Injury Prevention Series

Tennis & Racquet Sports



Orthopedics & Sports Medicine

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Common tennis & racquet sports injuries

Strains, sprains and pains

Racquet sports like tennis, racquetball, badminton and squash are a great way to stay in shape. Fun for athletes of all ages, racquet sports require very little equipment, and games may be played indoors and outdoors, one-on-one or in doubles and team settings. Many kids begin playing racquet sports at a young age and keep playing well into adulthood.

Overuse is the cause of most racquet sports injuries. Muscle strains, inflammation of tendons that join muscles to bones (tendinitis), "tennis elbow" (also a tendinitis) and other repetitivestress problems account for about two-thirds of injuries. Fortunately, most of these problems may be addressed with ice, rest and improved conditioning. More serious injuries, such as torn ligaments and concussions caused by falls and contact with players and racquets, are rare.

Player Safety Common accidents, serious injuries

Rotator cuff Regular stress on the rotator cuff muscles in the shoulder may lead to swelling and strains. Pain occurs when players serve or swing the racquet above their heads.

Eye and face Eye and facial injuries occur when a player is struck with a ball

or another player's racquet. These are most common in racquetball and squash. **Hips** Athletes who overextend or repetitively hyperflex their hips when stretching to make a shot risk tearing the labrum at the hip—that is, the cartilage that surrounds the ball and socket joint.

Wrists The snapping motion of the racquet may cause injuries to tendons and ligaments in the wrist. These injuries are most common in racquetball and squash.



Back

Playing on hard court surfaces like asphalt may lead to back sprains and stress fractures.

Lower body

Abrupt changes in direction may lead to ankle sprains, Achilles tendon ruptures and stress fractures.



How can you prevent tennis/ racquet sports injuries?

Getting ready to play

Technique

Playing racquet sports right means mastering a number of strokes: serves, lobs, backhands, forehands, drop shots and volleys. Each stroke requires different arm angles, footwork, grips, racquet angles and follow-throughs. Using improper technique—then repeating it—can put extra strain on the body and lead to injuries. Practice good form with the help of a coach.

Equipment

- **Racquet** A racquet that's too light or too heavy may increase the risk of shoulder and elbow injuries. Also, wrists and arms are at risk when playing with a racquet with the wrong grip size or too much string tension.
- **Shoes** Wear shoes specifically created for racquet sports. Find a shoe that supports the heel, keeps the ankle from rolling and decreases side-to-side sliding. Also, match the shoe to the surface: indoor shoes aren't right for play on asphalt, concrete, grass or clay.
- **Goggles** Eye and facial injuries are the two most common injuries in racquetball and squash. Athletes are at great risk of being struck in the eyes and face by racquets, opponents and ricocheting balls. Eye protection is essential.

The Court

- On outdoor courts, check for cracks or holes that might cause you to trip.
- Clear away loose balls or other objects on or near the court.
- For outdoor play at night and for all games played indoors, **be sure the court is well lit.**
- Moisture is a hazard on all courts. Mop up wet spots to avoid slips and falls.

Warm up

- Before playing, **try jumping jacks or running in place for five to 10 minutes** to get the blood flowing.
- Then, **stretch your arms, wrists, shoulders and legs.** Hold each stretch for at least 30 seconds.
- When you're finished, **cool down with light stretches** to help your body recover.

What is Tennis Elbow?

One of the most common upper body injuries in racquet sports, tennis elbow is an overuse injury affecting the tendons in the forearm on the outside of the elbow. These muscles extend the wrist or bend it backwards. They're used every time a ball hits a racquet.

Improper technique—particularly the one-handed backhand—is a leading cause of tennis elbow. Young players who learn proper stroke technique early may greatly reduce their chances of sustaining tennis elbow later in life.

Using a racket with the wrong grip size may also contribute to tennis elbow. Players are urged to select their racquets carefully to avoid discomfort and pain while playing.

> Strengthening the muscles in the forearm, along with a regular warm-up routine, may

decrease the likelihood of experiencing tennis elbow. Reducing stroke speed, using your legs and meeting the ball in front can also help. Treatment for the condition may include rest, anti-inflammatory drugs and using a brace on the forearm. More serious conditions may require physical therapy or surgery.



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This piece is part of an informational series on sports injury prevention produced by the Orthopedic Center/Sports Medicine Division at Boston Children's Hospital. For materials on preventing injuries in other sports, call 617-355-3501 or visit bostonchildrens.org/sportsmed.

