

Injury Prevention Series

Volleyball



Boston Children's Hospital

Orthopedics & Sports Medicine

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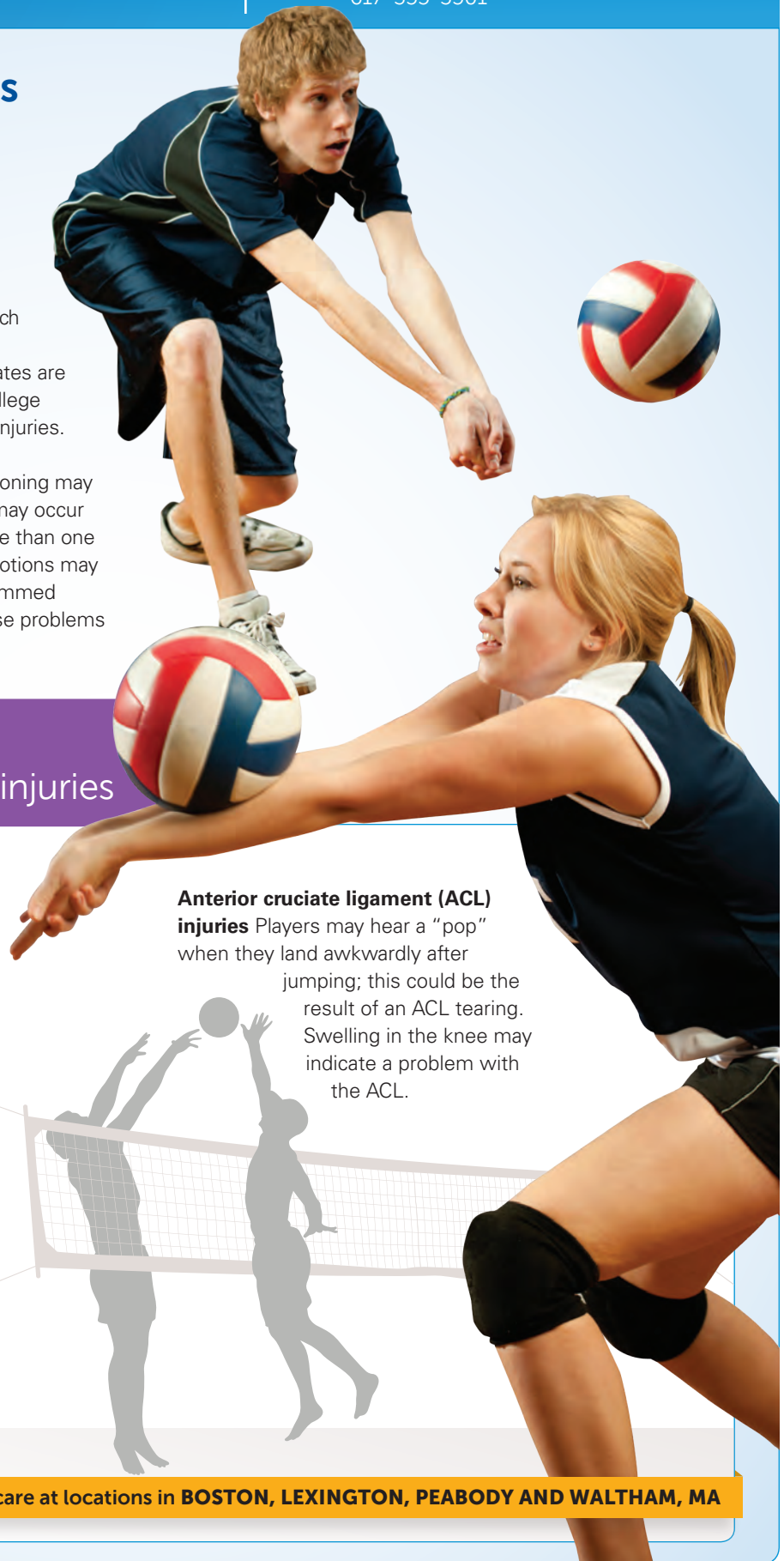
Common volleyball injuries

Minor strains and sprains

Volleyball is one of the fastest-growing major sports. It's also one of the safest.

At the high school level, more than 460,000 students, including more than 410,000 girls, play competitive indoor volleyball, and the outdoor game, particularly beach volleyball, is growing in popularity. While the rise in participation has led to an overall rise in injuries, injury rates are relatively low. For example, for every 1,000 women's college volleyball games or practices, there are only about four injuries.

Players who do not engage in proper pre-season conditioning may increase the risk of injury. In addition, overuse injuries may occur when volleyball players train year-round and play on more than one team. Spiking, blocking and other repetitive overhead motions may lead to sprains and strains, and athletes often sustain jammed fingers, sore backs and twisted ankles. Fortunately, these problems rarely result in athletes missing games or practice time.



Player Safety

Common accidents, serious injuries

Rotator cuff tendinitis Serving and spiking repeatedly may lead to irritation or fatigue in the muscles and tendons that connect the upper arm bone to the shoulder blade, called the rotator cuff.

Finger injuries Blocking, setting and digging put fingers at risk for fractures, dislocations and tendon and ligament tears.

Ankle sprains Ankle injuries may occur when a player jumps and lands awkwardly.

Patellar tendinitis Spiking and blocking put pressure on the knee and may result in inflammation of the tendon that connects the kneecap to the shin bone.

Anterior cruciate ligament (ACL) injuries

Players may hear a "pop" when they land awkwardly after jumping; this could be the result of an ACL tearing. Swelling in the knee may indicate a problem with the ACL.

How can you prevent volleyball injuries?

Overuse Injuries

Before and after:

- **Pre-season conditioning is critical to injury prevention.** To get ready for volleyball season, exercise to strengthen the upper back, shoulders, lower back and legs.
- **Warm up the muscles before games and practices** with stretching and light aerobic exercises.
- **Don't just stop when the game or practice is over.** Cool down by stretching.

What to wear

- **Knee pads** can prevent injuries caused when players dive or fall on the court.
- For play indoors or on hard outdoor surfaces, **wear shoes with strong ankle and arch support** and plenty of shock-absorbing cushion.
- Players who have sustained an ankle sprain may **tape their ankle or wear a brace to prevent further injury.**

On the court

- Communicate with your teammates. Be sure to **"call" the ball to avoid collisions.**
- **Don't grab the net or hang on to supports:** an overturned net may cause injuries.
- When playing indoors, **make sure that the court has enough overhead clearance to accommodate play.**
- When playing volleyball outdoors, **check the ground for glass, trash and debris** that could cause falls, slips and cuts.
- On sunny days when playing outdoors, **wear sunscreen and have plenty of water on hand.** Hats, visors and sunglasses may also help you stay safe in the sun.

Volleyball is great fun and highly competitive, so it's no surprise that young athletes want to play as much as possible. Too much practice and play, however, can lead to overuse injuries like strains, sprains and fatigue.

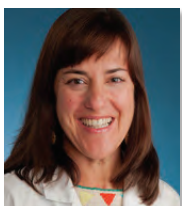
In many cases, injuries arise because kids specialize in one sport at an early age and play it year-round. Too much repetition of movement may cause soreness and pain. Excessive training may cause minor overuse injuries to become more serious, chronic injuries.

Young players are advised to get plenty of rest between games and practices.

Take a day or two off each week, and take a month or two off between seasons. Also, play other sports. Just playing volleyball may put too much strain on the muscles needed to play volleyball. Mix it up with swimming, cycling, soccer... something new!

In addition, young athletes may experience emotional problems by playing the same sport all the time. Did you know that about 70 percent of young athletes give up on youth sports by age 13? It's because pressure from parents, coaches and others become too much for the child to take. The games stop being fun, and the benefits of physical fitness and team togetherness get lost.

By taking steps to prevent overuse injuries, young athletes can avoid physical problems, and they can continue to enjoy sports, free of pressure and burnout. What's more, they may develop a love of physical fitness that will stay with them for the rest of their lives.



**Reviewed by Andrea Stracciolini, MD,
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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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