

SOCCER SAFETY

A GUIDE TO INJURY PREVENTION



SCOTTISH RITE
FOR CHILDREN
SPORTS MEDICINE

WHAT ARE THE RISKS?

Soccer is one of the most popular team sports in the world and is continually attracting more participants in the United States. It is an excellent opportunity for physical activity and team participation, but as with all sports, there is an element of risk.

About **22%** of soccer players ages 5-14 suffer injuries each year.¹ Due to the constant running and footwork, many of these injuries occur in the lower extremities. However, soccer is a contact sport and other injuries can also result from player collisions and headers.

COMMON PROBLEMS FOR SOCCER PLAYERS

CONCUSSIONS

Most athletes who suffer a concussion do not lose consciousness. An athlete with any symptoms or change in behavior, thinking, or physical functioning after a blow to the head or body should be suspected of having a concussion and removed from play immediately.

DEHYDRATION AND HEAT EXHAUSTION

High intensity work outs during hot and humid weather can make it difficult to replace the fluid and salt lost as sweat. This can result in cramps and eventually lead to heat exhaustion and even heat stroke.

See *Stay Hydrated*.

KNEE INJURIES

Sudden cutting, jumping and physical contact can put a lot of stress on the knees and force them into awkward positions. This can cause sprains and tears to ligaments and cartilage, especially to the anterior cruciate ligament (ACL) and meniscus. A swollen knee after an injury warrants a medical evaluation. Injury prevention programs have been shown to decrease knee injuries in soccer. See *Warm Up*.



ANKLE INJURIES

Lateral ankle sprains are common in many sports. In soccer, they may occur while cutting, stepping on another player's foot, or landing from a header. Mild ankle sprains are treated with RICE (Rest, Ice, Compression, and Elevation). More severe sprains or inability to bear weight may require an x-ray and evaluation by a sports medicine specialist.

STRESS FRACTURES

When muscles are overworked, they are no longer able to absorb the stress of physical activity. When this happens, the muscles transfer stress to the bone resulting in a stress fracture. If a stress fracture is suspected, a sports medicine specialist should be consulted.

¹Preserving the Future of Sport: From Prevention to Treatment of Youth Overuse Sports Injuries. AOSSM 2009 Annual Meeting Pre-Conference Program. Keystone, Colorado

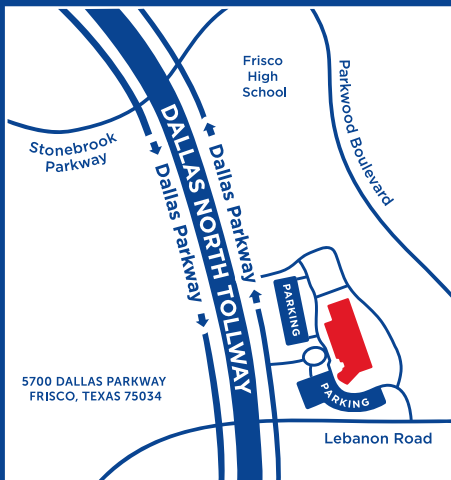


The Center for Excellence in Sports Medicine at Scottish Rite for Children is a comprehensive practice specializing in the treatment of sport-related injuries and conditions in young and growing athletes. Sports Medicine physicians, pediatric orthopedic surgeons, physical therapists, athletic trainers, psychologists and others work side-by-side with athletes, parents and coaches to develop the best game plan for recovery.



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PREVENTING SOCCER INJURIES

WEAR AND USE APPROPRIATE EQUIPMENT

Properly fitted cleats and shin guards can help reduce the risk of injuries. Goalies can also wear padded shorts and gloves for protection. When it comes to ball selection, be sure to use a size appropriate for the child's age. Furthermore, if it is raining, be sure to use synthetic, non-absorbent balls. Leather balls can absorb water, making the ball heavier and increasing chances of injury.

PRE-SEASON PHYSICAL EXAM & BASELINE NEUROCOGNITIVE TESTING

Many leagues require a physical exam before allowing participation. These exams help identify existing injuries or conditions, heart or lung problems, and other issues that could make an athlete more prone to injury during play. In the event of a concussion, a baseline neurocognitive test (i.e. ImPACT test) gives doctors access to information that can help develop the best plan of care for the athlete.

WARM UP

A dynamic warm-up involves continuous movement to raise the body's core temperature in preparation for competition. Warming up the body increases the elasticity of the muscles, tendons and ligaments around the joints, decreasing the likelihood of injury. Furthermore, there is growing evidence to support the effectiveness of ACL prevention programs, such as the FIFA 11+ program. FIFA 11+ includes warm-up exercises that have been proven to reduce injury rates in teams that complete the 20-minute program at least twice a week. More information about the FIFA 11+ program can be found at <http://f-marc.com/11plus/manual/>.

FIELD CONDITIONS

Poor weather can leave the field unfit for play. However, even in good weather, check the field for uneven surfaces, holes, rocks, or trash and make sure the goal posts are properly secured.

USE PROPER TECHNIQUE

Coaches and parents should discourage dirty and ill-intentioned play and emphasize the importance of obeying rules and using proper technique. Especially when heading the ball, be sure the athlete learns the correct technique (keeping the eyes open, mouth closed and tongue away from the teeth) with an age-appropriate ball. Coaches should also teach players to discern when heading the ball is appropriate. Because many concussions occur while heading the ball due to contact with the ball or another player, it is important for players to understand when there may be a safer way to make a play. Also emphasize dribbling with the head up and being aware of other players. This can help players avoid collisions as well as defenders.

STAY IN SHAPE

Soccer requires a lot of running and incorporates sharp cuts and changes of direction. When athletes are fatigued, they are more likely to sustain injuries during these sudden movements. Athletes will inevitably get tired during practices and games, but increasing stamina can help the athlete have enough energy to make plays with the proper stance, form and technique.

STAY HYDRATED

An athlete's performance can be impacted by even mild dehydration. Players should drink often—ideally every 15-20 minutes, especially during the heat of summer. Water should be readily available, but sports drinks are recommended for vigorous activities lasting longer than one hour to replace electrolytes lost through sweat and carbohydrates needed for energy.