

HAND AND WRIST INJURIES



AOSSM SPORTS TIPS

With so many bones, ligaments, tendons, and joints keeping hands and wrists working, there is ample opportunity for injury. In fact, injuries to the hand and wrists are some of the most common ailments facing athletes. If managed properly, however, most athletes can expect their injury to heal without any significant long-term disability.

WHAT ARE THE MOST COMMON SPORTS-RELATED HAND AND WRIST INJURIES?

There are a number of injuries that may occur in an athlete's hands or wrists. They can be classified into two main categories: traumatic (acute) and overuse (chronic).

Traumatic injuries are more likely to occur in athletes who participate in sports that require higher levels of contact (i.e., football, hockey, or wrestling), whereas overuse injuries result in athletes who participate in sports that require them to "overdo" a particular movement (i.e., baseball, tennis, or golf).

Some common traumatic injuries in athletes include joint dislocations, sprains, muscle strains, broken bones, tendon inflammation, and ligament tears. The most common fracture injury in the athletic population occurs in the fingers.

Overuse injuries are stress-induced and include tendon inflammation and dislocation, nerve injury, and over use stress fractures. Long-term disability is less likely to occur from overuse injuries than from traumatic injuries. However, if left untreated, an athlete's sports performance may be significantly diminished. Surgical treatment may be required if an injury persists.

WHAT SHOULD I DO IF I INJURE MY HAND OR WRIST?

Should you sustain a hand or wrist injury while participating in a game where an attending team physician is not present, seek immediate medical care if any of the following symptoms are present:

- Severe pain
- Severe swelling
- Numbness
- Coldness or grayness in the finger, hand, or wrist
- Abnormal twisting or bending of the finger or hand
- A clicking, grating, or shifting noise while moving your finger, hand, or wrist
- Bleeding that does not slow and persists for more than 15 minutes.

Contact your physician during regular practice hours if mild wrist pain, bruising, or swelling after an injury persists and does not improve after two weeks.

For minor hand injuries, home treatment, including rest, ice, compression, and elevation to the effected limb can help relieve pain, swelling, and stiffness. An anti-inflammatory medication such as ibuprofen or naproxen may also be taken to help with the pain and inflammation.

WHAT TREATMENT OPTIONS ARE AVAILABLE FOR HAND AND WRIST INJURIES?

Treatment depends on the location, type, duration, and severity of the injury. While surgery is needed for some injuries, such as ligament tears, medication, "buddy-taping" (taping the injured finger to a neighboring

one for support), splints, braces, casts, or physical therapy may be used as a treatment option. Your doctor will determine the best option, taking into consideration short and long-term damage; deformities, and stiffness.

HOW CAN I PREVENT A HAND OR WRIST INJURY?

Wearing wrist guards, gloves, and stretching are just a few ways to help prevent a traumatic hand or wrist injury. You can prevent overuse injuries by taking breaks to rest the hands or wrists, using proper posture and technique, and utilizing protective equipment.

Expert Consultant
Dan Matthews, MD

ADDITIONAL RESOURCES

American Physical Therapy Association
American Medical Society for Sports Medicine

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COMMON HAND AND WRIST INJURIES

INJURY	CAUSES/DESCRIPTION	SYMPTOMS	TREATMENT	RETURN TO PLAY
Jammed Finger	Striking the end of the finger while fully extended	Pain, swelling at the joint, difficult to bend, tenderness over the joint	Ice, rest, buddy tape to adjacent finger	As tolerated with buddy tape
Finger Fracture	Force of contact overwhelms strength of bone (ball, ground, helmet)	Pain, tenderness over the bone, deformity may be present	Ice, splint, doctor evaluation, X-rays	Only after proper evaluation, realignment from a physician, and wearing appropriate protection until healed
“Mallet” Finger	Impact on tip of finger leads to rupture of tendon that holds finger tip straight	Unable to hold small joint at finger tip out straight, tender just behind nail	Doctor evaluation, splinting finger in full extension 8 weeks	May return as tolerated in splint which must be worn at all times for 8 weeks
Nail Bed Injury	Impact or crushing injury on top of nail	Blood under nail, tender may represent tear in nailbed under nail	If blood covers >50% of nail, need doctor evaluation may need repair of nail bed	As tolerated
Finger Dislocation	Force on finger overwhelms ligaments and joint displaces	Most common at middle joint of finger, with visible displacement	Relocation of joint best performed by doctor, may require local anesthesia and X-ray evaluation. May require surgery.	After proper evaluation, use buddy tape or splint as determined by physician
Tendon Tear “Jersey Finger”	Force of grasp with object (jersey) pulling away, ruptures tendon	Most commonly seen in ring finger, unable to flex the joint at finger tip	Needs medical evaluation within 24–48 hours, requires surgery, possibly within 10 days	Only after surgical repair is fully healed. Early RTP places the athlete at risk of long-term problems with finger function and motion
Wrist Bone Fracture “Scaphoid”	Fall on outstretched hand	Pain with wrist motion, tenderness in wrist at the base of thumb	Needs doctor evaluation may require special X-ray (CT scan). May require surgery.	Not allowed until thorough evaluation by physician. If fracture present may be able to return with proper protection (cast) which is worn until healed.
Wrist Ligament Tear	Impaction or twisting injury of wrist	Pain in wrist with gripping rotation of wrist	Needs physician evaluation, X-rays, possible MRI	Not allowed until thorough evaluation by physician. Evaluation and early treatment can prevent long-term problems.
Ulnar Collateral Ligament Tear “Skiers Thumb”	Tear of ligament that stabilizes the thumb with grasping	Pain and instability of thumb with grasping objects	Needs physician evaluation, X-rays, may need surgery or casting	May return to play in cast protection.
Tendonitis	Repetitive activity of one specific movement	Tenderness over the tendon may feel “grading” over tendon with finger or wrist motion	Rest, ice, limitation of repetitive motion, NSAIDS	As tolerated
Stress Fractures	Repetitive activity overcomes strength of bones and leads to small fractures	Pain with activity, most commonly in lower extremities (running, jumping)	Physician evaluation, X-rays, bone scans, may need casting, surgery, must have rest, nutritional evaluation	Must rest and cease offending activity until fully healed. May need bone growth stimulator, casting, surgery
Growth Plate Stress	Over stressing bone of still growing children, most commonly seen in gymnastics (wrist bone), baseball pitchers(shoulder, elbow)	Persistent pain, tenderness swelling over growing bone, bone pain/tenderness	Physician evaluation rest, ice, must cease offending activity	Athlete cannot return to play until fully healed as growing problems can have long-term problems