



*When your child needs a hospital, everything matters.™*

**Helping Hand™**

## **Cast and Splint Care**

Your child needs a cast or splint. The cast or splint keeps an injured area from moving while it heals. Movement can cause pain, delay healing or make the injury worse. Some casts are waterproof. Your practitioner will tell you the type that has been put on your child.

Right after the cast or splint is put on it will feel warm and damp, but it will not harm your child. It will become cool as it hardens.

### **Swelling and pain**

- For the first few days after the cast or splint has been put on, your child's fingers or toes may be swollen. Keep the hurt arm or leg raised above the level of the heart as much as possible. This helps to keep the swelling down, and will make the child more comfortable.
- Check your child's fingers or toes several times every day to see if circulation or blood flow stays normal. The fingers and toes should stay warm to the touch, pink in color and move freely. There should be no tingling or numbness. For more information on checking circulation, refer to Helping Hand HH-II-60, *Circulation Checks*.
- After the injury, cold packs may be used for 20 minutes at a time for the first 48 to 72 hours to decrease swelling. First, place a cloth on the cast or splint over the injured area; then place the cold pack onto the cloth. Commonly used cold packs include: single-use and reusable ice packs, ice placed in a sealed plastic bag, and frozen vegetables in a bag. (Be sure to label any bag that is not reusable and throw it out after you are no longer using it for an ice pack.)
- It is normal for your child to have some pain and discomfort while in the cast or splint. The practitioner may give you a prescription for pain medicine or suggest an over-the-counter pain medicine. Do not give more pain medicine than the amount recommended.

### **Care of the cast or splint**

- The cast or splint will be damp for a few hours when it is new. Be careful not to dent or crack it. **Do not put anything over the cast or splint until it is completely dry.**

*Continued on page 2*

## Care of the cast or splint, continued

- Do not let anyone sign the cast until it has been on for 24 hours. The cast may be signed with a marker or ink pen. Paint, oil-based materials and stickers should **not** be used on the cast. These things will clog the pores of the cast and keep air from getting to the skin.
- Keep the cast or splint clean by using a damp cloth and a little bit of soap to remove dirt. For casts that are NOT waterproof, do not get the cast wet on the inside. **If the cast gets wet on the inside, call your child's practitioner to know what to do.** To help dry the outside of the cast or splint, you can expose it to sunlight or use a hairdryer on the cool setting. If your child's cast IS waterproof, water will not damage it.
- Do not let your child walk on the cast or splint. This could damage it and may cause hip and back problems.

## Pressure injuries

Pressure injuries (pressure ulcers or sores) occur when skin is under prolonged pressure from a bony area and another hard surface. Pressure injuries can occur while your child is wearing a cast or splint. It is important to be aware of the signs that a pressure injury may be developing:

- Children under the age of four years, or those who do not communicate well, are more likely to develop pressure injuries. You should watch your child for non-verbal behaviors, like excessive crying, that may mean a change in their condition.
- Some pain is normal while in a cast or splint. However, pain that seems to be getting worse or pain that has developed in a new area under the cast or splint (for example a child who has heel pain when in a splint because of an injured toe) should be re-evaluated by a practitioner. Other complaints about the injured area, such as numbness, tingling, burning or stinging, may mean more pressure on that area.
- **Do not** let your child walk on the cast or splint unless his or her practitioner has told you it is all right.

## Skin care

- Have your child change positions often when lying down or resting. This will keep pressure off any one area. Long-time pressure in the same place can cause skin sores.
- Check the skin around the openings of the cast every day. Look for any red, dry, swollen, cracked or bleeding areas. Contact your child's practitioner's office if you see any of these. For casts on the arms, be sure to closely check the area between the thumb and fingers. You can use an emery board to smooth rough spots on the cast between the thumb and index finger.

*Continued on page 3*

## Skin care, continued

- Do not use powders or lotions around the openings of the cast. Lotion can make the skin too soft. Powder can collect under the cast. These can cause pressure sores and other skin problems.
- Do not stick anything inside the cast or splint. This may injure the skin and lead to infection. It could also disturb the lining of the cast and make it uncomfortable.
- Do not pull out the padding of the cast. The padding protects the skin from injury.
- If your child's cast is **NOT** waterproof, you may clean the fingers or toes of the injured arm or leg with waterless soaps and sanitizers. These products should be used after using the bathroom and before eating. Many different brands are sold at grocery stores and drug stores.
- If the cast **IS** waterproof, it is OK to let soapy water get inside of the cast. All soap needs to be thoroughly rinsed. Soap left on the skin beneath a cast can be irritating to the skin. Use a hairdryer on the cool setting to completely dry the skin. Skin left damp can cause itching and skin irritation.
- Check for infection. If you see the fingers or toes turning purple, smell a strong, foul odor from the cast, or your child is in a lot of pain, call the doctor's office.

## Itching

If your child complains of itching, you may try to:

- Thump or knock gently on the cast.
- Use a hair dryer on a cool setting. Blow air into the opening of the cast.
- Call your child's practitioner and ask about giving your child Benadryl® to lessen itching.

## Dressing

When undressing your child, remove the clothing from the healthy arm or leg first. Then remove it from the casted or splinted arm or leg.

When dressing, first put the injured arm or leg into the clothing, then the healthy arm or leg.

## Bathing with a cast or splint

Check all that apply:

- A **splint** can be removed before your child's shower or bath. Skin must be completely dry before the splint is put back on.
- If the **cast IS waterproof**, it is OK for your child to shower or bathe with the cast uncovered. Afterward, use a hair dryer on a cool setting to dry the skin inside.

*Continued on page 4*

## Bathing with a cast or splint, continued

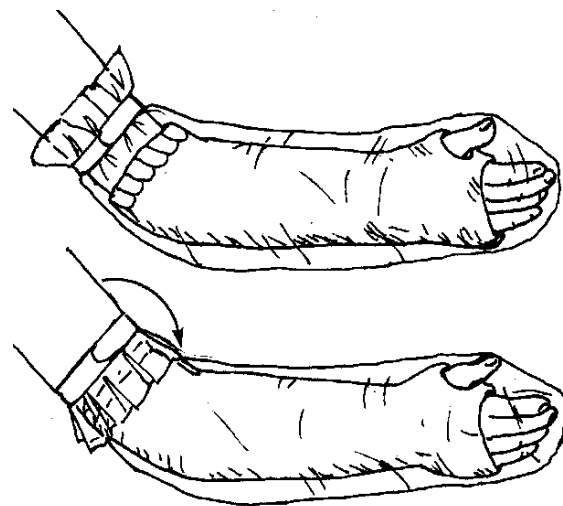
- If the **cast is NOT** waterproof or your child wears a **splint** that might get wet:
  - Child **may** take a bath.
  - Child **may** take a shower.
  - Child is **NOT allowed** to take a shower.
  - Child should be sponge-bathed only.

**To prevent a cast or splint from getting wet,** cover it with a plastic bag and seal it first.

To do this:

1. Put on a plastic bag or trash bag with no holes over the cast. Gather it above the cast or splint. Tape it snugly all the way around the arm or leg (Picture 1). **Do not use rubber bands.**
2. Fold the plastic bag back over the tape.
3. Tape the folded edges of the bag to the skin, all the way around your child's arm or leg. Try to tape in a different place each time to prevent skin irritation.

- **Do not let your child put the cast or splint into the water or a stream of water.**
- **Remove the bag as soon as the bath or shower is over. Check to be sure the cast or splint is not wet.**



**Picture 1** Use a plastic bag and tape to protect the cast or splint when bathing.

## Activity

- Children wearing casts may go to school. Sometimes they need help to carry bags and get around in crowded hallways and on stairs.
- Your child should follow the instructions that were given for using crutches or a walker. Refer to Helping Hand HH-II-6, *Crutch Walking*, or HH-II-140, *Walkers (Orthopedic)*.
- If the practitioner wants your child to wear a sling, it should be worn when he is up walking.
- No rough play is allowed while the cast or splint is on.
- For your child's safety and the safety of others, check with the school and the sports coach to know if your child is allowed to take part in group sports. If both your child's practitioner and his coach permit:
  - Your child can take part in sports, swimming and other water play.
  - Your child CANNOT take part in sports, swimming, and other water play.
  - Your child can take part in these activities: \_\_\_\_\_.

## Removing the cast or splint

- The practitioner will tell you if your child's splint may be removed for certain activities and then put back on. **Do not remove the splint unless your child's practitioner has told you that it is okay and you have been shown how to put it back on.**
- **Do not try to remove the cast yourself.**
- During your child's follow-up appointment, the practitioner will decide when the cast or splint will be taken off for good.
- A cast removing device will be used to take the cast off (Picture 2). This device vibrates back and forth very quickly and makes a loud noise. While the cast is being cut off, the vibration usually produces heat. This will not hurt your child unless the padding has been pulled out.



**Picture 2** A special cast removing device may be used to take the cast off.

## Aftercare

When the cast is removed, your child's skin will look yellow and flaky. This is normal. It is because the cast keeps the dead skin cells from falling off. It is also normal for hair on the casted arm or leg to be long and darker when the cast is removed. This will go away in a few weeks.

- **Do not scrub the skin.** The skin is very sensitive and tender because it has been covered for so long.
- Soak the arm or leg in warm water to soften flaky, dead skin. Pat dry gently and apply lotion. The skin will go back to normal in a few days.
- Your child's muscles may be stiff and sore at first. The practitioner or therapist may suggest special exercises to improve strength and movement.

## When to call the practitioner

### Call your child's practitioner if:

- Drainage or a foul odor comes from the cast or splint.
- There are any changes in circulation. Call if the fingers or toes change color, become cold, numb or tingle, or cannot move freely.
- The swelling of the fingers or toes does not start to go down.

**When to call the practitioner, continued**

- Your child’s temperature is: higher than **101° by mouth**; greater than **100.4 ° by ear or rectum**; or more than **99° axillary (taken in the armpit)**. The temperature guidelines are different for newborns 4 weeks old or younger.
- Your child’s pain does not get better or gets worse with the body part raised, with ice application, or with pain medicine.
- Any object falls in the cast and gets stuck.
- There are any cracks in the cast or the cast gets damaged.
- The wrap on the splint unravels or comes loose and cannot be replaced without moving the splint.
- If the cast is NOT waterproof and gets wet on the inside.

**If you have any questions, please call:**

Your child’s practitioner’s office: \_\_\_\_\_ at \_\_\_\_\_

Orthopedist’s office: \_\_\_\_\_ at \_\_\_\_\_

Plastic Surgeon’s office: \_\_\_\_\_ at \_\_\_\_\_

**Follow up appointment:** (date/time) \_\_\_\_\_

Provider: \_\_\_\_\_ Where: \_\_\_\_\_  
Nationwide Children's Hospital Orthopedic Center (614)722-5175

**Follow up appointment:** (date/time) \_\_\_\_\_

Provider: \_\_\_\_\_ Where: \_\_\_\_\_  
Nationwide Children's Hospital Plastic Surgery Center at (614)722-6299