Injury Prevention Series

Football



bostonchildrens.org/sportsmed 617-355-3501

Common football injuries

Sprains, strains and bruises

Though football is a loved and revered American pastime, about 50 percent of all football players sustain an injury each season. That's twice as many injuries as basketball, America's second most popular sport.

Most football injuries affect the lower part of the body. Knee, ankle and thigh injuries result from contact with other players, or when players change direction during play. Upper body injuries, like getting the wind knocked out you, happen when a player is hit hard or falls to the turf. More serious injuries like fractures, dislocations and concussions can also occur during football games and practices. Many of these injuries can be prevented when players train properly, play by the rules and wear the right equipment.



Player Safety

Common accidents, serious injuries

Burners or stingers result when the nerves that run from the neck to the arm are compressed or overstretched, causing tingling or numbness.

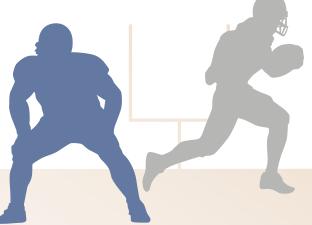
"Jersey finger" can happen when a player tries to tackle another player by grabbing his jersey and tears a tendon or ligament in the finger.

Running backs and linebackers

suffer more injuries than other players. Most football injuries occur during running plays.

All players can get the wind knocked out them. This happens when a hit to the abdomen temporarily paralyzes the diaphragm, the muscle that controls breathing. Players have trouble breathing until the diaphragm can move again.

Linemen are most likely to experience "turf toe," a hyperextension of the big toe that happens when linemen push off at the start of a play.



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

Preventing football injuries

What you need to know about concussions

The most common head injury in football

Every year, there are about 250,000 concussions reported at all levels of football. As a result, leagues at all levels have focused on concussion prevention and treatment in recent years.

What is a concussion?

A concussion is a brain injury that occurs when a blow to the head causes a rapid, rotational acceleration of the brain. Concussions vary in severity, but every impact to the head is cause for concern.

What causes a concussion?

A forearm to the head while being tackled, an accidental knee to the head when falling down and helmet-to-helmet collisions are among the many ways that football players can sustain a concussion.

How do you know it's a concussion?

Players with concussions may feel dizzy, have headaches and vision problems and experience nausea or vomiting. Concussion symptoms aren't always obvious, so coaches, staff and parents should pay close attention for at least 24 hours after a player has been hit in the head.

Back in the game

Football coaches, trainers and staff should be aware of the common symptoms, and exercise extreme caution with players who have been hit in the head. If dizziness, headaches, fatigue, visual problems and irritability continue, players should be removed from the field and taken for treatment.

Players should only be allowed to return to football when they have completely recovered from their concussion. Neurocognitive testing can determine if all of a player's symptoms have gone away and it's safe to resume play. If a player keeps playing the game with a concussion, the risk of brain hemorrhage, swelling and other long-term problems increases.

Repeated concussions

Players who suffer one concussion have a far greater chance of sustaining another concussion. Over time, football players who have sustained several concussions can experience memory loss and a decline in speaking and thinking abilities.

Prevention

Today, many leagues require players to undergo baseline neurocognitive testing before the season. Players who test poorly for memory and reaction time as a result of a previous head injury are not cleared to play. Those who are fit to play are advised to improve their ability to absorb a blow by engaging in exercises that strengthen their neck and shoulder muscles. Coaches are encouraged to offer their players resistance training that works these areas.



The best way to reduce the risk of your child getting hurt playing football is to make sure he or she wears the right protective equipment, including:

- Helmet
- Shoulder pads, hip pads, tail pads, knee pads
- Pants (one piece or shell)
- Thigh guards
- Mouth guard with a keeper strap
- Athletic supporter
- Athletic shoes or cleats (check with your league to see what's allowed)
- For players who wear eyeglasses, make sure they are made with non-shattering glass or safety glass. Contact lenses are also OK.

Preparing for play

A pre-season physical exam is usually required for all young football players.

Existing injuries, the presence of concussive symptoms, heart or lung problems or other problems that could put athletes at risk for injury can be found during a thorough pre-season exam.

Warm up

Before practices and games, coaches should lead players in a proper warm-up routine. Jumping jacks, jogging in place, and slow, gentle stretching are great ways to prepare for play. As the season moves along and temperatures drop, warm-ups and stretching—before and during games—are increasingly important.

Know the plays, know the rules

Injuries often occur when players are out of position, confused about their assignments or engaging in play that is outside the rules. Young, inexperienced football players in particular should study their playbooks and understand exactly what they are supposed to do and where they are supposed to be on every play. Coaches, staff and parents should not tolerate "dirty" play—in games or in practice. Parents and players should seek out leagues and coaches that put an emphasis on safe and proper play.



Reviewed by William Meehan, MD, director, Sports Concussion Clinic, Boston Children's Hospital

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.

