Wrist Fractures

The wrist is made up of 8 small bones and two bones of the lower arm called the radius and ulna.

A fracture, also called a broken bone, can happen when there is force against a bone, such as from a fall or accident. If you have brittle bones from osteoporosis, you can also be at greater risk for a wrist fracture. The bone most often fractured in the wrist is the radius.

A fracture may be called:
- A **simple fracture** – the bone pieces are in place
- An **unstable fracture** – the bone pieces are out of place or the bone may be in many pieces
- A **compound or open fracture** – the bone breaks and comes through the skin making it more at risk for infection

**Signs of a fracture**
You may have one or more of these signs:
- Pain in the hand or wrist
- Swelling
- Loss of motion or strength in the hand and wrist
- A crooked wrist

**Treatment**
Your doctor will do an exam and will order x-rays to be done to see if there is a fracture. A CT scan or an MRI of the hand and wrist may be done to check for damage to the ligaments, tendons, muscles, and nerves that may also need treatment.

For a simple fracture, a splint or cast may be used to protect the bone as it heals. Other fractures may need surgery. Pins, screws, plates, rods, and external fixation may be used to hold the bone pieces together.

- **External fixation** uses a frame on the outside of the hand that is attached with pins to the bone above and below the injury.
- **Bone grafts** may be needed if bone is missing or crushed. The bone graft may be taken from another part of your body, or it may come from a bone bank. Synthetic bone grafts may also be used.

Your hand surgeon will talk with you about the best treatment for your injury.

**Healing and recovery**

- While the wrist fracture heals, keep your fingers moving to prevent stiffness unless your doctor told you to limit movement.

- Avoid smoking or use of any tobacco products. Tobacco use slows the blood supply to the bone and could slow or prevent bone healing. If you need help quitting tobacco, please talk to your doctor.

As healing occurs, your doctor or therapist will have you start other exercises to help improve motion, strength, and use of your wrist. Follow your exercise program.

Recovery time will depend on the type of fracture and any other injuries. It is not unusual for a wrist fracture to take several months to heal. Some people have some stiffness or aching and arthritis may develop. In some cases, other treatment or reconstructive surgery may be needed.