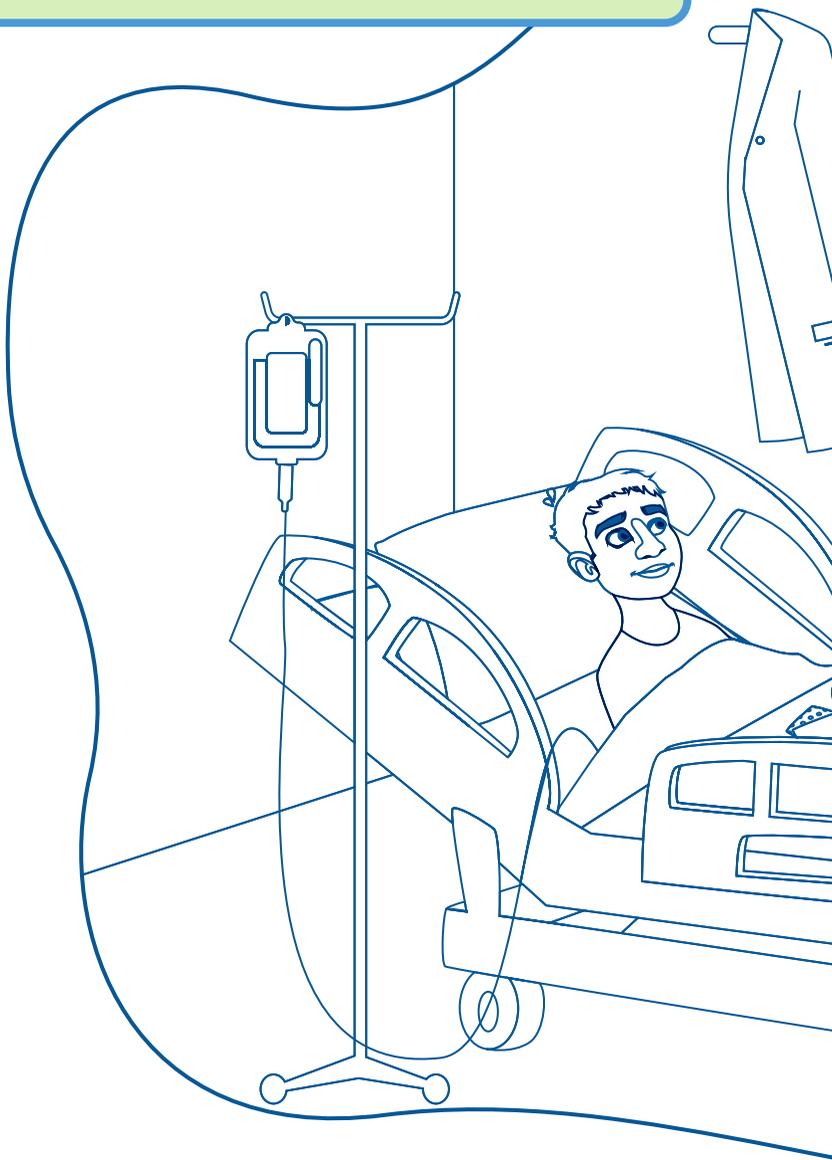
www.montrealchildrenshospital.ca/parking/

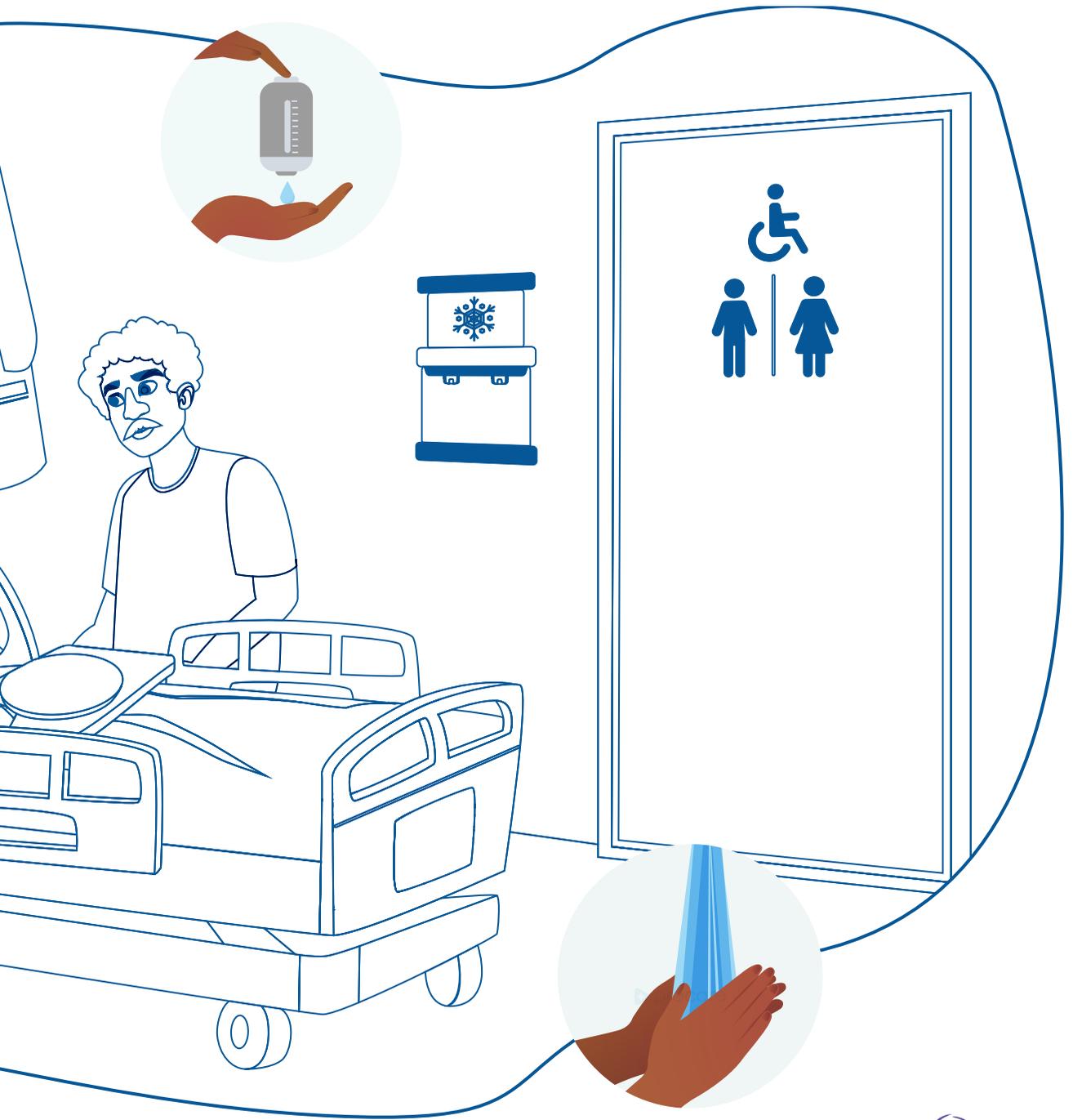
Info-Santé: 811

(Contact a nurse for non-urgent health issue, 24 hours a day and 365 days a year)

Tips to prevent infection in your hospital room - a coloring page

- Do not touch your catheter, wounds or IV lines
- Wash your hands before eating or drinking
- Visitors and patients should wash their hands when entering the room and when leaving the room
- Wash your hands before and after touching any equipment such as the ice machine
- Visitors should hang coats and bags up on the hooks: do not put them on the floor
- Do not share food or utensils
- Visitors should avoid sitting on the bed





Hospital Maps - Montreal Children's Hospital and Shriners Hospital



Parking information

Montreal Children's Hospital

There are two parking lots available to hospital visitors:

- The underground parking lot is located below the main plaza at the MUHC Glen site. There is space for 1,582 cars (including 38 handicapped spaces).
- The Express Parking lot is located on the main plaza at the Glen site, directly across from the main entrance to the hospital. There is space for 40 cars.

Payment kiosks, which accept Visa, Mastercard, debit and cash are located on:

- Level P1 (corresponding with level S1 in the hospital) outside the Montreal Children's Hospital Emergency entrance.
- Level P2 in front of the elevators that lead up to the hospital.

The Parking Desk (A RC.1000) in the Larry and Cookie Rossy Promenade accepts Visa, MasterCard, and payment by Interac.

You can also pay for daily parking rates by credit card (Visa, MasterCard) or debit card at the exit gate when you leave the parking lot.

Parking information

Shriners Hospital

Free parking for our guests is underground at the P3A level in the 100 area. To get to the public parking area, guests must drive past all the hospitals, turn left onto the contour road and immediately turn left again into underground parking. The moment you are going down the ramp towards the parking, you must look up to see the signage, take a ticket at the wicket and follow the signage for Shriners Hospitals for Children Canada all the way to P3A 100, where you will find the parking entrance directly into level SS2 of the hospital.

Families must bring their parking ticket to the front desk for validation. Once in the hospital through the SS2 doors, please take the elevators that you will find in the museum up to RC.

Important: the families of children treated at Shriners Hospitals for Children Canada who wish to take advantage of the free parking must park in the underground parking in the P3A - 100 area. Free parking does not apply to the express parking outdoors.



Hôpital de Montréal
pour enfants
Centre universitaire
de santé McGill



Montreal Children's
Hospital
McGill University
Health Centre



Hôpitaux Shriners
pour enfants®
Shriners Hospitals
for Children®

Canada

RÉCUPÉRATION
AMÉLIORÉE
APRÈS LA
CHIRURGIE

