

Physical Therapist's Guide to Wrist Fracture

A wrist fracture is a break in one of the bones near the wrist, most frequently the radius. Because of the high-risk sports that they play, wrist fractures often occur in children. Due to osteoporosis, wrist fractures also are very common in women after menopause.

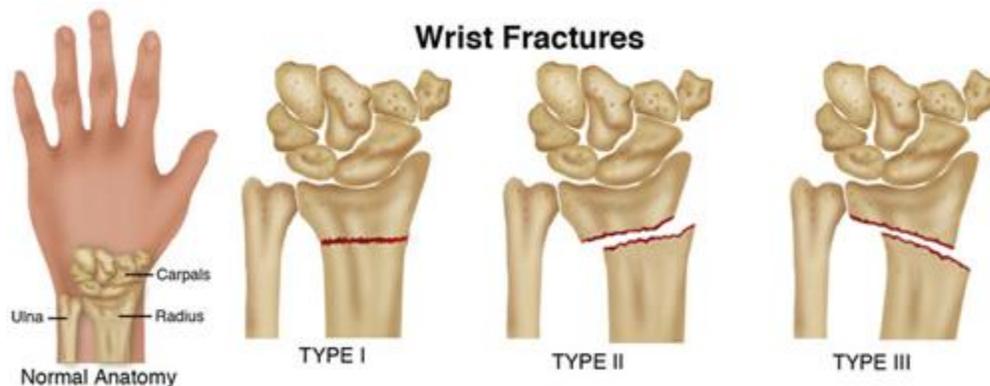
What Is Wrist Fracture?

Wrist fracture can occur as a result of a trauma, such as a fall while you're playing sports or while you're just walking on a sidewalk. Fractures due to falls happen most often when people stretch the arm straight out to catch themselves as they fall. A strong enough force can cause a bone in the wrist or forearm to break.

There are 3 types of bone fractures:

- Type I – a "nondisplaced" fracture, where the bone has a break but is still in normal position.
- Type II - a fracture where a fragment of bone is shifted from its normal position.
- Type III - the most serious type of fracture, because there are multiple breaks of the bone.

Type I and II fractures usually are treated without surgery, but type III fractures usually require surgery.



Wrist Fractures:

How Does it Feel?

A fractured wrist is usually painful, tender, and swollen, and you may have difficulty moving your wrist or fingers.

How Is It Diagnosed?

An x-ray is the best way to diagnose a wrist fracture. If a physical therapist suspects that you have a wrist fracture, the therapist may arrange for an x-ray and refer you to an appropriate physician. The physical therapist can check for damage to other joints and muscles and make sure that the nerves and blood vessels in your wrist, forearm, and hand have not been affected by the broken bone.

In most cases, people with fractures visit a physician with a specialty in managing bones and joints (*orthopedist*). Depending on the type of fracture, the physician might prescribe a cast or a sling, or, with severe fractures, surgery.

How Can a Physical Therapist Help?

While Your Wrist Is in a Cast or a Sling

While your bone heals, your arm will be in a cast or a sling to keep your arm still and promote healing. During that time, it will be important that your arm not get too stiff, weak, or swollen. Depending on the amount of activity that is allowed for your type of fracture, your physical therapist will prescribe exercises to keep your shoulder, elbow, and fingers moving while you are in the cast or sling.

So the rest of the body doesn't get out of shape, most people with wrist fracture will slowly return to exercising the other arm and the legs. Physical therapists can help you adapt your exercise program so that you can maintain your overall strength and fitness without interfering with the healing of your wrist.

When the Cast or Sling Is Removed

Your wrist will most likely be stiff, and your arm will be weak. Your physical therapist will examine your wrist and select treatments to improve its function.

Increase Your Strength and Your Ability to Move

Physical therapists prescribe several types of exercises during recovery from a wrist fracture. Early on, your therapist can help you begin to gently move your elbow, using "passive range-of-motion" exercises. As your arm gets stronger, you can exercise it yourself without weights ("active range of motion"). Once the bone is well healed, you can begin using weights or resistance bands. In addition to range-of-motion and strengthening exercises, the therapist can help you retrain your muscles to react quickly when you need to protect yourself from a fall.

Relieve Your Stiffness

Your physical therapist may use skilled hand movements called manual therapy to enable your joints and muscles to move more freely with less pain.

Get You Back to Your Daily Activities

Your physical therapist will help you remain independent by teaching you how to do your daily activities—such as dressing, working on a computer, and housekeeping—even while wearing a cast or a sling. Once you can move your arm freely without pain, the therapist may begin adding activities that you were doing before your injury, such as using your arm for dressing, grooming, and housekeeping. This program is based on the physical therapist's examination of your wrist, your goals, your level of physical activity and general health.

Prepare You for More Demanding Activities

Depending on the requirements of your job or the type of sports you play, you might need additional physical therapy that is tailored for these demands. A physical therapist can develop a specialized program for you.

Reduce Your Pain

To help control the pain and swelling in your arm, your physical therapist might use either warm or cold therapeutic treatments or electrical stimulation.

Everything that the physical therapist does will help you prevent long-term disability, including:

- Returning the arm to a good level of fitness
- Restoring full movement and strength in a safe manner while healing occurs
- Assessing the fracture to make sure that you can return safely to previous home and work activities
- Guiding you to a safe return to sports and other physical activities—a return too early after a fracture may increase the risk of another fracture
- Recommending protective equipment, such as wrist guards, for use during sports

Can this Injury or Condition be Prevented?

Avoiding falls or other trauma is the best way to prevent fractures. Physical therapists are experts at determining your risk of fallin and can teach you how to do balance exercises and how to avoid falls.

Real Life Experiences

You're late for work, and there was a bad rainstorm last night. You take one step outside onto the sidewalk and slip. Your first instinct is to put your arm out to catch yourself from falling. As the heel of your hand hits the ground, you feel a sharp pain in the wrist.

What do you do next?

You hold the elbow securely against your body, stabilizing the wrist as much as possible to avoid further damage in case there is a broken bone. Then you go to your local family emergency medicine clinic or the emergency department of a local hospital, where an x-ray will be taken to rule in or rule out a fracture and to determine the fracture's severity.

The x-ray confirms that you have a "type II" fracture, where a fragment of bone is shifted from its normal position. Surgery is not needed. You begin to see your physical therapist, who treats you throughout the healing process and helps to restore full function to your wrist.

This story was based on a real-life case. Your case may be different. Your physical therapist will tailor a treatment program to your specific case.

What Kind of Physical Therapist Do I Need?

All physical therapists are prepared through education and experience to treat a variety of conditions or injuries. You may want to consider:

- A physical therapist who is experienced in treating people with orthopedic problems. Some physical therapists have a practice with a orthopedic focus, and some even specialize in upper-body injuries.
- A physical therapist who is a board-certified clinical specialist or who completed a residency or fellowship in orthopaedics physical therapy. This therapist has advanced knowledge, experience, and skills that may apply to your condition.

You can find physical therapists who have these and other credentials by using [Find a PT](#), the online tool built by the American Physical Therapy Association [www.APTA.org] to help you search for physical therapists with specific clinical expertise in your geographic area.

General tips when you're looking for a physical therapist (or any other health care provider):

- Get recommendations from family and friends or from other health care providers.
- When you contact a physical therapy clinic for an appointment, ask about the physical therapists' experience in helping people with fractures.
- During your first visit with the physical therapist, be prepared to describe your symptoms in as much detail as possible, and say what makes your symptoms worse.

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