



## PREVENTION & CARE OF SOCCER INJURIES

**S**occer is one of the most exciting sports in the world. Although soccer provides an enjoyable form of aerobic exercise and helps develop strength, balance, agility, coordination, and a sense of teamwork, players must be aware of the injury risk due to the physical nature and fast pace of play.

### Injury Prevention

In 2016, US Youth Soccer implemented a heading policy to reduce concussion and neck injuries in skeletally immature athletes. Players 10 and younger are prohibited from heading the ball in both practice and competition. Children ages 11–12 are permitted to head up to 25 times per week in practice or competition. When players reach age 13 there are no heading restrictions. Introduction of heading in practice should include the instruction of proper technique and safe play habits when challenging for a ball in the air. When possible, begin heading drills with a lightweight ball until technique is mastered.

Due to the demanding nature of soccer, it is important for an athlete to be physically well rounded by maintaining flexibility, balance, agility, endurance, speed, and strength standards appropriate for their level of play. Injury prevention programs are designed to address these factors and decrease the incidence of injury, particularly in the lower extremity.

### Warm Up

To prevent musculoskeletal injuries common in soccer, a thorough warm-up of at least 10 minutes should be performed including movement and stretching. Start with jogging to increase overall body temperature and blood flow to the muscles. Next, loosen joints and muscles with large, controlled dynamic movements such as walking lunges, hip swings, trunk rotation, and arm circles. Stretch all large muscle groups and any other stiff areas for 30–60 seconds. Next, ball work and short passes will warm you up for long passes and cutting motions at game speed. Now you are ready to take the field!

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### Common Injuries in Youth Soccer

General symptoms of musculoskeletal injury to watch for include pain during activity, ache during rest, stiffness, swelling, discoloration, loss of motion, favoring the sore area, decrease in strength or speed.

#### Lower Extremity Injuries

Ankle and foot injuries are prevalent in soccer. Sprain or fracture (break) may occur when the ankle or foot is forcefully turned or when contacting the ball or an opponent. If fracture is suspected or athlete is unable to bear weight, visit a medical doctor for evaluation. For sprains, initial treatment with ice and rest can reduce swelling and pain. Begin range of motion and non-weight bearing strength exercises soon after injury to speed recovery time. Once the athlete can full weight bear, he or she can progress from jogging, to running, to sprinting to cutting. During this progression, work on ball skills, ankle strength, agility drills, and maintain flexibility of the ankle and low leg.

Knee injuries can occur due to contact with another player, the ground, or without contact. Patellar dislocations, knee ligament injuries warrant medical exam for appropriate recommendations for care. ACL (anterior cruciate ligament) injuries are primarily non-contact injuries occurring when the leg rotates or pivots while planted on the ground. Athletes will often hear and/or feel a pop and experience pain throughout the knee. Swelling, decreased range of motion and difficulty walking generally follow. Initial care of ice and compression wrap are recommended to assist in reduction of pain and swelling. Visit a sports medicine doctor to help determine if surgical or non-surgical treatment is the appropriate option.

Muscle strains in soccer are common in the hamstring, quadriceps, and calf and may occur with a sudden movement such as stretching out to stop a ball or quickly changing speeds. Stretching and tearing of muscle fibers leads to pain, and decrease in motion, strength, and endurance of the muscle. After initial treatment of ice, recommended treatment with a sports medicine professional will include exercises to increase strength, endurance, and flexibility while combined with a return to play progression.

Athletic pubalgia is often called a sports hernia. Muscles of the lower abdomen and groin are stressed with repetitive motion or due to a combination of poor strength and poor flexibility. The injury causes pain in the groin and abdomen and may be accompanied by a decrease in strength, difficulty running and/or striking a ball. Non-surgical treatment involves rest and physical therapy to address factors contributing to injury and a graduated return to play progression. Surgical treatment is appropriate for cases involving more severe symptoms or those that failed non-surgical treatment.

#### Upper Extremity Injuries

Wrist and hand fractures and sprains are common in goal keepers but may also happen to position players who fall to the ground with an outstretched hand. Damage to one or more wrist or hand ligaments may lead to pain, swelling, and feeling of instability. Treat initially with ice and exercises to increase motion and strength. High levels of pain or swelling or presence of deformity are symptoms of fracture or dislocation and need to be evaluated by a medical doctor.

Shoulder dislocations, sprains, and clavicle fractures can occur with a fall onto an outstretched arm, fall onto the shoulder, or a collision. If a player is unable to move the arm, use an elastic bandage or sling to secure the arm to the body and seek evaluation by a medical doctor. Consult with your doctor to determine if surgical or non-surgical treatment is most appropriate.

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### Head and Neck Injuries

Neck pain can create a difficult situation for a soccer player. If the injury prevents full range of motion, the player should sit out until full motion and strength are restored. This may need to be achieved under the guidance of a sports medicine professional. Pain described as along the spine, pain with motion, or loss of sensation is a medical emergency. Do not move the player. Keep him or her calm and call 911.

Concussion may result from a collision with a player, ball, ground, goal post, or a sudden jarring movement. A concussion is a traumatic, microscopic injury causing a disturbance in normal brain activity which causes the symptoms of concussion. Most concussions are not associated with loss of consciousness. Headache, dizziness, nausea, confusion, ringing in ears, sensitivity to light or noise, irritability, and grogginess are some signs of concussion. Please note this list is not exhaustive as every concussion presents differently. If concussion is suspected, remove the athlete from play immediately and seek medical attention. Following evaluation and release by a medical doctor, the athlete will begin a gradual return to play progression to determine if the concussion has fully resolved before full return to sports activity.

### Care

For minor musculoskeletal injuries not requiring immediate medical attention, ice the injured area for no longer than 20 minutes and repeat as often as every 2 hours. Compress swelling using elastic wrap; taking care as not to decrease circulation by applying too tightly. Elevate injuries to the extremities to decrease swelling.

If symptoms persist, or for any injury involving pain, swelling, dysfunction, loss of sensation, uncontrolled bleeding or concussion related symptoms, the athlete follow up with a trained sports medicine professional for evaluation and care. You should return to sport activity only when clearance is granted by a health care professional.

### Expert Consultants

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### Resources

[www.usyouthsoccer.org](http://www.usyouthsoccer.org)