

Cast or Splint Care, Pediatric

Casts and splints are supports that are worn to protect broken bones and other injuries. A cast or splint may hold a bone still and in the correct position while it heals. Casts and splints may also help with pain, swelling, and muscle spasms.

A cast is a hardened support that is usually made of fiberglass or plaster. It is custom-fit to the body and offers more protection than a splint. Most casts cannot be taken off and put back on. A splint is a type of soft support that is usually made from cloth and elastic. It can be adjusted or taken off as needed. Often when a bone is broken, a splint is put on until the swelling goes down, and then the splint is replaced by a cast.

Your child may need a cast or a splint if he or she:

- Has a broken bone.
- Has a soft-tissue injury.
- Needs to keep an injured body part from moving (keep it *immobile*) after surgery.

What are the risks?

In some cases, wearing a cast or splint can cause a reduced blood supply to the wrist or hand or to the foot and toes. This can happen if there is a lot of swelling or if the cast or splint is too tight. Limited blood supply results in a condition called compartment syndrome and can cause permanent damage. Symptoms include:

- Pain that is getting worse.
- Tingling and numbness.
- Changes in skin color, including paleness or a bluish color.
- Cold fingers or toes.

Other complications of wearing a cast or splint can include:

- Skin irritation that can cause itching, rash, skin sores, or skin infection.
- Limb stiffness or weakness.

How to care for your child's nonremovable cast or splint

- **Do not** allow your child to put pressure on any part of the cast or splint until it is fully hardened. This may take several hours.
- Check the skin around the cast or splint every day. Tell your child's health care provider about any concerns.
- **Do not** allow your child to stick anything inside the cast or splint to scratch the skin. Doing that increases the risk of infection.
- You may put lotion on dry skin around the edges of the cast or splint. **Do not** put lotion on the skin underneath the cast or splint.
- Keep the cast or splint clean and dry.



How to care for your child's removable splint

- Have your child wear the splint as told by your child's health care provider. Remove it only as told by your child's health care provider.
- Check the skin around the splint every day. Tell your child's health care provider about any concerns.
- Loosen the splint if your child's fingers or toes tingle, become numb, or turn cold and blue.
- Keep the splint clean and dry. Clean your child's splint as told by the health care provider. Use mild soap and water and let it air-dry. **Do not** use heat on the splint.

Follow these instructions at home:

Bathing

- **Do not** have your child take baths, swim, or use a hot tub until his or her health care provider approves. Ask your child's health care provider if your child may take showers. Your child may only be allowed to have sponge baths.
- If the cast or splint is not waterproof:
 - **Do not** let it get wet.
 - Cover it with a watertight covering when your child takes a bath or shower.

Managing pain, stiffness, and swelling

- If directed, put ice on the affected area. To do this:
 - If your child has a removable cast or splint, remove it as told by his or her health care provider.
 - Put ice in a plastic bag.
 - Place a towel between your child's skin and the bag or between your child's cast and the bag.
 - Leave the ice on for 20 minutes, 2–3 times a day.
 - Remove the ice if your child's skin turns bright red. This is very important. If your child cannot feel pain, heat, or cold, he or she has a greater risk of damage to the area.
- Have your child move his or her fingers or toes often to reduce stiffness and swelling.
- Have your child raise (*elevate*) the injured area above the level of his or her heart while he or she is sitting or lying down.



Safety

- **Do not** let your child use the injured limb to support his or her body weight until your child's health care provider says that it is okay. Have your child use crutches or other assistive devices as told by his or her health care provider.
- If it applies, ask your child's health care provider when it is safe for your child to drive if he or she has a cast or splint on part of the body.

General instructions

- Give over-the-counter and prescription medicines only as told by your child's health care provider.
- Have your child return to his or her normal activities as told by your child's health care provider. Ask your child's health care provider what activities are safe for your child.
- Keep all follow-up visits. This is important.

Contact a health care provider if:

- Your child's skin under or around the cast or splint becomes red or raw.
- Your child's skin under the cast is extremely itchy or painful.
- Your child's cast or splint:
 - Gets damaged.
 - Feels very uncomfortable.
 - Is too tight or too loose.
- Your child's cast becomes wet or develops a soft spot or area.
- Your child gets an object stuck under the cast.
- There is fluid leaking through the cast.

Get help right away if:

- Your child develops any symptoms of compartment syndrome, such as:
 - Severe pain or pressure under the cast.
 - Numbness, tingling, coldness, or pale or bluish skin.
- The part of your child's body above or below the cast is swollen or discolored.
- Your child cannot feel or move his or her fingers or toes.
- Your child has trouble breathing or shortness of breath.
- Your child has chest pain.
- Your child's pain gets worse.

These symptoms may represent a serious problem that is an emergency. Do not wait to see if the symptoms will go away. Get medical help right away. Call your local emergency services (911 in the U.S.).

Summary

- Casts and splints are worn to protect broken bones and other injuries.
- Casts and splints should remain clean and dry.
- Have your child remove the cast or splint only as told by your child's health care provider.
- Get help right away if your child's pain gets worse, or if your child has numbness, tingling, or skin that turns cold, blue, or discolored.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

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