

# GOLF INJURIES

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## AOSSM SPORTS TIPS

Golf is a wonderful sport which has experienced an increase in popularity over the last 10 to 15 years. The National Golf Foundation's records show an estimated 12.98 million core adult golfers, with over 27.8 million golfers in the United States alone as of 2004. There are over 16,000 golf facilities in the United States. In 2002, golfers spent over \$24.3 billion on equipment and fees.

The average golfer typically plays approximately 37 rounds per year and spends many more days practicing, so it is not surprising that the rate of injuries is on the rise. Golf, however, is perceived as a low-risk sport. Other sports such as football, basketball or skiing have higher injury rates, but several studies show that golf has its share of injuries, too. One recent study showed that during a two year period, 60 percent of golf professionals and 40 of amateurs suffered either a traumatic or overuse injury while golfing. Over 80 percent of the reported injuries were related to overuse.

### TYPES OF GOLF INJURIES

There are some unusual injuries associated with golfing. Errant backswings frequently deal blows to golfing partners. Golf clubs thrown in anger or disgust often injure their owners or others in proximity. Golfers also suffer bone-jarring sensations when their clubs strike the ground during a misplaced swing.

Low back pain is the most common injury or complaint among both professional and amateur golfers, followed by injuries to the upper extremities (elbow and shoulder). Professional golfers experience a higher number of wrist

injuries, and amateur golfers experience more elbow problems. Both groups have a relatively high rate of shoulder injuries.

Low back problems can occur as a result of the powerful rotation and extension motion in the golf swing. In elite golfers the golf swing can generate club head speeds of over 120 mph. In a study of PGA golfers, 33 percent had experienced low back problems of greater than two weeks' duration in the past year. A 2004 study suggests that increasing the range of motion of lumbar spine extension and rotation of the lead hip (left hip in right-handed golfers) may decrease the incidence of low back pain. Golfers who carry their own bag have twice the incidence of back, shoulder and ankle injuries as those who do not carry their bag.

The elbow is the second most commonly injured area in golfers. The two most common problems are medial epicondylitis (also known as golfer's or thrower's elbow) and lateral epicondylitis (more commonly known as tennis elbow). Both are thought to occur as a result of poor swing mechanics. Medial epicondylitis is thought to be caused by hitting shots "fat" (that is, hitting the ground first), and lateral epicondylitis may be caused by over-swinging with the right hand in right-handed golfers. Both of these problems increase with age and frequency of play. Good pre-round stretching of the upper extremity and a good strengthening program have been shown to decrease these problems.

In professional golfers, injuries to the low back are followed in incidence by injuries to the wrist. The lead wrist (left wrist in right-handed golfers) is most commonly injured. The majority

of golf injuries are overuse injuries of the wrist flexor and extensor tendons. Such overuse injuries are treated with rest, splinting and either oral anti-inflammatory medicines or steroid injections. Therapy exercises, altering swing mechanics and strengthening the forearm and hand muscles have also been shown to be beneficial. (See exercises for strengthening these areas.)

Another commonly injured area in golfers is the shoulder. There are specific muscles in the shoulder that are most active in the swing. These are the subscapularis (one of the rotator cuff muscles), pectoralis ("Pecs") and latissimus ("Lats") muscles. Impingement syndrome (a bursitis and tendonitis in the shoulder), rotator cuff problems, and arthritis are the most common shoulder problems. These occur most frequently in the lead arm. A good warm-up routine and specific exercises that target the shoulder (see illustrations) can help decrease the incidence of these injuries.

### INJURY PREVENTION

Warming up before golfing has been shown to decrease the incidence of golf injuries. One survey showed that over 80 percent of golfers spent less than 10 minutes warming up before a round. Those who did warm up had less than half the incidence of injuries of those who did not warm up before playing. Lower handicap and professional golfers were more than twice as likely to warm up for more than 10 minutes as compared to other golfers.

Many of these problems can be improved by using good swing mechanics. Instruction by a golf pro to improve

technique is one of the best ways to decrease your chances of being injured. A regular exercise program that includes core strengthening, stretching and strengthening all the major muscle groups can also help decrease your injury rate and increase your playing time.

## LIGHTNING: A WORD OF CAUTION

Lightning is a risk on any golf course. Every year there are injuries from lightning strikes. Golfers should seek safe shelter such as the clubhouse or a closed metal vehicle. Avoid standing in the middle of the fairway, near a metal pole or near isolated trees. It is also advisable to lie down in a sand trap and wait for the storm to be well past. Golfers should also consider separating from each other as opposed to staying together as a group. Know and follow the course's guidelines for lightning safety.

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Exercise for building wrist extensor muscles.



Exercise for building wrist flexor muscles.



Exercise for forearm pronator muscles.



Exercise for forearm supinator muscles.



Exercise to build up deltoid and external rotator cuff muscles.



Exercise to build internal and external rotator cuff muscles. Use dumbbells to add difficulty. You should be able to do 8-12 repetitions.