Casts, Splints and Braces for Immobilization

Why does my child’s arm, leg, etc. need to be immobilized?

Immobilization (holding in place) keeps a body part from moving while it heals. A splint, cast, or brace is used to hold the body part in one position. Splints, casts, and braces support and protect broken bones, dislocated joints, and injured soft tissues such as tendons and ligaments.

What is a cast?

A cast is made of fiberglass, plaster, or both. It can only be put on and taken off by a trained professional (most often an Ortho Tech).

- A Fiberglass cast is made from a type of plastic that can be easily shaped. Fiberglass is used most often and comes in different colors. The skin under the cast gets more air than it does in a plaster cast. It is also easier to X-ray through fiberglass than plaster.
- A plaster cast is made with strips or rolls of Plaster of Paris coated gauze.

When a cast is put on:

- A layer of padding is wrapped around the skin to cover the area and protect the skin. The Fiberglass or plaster is then wet with water and put on over the padding and allowed to dry.
- Fiberglass usually dries in about 10 minutes, while plaster can take up to 24 hours to totally dry.

What is a splint or a brace?

Both splints and braces are used for immobilization or support. They can be taken off, but sometimes the doctor will ask that they be worn at all times and not taken off.

- Splints or braces can be ready-made or custom made.
- Splints or braces are sometimes used after surgery is done on an arm or a leg, or after an injury.
- Since splints or braces can be taken off and put back on, they are often used when the child needs to exercise the arm or leg while it’s healing.
- Some splints or braces can be set so that the arm or leg can move.
- Sometimes splints or braces are worn just during sleep or during activities.
- Your doctor will tell you how your child will wear the splint or brace.

Both braces and splints give less support and protection than a cast.

Can my cast get wet?

Casts cannot get wet! It is very important to keep the cast clean and dry.
• Cover the cast with a plastic bag or wrapping if you think the cast might get wet.
• It is best to sponge bathe infants and small children with a cast, as well as children with a body cast.
• Your child should not take a shower. Bathing in a tub is best, if you can keep the cast out of the water.
• Casts must be covered if your child goes out in the rain and snow.
• Occasionally, the doctor will allow a child to have a waterproof cast. A special padding is used under the cast, allowing the cast to get wet. Depending on the child’s condition, it is often not possible to get a waterproof cast. If a waterproof cast was applied, it is ok to swim in a pool, shower or bathe. Do not wash dishes with a casted arm. No swimming in lakes, ponds, rivers, or oceans. Once the cast is submerged in water, rinse the cast and skin thoroughly and then let the cast drain out thoroughly. Finally, blow dry the cast on cool setting to make sure the skin underneath the cast is dry.

What do we do if the cast does get wet?

• If the cast gets a little bit wet, dry as much as possible with a hair dryer on the cool setting.
• If the cast gets soaked, the skin under the cast might break down. The cast must be taken off and a new one put on. If you not sure if the cast is wet, it is best to call your doctor.

Cast Tips

• You can buy a cast bag from a pharmacy. They will help keep the cast clean and dry, but these bags won’t keep the cast dry if you swim or bathe with them.
• Have your child move their fingers or toes often to keep them from swelling.
• Never put anything (objects, lotions or powders) inside the cast.
• For small children it is a good idea to cover that cast when the child is eating.
• Don’t pull the padding out of the cast or cut or trim the cast.
• For body casts on small children, put two diapers on to keep the cast from getting soiled.
• If the the skin under the cast is itching don’t let your child scratch inside the cast. You can use a hair dryer on the cool setting or tap gently on the outside of the cast.

When should we call the doctor?

• If there is swelling or pain that doesn’t go away after changing the position and elevating the body part with cast, splint or brace, above the level of the heart.
• If the cast feels too tight or too loose.
• If any of the skin near the cast is not pink and warm.
• If there is numbness, tingling, or burning in the area of the cast, splint or brace that does not go away in a few minutes after changing the position and elevating the area.
• If there is a feeling of pressure or pain in the heel.
• If there is a foul smell coming from the area of the cast, splint or brace.
• If something gets caught under the cast and you can’t easily get it out.
• If the cast starts to break down or crack.
• If the child has a fever over than 101.5 degrees Fahrenheit.

If your child is having problems with their cast, splint or brace, please call the following number:

720-777-6600 during normal business hours: Monday through Friday.
720-777-1234 at all other times, and ask for the Orthopedic Resident on call.