



MILLER SCHOOL
of ALBEMARLE

SPORTS CONCUSSION
MANAGEMENT PLAN

SPORTS CONCUSSION MANAGEMENT PLAN

The Miller School of Albemarle (MSA) recognizes that a concussion is a brain injury that is characterized by the onset of impairment of cognitive and/or physical functioning, and is caused by a blow to the head, face, neck or body that causes a sudden jarring of the head. MSA is committed to safe practices and provides a Sports Concussion Management Plan to ensure that: (i) coaches, athletic directors, Certified Athletic Trainers (ATC), administrators, volunteers, student-athletes, and their parents are aware of the short-and long-term effects of concussions; (ii) student-athletes sustaining concussions are removed from play immediately and referred appropriately; (iii) student-athletes who have sustained concussions are returned to play only after receiving appropriate medical care, adequate time to heal, and demonstrating no symptoms consistent with a concussion.

MSA guidelines mandate that if a student-athlete exhibits or reports any sign or symptom of a concussion; he/she will be immediately removed from practice or play. Parents should be notified on the day of the injury. The parents will obtain a proper medical evaluation by a licensed health care professional with training in concussion evaluation and management per the MSA Sports Concussion Management Plan. MSA acknowledges that clearance to return to play is a medical decision. The licensed health care professional who evaluates the student-athlete is the only individual to provide clearance, which will then place the student-athlete in the care of the ATC, possibly in consultation with a physician, to oversee the Gradual Return to Sports Participation found in Form # 2 of this document. MSA will not allow the student-athlete to participate in a practice or game while experiencing any lingering or persisting symptoms of a concussion, no matter how slight. The student-athlete must be completely symptom free at rest and during physical and mental exertion, with neurocognitive functioning that has returned to their normal baseline, as determined by the results from the Immediate Post Concussion Assessment and Cognitive Testing (ImPACT) prior to returning to sports training, practice, play or competition.

The MSA Sports Concussion Management Plan includes five fundamental components:

1. Verified training of coaches on concussion risks, recognition, and management.
2. Education of parents and student-athletes on concussion risks, signs, symptoms, and post-injury management for sports and school officials. Parents and student-athletes will read, sign and submit the Miller School of Albemarle Concussion Information Sheet (Form #4) to the school before the first practice.
3. Immediate removal from play by the student-athlete's coach, ATC or team physician of any student-athlete suspected of sustaining a concussion in a practice or game (i.e. exhibiting signs and/or symptoms). **“When in doubt, sit them out”** is the operating principle.
4. Written clearance for return to play for the student-athlete by a licensed healthcare professional trained in the evaluation and management of a concussion. The written clearance (Form #3) must be received by the ATC before the student-athlete is allowed to return to the field/court. **“Return to play requires Medical OK”** is the operating principle. (Form #2: Gradual Return to Sports Participation Program)
5. Treatment of the student-athlete in school. School personnel will be trained on concussion management in the school. They will be informed of the student-athlete's injury and its specific symptom manifestations – physical, cognitive, emotional, sleep. The school nurse, athletic director, dean of academics and student's advisor will be notified to assist the student-athlete's recovery by informing the student-athlete's teachers, who may provide an altered work-load to aid the student's recovery.

**The Certified Athletic Trainer (ATC) is a highly educated and skilled professional specializing in athletic health care. In cooperation with physicians and other allied health personnel, the athletic trainer functions as an integral member of the athletic health care team in secondary schools, colleges, universities, sports medicine clinics, professional sports programs, and other athletic health care settings.*

IDENTIFICATION AND HANDLING OF SUSPECTED CONCUSSIONS IN STUDENT-ATHLETES

1. Student-Athlete and Parent or Guardian
 - a. In order to participate in any extracurricular athletic activity, MSA will require student-athletes and their parent/guardian to review information on concussions on an annual basis (every 12 months). This information will include a parent and student-athlete fact sheet (Form #4). After having reviewed the materials describing the short and long-term health effects of concussion, each student-athlete and the student-athlete's parent or guardian shall sign a statement acknowledging receipt, review and understanding of such information (Form #4).
 - b. By signing this form the student-athlete and the student-athlete's parent or guardian will accept the responsibility for reporting their injuries and illnesses, including signs and symptoms of a concussion, to the coaching staff, school nurse and school athletic trainer.
 - c. All students at MSA will be required to take a baseline neurocognitive test (ImPACT) in order to participate in any extracurricular athletic activity. The test will be administered within 10 days of team selection and before the first competition.
2. If the coach, ATC, team physician, or school nurse suspects that a student-athlete may have sustained a concussion or brain injury in practice or during a game, that student-athlete will be removed from the activity at that time. Once removed from play, the student-athlete in question will be evaluated by the school ATC or school team physician (Form #3). Those suspected of having a concussion or brain injury will not return to play that same day. The student-athlete's concussion care will follow the MSA Sports Concussion Management Plan. Any student-athlete suspected of sustaining a concussion by a coach, ATC, team physician, or school nurse must be treated according to the MSA Sports Concussion Management Plan.
3. MSA will establish a Concussion Management Team (CMT) consisting of a school administrator, school nurse, athletic administrator, licensed healthcare provider, coach, and any other person whom the superintendent/designee determines will assist the CMT in its actions. The team will review and refine the MSA Sports Concussion Management Plan on an annual basis at a minimum.
4. MSA recognizes that a concussion can affect the student-athlete's ability to function in many activities in the school setting. Therefore, MSA will assist the student-athlete with his/her academic needs and provide a school care plan for the gradual reintroduction of cognitive demands for student-athletes who have sustained a concussion. (See MSA Academic Accommodations Appendix 1)

Protocol for Return to Play

MSA has established a Sports Concussion Clinical Management plan that describes in detail the protocol for return to play. (See MSA Concussion Clinical Management)

Helmet Replacement and Reconditioning Policies and Procedures

All helmets used in extracurricular physical activities will be school issued and must conform to the National Operations Committee on Standards for Athletic Equipment (NOCSAE) and certified as conforming by the manufacturer at the time of purchase.

Reconditioned helmets that have been purchased must be recertified as meeting the requirements of NOCSAE by the party doing the reconditioning.

Training Required for Personnel and Volunteers

MSA will require that school nurses, coaches, athletic trainers, licensed healthcare provider, and volunteers receive current training annually on the following:

1. Recognizing the signs and symptoms of a concussion
2. Strategies to reduce the risks of concussions
3. How to seek proper medical treatment for student-athletes suspected of having a concussion
4. Determining when the student-athlete may safely return to play

Coaches:

1. Review the MSA Sports Concussion Management Plan
2. Attend presentation on concussion management and recognition during opening faculty meeting
3. Teach safe techniques and skills to ensure proper use of equipment.
4. Written verification/acknowledgment will be provided to school administration prior to the first practice on an annual basis.

School nurses, counselors, and teacher:

1. Review MSA Sports Concussion Management Plan and Academic Accommodations chart
2. Attend presentation on concussion management and recognition during opening faculty meeting
3. Written verification/acknowledgement will be provided to school administration prior to the first practice on an annual basis.

Volunteers:

1. Review MSA Sports Concussion Management Plan
2. Review PowerPoint regarding concussion management and recognition distributed by ATC
3. Written verification/acknowledgement will be provided to school administration prior to the first practice and on an annual basis.

Certified Athletic Trainer:

1. Review MSA Sports Concussion Management Plan
2. Participate in continuing education programs through the National Athletic Trainer's Association (NATA) or other professional organizations.

Team Physicians: (Crozet Family Medicine)

1. Review MSA Sports Concussion Management Plan

MSA Sports Concussion Clinical Management

When a student-athlete sustains a concussion or is suspected by the athletic trainer, coach or school nurse of having a concussion, the management plan outlined below will be followed.

1. Evaluation on the field by a Certified Athletic Trainer (ATC) with the VHSL On-Mat Concussion Evaluation Protocol at the time of injury; 24 hours after the injury or the next school day the student-athlete will complete neurocognitive testing (ImPACT). The ATC will compare results to baseline scores and send a copy of the report to the physician.
2. If an ATC is not available then the coach will remove the student-athlete from the game or practice. The coach will contact the parent and refer the student-athlete to their Primary Care Physician (PCP) or Emergency Department. The coach will also contact the ATC.
3. The student-athlete MUST be evaluated by their PCP or a sports concussion specialist prior to returning to play.
4. All student-athletes who have had a prior concussion at any time must be evaluated by a physician.

5. All student-athletes must bring written documentation of medical clearance (Form #3) from the physician prior to starting the Gradual Return to Sports Participation Program (Form #2).
6. The student-athlete must have no symptoms for a minimum of 24 hours prior to considering medical clearance for starting the Gradual Return to Sports Participation Program (Form #2).
7. All student-athletes must follow a Gradual Return to Sports Participation Program (Form #2) for a minimum of 5 days prior to returning to full participation.
8. If the student-athlete develops any signs or symptoms during the Gradual Return to Sports Participation (Form #2), after they have rested for 24 hours and tried a second time to progress, they must be re-evaluated by a physician.

After the school ATC evaluates the student-athlete, management will follow one of three possible pathways depending on the assessment:

1. Immediate referral to emergency department
 - a. The ATC will contact the student-athlete's parent via phone, email or in person and give them the Athletic Training Concussion Information Sheet for Parents and Guardians (Form #1).
 - b. The student-athlete must be seen by either their PCP or a sports concussion specialist and have medical clearance signed by the healthcare professional (Form #3) prior to starting the Gradual Return to Sports Participation (Form #2). The only exception is if the emergency department physician has signed medical clearance for the Gradual Return to Sports Participation Program (Form #2). However, it is not recommended that the student-athlete who was referred to the emergency department due to the severity of their symptoms per the referral signs/symptoms list (see Appendix 1) be cleared for the Gradual Return to Sports Participation Program (Form #2) by the emergency department due to the possibility of delayed signs or symptoms not being present in the first 24 hours.
2. Referral to PCP
 - a. The ATC will contact the student-athlete's parents via phone, email or in person and give them the Athletic Training Concussion Information Sheet for Parents and Guardians (Form #1).
 - b. The post-injury ImpACT scores will be offered to the PCP as part of the student-athlete's concussion management (via written and/or oral communication). If the PCP does not feel comfortable interpreting the ImpACT scores then the PCP or ATC will consult the sports medicine physician prior to starting a Gradual Return to Sports Participation Program (Form #2).
 - c. The PCP can clear the student-athlete (Form #3) for a Gradual Return to Sports Participation Program (Form #2 – minimum 5 day progression) or refer to a sports concussion specialist.
 - d. The ATC or school nurse will perform the post-injury ImpACT test 24 hours after the injury or the next day the student is at school. The ATC examination will include a symptom checklist, neurologic examination and balance testing.
 - e. The Gradual Return to Sports Participation Program (Form #2) cannot be started until the pre- and post-injury ImpACT tests are interpreted by the PCP or the sports concussion specialist.

If the PCP decides not to interpret the post-injury ImpACT test:

- f. The ATC will call an appropriate healthcare professional (Dr. Donna Broshek 434-688-4940) and consult regarding the student-athlete's concussion. Dr. Broshek is a local Neuropsychologist specializing in sports concussion among other neurological conditions.
- g. The ATC will send written documentation that day via fax or email to include:
 - i. A detailed summary note, which will include all documentation of the injury in a SOAP format. (SOAP is an acronym for Subjective (tell the patient's story, their symptoms, history of the present event, pertinent medical history), Objective (first impressions of the scene or patient, the patient's physical exam finding, vitals), Assessment (conclusions based on patient's complaint and the physical exam), and Plan (What is/will be done for the

APPENDIX 1

Physician Referral Signs and Symptoms List (ED, PCP, Sports Medicine)

Day of Injury Referral

These are symptoms which require immediate transport to nearest emergency department via EMS

1. Deterioration of neurologic function
2. Decreasing level of consciousness
3. Decrease or irregularity of respirations
4. Decrease or irregularity of pulse
5. Unequal, dilated, or un-reactive pupils
6. Cranial nerve abnormalities
7. Any signs or symptoms of associated injuries; spine, skull fracture, or bleeding
8. Mental status changes: lethargy, difficulty maintaining arousal, confusion, or agitation
9. Seizure activity
10. Vomiting

Transport disposition is dependent on ATC assessment

11. Loss of consciousness on the field
12. Amnesia lasting longer than 15 minutes
13. Increase in blood pressure
14. Motor deficits subsequent to initial on-field assessment
15. Sensory deficits subsequent to initial on-field assessment
16. Balance deficits subsequent to initial on-field assessment
17. Cranial nerve abnormalities subsequent to initial on-field assessment
18. Post-concussion symptoms that worsen
19. Additional post-concussion symptoms as compared with those on the field
20. Athlete is still symptomatic at the end of the game

Referral after the Day of Injury

1. Any of the findings in the Day of Injury referral list
2. Post-concussion symptoms which become present later

MSA Concussion Recovery Guidelines (For teachers)

	Shortened Day	Full Day w/Accommodations	Full Day w/o Accommodations
Symptoms	Student has mild symptoms but can do light academic work for short intervals	Student can control symptoms with activity modification and/or can sit through full class asymptotically while being engaged	Student is symptom free for a full day of school without accommodation and student demonstrates clinical recovery
Teacher's Expectations and Accommodations	<ul style="list-style-type: none"> - NO TESTS or QUIZZES - NO STANDARDIZED TESTING - Encourage student to complete class work in short intervals in class - Class notes may need to be provided (assign a note-taking buddy) - Homework and make-up work completed as tolerated but not expected to be completed (pick essential problems) - Send student to infirm if symptoms worsen (15min) 	<ul style="list-style-type: none"> - NO QUIZZES or TESTS - NO STANDARDIZED TESTING - Homework and class work is expected to be attempted, but will be completed on an as tolerated basis (essential problems) - Send student to infirm if symptoms occur (10min) - Student is expected to try to be engaged when in the classroom 	<ul style="list-style-type: none"> - Student is expected to be fully engaged - Homework is expected to be completed in full - Make-up work will be completed with reasonable due dates (follow absence policy regarding make-up work) - Quizzes and tests allowed
Parent Recommendations	<ul style="list-style-type: none"> - May leave house if symptom- free - No parties, sleepovers, concerts, or activities that may be noisy, stressful or interfere with sleep - Try homework for short intervals 10min with 15 minute break slowly progress in time - Computer usage and phone usage allowed as long as it does not exacerbate symptoms - No physical activity other than short walks when symptom free 	<ul style="list-style-type: none"> - Avoid activities that create symptoms - No activities that interfere with getting a full night's rest - Homework is to be completed in intervals no longer than 45min work with 15min break - No physical activity other than walks when symptom free 	<ul style="list-style-type: none"> - No restrictions at home - No physical activity or team practices until cleared by athletic trainer (must complete a 5 day return to play progression under ATC supervision)

* Based on *Returning to Learning after a Concussion* from the American Academy of Pediatrics 11/13

MSA Concussion Recovery Guidelines (Student and Parent)

	Shortened Day	Full Day w/ Accommodations	Full Day w/o Accommodations
Symptoms	Student has mild symptoms but can do light academic work for short intervals	Student can control symptoms with activity modification and/or can sit through full class asymptotically while being engaged	Student is symptom free for a full day of school without accommodation and student demonstrates clinical recovery
Student Expectations	<ul style="list-style-type: none"> - Complete class work in short intervals in class - Report worsening symptoms to the teacher - Homework/make-up work completed as tolerated - NO TESTS, QUIZZES, STANDARDIZED TESTING 	<ul style="list-style-type: none"> - Homework and class work expected to be attempted - Be engaged when in the classroom - Report any occurrence of symptoms to the teacher - NO TESTS, QUIZZES, STANDARDIZED TESTING 	<ul style="list-style-type: none"> - Be fully engaged in class - Homework is completed in full - Make-up work completed in a reasonable amount of time - TESTS and QUIZZES ALLOWED
Parent Expectations	<ul style="list-style-type: none"> - No activities that are stressful or interfere with sleep - Homework completed in short intervals (10min work, 15min break) - Computer and phone usage allowed as long as it does not worsen symptoms - No physical activity other than short walks when symptom free 	<ul style="list-style-type: none"> - Avoid activities that cause symptoms - No activities that interfere with full night's sleep - Homework completed in intervals (45min work, 15min break) - No physical activity other than walks when symptom free 	<ul style="list-style-type: none"> - No restrictions at home - No physical activity or team practices until cleared by the athletic trainer (must complete 5 day return to play progression supervised by ATC)

*Based on *Returning to Learning after a Concussion* from the American Academy of Pediatrics 11/13

MSA Concussion Recovery Guidelines (Dorm Directors, Duty Teams)

	Shortened Day	Full Day w/Accommodations	Full Day w/out Accommodation
Symptoms	Student has mild symptoms but can do light academic work for short intervals	Student can control symptoms with activity modification and/or can sit through full class asymptotically while being engaged	Student is symptoms free for a full day of school without accommodation and student demonstrates clinical recovery
Dorm Parent/Duty Team Recommendations	<ul style="list-style-type: none"> - No activities that may be stressful or interfere with sleep (sleepovers, parties, etc) - Try homework for short intervals (10min work with 15min break) - Computer and phone usage allowed as long as it does not exacerbate symptoms - No physical activity other than short walks when symptom free 	<ul style="list-style-type: none"> - Avoid activities that create symptoms - No activities interfering with getting full night's sleep - Homework completed in intervals (45min work, 15min break) - No physical activity other than walks when symptom free 	<ul style="list-style-type: none"> - No restrictions in dorm - No physical activity or team practices until cleared by athletic trainer (must complete a 5 day return to play progression under ATC supervision)

* Based on *Returning to Learning after a Concussion* from the American Academy of Pediatrics 11/13

APPENDIX 2

Useful websites regarding concussions:

CDC Concussion in Sports

<http://www.cdc.gov/concussion/sports/index.html>

American Academy of Pediatrics (AAP) Sport-Related Concussion in Children and Adolescents

<http://pediatrics.aappublications.org/content/132/5/948.full.pdf+html>

<http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Concussion.pdf>

Virginia High School League (VHSL)

http://www.vhsl.org/sports_medicine/concussions

National Federation of State High School Associations (NFHS) Free online course

<http://www.nfhslearn.com/>

NFHS Parent's Guide to Concussion in Sports

<http://www.nfhs.org/content.aspx?id=3325>

REFERENCES

Albemarle County Public Schools, "Sports Concussion Management Plan", (2011) p.1-20

Halstead, Mark; Walters, Kevin and the Council on Sports Medicine and Fitness. "Sport-Related Concussion in Children and Adolescents", Pediatrics 126.3 (2010) p.597-615

Consensus Statement on Concussion in Sport 3rd International Conference on Concussion in Sport held in Zurich, 2008. Clinical Journal of Sports Medicine 2009.

CDC educational material available online at: <http://www.cdc.gov/concussion/HeadsUp/Training/index.html#>

Information regarding ImPACT is available online at www.impacttest.com

Written Notification of Concussion to Parent

Dear

While participating in athletics on (date) _____ your son/daughter _____ sustained a head injury that appears to be a concussion or brain injury. The attached fact sheet should answer your questions about concussions and how to treat them.

Your student-athlete's safety is our main priority. Your student-athlete will not be able to return to activity until a medical physician or your child's school athletic trainer (depending on their assessment) has determined that it is safe to do so with written clearance. Your student-athlete must complete the MSA supervised Gradual Return to Sports Participation Program prior to being allowed to compete. You should take your student-athlete to his/her primary care physician or the school can set-up an appointment for your child with MSA's school physician. If you have any questions or concerns please don't hesitate to contact me at the information listed below.

Sincerely,

Athletic Training Concussion Information for Parents and Guardians

What is a concussion?

A concussion is a brain injury which results in a temporary disruption of normal brain function. A concussion can be caused by a bump, blow, or jolt to the head or body. Even what seems to be a mild bump to the head can be serious. A student-athlete does not have to lose consciousness (or be “knocked out”) to suffer a concussion.

A concussion may cause multiple symptoms. Many symptoms appear immediately following the injury, while others may develop over the next several days or weeks. The symptoms may be subtle and are often difficult to fully recognize.

Signs and Symptoms of a Concussion				
Physical		Cognitive	Emotional	Sleep Patterns
Headache	Blurry or double vision	Feeling mentally “foggy”	Sadness	Excessive drowsiness
Nausea or vomiting	Fatigue	Feeling slowed down	Nervousness	Sleeping less than usual
Dizziness	Sensitivity to light or noise	Difficulty remembering	Irritability	Sleeping more than usual
Instability	Numbness/tingling	Difficulty concentrating	More emotional	Trouble falling asleep

What should I do in the first 24-38 hours?

- Your student-athlete should not be left alone. Check on him/her regularly throughout the night
- It is OK to let them sleep. You only need to wake them up if you are concerned about their breathing or how they are sleeping.
- Your student-athlete should not drive while they are still having symptoms.
- Check with your doctor before giving any prescribed pain medications.
- It is OK to use an ice pack on the head and neck for comfort.

When should I take my child to the doctor?

All student-athletes who sustain a concussion need to be evaluated by a licensed health care professional who is familiar with sports concussion diagnosis and management. You should call their physician and explain what has happened. A follow-up appointment should be scheduled with the primary care doctor or a sports concussion specialist if directed.

If any of your student-athlete’s signs or symptoms worsen, then proceed IMMEDIATELY to the nearest emergency medical facility. Additional symptoms to watch for that would require IMMEDIATE MEDICAL ATTENTION include:

Headaches that worsen	Very drowsy, can’t be awakened	Can’t recognize people or places
Seizures	Repeated vomiting	Increasing confusion
Neck pain	Slurred speech	Weakness/numbness in arms/legs
Unusual behavior changes	Significant irritability	Less responsive than usual

When can a student-athlete return to play following a concussion?

NO student-athlete should return to play or practice on the same day as the injury. Studies have shown that a young brain does not recover quickly enough for a student-athlete to return to activity in such a short time. Your student-athlete **should not participate in any high-risk activities which may lead to head injury. This includes physical education class, recess, and riding a bike or skateboard** until they have been cleared to do so by a licensed health care professional.

Once a student-athlete has been completely symptom-free for a minimum of 24 hours and is cleared to return to physical activity by a licensed healthcare professional (with knowledge of care for sports concussions) he or she may proceed with activity in a supervised, step-by-step fashion, to allow the brain to re-adjust to exertion. This should occur over a minimum of five (5) days. (See Gradual Return to Sports Participation-Form #2)

**Signed medical clearance to begin the Gradual Return to Sports Participation must be returned to your school ATC prior to beginning the progression.*

How can a concussion affect school work?

Following a concussion, many student-athletes will have difficulty in school. These problems may last for days or months and often involve difficulties with short- and long-term memory, concentration, and organization. In many cases it is best to lessen the student-athlete’s class load early on after the injury. This may include staying home from school for a few days then a lightened schedule for a few additional days. It is possible that a longer period of time may be needed. Decreasing the stress on the brain early on after a concussion may lessen symptoms and shorten recovery time.

Why is it so important that a student-athlete not return to play until they have completely recovered from a concussion?

A second concussion that occurs before the brain recovers from the first can slow recovery or increase the chances of long-term problems. In rare cases brain swelling can result, leading to permanent brain damage or even death. This is known as second impact syndrome.

What is the best treatment to help my student-athlete recover more quickly from a concussion?

The best treatment for a concussion is rest, both physically and mentally. There are no medications that can speed the recovery from a concussion. Exposure to loud noises, bright lights, computers, video games, television, and phones (including text messages) may worsen the symptoms of a concussion. You should allow your student-athlete to rest as much as possible in the days following the injury. As the symptoms decrease, you can allow increased use of electronic devices. If symptoms worsen after increasing use, access must again be limited.

How long do the symptoms of a concussion typically last?

The symptoms of a concussion will usually go away within one week of the initial injury. In some cases symptoms may last for several weeks or even months.

Is a CT scan or MRI needed to diagnose a concussion?

Diagnostic testing, including CT and MRI scans are rarely needed following a concussion. While these are helpful in identifying life-threatening brain injuries, they are not normally utilized by student-athletes with mild to severe concussions. A concussion is diagnosed based on the student-athlete's description of the injury or event and the licensed healthcare provider's physical examination.

When should the student-athlete see a sports concussion specialist?

Any student-athlete who has had significant or recurrent head injuries or whose symptoms persist beyond 5-7 days may benefit from an evaluation completed by a pediatric sports concussion specialist. Your child's physician may also recommend a specialty evaluation if they have any concerns or need further assistance with the student-athlete's concussion management. Neuropsychological testing, which should be part of the evaluation when possible, can be helpful to assist with return to academic and physical activity, (2010 AAP Sport-Related Concussion in Children and Adolescents)

Some of this information has been adapted from the CDC's "Head's Up: Concussion in High School Sports" and the NFHS's Sports Medicine Advisory Committee. Please go to www.cdc.gov for more information.

GRADUAL RETURN TO SPORTS PARTICIPATION FOLLOWING A CONCUSSION

After a student-athlete has sustained a concussion, they will be started on a supervised Gradual Return to Sports Participation program only after they have received written medical clearance from a licensed health care provider. Ideally, the program will be supervised by a school certified athletic trainer (ATC).

Stage of Rehabilitation	Functional Exercises	Objective of the Stage
1. No Activity	Complete physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming, stationary cycling, keep intensity < 70% maximum heart rate; no resistance exercises	Increase heart rate
3. Sport-specific exercise	Sport specific drills but no head impact	Add movement
4. No-contact training drills	More complex training drills; may start light resistance training	Improve exercise, coordination, cognitive load
5. Full-contact practice	After medical clearance – participate in normal training	Restore confidence and allow for coaches to assess functional skills
6. Return to play	Normal game play	

(2010 AAP Sport-Related Concussion in Children and Adolescents, 2008 Zurich Concussions in Sport Group Consensus Statement)

Each stage in concussion rehabilitation should last no less than 24 hours. The program will last for a minimum of five days before consideration of a return to competition. If symptoms recur during the rehabilitation program, the student-athlete should stop immediately. Once the student-athlete is asymptomatic for at least 24 hours, they should resume at the previous asymptomatic level and try to progress from there. Student-athletes must contact their licensed healthcare provider if symptoms return. Any student-athlete with multiple concussions or prolonged symptoms may require a longer concussion rehabilitation program, which should ideally be created by a physician who is experienced in concussion management.

Prior to participation in a full-contact practice the student-athlete will be given a post-injury ImPACT test that will be interpreted by a physician knowledgeable in concussion management. The ImPACT test results will be used in conjunction with the entire history and assessment to help determine “return to play” status.

As each sports concussion is unique, the concussion management plan will be individualized for each student-athlete. The ultimate goal of the concussion program is to allow a safe return to play and minimize any long-term health problems from a concussion.

Student-Athlete: _____ Date of Evaluation: _____

The student-athlete named above has suffered a concussion and may not return to **ANY** contact sport activity (practice, games, contact drills, conditioning) until cleared by this clinic. Please see below for permitted levels of exertion:

_____ No physical exertion until next clinic visit _____

_____ No physical exertion until _____

_____ May begin return to play progression when symptom free for 24hrs and ImPACT scores return to baseline (ATC supervision)

Return to Play Progression (EACH STEP REQUIRES AT LEAST 24HRS)

1. If student-athlete is **symptom free for 24 hours he/she can begin low levels of physical exertion. This includes walking, light jogging, and light stationary biking (heart rate <70% max).**
2. If student-athlete remains symptom free, begin moderate levels of physical exertion. **This includes moderate jogging/brief running, moderate-intensity stationary biking, light weightlifting (reduced time and reduced weight from your typical routine), sport-specific exercise (e.g., running drills in soccer), but NO head impact.**
3. If student-athlete is symptom free, begin high levels of physical exertion. **This includes sprinting/running, high-intensity stationary biking, and regular weight-lifting routine, no-contact, sport-specific drills (e.g. passing drills in football).**
4. If student-athlete is symptom free, begin **full-contact training.**
5. If student-athlete is **symptom free he/she can return to full sports participation.**

****** EACH STEP REQUIRES AT LEAST 24HRS******

ACADEMIC RECOMMENDATIONS

___ No return to school. Return on (date) _____

___ Shortened day starting at 8am. Recommend ___ hours per day until (date) _____

___ Shortened classes (i.e. rest breaks during classes). Maximum class length: ___ minutes.

___ Allow extra time to complete coursework/assignments and tests.

___ Lessen homework load by ____%. Maximum length of nightly homework: ___ minutes.

___ No significant classroom or standardized testing at this time.

___ Check for the return of symptoms when doing activities that require a lot of attention or concentration.

___ Take rest breaks during the day as needed.

___ Request meeting of Academic Administration and Concussion Management Team to discuss further academic modifications or supports

Additional recommendations and special instructions:

Doctor's Print name/signature _____

Date _____ Time: _____

CONCUSSION INFORMATION SHEET

Parents and student-athletes are to read and sign the 2nd page of this document, keep a copy for themselves and return a copy prior to attending any practice.

A Concussion is a brain injury and all brain injuries are serious. They are caused by a bump, blow, or jolt to the head, or by a blow to another part of the body with the force transmitted to the head. They can range from mild to severe and can disrupt the way the brain normally works. Even though most concussions are mild, all concussions are serious and have the potential to result in complications including prolonged brain damage and death if not recognized and managed properly. In other words, even a “ding,” “getting your bell rung,” or a bump on the head can be serious. You can’t see a concussion, and most sports concussions occur without loss of consciousness. Signs and symptoms of concussion may show up right after the injury or can take hours or days to fully appear. If your student-athlete reports any symptoms of concussion, or if you notice the symptoms or signs of concussion yourself, seek medical attention right away.

***Symptoms may include one or more of the following:**

· Headaches	· Irritability
· “Pressure in the head”	· More emotional
· Nausea or vomiting	· Confusion
· Neck pain	· Concentration or memory problems
· Feeling foggy	· Repeating the same question/comment
· Drowsiness	· Change in sleep patterns
· Fatigue or low energy	· Balance problems or dizziness
· Sadness	· Blurred, double, or fuzzy vision
· Nervousness or anxiety	· Sensitivity to light or noise

***Signs observed by teammates, parents and coaches include:**

· Appears dazed	· Shows behavior or personality changes
· Vacant facial expression	· Can’t recall events that happened pre-injury
· Confused about assignment	· Can’t recall events that happened post-injury
· Forgets plays	· Seizures or convulsions
· Is unsure of game, score, or opponent	· Any change in typical behavior or personality
· Moves clumsily or is uncoordinated	· Slurred speech
· Answers questions slowly	· Loss of consciousness (LOC)

*Adapted from the ACPS, CDC, AAP and 3rd International Conference on Concussion in Sports

CONCUSSION INFORMATION SHEET

What could happen if my student-athlete keeps playing with a concussion or returns too soon?

Student-athletes with the signs and symptoms of a concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the student-athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after the concussion occurs, particularly if the student-athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (second impact syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage student-athletes will often under report symptoms of injuries. Concussions are no different. As a result, the education of administrators, coaches, parents and student-athletes is critical for the student-athlete's safety.

If you think your student-athlete has suffered a concussion...

Any student-athlete even suspected of suffering a concussion should be removed from the game or practice immediately. No student-athlete may return to activity after an apparent head injury or concussion, regardless of how mild it seems or how quickly symptoms clear, without medical clearance. Close observation of the student-athlete should continue for several hours. MSA requires the consistent and uniform implementation of well-established "return to play" concussion guidelines that have been recommended for several years:

"A student-athlete who is suspected of sustaining a concussion or head injury in a practice or game shall be removed from competition at that time" AND "...may not return to play until the student-athlete is evaluated by a licensed health care provider trained in the evaluation and management of concussion and received written clearance to return to play from that health care provider, which will initiate the Gradual Return to Sports Participation Program (Form #2). You should also inform your child's coach if you think that your child may have a concussion. Remember... it's better to miss one game than miss the whole season. And..."when in doubt, the athlete sits out."

For current and up-to-date information on concussions you can go to:

<http://www.cdc.gov/Concussions>

Student-Athlete Name Printed

Student-Athlete Signature

Date

Parent or Legal Guardian Printed

Parent or Legal Guardian Signature

Date

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