

Fracture Healing and Remodeling

Your child has a break (fracture) in the bone. The body will heal this fracture by making new bone over a period of time. This time will be different based on your child's age, as well as the type and location of the fracture.

Sometimes, the bone will not be completely straight or in the right place after it is broken (fractured). The bone may be displaced, shortened, or angled. The orthopedic provider will decide if the bone needs to be

placed into a better position. This is called 'setting' or 'reducing' the bone.

Even if the bone is not set or reduced, it can still straighten and reshape over time. This process is called bone remodeling. Your provider will closely monitor your child's progress with x-rays. It is important to know that your child's bone is healing, even if the bone may not look straight on the initial x-rays.



When your child needs a hospital, everything matters.

How the Bone Heals

- Children's bones heal quicker than adult bones do because their bones are still growing. Their bones can remodel over a period of time. The process can take a few months to a few years.
- For most children, the process of remodeling will lead to complete bone healing.

How the bone heals will depend on:

- the age of the child
 The younger the child, the faster the bone will heal.
- the location of the fracture
 The closer to the growth plate, the faster the bone will heal and remodel.
- the type of fracture

The following pictures are x-rays of bones that are remodeling over time.

Right proximal humerus fracture in a 5-year-old







Injury 2 months 9 months

Distal radius fracture in a 7-year-old







Injury 2 months

Left midshaft humerus fracture in a newborn







7 months

Left midshaft humerus fracture in a 16-year-old





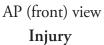




3 months Injury

Both bone (radius and ulna) fractures in a 4-year-old







6 weeks



7 months



Lateral (side) view

Injury





6 weeks



7 months

Clavicle fracture in a 7-year-old







Injury 6 weeks

2 months

Femur fracture in a 3-year-old













AP (front) view **Injury**

7 weeks

5 months

Lateral (side) view

Injury

7 weeks

5 months





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