

Arizona Bone and Joint Specialists

5620 E. Bell Rd, Scottsdale, Arizona 85254 602.493.9361

13640 N. 7th Street, Phoenix, Arizona 85022 602.863.1962

**Hand**

Hand Fractures

Have you ever been so frustrated that you wanted to slam your fist into a wall? If you do, you could break one of the bones in your hand (metacarpals). Fractures of the hand bones account for about one-third of all hand fractures. In fact, fractures of the fifth bone (the one that leads to your little finger) are commonly known as "boxer's fractures."

The hand bones can break near the knuckle, mid-bone, or near the wrist. Signs and symptoms of a broken bone include:

- Swelling
- Tenderness
- Deformity
- Inability to move the finger
- Shortened finger
- Depressed knuckle
- Finger crosses over its neighbor when you make a partial fist

Diagnosis and Treatment

Your physician will request X-rays to identify the fracture location and type. The physical examination may include some range of motion tests and an assessment of sensation in the fingers to ensure that there is no damage to the nerves.

Most of the time, the physician can realign the bones by manipulating them without surgery. Then, a cast, splint or fracture-brace is applied to immobilize the bones and hold them in place. The cast will probably extend from the fingertips down past the wrist almost to the elbow to ensure that the hand bones remain

fixed in place. Your physician will probably request a second set of X-rays about a week later to ensure that the bones remain in the proper position. You will usually have to wear the cast for three to four weeks, but you can probably begin gentle hand exercises after three weeks. Afterwards, the finger may be slightly shorter, but this should not affect your ability to use your hand and fingers.

Surgical options

Some hand fractures, such as those that break through the skin or result from a crushing accident, require surgery to stabilize and align the bones. The orthopaedic surgeon implants wires, screws or plates in the hand to hold the fracture in place. If the bone rotates while healing, loss of function could result.

After the bone has healed, the surgeon may remove the implants, or they may be left in the hand. Research to develop implants that are resorbed into the body is ongoing. Your physician may ask you to return frequently for check-ups to ensure that the joint doesn't tighten (contract) during healing. You may experience some joint stiffness in your hand because of the long immobilization period. Your physician may prescribe exercises to help restore strength and range of motion or recommend that you see a physical therapist.

March 2001



[American Society for Surgery of the Hand](#)

For More Information:

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[Scaphoid \(wrist bone\) Fracture](#)

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