

It Takes a Team!

Managing Sports-Related Concussion in Student Athletes





Heads Up: *Concussion in youth sports*

The Jacksonville Sports Medicine Program (JSMP) is committed to youth sports injury prevention. Partnering with local schools and other child health organizations, JSMP wants to help manage this serious brain injury when it occurs and reduce the possible effects that can last a lifetime.

Managing concussions takes a **team** approach. The team includes the **Guardian Team**, the **Educator Team** and the **Medical Team**, all centered around the student athlete. This folder is color-coded to help you quickly and easily find your team and the information needed to help your student-athlete recover from a concussion. Color coded forms are included in the packet to assist each team in documentation and communication.





What is a concussion?

Concussion is a brain injury. Concussions, as well as all other head injuries, are serious. They can be caused by a bump, a twist of the head, sudden deceleration or acceleration, a blow or jolt to the head, or by a blow to another part of the body with force transmitted to the head.

Concussions can have many different symptoms but all must be taken very seriously in order for the athlete to safely recover. Rushing recovery may prolong symptoms and have serious consequences.



Student Athlete Teams:

Working together to enhance the student-athlete's recovery

GUARDIAN TEAM

The first step in youth sports injury prevention and management starts with the guardian. Guardians want their young athlete to succeed and thrive in sports. The primary concerns are safety, well-being and future health.

The Guardian Team includes:

- **Parents/legal guardians**
- Siblings
- Grandparents
- Extended family members
- Babysitters
- Neighbors/friends

EDUCATOR TEAM

The Educators have the role to monitor every student athlete's academic performance, brain development, fitness and well-being.

The Educator Team includes:

- **Teachers**
- Coaches
- Principals
- Guidance counselors
- Tutors
- School aides
- Physical education teachers
- Recess/activity supervisors

MEDICAL TEAM

The medical team has the role to recognize the signs/symptoms of concussion and understand optimal management of concussions.

The Medical Team includes:

- **Family health care providers**
- Certified athletic trainers
- Team physicians
- School nurses
- Concussion specialists

■ ■ ■ **Suggested team leader**



The Game Plan: *Team assignments*

Each **team** has an important role in monitoring and caring for the student athlete, as he or she progresses through the three phases of concussion recovery. As part of a young athlete's collaborative team, we are responsible for the prevention, recognition, evaluation and management of a concussive injury.

RED FLAG

If the student athlete begins to feel worse or has an increased intensity of symptoms such as:

- change in behavior
- vomiting
- dizziness
- worsening headache
- double vision
- excessive drowsiness

This is an indication that you must immediately take him/her to the nearest emergency room for further evaluation.

In general, a concussion injury, recovery and return to unrestricted play can be divided into three phases and each team has certain responsibilities during each phase. It is important that the athlete is monitored and activities are appropriate to their individual recovery phase, allowing for safe recovery and the best long-term outcome.

PHASE 1: *Injury Education, Prevention, Recognition and Removal from Play and Initiation of Rest*

PHASE 2: *Symptom Resolution; Physician approved reintroduction of academics and activity*

PHASE 3: *Completed return to full academic and activity without symptoms recurring, final health care provider clearance*

Attention all teams:

A majority of concussions will improve in 7-10 days, with 80% being resolved in 3 weeks. Every athlete responds differently to concussion symptoms and recovery. If an athlete experiences a return of any concussion symptoms during recovery, or begins experiencing any new symptoms, they must immediately stop activity. The athlete must then wait at least 24 hours, be asymptomatic and directed by the medical team prior to resuming activity.

Do you recognize the signs of concussion?

Symptoms related to concussions

Physical

- Vacant stares or “seeing stars”
- Altered vision
- Headache
- Nausea
- Vomiting
- Dizziness (including light-headedness, vertigo, spinning)
- Disorientation
- Sensitivity to light or noise
- Lack of awareness of surroundings
- In rare cases, loss of consciousness

Emotional

- Emotions out of proportion to circumstances (inappropriate crying or anger)
- Irritability
- Depression
- Anxiety

Cognitive

- Slurred or incoherent speech
- Decreased coordination, reaction time
- Delayed verbal and motor responses
- Memory loss
- Sudden change in academic performance or drop in grades
- Confusion and inability to focus attention

Maintenance

- Sleep disturbances
- Easy fatigability

Important facts about concussions:

- You can’t see them.
- More than 90% occur without loss of consciousness.
- Signs/symptoms can show up right after the injury, but may not appear for hours or days after.
- Even a “ding” or bump on the head can be serious.
- Florida law protects youth athletes following a suspected “concussive injury.” That means that all youth athletes must be evaluated by a licensed physician and medically cleared prior to return to activity.

The Florida High School Athletic Association (FHSA) provides specific criteria for an athlete to return to play after concussion. These are outlined on Form AT18 and are designed to ensure the safety of all youth athletes (see packet inserts).



RED FLAG

Second Impact Syndrome

Athletes with signs and symptoms of concussion should be removed from activity (play or practice) immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to sustaining another concussion. Athletes who sustain a second concussion before the symptoms of the first concussion have resolved and the brain has not had a chance to heal are at risk for prolonged concussion symptoms, permanent disability and even death (called “Second Impact Syndrome” where the brain swells uncontrollably). There is also evidence that multiple concussions can lead to long-term symptoms.



Phase 1

- Recognition of injury and immediate removal from physical activity
- Obtain medical evaluation
- Daily symptom monitoring
- Notify teachers
- Advocacy for academic adjustments
- Recovery requires rest
- Reduce stimulating activities: gaming, texting, computer work, reading and homework

Phase 2

- Symptoms have completely resolved
- Returned to full academic load
- Obtain clearance from medical team to begin graduated return-to-activity progression as outlined on FHSAA form AT-18 (page 1)

Phase 3

- When the graduated return-to-activity protocol has been successfully completed without return of symptoms, the athlete will present the FHSAA form AT-18 (page 2) to the medical team for review and physician signature

Phase 1

- Teachers acknowledge notification from parents, coaches and administration regarding a concussion diagnosis
- Teachers be prepared to reduce academic demands: untimed tests, assigning a scribe for note-taking, and tutoring as appropriate

Phase 2

- Monitor symptoms
- Increase academic demands as tolerated
- If necessary, implement 504, IEP or other accommodations
- Notify medical team and athlete's guardian of progress or decline in performance
- Return to full academic demands without accommodation

Phase 3

- Begin graduated return-to-activity protocol as outlined on FHSAA form AT-18 (page 1)
- Return to competition after completion of FHSAA form AT-18 (page 2)

Phase 1

- Educate on the dangers associated with head injury
- Recognize injury and immediately remove from play (**WHEN IN DOUBT, SIT IT OUT**)
- Refer for medical evaluation, record findings

Phase 2

- Monitor symptoms
- Graduated return-to-activity when:
 - asymptomatic
 - normal neurological exam
 - off medications for this concussion
 - returned to a normal academic demands
 - neuropsychological testing, as available as return to baseline
- Complete FHSAA form AT-18 (page 1)

Phase 3

- Athletic trainer or coach will complete bottom section of FHSAA form AT-18 (page 1)
- Physician review of FHSAA form AT-18 (page 1)
- Physician authorization for return to competition (completion of FHSAA form AT-18, page 2)
- Athlete can return to competition. They should continue to be monitored for signs/symptoms of concussion and removed from activity immediately if symptoms return

Preventative Phase

- Discuss concussions with your athlete and their medical and educational teams
- Read and sign the mandatory *Consent and Release from Liability Certificate for Concussion and Heat Related Illnesses* form and encourage early reporting of symptoms
- Learn more at trusted websites listed on the back page of this brochure

Preventative Phase

- Coaches provide supervision and guidance in fitting of protective equipment and teach proper technique to minimize head impact
- Academic staff becomes familiar with the importance of academic modifications with concussions
- Know the signs and symptoms associated with concussions
- Prepare for computer neuropsychological testing

Preventative Phase

- Educate on the dangers associated with head injury during sports physicals and team meetings
- Encourage early reporting of symptoms
- Recommend computer neuropsychological testing

Can concussions be prevented?

Collision and contact sports have a high rate of concussion; but, concussion can happen in non-contact activities as well, such as bicycling. Concussion is a brain injury, and understanding how concussions occur helps us recognize the risk of injury and the steps we can take in preventing injury. Remember, it may not be possible to prevent ALL concussions. Recognizing when an injury has occurred is, by far, the most important step to preventing a potential second injury that could possibly be catastrophic.

Prevention strategies

1. Education: what is a concussion and how do they happen?
2. Neck strengthening exercises
3. Properly fit protective equipment
4. Understanding the rules of the game and how this relates to increased safety
5. Early reporting of symptoms by injured athletes
6. Recognition of injury by coaches or guardian and removing the athlete from further participation
7. Compliance with rehabilitative protocols

Do helmets or head bands prevent concussion?

Helmets do a great job protecting the skull from fracture; however, there are NO concussion proof helmets or head bands. Be cautious how products are advertised before making a purchase of an expensive item that has not been proven effective.

Computer neuropsychological testing

Tools like "ImPact" testing are available through our schools and physician offices. They are objective tools that can help a physician in their overall management of a concussion. **They are not diagnostic tools.** A baseline assessment is recommended and should remain on file at the site where the athlete took the test. Should an injury occur, a post-injury assessment can assist in the management of the injury upon the physician's request.

Computer neuropsychological testing is mandatory in the NFL, NCAA and other leagues. Some schools and school districts have made this assessment a mandatory safety initiative. Check with your local school for specific information on this tool.



Be a partner in the recovery of your student athlete

- Communicate frequently with your student athlete's school so that adjustments can be made at school.
- Continue to follow-up with your student athlete's healthcare professional.
- Do not return your student athlete to PHYSICAL activity (recreational, club or school-sponsored sports, household chores and after-school work) until cleared by the healthcare professional.

REFERENCES

For more information, see these trusted web sites:

- jsmp.us
- cdc.gov/concussions
- nemours.org
Search "about concussions"
- mayoclinic.org
Search "concussions in children"
- wolfsonchildrens.org/programs-services/programs/safe-kids/Pages/sportsafety.aspx
- healthychildren.org
Search "concussions" and also
"after concussion, when to return to school"

NOTES

**Required forms and information on student athlete
concussion management**

Please collect and bring all completed forms to each medical appointment.

GUARDIAN TEAM	EDUCATOR TEAM	MEDICAL TEAM
Please refer to the information that is highlighted at the top of the page in ORANGE.	Please refer to the information that is highlighted at the top of the page in GREEN.	Please refer to the information that is highlighted at the top of the page in PURPLE.

If not color-coded, the form or information sheet is applicable to any adult Team Member.



Dedicated to youth sports injury prevention.

904.202.4332 | jsmp.us

Sustaining Partners

The Jacksonville Sports Medicine Program is made possible by our Sustaining Partners, who are committed to our mission of protecting youth athletes:

