

Injury Prevention Series

Basketball



Boston Children's Hospital

Orthopedics & Sports Medicine

bostonchildrens.org/sportsmed
617-355-3501

Common basketball injuries

Sprains, strains, contusions and fractures

Combining explosive running and jumping with the subtle skills of dribbling, passing and shooting, basketball is great exercise and lots of fun to play.

So, it's no surprise that basketball is one of the world's fastest-growing sports, drawing in boys and girls from all over the world. But the rise in popularity has led to more players getting hurt. According to the Encyclopedia of Sports Medicine, authored by Children's Lyle Micheli, MD, each year in the United States, more than 500,000 individuals seek treatment for basketball-related ailments. Of those injuries, 60 percent affect the lower extremities. The most common diagnoses are ligament sprains, muscle strains, bruises and fractures. Fortunately, very severe—even life-threatening—injuries are rare in basketball.

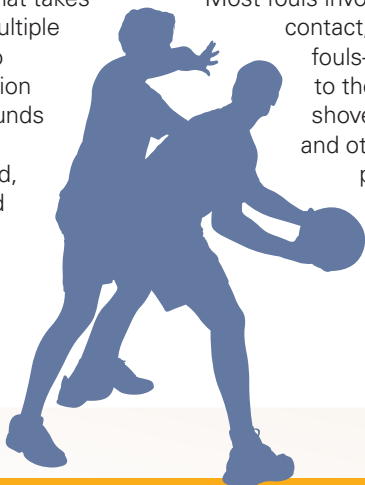
There are many ways to prevent or reduce the severity of basketball injuries. By using proper playing technique, wearing the right equipment and obeying the game's rules, basketball can be a safe game to play.



Player Safety

Common accidents, serious injuries

Under the basket is where the majority of basketball injuries occur. The tough physical play that takes place when multiple players fight to establish position and grab rebounds can lead to a range of head, hand, back and lower-body injuries.



Fouls are called when players make physical contact with other players. Most fouls involve minor contact, but hard fouls—forearms to the head, shoves in the back and other rough play—can result in serious injury.

Overuse injuries such as stress fractures and tendinitis may result from playing too much. Younger players are particularly susceptible to Osgood-Schlatter syndrome, which causes swelling just below the kneecap, and Sever's syndrome, marked by pain in the growth plate in the heel.



Poor court conditions may lead to slips, falls and twisted ankles. On indoor courts, efforts should be made to clean up wet spots. Outdoors, players should exercise caution when the weather turns bad.

Boston Children's Hospital offers Sports Medicine care at locations in **BOSTON, LEXINGTON, PEABODY AND WALTHAM, MA**

Preventing basketball injuries

Injuries to look out for

Knees The main ligaments in the knee, particularly the anterior cruciate ligament, or ACL, are susceptible to sprains. Players who tear an ACL experience swelling in the knee joint and become unsteady when trying to walk or run; if this happens, you should seek medical attention.

Ankles Running and pivoting in basketball often lead to ankle sprains, which can be treated with rest, ice, compression and elevation. Achilles tendinitis, which is an inflammation of the tendons at the back of the leg near the heel, can be treated with rest and ice. Tears to the Achilles tendon may require surgery. To guard against ankle problems, you may want to consider using tape or braces.

Feet Rolling your foot or having your foot stepped on by another player may cause stress fractures and acute fractures. Players in pain should seek medical treatment.

Shins The constant pounding absorbed by the legs while running up and down the floor can result in painful inflammation of the tissues surrounding the lower leg bone (tibia)—known as shin splints. Players with shin splints should rest until strength and flexibility have returned before resuming play. If pain persists, it may indicate a stress fracture.

Shoulders Shoulder injuries in basketball are usually the result of overuse: too much shooting, passing and rebounding. Rest is the best remedy. More serious injuries, like dislocated shoulders, are common and require medical attention.

Wrists Falling on an outstretched hand could lead to a wrist injury. Sprains of the wrist ligament can usually be treated with icing, elevation and the use of a wrist brace. If pain persists, it could indicate a wrist fracture, requiring medical attention.

Fingers It is common for basketball players to jam their fingers. In most cases, finger pain and swelling can be treated with ice or taping. Recovery times for a dislocated finger can run from three to six weeks. Broken fingers are also common in basketball and require medical attention.

Spine The jumping and twisting required of basketball players can lead to spine injuries, including stress fractures that require medical attention. Simple muscle strains in the neck and lower back can be treated with rest, ice and stretching.

Head and face Flying elbows, forearms, fingers and hands—not to mention getting hit by the ball—can cause injuries to the teeth and eyes, as well as head and face lacerations. Goggles and mouth guards offer protection. Players with serious facial injuries often wear face masks while recovering from an injury.

Concussions Hitting your head on the floor or receiving a blow from the arm of an opponent can cause a concussion. Headaches, nausea, dizziness and lack of balance are common symptoms. Concussions vary in severity, but all players who have been hit in the head should be monitored closely. Because improper treatment or getting a second concussion before fully recovering from the first can have a long-term impact on mental functioning, players should be removed from games or practice and seek medical attention until all symptoms have gone away.

Reducing the Risk of Injury

Dress for success

- Wear non-skid basketball shoes that fit well and provide arch and ankle support
- Pads for knees and elbows can guard against bruises and cuts
- Mouth guards can protect your teeth and mouth
- Players who wear eye glasses should use safety glasses or glasses guards
- Boys should wear a protective cup
- Many girls wear sports bras for support and comfort
- Don't wear jewelry, rings or piercings in practices or games

Play it right

- Young players should understand the rules of the game, their positions on the court and their team's plays and schemes. This will reduce the chance of collisions.
- Practice proper passing and shooting techniques
- Holding, blocking, charging and tripping lead to injuries. Dirty play also leads to technical fouls and time on the bench!

Order on the court!

- Outdoor courts: Clear all rocks and debris. Watch for holes and uneven surfaces. If playing at night, make sure the court is well lit.
- Indoor courts: Make sure they're clean, free of debris and slick spots, and have good traction. Boundary lines should not be too close to walls, bleachers, tables and seating areas. Put padding on basket goal posts and the walls behind them.



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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.



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