Concussion Management Procedures

1.) A concussion information handout will be given to all coaches, and all athletes and their parent/guardian before each sports season. Both oral and written instructions for home care should be given to the concussed athlete and to a responsible adult (eg, parent/guardian) who will observe and supervise the patient during the acute phase of the concussion.
2.) After the initial monitoring period, rest is currently the best practice for concussion recovery. As such, there is typically no need to wake the patient during the night unless instructed by a physician.
3.)During the acute stage of injury, the patient should be instructed to avoid any physical or mental exertion that exacerbates symptoms.
4.) After a concussion diagnosis, the patient should be instructed to avoid medications other than acetaminophen. All current medications should be reviewed by the physician.
5.) In addition to exclusion from physical activity related to team activities, concussed student-athletes should be excused from any activity requiring physical exertion (eg, physical education classes). School administrators, counselors, and instructors should be made aware of the patient's injury with a recommendation for academic accommodation during the recovery period.
6.) Athlete will be imPACT tested once asymptomatic and scores will be compared to pre-injury, baseline scores.
7.) Before beginning the return to play progression, patient must have clearance from a Sports-Medicine trained physician. While in the return to play progression, patient must be cleared by a Sports Medicine physician prior to moving onto Step 5.
8.) Return to activity following a concussion is a medical decision. Progression is individualized, and must be closely supervised according to the schools' policies and procedures, and will be determined on a case-bycase basis.

After the student has not experienced symptoms attributable to the concussion for a minimum of 24 hours, has returned to school on a full-time basis, and reaches pre- concussion SCAT5 scores, the stepwise progression as listed below shall be followed:

Step 1: Light cardiovascular exercise
Step 2: Running in the gym or field, no helmet or other equipment.
Step 3: Non-contact training drills in full-equipment, Weight training

Step 4: Full, normal practice or training (walk-throughs do not count as full, normal practice)
Step 5: Full participation (must be cleared by MD/DO/Neurophyschologist prior to reaching this step)

A minimum of one full day must be spent at each step before advancing to the next. If concussion symptoms return with any step, the athlete must stop activity and contact the treating healthcare provider. The athlete may be told to rest for 24 hours, and then resume activity at a level one step below where he/she was when symptoms returned.

8.) Sideline evaluation

A.) At the time of suspected injury, the initial evaluation should assess acute trauma. If the athlete is unable to leave the field under his or her own power, the AT should perform a primary survey, including evaluation of airway, breathing, and circulation (ie, the ABCs).
B.) Whether the patient is conscious or not, the AT should suspect and, if possible, rule out a cervical spine injury and other more severe injuries. Once no life-threatening injuries are determined to be present, the concussion examination should begin.
C.) Graded symptom checklist, a SCAT5 screening, and a cranial nerve test will be used to evaluate current symptoms. An athlete determined to have a concussion or have concussion-like symptoms will be removed from practice or competition and is not allowed to return to practice or competition that same day.
D.) Student-Athlete will referred to sports medicine MD/DO for management of concussion and player's return to sport.

9.) Multiple concussions

Referral to a physician or designate with concussion training and experience should be considered when an athlete with a history of multiple concussions sustains concussions with lessening forces, demonstrates increasing severity with each injury, or demonstrates objective or subjective changes in baseline brain function.

a. The AT should recognize the potential for second-impact syndrome in young patients who sustain a second trauma to the brain prior to complete resolution of the first injury.
b. The AT should be aware of the potential for long-term consequences of multiple sub-concussive and concussive impacts.
c. Student-Athletes with multiple concussions should be told that progression may happen more slowly, and return to play progression will be determined by sports medicine physician.

10.) Return to Learn protocol

Step 1: Complete Rest
A. Present Characteristics:
-Severe symptoms at rest
-Students may complain of intense and continuous/frequent headaches -Students may not be able to read for more than 10 minutes without an increase in symptoms
-No PE or athletic participation (includes practices and attending events)
B. Interventions:
-No school attendance for at least one full day- emphasize cognitive and physical rest
**Limit television and cell phone usage at this time.*
-Sports: does not attend practice/games
-No tests, quizzes or homework
-School nurse and/or guidance counselor will notify student's teachers and appropriate staff who will follow recommendations.
Student-Athlete may return to school once they are able to tolerate visual and auditory stimulation for 30-45 minutes at the time. They may return to school with adjustment as described in this protocol and as decided upon by Team Physician, School Nursing staff, Athletic Training staff and the Athletic Administration.

Step 2: Return to School (Options for altered daily schedule if needed)
A. Present Characteristics
-Mild symptoms at rest, but increasing with physical and mental activity B. Interventions
-Modified class schedule (for example, alternating morning/afternoon classes each day)

- No PE or athletic participation (may attend practices or PE class but no participation

-Avoid choir, band, PE areas, cafeteria

-Rest in nurse's office to offer breaks between academic classes

-Reduce weight of backpack or provide second set of textbooks (teachers) -Authorization to leave class 5 minutes early to avoid crowded hallways -Limit computer work, videos/movies in class

-No quizzes or tests, limit homework

Step 3: Full Day of School Attendance

A. Present Characteristics: -Symptom free at rest

-Mild to moderate symptoms with cognitive and school day activity

-No PE or athletic participation {may attend practices/events or PE class, but no participation)

B. Interventions:

- Progress to limited homework, tests, quizzes (may split tests into halves, limit to 1 test per day.

Step 4: Full Academic and Partial Athletic Participation

A. Present Characteristics:

-Symptom free with cognitive and physical activity

-Student should report any return of symptoms with cognitive or school day activity

Student will begin the MSHSAA required Return to Play Protocol with the athletic trainer. Return to play timing may vary as determined by physician.