
Fractures, Casts and Splints:

Information for Parents and
Caregivers after your visit to the
Emergency Department



An agency of the Provincial
Health Services Authority

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What is a fracture?

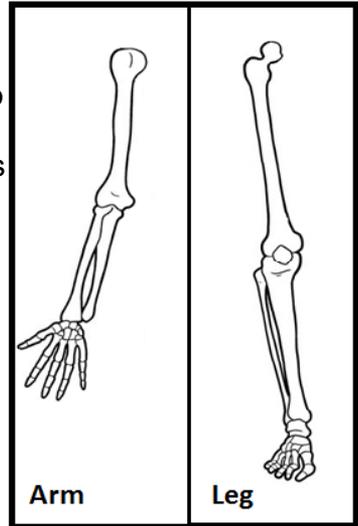
A fracture is a break in the bone.

Ask your child's doctor or nurse to mark on the picture where your child has the fracture.

After a fracture, the body swells up to protect the injury and heal the bone. Too much movement can make the fracture worse and cause more pain. Your child's fracture will heal best when they keep their broken bone still and let it rest.

A doctor or nurse practitioner will give your child a cast or splint to protect the bone while it heals. The cast or splint will also help with pain and swelling.

Fractures can take several weeks to heal.



What are casts and splints?

Casts and splints are supportive bandages that fit your child's injured body part.

Casts and splints have 2 layers:

- A soft, cotton padded liner on the skin of the injured part of your child.
- A hard, fiberglass layer that surrounds the fracture. It keeps your child's broken bone still, and helps it heal

Casts and splints: What is the difference?

A cast's hard layer **completely** covers your child's injured body part.

A splint's hard layer **partly** covers your child's injured body part.

A splint may be used for smaller fractures. It may also be used for newly broken bones if the area around the break is swollen. A doctor will usually replace the splint with a cast after the swelling gets better, for more protection.

The cast or splint fits the injured part of your child's body. If the cast or splint is too loose, it will fall off. If it is too tight, it will cause problems with swelling and rubbing underneath the layers. A doctor or nurse will check that your child's cast or splint fits well after it dries.

How do I care for my child during the first 36 hours?

ARM Casts or Splints:

If your child has an arm cast, they may go home with it in a sling or collar and cuff. The sling or collar and cuff can be very important to keep some fractures still, which will reduce pain and aid healing. Your child should keep the sling on when they are awake, unless your doctor tells you it can come off.

LEG Casts or Splints:

Encourage your child to rest on a bed, couch or easy chair. Your health care provider will tell you how your child should rest.

Help your child change positions about every 2 hours.

Broken arms or legs may swell and cause discomfort. You can help prevent swelling by raising your child's injured body part above their heart. To do so, rest your child's arm or leg on 2 or 3 cushions.

For an arm cast:



For a leg cast:



Your child may feel uncomfortable or frustrated at first. Most children get used to the cast quickly. Offer activities like books, games, and music to help pass the time.

Your child may need crutches. Ask your child's health care provider about where you can borrow, rent, or buy them.



To learn more about crutches, read the *How to Use Crutches* pamphlet. You can find it in the resource center collection if you search "Crutches":
<https://libraries.phsa.ca/fsrc>

Pain Relief

Your healthcare team may recommend medicines to keep your child comfortable. These may include Acetaminophen (Tylenol) or Ibuprofen (Advil). Follow the instructions on the bottle when you give your child medicine.

How do I care for the cast or splint?

1. **Keep the cast or splint dry.** If it gets wet, it will soften and will not protect and support the injured bone. The skin under the cast can also become damp and irritated. If the cast or splint gets a little wet, you can dry it with a hairdryer on a cool setting. Do not use the warm setting as this can burn the skin.
2. **Keep the cast or splint clean.** If the cast or splint gets dirty, bits of dirt can get stuck in the soft layer and irritate your child's skin.
3. **Protect the cast or splint from being hit.** The hard layer is strong but will break after repeated hits.
4. **Look for rough edges to the cast or splint.** The cast or splint may develop rough or sharp edges, especially near the fingers and toes. If the skin looks red, sore, or raw, call your family doctor or go to the nearest Emergency Department.
5. **Do not scratch.** The skin under the cast or splint may get itchy. Do not stick objects (e.g. knitting needles, sticks) under the soft or hard layers to scratch. This can damage the skin and cause an infection.

Use a fan or blow *cool* air from a hairdryer under the hard layer to reduce itch. Be careful because even air from a hairdryer can burn the skin. You can also use a “loonie” or a “toonie” to rub on top of the cast. The vibration can help with the itch.

6. **Raise the cast or splint.** Raise the cast or splint above the level of the heart to reduce swelling and pain.
7. **Keep moving.** Have your child wiggle their fingers and toes. This will help the bone to heal.

8. **Protect the cast or splint while bathing your child.** If your child has a leg cast, you can give him or her a sponge bath. If your child has an arm cast, they can sit in the bathtub **ONLY** if they are old enough to keep their arm out of the water. Wrap your child's arm in a plastic bag for bath time and fill the bath with a little water.



Who do I contact in case of emergency?

Contact your child's doctor or go the nearest Emergency Department if:

- Your child feels that the cast or splint is too tight, even after raising the cast or splint above the level of their heart for 15 minutes. Remember that the cast or splint will feel tight until your child gets used to it.
- Your child complains about pain under the cast or splint that does not go away or gets worse with pain medicine. Pain is common the first few days.
- Your child cannot move or feel you touch their fingers or toes.
- Your child feels their fingers or toes are numb and tingling.
- Your child's fingers or toes look blue, swollen, or feel cold.
- Your child has another injury to the part of the body that is covered by the cast or splint.
- Your child's cast or splint smells bad.
- Your child's cast or splint is cracked, broken, wet, or soggy.
- You see less of your child's fingers or toes at the end of the cast or splint. The cast or splint may be too loose or have slipped.
- Your child has a fever (temperature above 38 degrees Celsius or 100 degrees Fahrenheit).

When will my child be seen in the follow-up clinic?

The Orthopedic Surgeon on call will determine when your child needs to visit the follow-up clinic. The Orthopedic Trauma Clerk will call you in about one week to schedule an appointment.

At your follow-up appointment, the Orthopedic Surgeon or Orthopedic Nurse Practitioner will check that the bone is healing. The Orthopedic Surgeon or Nurse Practitioner will also tell you when your child's cast or splint can come off.



If you have questions regarding your appointment please call the Clerk at: **604-875-2345 extension 7134**.



If you have non-emergent questions, you can call the provincial health information and advice phone line, also called the nurses line, at **8-1-1**. Registered nurses are available 24 hours a day, 7 days a week.



At BC Children's Hospital, you are an important member of your child's health care team. Please ask questions so you understand and can be part of decisions about your child's care and treatment.

It's good to ask!

*Developed by the health professionals of the Orthopedic Clinic
and the Emergency Department with assistance from the
Learning & Development Department*