

# Ouch! It's Broken!

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# A Bad Break

Picture yourself playing with your friends at the park. You are crossing the monkey bars. Just as you are trying to reach the next rung, your fingers begin to slip. You try to hold on, but you can't. You fall to the ground. The next thing you know, you are at the hospital with a broken arm.



Broken bones, or **fractures**, are common among kids. Bones break if they are bent too far or are struck too hard. A broken bone begins to heal right away. Blood cells form a **clot** around the fracture. Over the next few days, new bone cells begin to replace the clot. These cells grow in order to help the two sides of the fracture join together again. The bone slowly builds back to its original strength.





## Chapter Two

# Is It Broken?

**How can you tell if you have a broken bone?  
If you are hurt, here are some ways to tell:**

.....  
You hear a “snap” or grinding noise.  
.....

You can see that the bone has come through your skin.  
.....

You see the injured part begin to swell.  
.....

It is difficult to move the injured part.  
.....

The injured part hurts when touched.  
.....

It is painful to put pressure on the area.  
.....

## Chapter Three

# What to Do

**If you think you have a fracture, here's what you should do:**

Tell an adult. He or she will decide if you need to go to the hospital to have it checked.

Try not to move the injured part. Moving it will most likely be very painful. You might also make the injury worse.

Put ice or a cold towel on the injury. This will reduce the swelling.



## Chapter Four

# X-Rays

When you go to the doctor, he or she must figure out if you have broken a bone. If you do have a fracture, the doctor needs to figure out exactly where and how bad the break is. To find out, an X-ray of the injured area is taken. An X-ray is a picture of the bones in your body. The doctor looks at the X-ray. Then he or she will decide if the bone is really broken and the best way to fix it.

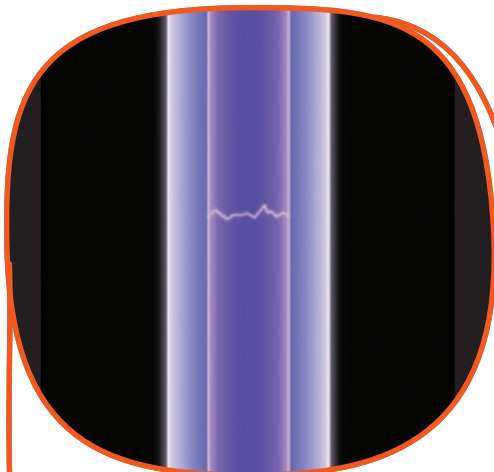


← This is a broken bone in a person's arm.

# Kinds of Fractures

Did you know that there are many different kinds of fractures? A **simple** (or closed) **fracture** is one where the bone is broken but doesn't come through the skin. If the bone is sticking out through the skin, it is called a **compound** (or open) **fracture**. In the case of a **greenstick fracture**, the bone cracks but doesn't break completely. When a **complete fracture** occurs, the bone breaks all the way through, into two pieces.

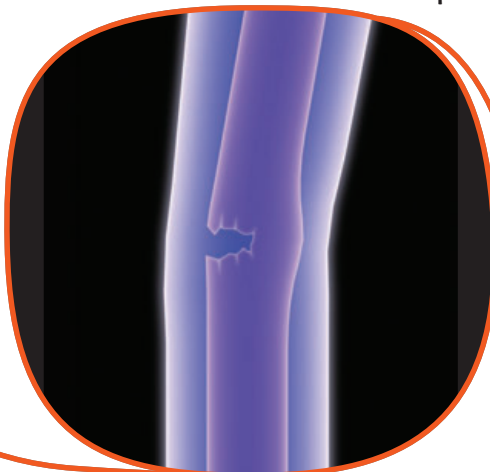
## Types of Fractures



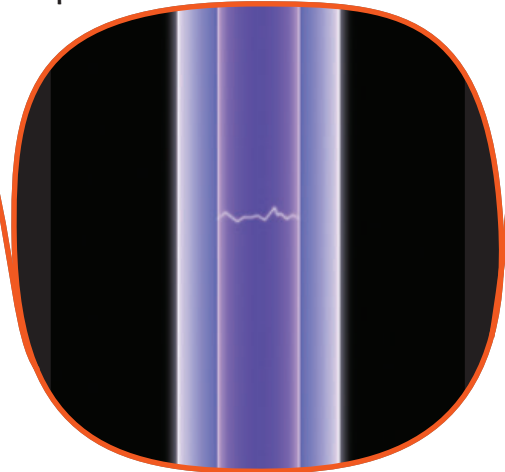
Simple (closed)



Open (compound)



Greenstick



Complete



## Chapter Six

# Setting the Bone

After the doctor has decided that a bone is broken, the bone must be **set**. This is so the bone will heal correctly. The doctor has to line up the ends of the broken bone. That may mean pushing or pulling the bone parts to get them lined up correctly. If that sounds painful, it is! That's why doctors **numb** the area around the injury before they line up the bones.



# Casts

After the fracture has been set, the doctor will most likely put the injured area in a **cast**. A cast will prevent the bones from moving while they heal.

A cast is like a two-layered bandage. The first layer is the layer closest to the skin. It is made of soft cotton padding. Above that goes a hard layer that keeps the bones from moving. This outer layer is made from either plaster or fiberglass. Fiberglass is a kind of moldable plastic. A doctor may use a plaster cast early in the healing process. Plaster is easier to shape the way the doctor wants it. Plaster is heavy and must be kept dry to hold its shape. Once the bones begin to heal, the doctor may replace the plaster cast with a fiberglass cast. These casts are lighter and stronger.

Plaster casts are white. Fiberglass casts come in many colors. If you're lucky, the doctor may let you pick your favorite! A cast can be fun for your friends and family, because they can write messages on it.

Nobody knows exactly how long it will take for a bone to heal. That's because not all bones heal at the same rate. It can also depend on the age of the person. Bones tend to heal faster the younger you are.

So, the next time you are playing with your friends and you are injured, or someone else is injured, you will know exactly what to do and what will happen if a bone gets broken.



This boy has a plaster cast.



This girl has a fiberglass cast.

# Glossary

**cast:** plaster or fiberglass (plastic) covering that keeps broken bones from moving.

**clot:** mass of thick blood.

**complete fracture:** bone that has broken totally into two pieces.

**compound (open) fracture:** broken bone that comes through the skin.

**fracture:** broken bone.

**greenstick fracture:** cracked bone that is not completely broken.

**numb:** unable to feel sensations (such as pain).

**set:** to put broken bones back in the correct place.

**simple (closed) fracture:** broken bone that does not go through the skin.

**X-ray:** photograph of the bones in a body.