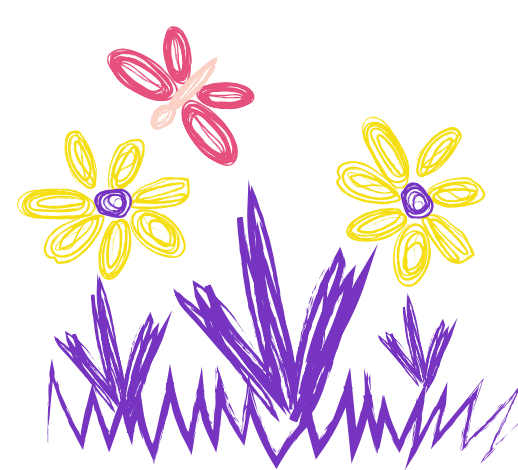
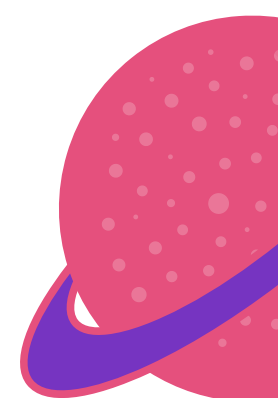
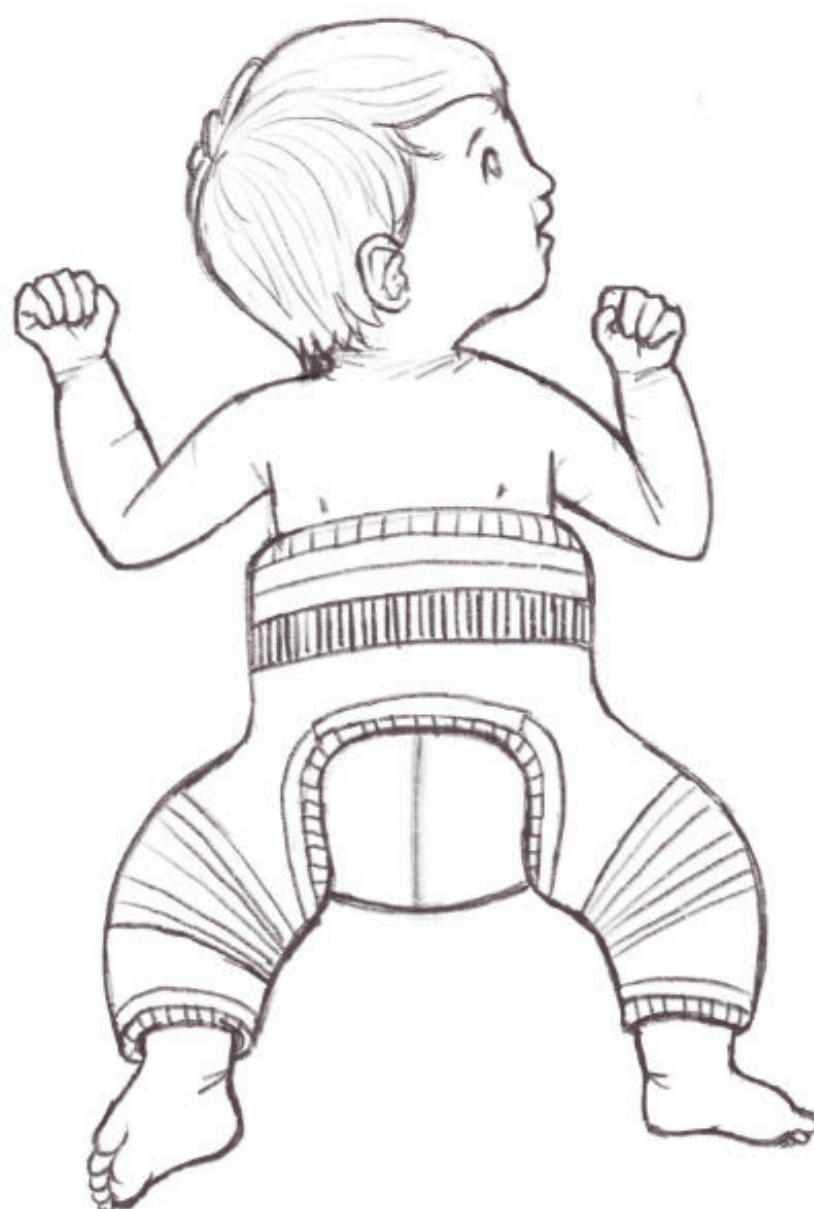
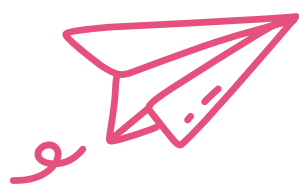




HIP SPICA BODY CAST

A Guide for Parents and Caregivers



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Child Care and School Attendance

You may need to make alternate arrangements if your child attends a child care program. Some child care providers may not accept your child while they have the hip spica cast on. Check with your child's care provider and see if there is any education you can provide to help them adapt to the cast.

If your child goes to school, they are strongly encouraged to attend school while in the hip spica cast. Creative accommodations while at school or alternate arrangements like modified/virtual environments may be needed. Talk to your child's teacher or principal. Please speak to your surgeon or nurse practitioner if you require a letter to be sent to your school.

Car Seats

If your child uses a car seat you may need to purchase another car seat. Ask your nurse or the occupational therapist for more information on safe transportation in a car.

You may also take your child home from the hospital using public transportation like bus and train. Although car seats are not generally required when using public transportation, children should be in a stroller and tethered in. **Taxis also do not require car seats by law, but hiring a taxi without a car seat is not safe.**

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INTRODUCTION TO A HIP SPICA

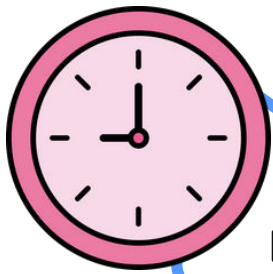
What is a Hip Spica body cast?

A hip spica body cast is a special kind of cast made of hard fiberglass material that is not waterproof. Your child will receive a general anesthesia before the cast is applied. This is because your child needs to be positioned without moving for long enough to have the cast applied.

The cast can be bulky and awkward, the reason for the cast is to:

- Keep the ends of broken bone together so they can heal correctly
- Prevent the bone from moving after surgery
- Correct a hip that is not aligned properly (e.g. hip dysplasia)

Hip spica casts vary in size. The size depends on the reason why your child needs the hip spica cast. Not every child will need both legs in a cast. Some may have just one hip and leg in a cast. Ask the doctor for the type of cast that your child will need. All hip spica casts have a hole in the groin area so that your child can go to the bathroom.



How long will my child be in a Hip Spica

This depends on the reason for the hip spica cast. Each child's needs are different. Some children may be in the cast for 1-3 months. Your child's doctor or nurse will tell you how long your child will need the cast for.

Is a Hip Spica cast painful?

The hip spica cast itself is not usually painful for children. Sometimes it is difficult to know if your child is in pain or if they are frustrated about the cast. If you feel that your child is in pain, please refer to the 'pain management' section of this document.

Child Passenger Safety with a Hip Spica

Each Canadian province or territory sets its own laws for restraining children in a vehicle. In Alberta, it is the driver's responsibility by law to ensure that passengers under 16 years of age are buckled up correctly. If you live outside of Alberta, understand your own provincial regulations.

In Alberta, children under 40 lb (18 kg) and under 6 years of age, the law states the following:

- An appropriate child safety seat must be used.
- The child safety seat must be correctly installed in the vehicle.
- The child must be properly secured into the seat.

More specific information can be found at the end of this document

CAST CARE AT HOME



It is important to keep the cast clean and dry to avoid strong foul odours from the cast. To avoid unnecessary cast changes:

- Do not get the cast wet; it is not waterproof. Wipe the cast with a damp cloth or wet wipes as soon as it gets soiled. Dry the cast with a dry cloth by gently pressing the cloth against the cast. Use a hair dryer on the cool setting to finish drying.
- Try and keep the dressings dry and intact. If the dressings are lifting or if they are soiled with urine or stool, please remove the dressing.

If any part of the cast has not dried and is still damp or wet, please call your surgeon's office or the cast clinic number. The cast will likely need to be changed.

As long as your child has the hip spica cast, there will always be a slight odour coming from the cast. The odour is from your child sweating in the cast. This doesn't mean that you have not been thorough with cast care. It just means that it is not easy keeping your child clean in a hip spica cast. Once the cast is removed the odour will fade when your child returns to their normal bathing routine.



Tip: Electric fans and things like a Cast Cooler TM® may be helpful when the temperature outside is too hot.

Your child may complain of itchiness. Itchiness can make your child irritable. To relieve itchiness you may use a hair dryer on the cool setting right on the cast. Do not put anything inside the cast to scratch the skin.

Diapering and Toileting

Toileting your child with a hip spica or body cast can be challenging. Once a cast is soiled, the cast will begin to smell. Keep the cast as clean as possible. The cast may need to be changed if it becomes soiled.

For children who wear diapers, you may need 2 different sizes of diapers.

1. Use a diaper small enough to tuck inside of the cast to keep the area as dry and clean as possible. Your child's regular size diaper may fit. Just cut off the Velcro tabs to make it easier to use.
2. Use a diaper large enough to wrap around the outside of the cast to hold the smaller one in place.
3. Change the diaper as soon as it becomes wet or soiled. This will help prevent skin irritations and the cast from soiling.
4. During the day, leave the diaper open as long as you can each day to air out the area. This will help lessen the possibility of rashes and skin irritation.
5. During the night, use overnight diapers. They absorb more, but you may still need to change the diaper. Your child should drink more during the day and less before bed. This will help to decrease the amount they pee during the night.



Tip: Using super absorbent sanitary pads or incontinent pads may be added inside the diaper to help protect the cast. Thin daily liners can be put around the edges of the cast around the buttocks to protect the cast and provide comfort.



Tip: Use a tongue depressor to help get diaper edges under the cast.



For children who are toilet trained:

Hold your child over the toilet if your child is small and light enough to do so. Carry your child upright to prevent the cast from getting soiled with stool. A soft toilet seat may help stop your child from slipping off the toilet. These can be purchased at any large home or hardware store or online.

If your child is fully potty trained and wears underwear, unfortunately, regular underwear will not fit well over the cast and will be challenging to put on and take off. Modifying or buying bigger underwear that has snaps or Velcro on the sides can help stretch over the cast.

If your child is too heavy for you to hold over the toilet, use a bedpan. Boys can also use a urinal. To learn how to use a bedpan, click on the link or go to [My.HealthAlberta.ca](https://www.health.alberta.ca) and search how to use a bedpan.



Tip: For girls, there are female urinals that can be used with a bedpan to help direct the flow of urine. These are available for purchase online.



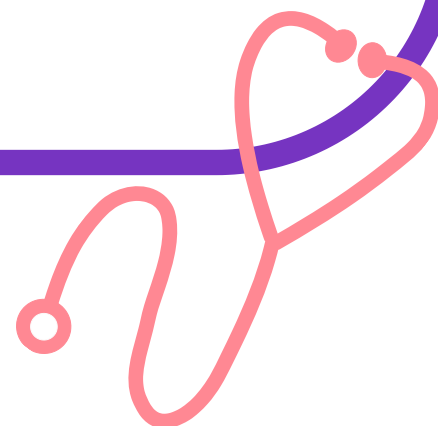
Skin Care

It's important to check your child's skin around the edges of the cast every day for:

- Redness, blisters, pressure areas, and sores.
- Anything that could irritate the skin under the cast. Gently feel inside the edges of the cast and try to remove any food particles or anything else that may have gotten under the cast.
- Adequate blood circulation:
 - Your child's toes should be warm and pink
 - Your child should be able to wiggle their toes
- If your child is complaining of numbness or tingling in the feet or toes, it may be related to low blood circulation. It is important to put your child's feet on pillows and try to raise them above the level of the heart. Their toes should return to normal colour within an hour

If this does not work, call **the pediatric surgery clinic** at **780-407-6393** during business hours.

If it is a weekend, bring your child to the **Stollery Emergency Room** or the **nearest emergency room** if you live too far from the Stollery Children's Hospital.



How to “Petal” a Cast

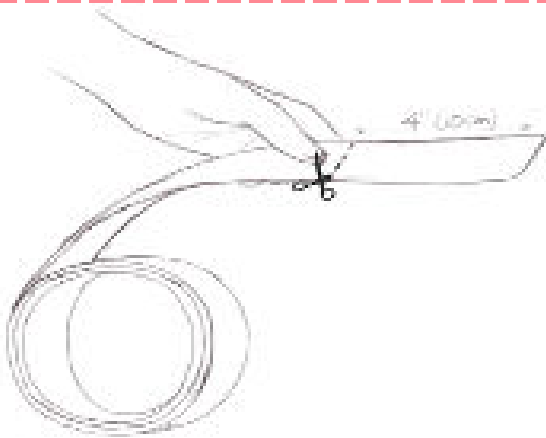
It is important that the edges of the cast are covered and overlapped with waterproof tape. This is most important around the groin area to keep the cast edges from getting soiled. This is called “petaling.” This will first be done in the hospital. You can help your nurse petal the cast so that you can learn to do this at home when needed. You will only need to re-petal the cast if the tape is soiled or has come off.



Tip: A fun option for the kids is to use a decorative duct tape from Michaels Craft store **only** to petal over the waterproof tape

To petal a cast, you will need:

- **Waterproof medical tape.** If your child is allergic to latex, make sure you buy latex-free waterproof tape. **Do not** use construction grade duct tap, as this will ruin the special saw that is used to remove the cast.
- **A good pair of scissors** to cut the tape.
- **Mole skin (optional).** May be used on top of the waterproof tape for comfort



Cut the waterproof tape into 4” (10cm) strips. Do not cut longer than this as a longer length makes it tricky to petal the cast.



Stick ½ of the tape inside the cast. Make sure there are no wrinkles that you can see. Wrinkles cause rough spots that can irritate your child’s skin.

With the remaining ½, stick it to the cast on the outside.

Overlap the next strip of tape over the first so that they look like petals on a flower. Making petals on the cast with the waterproof tape helps keep the cast dry and protects it from pee or poop.



Finally, with a **single continuous piece of tape**, go **around the cast and tape down the edges of the petals.** This will prevent the tape from rolling up and peeling off.

Once the tape is applied, try not to remove the tape unless you have to.

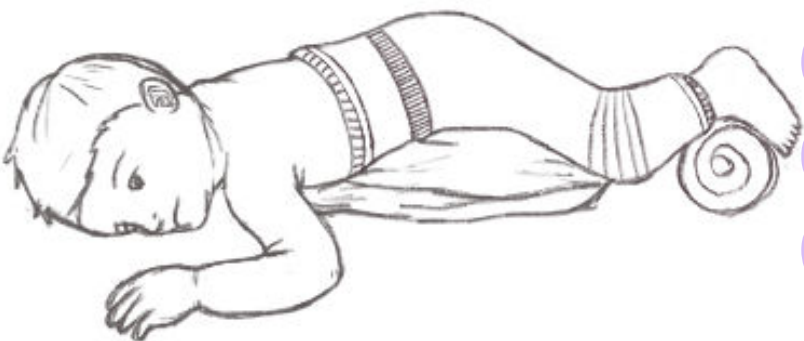
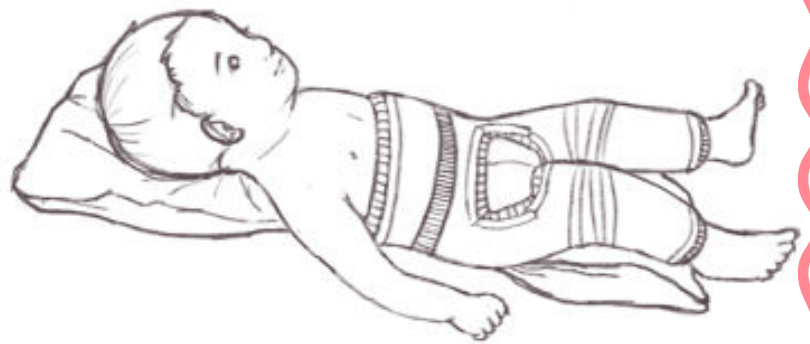
Removing the tape will also remove the padding inside the cast.

Positioning

Children in a hip spica cast cannot move easily. They will need your help to avoid sores from forming under the cast.

- Change your child's position every 2 to 4 hours during the day and at least once during the night.
- To prevent your child from falling out of bed, use a bed rail or use the rails on the crib.
- Children should spend some time on their tummy each day to prevent pressure sores on their heels and back. **While in this position, constant supervision is required to prevent your child from suffocating. Do not lay your child on their stomach to sleep.**

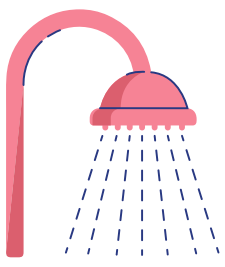
Back: position pillows under the head, neck, and under the legs. Keep heels off the mattress by placing a pillow or rolled towel under the calves.



Tummy: place flat pillows under the stomach. Make sure the toes are not touching the mattress. Place a pillow or rolled towel under the ankle of the casted leg.

Side: place a pillow under the head, one behind the back to prevent rolling, and one between the legs to support the cast.





HOME ROUTINES



Bathing and Hair Washing

- Best way to bathe your child is to sponge bath your child. Use a slightly damp cloth to reach under the edges of the cast to remove plaster crumbs or food particles from the front of the cast.
- If the cast gets wet, dry the area well with a towel. You may also use a hair dryer on the **cool** setting.
- Don't use oils or lotions near your child's cast. If the skin gets red or irritated around the edge of the cast, you may “petal” the edges with mole skin for comfort.
- Wash hair over the edge of a sink or bath. Support your child's head with a pool noodle or towel rolled under their neck. To keep your child safe, you will need the help of another person. A hand-held shower head or a jug can be used to rinse hair.
- Older children and teens can be shampooed lying down with a hair-washing tray. Or, they can also lie across the bed with their heads hanging over the side. Use a large plastic tote or bucket under their head to catch the rinse water.
- Another option for older children is the use of dry shampoo or no-rinse shampoo cap.



Sleep

Keep to your child's home routine as much as possible, this will help your child rest easier at night. Limit screen time just before bed. Use sound machines, soft music, gentle massage, or soft lighting such as a night light or projector. Position your child for sleep in whatever position your child finds comfortable. **DO NOT put your child on their stomach to sleep.** Don't forget to reposition your child at least once during the night.



Activity and Entertainment

During the time spent in the hip spica, your child may feel angry, sad, or frustrated about losing their independence as they adjust to being in the cast.

Toddlers and younger children may return to previous habits or behaviours as a way to feel or seek comfort and control (e.g. use of a soother). Changes in eating, sleeping, and toileting may occur. You may notice these behaviours again once the cast is removed. These changes may not last long. If you are concerned, please contact your pediatrician or family doctor.

It is important to give your child time to play and be active. Activities where the child may fall or break the cast should be avoided. No swimming or bathing is allowed while the cast is on.



Remember! If your child has a cross bar between the legs of the cast, hold your child by supporting the bottom of the cast while using the cross bar.

Strollers and/or wagons are helpful to move your child around outside the house. Going for walks outside, around the mall, and wheelchair-accessible places can be fun for you and your child. Some examples of wheelchair-accessible locations in Edmonton include: the Edmonton Valley Zoo, Telus World of Science, Fort Edmonton Park, John Walter Museum, Royal Alberta Museum, and the Muttart Conservatory.

If your child is older, they may require a wheelchair. A short-term wheelchair rental can be requested through the Canadian Red Cross Short Term Health Equipment Loan Program with a healthcare provider prescription. Please call the **pediatric surgery clinic** at **780-407-6393** during business hours to request a prescription.

Your child should not stay in bed all day. They may be out and about if they can safely fit in a wagon or stroller. Try to keep your child involved with family and friends as well as outings when possible.



- Finger painting
- Building blocks like Duplo, Lego
- Medical play - play doctor kit
- Puppet play
- Arts and Crafts - cast decorating

Some activities to try:

- Play doh/clay
- Rolling or throwing ball games
- Colouring
- Remote control cars
- Dolls
- Stories
- Music
- Puzzles
- Video or video games
- Reading books, comics



These activities might require some adjustments in position, for example; adjustable art easel, a laptop table, a beanbag chair, breastfeeding pillow, body pillow or lots of cushions.

For more questions about activity and entertainment for your child, please contact the Stollery Child Life Program at

<https://www.albertahealthservices.ca/stollery/Page14246.aspx>

Diet

- Make sure to keep the cast dry and prevent food from going down cast, use a bib, plastic shirt or plastic bag to protect the cast. You'll find it's helpful to use a cup with a lid and a straw or a sippy cup for drinks to lessen spills. Your child should be sitting in an upright position as much as possible for all meals. Do not provide meals in bed with your child lying down.
- Adapting highchairs, chairs or booster seats, such as an Upseat™. The Bumby™ seat would likely be too small and not fit the spica cast. An alternative seating option would be a vinyl bean bag chair. Speak to the occupational therapist for ways to adapt your current seating.
- Hip spica table, these can be purchased online or made if you are handy.



It is important that your child does not over eat because the cast around the torso cannot expand. Also your child is not as physically active with the hip spica cast, which can result in constipation.

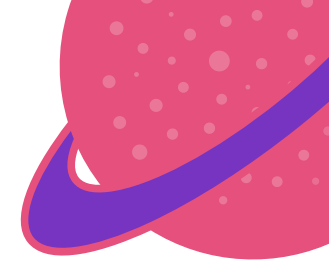
Because of this, you will want to:

- Offer smaller meals, more often.
- Give food high in fibre and enough fluids to help prevent constipation. Refer to 'MyHealth Alberta Constipation' website for more information.
- Avoid new foods or foods that may cause loose stools.





PAIN MANAGEMENT



To manage pain at home, use over-the-counter medicines like acetaminophen (Tylenol™) or ibuprofen (Advil™) as directed by the nurse or doctor. Follow the instructions on the medicine bottle to know how much to give.

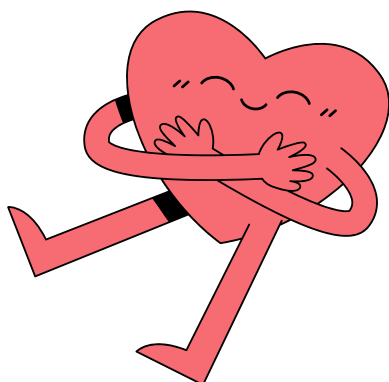
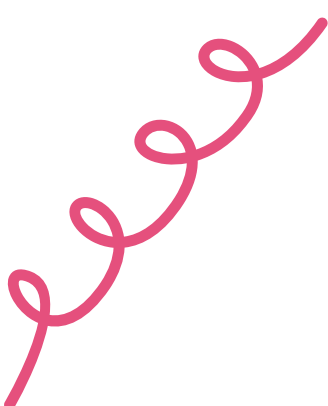
Your child may have muscle spasms. You may notice that your child is sitting calmly, and then the leg or body just “jumps”. These spasms are caused by the muscle suddenly contracting. Muscle spasms can occur for the first 24-72 hours. Muscle spasms are different than twitches that can happen when children fall asleep.

If the prescribed pain medicine is not working, call the doctor or the nurse.

Pain will be greatest during the first 24-72 hours after surgery but should decrease as the week goes by. Pain can get worse during the night as your child sleeps. It is really important to try and treat pain before it becomes unmanageable. This can be done by offering medicine before your child wakes up on their own with pain. It takes approximately 15-30 minutes for the pain medication to work.

If your child refuses to take the pain medicine, there may be other options. Try mixing the medication with apple sauce, pudding, jello, or juice. Another option is to talk to your healthcare provider and/or community pharmacy about compounding medication options (e.g. flavour changes, gummies, chocolate). There may be an additional cost for compounding.

Comfort Measures to also relieve pain:



Physical Support	Emotional Support
Repositioning using pillows or moving to a different environment	Talk to your child about how they are feeling can help decrease fear and anxiety
Physical touch (e.g. light touch, massage, cuddling, rocking, swaddling)	Create a calming and relaxing environment (e.g. quiet space, lights dim)
Younger children: encourage sucking with a bottle, pacifier, or breastfeeding Older children: guided imagery and deep breathing	Distraction: Help your child focus on something else instead of the pain (e.g. music, bubbles, playing with toys, crafts, watching a video, TV, iPad, reading a book, telling stories)

WHEN SHOULD YOU CALL FOR HELP?

Call the Pediatric Surgery Clinic 780-407-6393 (open Monday to Friday 8am-4:30pm, please leave a message on the voicemail if no response)

- Feels rubbing or burning under the cast
- There is a foul smell coming from under the cast that is not from stool or urine
- You notice sores, ulcers or open areas under the edges of the cast
- The cast is too tight or too loose
- Something falls down and becomes stuck under the cast
- The cast breaks, cracks or becomes soft
- Numbness or tingling in the feet or toes that is unchanged after elevating the feet above heart level

When to take your child to the Stollery Emergency Room or the nearest emergency room

- If it is the weekend and you are concerned about your child's blood circulation
 - Toes remain blue or purple even after raising feet on pillows for 60 minutes
- Your child cannot move his toes or complains of tingling or numbness in the toes
- Pain that worsens and the prescribed pain medicine is not working

Follow-up appointment

- You will be advised when your child needs to have a follow-up appointment with a doctor

Cast Removal

The cast is removed by cutting it down both sides of the body and legs with a special electric saw. The saw works by vibrations. It cannot cut the child's skin. The saw is large and noisy. This might frighten your child. Prepare your child prior to coming to the hospital to get the cast removed. Reassure them that the machine works to cut the skin, not their skin. Bring music and headphones to block the noise from the saw.

The skin under the cast may be darker in color, dry and flaky. This is from the accumulation of dead skin. The skin will be very sensitive. Gentle handling is necessary. Do not rub it. The dead skin will gradually come off. A warm bath with warm soapy water and non-scented body lotion daily will help.

In older children, there may be an unusual amount of hair on the skin after the cast is removed. This extra hair will fall out after several weeks.

Young children will learn to walk by going back to earlier developmental stages. They will move around the bed more freely, start to crawl, use furniture to pull themselves up and to move around until they feel safe. Older children will gain confidence slowly. Do not worry; they will gradually return to more normal walking.

After the cast has been removed, follow your doctor's instructions about your child's return to physical activity.



SPECIAL CONSIDERATIONS FOR PARENTS & CAREGIVERS

Caring For Yourself

Caring for a child with a hip spica cast can be tiring. It is important to take care of yourself. Take time to rest and relax. Ask family members, friends, or a trusted neighbor to help care for your child so you can take a break.

For help and support in your community:

- **211 Alberta:** dial 211. A free, confidential, multilingual, 24-hour information and referral system. It can help with day-to-day needs and coping with stressful situations before they escalate into a crisis.
- **Health Link:** dial 811

Caring For Your Back

When lifting your child, always use proper techniques to avoid injury to your back. Your child needs you. Wearing long sleeves will help to prevent fiberglass cuts to your skin.

- Hold your child as close to you as possible
- Bend your knees, keep your back straight
- Lift by straightening out your legs
- Do not twist at the waist; instead, pivot the legs

To learn more about proper lifting click on the links or go to [MyHealth.Alberta.ca](https://myhealth.alberta.ca), search *Proper Lifting*. Or speak to a Stollery Occupational Therapist or Physiotherapist.

Resources: International Hip Dysplasia Institute <https://hipdysplasia.org/>
I'm a HIPpy <https://imahippy.org/hip-dysplasia-ddh>

EQUIPMENT AND SUPPLIES FOR CARE AT HOME

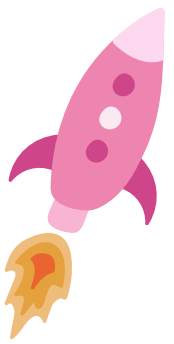
The items listed below are the essential supplies that you may need to care for your child at home. These supplies can be purchased online or at any health supply store. You may need to go to more than one store to buy the supplies.

Medical supplies for children that are not toilet trained:

- Sanitary pads with adhesives or smaller diapers to fit into the cast if needed
- Waterproof tape or latex free waterproof tape
- Disposable bed pads
- Diaper wipes

Medical supplies for children that are toilet trained:

- Waterproof tape or latex free waterproof tape
- Disposable bed pads
- Rinse free shampoo cap
- Disposable rinse free washcloth
- Disposable urinal (boys only)
- Disposable slipper bed pan (boys and girls)



TRANSPORTATION OPTIONS FOR A CHILD IN A CAR SEAT WITH A HIP SPICA CAST

Children with a hip spica cast may not be able to go back in to their regular car seat. If your child can't be properly secured in their car seat, the following information contains options that you can consider. (1)

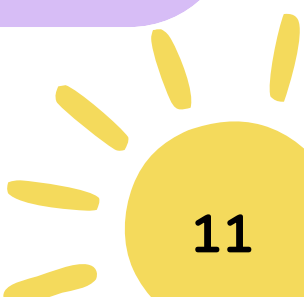
Confirm your coverage with your insurance provider for the transportation option you choose.

If you live outside of Alberta, make sure you understand your provincial regulations for safe transportation of a child in a vehicle.

Transportation options in Alberta where a child does not need to be secured in a Car Seat.

- **Taxi** - Taxis do not require a child be secured in a car seat. Please note that companies like Uber will require the child to be restrained in an approved car seat.
- **Public Transportation** - Public buses or trains do not require a child be secured in a car seat.
- **Emergency Vehicles** - Emergency vehicles such as ambulances or non-ambulance medical transport vehicles do not require a child be secured in a car seat.
- **Rental or Lease vehicles** - Vehicles rented or leased for 14 days or less do not require a child be secured in a car seat.

(1) These lists have been compiled for convenience they are not intended to be current, accurate or comprehensive. No endorsement or recommendation of any of the Vendors or options set forth herein is intended to be, nor should this list be construed as an endorsement or recommendation. Confirm car seat return policies before purchase. Utilize any vendor or option at your own sole risk. Research the requirements for car seats in the province or territory where you will be transporting your child.



For more about Alberta's car seat laws, use the links below or search online for:

- [Alberta Health Services car seat guidelines](https://myhealth.alberta.ca/Alberta/Pages/alberta-child-safety-seat-guidelines.aspx) - <https://myhealth.alberta.ca/Alberta/Pages/alberta-child-safety-seat-guidelines.aspx>
- [Alberta Government car seat guidelines](http://albertaseatbelts.ca/) - <http://albertaseatbelts.ca/>
- [Transport Canada car seat guidelines](https://www.tc.gc.ca/en/services/road/child-car-seat-safety.html) - <https://www.tc.gc.ca/en/services/road/child-car-seat-safety.html>

Selecting the appropriate car seat

Before buying a new car seat, look at the car seat that you have.

Keep in mind:

- Your child must be able to sit upright and the cast cannot interfere with the buckling mechanism or harness.
- The car seat must be appropriate for your child's weight. You must consider the weight of your child and the weight of the cast.
- Always look for the National Safety Mark. It is proof the child car seat meets Canadian safety standards



If your child needs a new car seat, look for:

- A wider front. The widest part of the car seat should be at least 43 cm (17 inches)
- Deep seating. The depth from front to back should be at least 41 cm (16 inches)
- The seat should be flat with low sides
- The harness must fit over the cast and comfortably lock into place

These measurements allow for the width of your child's cast measured at the widest part.

Take measurements of your child's width at the hips and knees and the angles of these joints in the cast.

Even with these guidelines the true fit of your child fitting into a car seat will not be known until after the cast is applied.

Before you buy the car seat, be aware of the return policy. Some stores will not allow you to return the car seat once it is removed from the packaging.



DIONO brand car seats can accommodate some hip spica casts, but you will still need to research the specific car seat that works with your vehicle and family's needs. This brand can be purchased at retailers such as: Canadian Tire, Toys R Us, Walmart.

