



### **Ortholnfo Basics**

## Cast Care

# Broken bones hurt – especially when you try to move them. If you move a broken bone too much before it is treated, you can cause more damage.

Treating a broken bone follows one basic rule: the broken pieces must be put back together and prevented from moving out of place until they are healed.

That's where casts and splints come in.





### What are casts and splints?

Casts and splints support and protect injured bones and soft tissue.

When you break a bone, your doctor will put the pieces back together in the right position. Casts and splints help to hold the bones in place while they heal.

Splints and casts are sometimes used after surgery, as well.

Splints or "half casts" provide less support than casts, but are often used when a great deal of swelling is present. This is because they can often be tightened or loosened, depending on how much swelling there is around your injury.

Both casts and splints have a soft inner lining, usually made of cotton. A cast's hard, outer layer may be made of plaster or fiberglass — a plastic that can be shaped. Splints can be made the same way, or they come ready-made in a variety of shapes and sizes.

### Why does my cast feel so uncomfortable?

It is common for a cast or splint to feel snug at first.

This is because your injury may cause some swelling for the first few days. It is very important to keep the swelling down. This will lessen your pain and help your injury heal. To help reduce swelling, improve your comfort, and lower the risk of complications, do the following:



All casts and some splints are custom made. They must fit the shape of your injured limb correctly to provide the best support.

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Elevate. Prop your injured arm or leg up on pillows or another support so that it is above your heart. Keeping your cast raised helps fluid drain "downhill." You will have to recline if the splint or cast is on your leg.



**Exercise.** Gently exercise your swollen fingers or toes. Moving them often will prevent stiffness.

**Ice your splint or cast.** Loosely wrap a plastic bag with ice around the cast at the place of your injury. A bag of frozen vegetables works very well for this. Be sure to keep your cast dry when applying ice.

After this swelling goes down, your splint or cast will give you the support and protection you need to get back to your daily activities.

Even if your cast or splint feels uncomfortable, never try to remove it yourself. You could cut your skin or prevent your fracture from healing properly.

### How do I take care of my cast or splint?

You must protect your cast from damage so it can protect your injury while it heals. If you have broken your foot or leg, you will probably get crutches to help you walk. A sling will help support your cast or splint if it is on your arm.

**Keep your splint or cast dry.** Moisture can weaken it and it may not be able to keep your injured bone in place. Wet cotton padding next to your skin can cause a rash or other irritation.

Use two layers of plastic or purchase waterproof shields to keep your splint or cast dry while you bathe. Even with protection, never submerge your cast in water. Because keeping a cast dry may be harder for children, many doctors recommend sponge baths until a child's cast is removed.

**Walking casts.** Do not walk on a walking cast until your doctor says it is safe. It takes time for casts to become hard enough to walk on. Using a cast shoe over your cast may prevent slipping.

**Avoid dirt.** Keep dirt, sand, and powder away from the inside of your splint or cast.

**Padding.** Do not pull out the padding from your splint or cast.

**Itching.** Do not stick objects inside the splint or cast to scratch itching skin. Do not squirt cream or anything else inside it to soothe the itch. In some cases, blowing cool air from a hand-held hair dryer into the cast may help relieve itching. If itching persists, talk to your doctor.

**Inspect the skin around the cast.** If it becomes red or raw, contact your doctor.

**Inspect your cast regularly.** If it becomes cracked or has soft spots, contact your doctor's office.

**X-rays.** Your doctor will probably schedule additional x-rays during your recovery to make sure your cast or splint is doing its job. X-rays can show whether the bones are healing well or have moved out of place.

# Are there any warning signs I should watch for?

Swelling can create a lot of pressure under your cast. This can lead to problems. That's why it is so important to keep the swelling down. If you experience any of the following symptoms, contact your doctor's office immediately for advice.

Your pain is getting worse. Pain may worsen if swelling makes your cast or splint feel too tight. It may also worsen if you have developed an infection or another problem.

**Numbness.** Too much pressure on your nerves can cause numbness or tingling in your hand or foot.

**Burning.** Too much pressure on your skin can cause burning or stinging under your cast.

**Severe swelling.** If you have a lot of swelling below your cast in your fingers or toes, it may mean your cast is slowing your blood circulation.

**No movement.** You cannot move your toes or fingers.







### What will rehabilitation be like?

Broken bones take several weeks to several months to heal. Pain usually stops long before the bone is solid enough to handle the stresses of everyday activities. You will need to wear your cast or splint until your bone is fully healed and can support itself.

While you are wearing your cast or splint, you will likely lose muscle strength in the injured area. Exercises during the healing process and after your cast is removed are important. They will help you restore normal muscle strength, joint motion, and flexibility.

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### For more information

For more information about broken bones and the care of casts and splints, visit *OrthoInfo* at www.orthoinfo.org.

OrthoInfo is the patient education website of the American Academy of Orthopaedic Surgeons (AAOS), and is a trusted source of information about musculoskeletal conditions. Our articles are developed by orthopaedic surgeons, and provide detailed information about a wide range of injuries and diseases, as well as treatment options and prevention topics.

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