# PENN MANOR HIGH SCHOOL ATHLETICS SPORTS MEDICINE HANDBOOK



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### SCOPE OF PRACTICE

"Athletic Training" means the form of health care that includes the practice of preventing, recognizing, assessing, managing, treating, disposing of, and reconditioning athletic injuries under the direction of a physician licensed in this state or another qualified, licensed health professional who is authorized to refer for health care services within the scope of the person's license.

The Penn Manor School Sports Medicine Staff shall be licensed by the State of Pennsylvania & certified by the National Athletic Trainers Association. With this license, all staff athletic trainers shall practice under the direction of a Pennsylvania licensed team physician.

#### **MISSION STATEMENT**

The Penn Manor High School Sports Medicine Department strives to provide the student-athletes with the utmost quality health care. In doing so, the Sports Medicine staff is devoted to the care, prevention, treatment, and rehabilitation of injuries and illnesses while maximizing athletic performance. The Sports Medicine Department is dedicated to providing the Penn Manor student-athletes with the latest in sports medicine research and technology, and to create an environment that promotes the total wellness of the student, the athlete, and the person.

# ATHLETIC TRAINING STAFF / COACHING STAFF RELATIONSHIP

A. Injuries take variable amounts of time to heal properly. Understand that the team physician and the athletic training staff will return a student-athlete to participation when the time is appropriate and safe for the student-athlete.

- B. Purchase or distribution of any nutritional supplements and/or ergogenic aids by coaches is strictly prohibited by the PIAA & Penn Manor High School Athletic Department. If a student-athlete is taking supplements and/or ergogenic aids, they must disclose this information in the pre-participation physical exam. The athletic training staff will then research these substances to ensure the student-athletes safety and compliance with PIAA standards.
- C. Over-the-counter medication such as non-steroidal anti-inflammatories (NSAIDS), cough medicine, or any other such medication will not be administered to athletes without prior written authorization from a licensed healthcare provided and the athlete's parent/guardian.
- D. It is the expectation of the athletic training staff that coaches will not attempt to evaluate, treat, or rehabilitate athletic injuries/illnesses.
- E. In the event of injury or illness, the head coach or the coach in charge of a specific group will be given the student-athlete's status as soon as possible.
- F. If a coach is not satisfied with the care being rendered to his/her student-athletes by a certified athletic trainer, he/she should direct his or her concerns to the Director of Athletics.
- G. Athletic training students are under the direct supervision of a certified athletic trainer. If a coach has concerns regarding an athletic training student he/she should notify the supervising certified athletic trainer.

# ATHLETIC TRAINING ROOM POLICIES

# PENN MANOR HIGH SCHOOL ATHLETIC TRAINING ROOM SCHEDULE

Generally, the Penn Manor training room is open Monday through Friday, 3:00pm to 5:00 pm. However, during the summer and holiday season, the Penn Manor athletic training room hours will be adjusted and posted. Special scheduling arrangements will be made for athletic teams that hold practice or competition on designated state holidays. Athletic training facilities are open for designated periods of time so that all Penn Manor athletic teams have the opportunity to use the facilities both prior to and after practices, workouts, and competition.

# ATHLETIC TRAINING ROOM RULES IN GENERAL

The use of all athletic training facilities and the conduct of the athletic training staff, athletic training students, and student-athletes will be governed by the athletic training room rules as set forth by the Director of Sports Medicine and his staff. In general, these rules shall include the following:

- 1. No rough-housing or horse-play.
- 2. No abusive language or cursing.
- 3. No eating or drinking in the Athletic Training Room.
- 4. No cleats or muddy shoes into the Athletic Training Room.
- 5. Do not bring athletic equipment into the Athletic Training Room.
- 6. In order to receive post-practice treatment all student-athletes must first shower and change out of practice clothes.
- 7. Student-athletes should be sure that they are completely dry when entering the athletic training room from showers or whirlpools.
- 8. Do not treat yourself. An athletic trainer will assist you.
- 9. Return loaned items to the Athletic Training Room. If items are not returned, the student-athletes registration may be held until the item is returned. If the item is not returned, the athletic training department may be reimbursed directly from the student-athletes scholarship funds.
- 10. No student-athletes are permitted to be in the storage area or in the athletic training offices without permission.
- 11. Athletic training room telephones, fax machines, and computers are off-limits for all student-athletes.
- 12. Treatments are given only upon doctor's or athletic trainer's approval. The medical staff will decide what care each injury will receive.
- 13. Treatments are to be continued until the medical staff indicates that treatments may be terminated.
- 14. No supplies are to be removed from the athletic training room without the permission of a staff athletic trainer.
- 15. Never touch the modality equipment. It is dangerous and can cause harm to student-athletes should they be used improperly.
- 16. Ice is for athletic training room use only. Contamination of ice machines by hands or items other than ice scoops is prohibited.
- 17. Student-athletes need to allow ample time to receive treatment or rehabilitation prior to practice.
- 18. All athletes must dress out for each practice even though injured and unable to participate unless told otherwise by the staff athletic trainer.

# ATHLETIC TRAINING ROOM PROCEDURES

- 1. No one is to be in the athletic training room without the permission of the certified athletic trainer. *Athletes are not to be in the athletic training room without the certified athletic trainer present.*
- 2. No coaches or administrators will allow athletes into the athletic training room without <u>direct</u> supervision.
- 3. Shoes are to be placed under the treatment tables. Cleats are not to be worn in the training room.
- 4. Athletes are to leave immediately after treatment and to report to their coach or their strength coach for further instructions.
- 5. Coaches will be informed of the return to play availability of the athlete as well as the rehabilitation the athlete is to have.

# RISK MANAGEMENT PROCEDURES FOR ATHLETIC TRAINING EQUIPMENT AND FACILITIES

# CLEANING AND STRILIZATION OF ALL MODILITIES AND EQUIPMENT IS IMPERATIVE AFTER EACH USE.

- 1. TREATMENT TABLES ARE TO BE SPRAYED WITH A DISINFECTANT AND WIPED DOWN AFTER EACH USE TO PREVENT THE SPREAD OF GERMS SUCH AS MRSA. A 10:1 RATIO OF WATER TO BLEACH MAY BE USED.
- 2. WHIRLPOOLS WILL BE CLEANED WITH A DISINFECTANT APRROVED BY THE CERTIFIED ATHLETIC TRAINER BEFORE AND AFTER THEIR USE.
- 3. A WHIRLPOOL CONCENTRATE SOLUTION WILL BE ADDED TO THE WATER DURING WHIRLPOOL USE TO KILL GERMS IN THE WATER. THIS IS A STANDARD PRRACTICE.
- 4. ATHLETES WITH OPEN WOUNDS WILL NOT BE ALLOWED TO USE THE WHIRLPOOLS.
- 5. ATHLETES SHOULD PROVIDE THEIR OWN TOWELS FOR WHIRLPOOL USE.
- 6. TOWELS SUPPLIED BY THE TRAINING ROOM WILL BE WASHED BY THE TRAINING ROOM STAFF USING BLEACH AND LAUNDRY SOAP.

# **INJURY MANAGEMENT**

All injuries are to be the coach first and then to the certified athletic trainer. The school nurse is not to be contacted. The school nurse will be included if necessary by the certified athletic trainer.

Athletic injury reports are to be completed by the coach the same day of the injury using a printed form or by Google Docs. These are necessary if the athlete is to be seen by a doctor or is transported to a hospital from the practice or game. The injury report will be signed by the coach, athletic trainer and the principal. Copies will be kept by the athletic trainer, athletic director and the school nurse.

During a practice or game if an injury occurs, the athletic trainer will respond & assess the incident. The athletic trainer will then determine if the athlete can be moved to an area for additional care or if 911 should be called.

In the athletic trainer's absence, student trainers will assist the coach or other designated personnel with the injury. The coach can then decide if immediate advanced care is needed such as: ambulance, hospital, etc. Injuries requiring advanced immediate care will usually have severe pain, numbness, severe swelling, deformity, unconsciousness as well as back & neck injuries with these signs & symptoms. In the event of a back & neck injury, <u>DO NOT MOVE THE ATHLETE. IMMOBILIZE THE HEAD & NECK & CALL 911.</u>

All injuries are to be reported to the athletic trainer for further evaluation, care & treatment. The athletic trainer or a coach who is witness to the injury should complete an athletic injury report.

The standard protocol for the care of athletic injuries is R.I.C.E.: rest, ice, compression and elevation.

The athletic trainer can also be contacted by cell phone/text if necessary.

A written medical release must be given to the injured athlete from the doctor & athletic trainer before the athlete can resume play &/or practice.

# **Penn Manor School District Sports Medicine Guidelines**

# Written Medical Releases for Return to Participation from Routine Exams or Illness Any student athlete who sees a licensed medical professional should secure a written release for sports in order to return to athletic participation. This includes ANY type of physician visit .Licensed medical professionals include: ☐ Medical Doctor (MD, DO), or any specialist with the credentials MD or DO ☐ Dentist (DMD) or any specialist with the credentials MD or DMD ☐ Podiatrist (DPM) Healthcare professionals that **cannot return** an athlete from injury include, but are not limited to: ☐ Chiropractors ☐ Physical Therapists ☐ Massage Therapists ☐ Sports Performance Specialists, etc Written Medical Releases for Return to Participation from an Injury All injuries that occur at home or away events should be reported to the Licensed Athletic Trainer in the Penn Manor School District. If the student-athlete seeks additional medical attention from a licensed healthcare provider, they must secure a written release stating when they can return to full participation. However, if the student-athlete does not meet the following criteria for return to participation (90% strength, pain free range of motion, normal gait, etc) the Licensed Athletic Trainer retains the right to withhold that athlete from participation until they meet the above criteria and are able to return to participation in a safe manner, as instructed by the school medical director. All releases should contain student-athletes name, date, reason for visit, diagnosis, and date for full return to participation without restrictions • It can also include any special athletic training/rehabilitation requests or requirements **Concussion Management Plan** All student-athletes are required to complete a baseline Neuro-Cognitive Concussion baseline test before participation in athletics. Penn Manor Athletic Training Department offers the IMPACT baseline concussion test to all athletes as a baseline testing tool. All student-athletes suspected of a concussion should be evaluated and cleared by a licensed healthcare professional trained in the evaluation and management of concussions. The student-athlete may complete a 5 Phase Return to Participation with the staff Licensed Athletic Trainer at Penn Manor High School if designated by a licensed healthcare professional trained in the evaluation and management of concussions. **Athletic Training Services** There is 1 Licensed Athletic Trainer at Penn Manor High School. The athletic training room is open 5 days a week from 1:30pm until completion of all athletic events. All rehabilitation and treatment must begin 30 minutes before practice or pre-game. After school treatments should be started no later the 3:00pm Taping and bracing is only done with conjunction with completion of a comprehensive daily rehabilitation program. Treatments include hydrotherapy, cryotherapy, thermal therapy, ultrasound, electrical stimulation, and manual therapies. Rehabilitations include bikes, treadmills, physioballs, plyometric equipment, thera-bands, and weight room access. Consultations on core, strength, flexibility, nutritional, hydration, weight, concussion management, and sports specific training can also be addressed. Student---Athlete Signature Date

Date

Parent/Guardian Signature

# Penn Manor Sports Medicine Department Concussion Management Plan

Due to recommendations at the collegiate and scholastic school level the Penn Manor Sports Medicine Department has adopted the following policy for its athletics program:

"Institutions shall have a concussion management plan on file such that a student-athlete who exhibits signs, symptoms, or behaviors consistent with a concussion shall be removed from practice or competition and evaluated by an athletics healthcare provider with experience in the evaluation and management of concussion. Student-athletes diagnosed with a concussion shall not return to activity for the remainder of that day. Medical clearance shall be determined by the team physician or their designee according to the concussion management plan. In addition, student-athletes must sign a statement in which they (or their parent/guardian) accept the responsibility for reporting their injuries and illnesses to the institutional medical staff, including signs and symptoms of concussions. During the review and signing process student-athletes should be presented with educational material on concussions."

The following are the recommendations and implemented policies for a Concussion Management Plan according to PA Senate Bill 200, The Safety in Youth Sports Act and the 2010 NCAA Memorandum on Concussion Management Plans:

1. Institutions shall require student-athletes (and parent/guardian) to sign a statement in which student-athletes (and parent/guardian) accepts the responsibility for reporting their injuries and illnesses to the institutional medical staff (Licensed Athletic Trainers), including signs and symptoms of concussions. During the review and signing process student-athletes (and parent/guardian) should be presented with educational material about concussions.

The Penn Manor Sports Medicine Department requires all student-athletes and parent/guardian to review and Section 3 "Understanding of Risk of Concussion and Traumatic Brain Injury" as part of the Comprehensive Initial Pre-Participation Physical Evaluation (CIPPE) required by the PIAA.

2. Institutions should have on file and annually update an emergency action plan for each athletics venue to respond to student-athlete catastrophic injuries and illnesses, including but not limited to concussions, heat illness, spine injury, cardiac arrest, respiratory distress (asthma), and sickle cell trait collapses. All athletics healthcare providers and coaches should review and practice the test annually.

The Penn Manor Sports Medicine Department has an Emergency Action Plan (EAP) that is made available to all athletics healthcare providers, coaches, and athletic staff at the beginning of each season. The EAP is also posted on the Sports Medicine website.

3. Institutions should have on file an appropriate healthcare plan that includes equitable access to athletics healthcare providers for each sport.

The Penn Manor Sports Medicine Department provides healthcare to all student-athletes involved in Penn Manor athletics. In-season athletes have access to healthcare services and take precedence over out-of-season athletes and injuries occurring outside of Penn Manor.

- 4. Athletics healthcare providers should be empowered to have the unchallengeable authority to determine management and return-to-play of any ill or injured student-athlete, as he or she deems appropriate. For example, a countable coach should not serve as the primary supervisor for an athletics healthcare provider nor should they have the sole hiring or firing authority over that provider.
- 5. Institutions shall have on file a written team physician-directed concussion management plan that specifically outlines the role of athletics healthcare staff (e.g. physicians, athletic trainers, physician assistant, neuropsychologists). In addition, the following components have been specifically identified for the collegiate environment:

a. Institutions should ensure coaches have acknowledged they have taken an approved Concussion Education Course and understand the concussion management plan, their role within the plan and have turned in documentation that they have successfully completed an approved course that includes education about concussions.

The Penn Manor Sports Medicine Department makes available to all coaches and parents the concussion management plan, which addresses their roles within it.

b. Athletics healthcare providers should practice within the standards as established for their professional practice (e.g. physicians, athletic trainers, physician assistants, neurologist, neuropsychologist).

The athletic trainer on staff at Penn Manor High School follow the Standard Operating Procedures as directed by the school physician director.

c. Institutions should record a baseline assessment for each student-athlete prior to the first practice in the sports of baseball, basketball, field hockey, football, soccer, and wrestling, at a minimum. The same baseline assessment tools should be used post-injury at appropriate time intervals.

All student-athletes who participate in listed athletics at Penn Manor must complete baseline testing using IMPACT concussion test

d. When a student-athlete shows any signs, symptoms, or behaviors consistent with a concussion, the athlete shall be removed from practice or competition and evaluated by an athletics healthcare provider with experience in the evaluation and management of concussion.

Any student-athlete who is suspected of sustaining a concussion must obtain a written medical release from a licensed healthcare professional trained in the evaluation and management of concussion before they will be allowed to return to participate in athletics.

e. A student-athlete diagnosed with a concussion shall be withheld from the competition or practice and not return to activity the remainder of that day.

Any athlete who is suspected of sustaining a concussion will NOT be permitted to return to practices or games that day or until further evaluation and testing have been completed.

f. The student-athlete should receive serial monitoring for deterioration. Athletes should be provided with written instructions upon discharge; preferably with a roommate, guardian, or someone that can follow the instructions.

All student-athletes who have suffered a known concussion at a Penn Manor athletic event where a staff athletic trainer is present shall receive written instructions for their parents/guardians. Those written instructions are also available on the Sports Medicine website.

g. The student-athlete should be evaluated by a team physician as outlined within the concussion management plan. Once asymptomatic and post-exertion assessments are within normal baseline limits, return to play should follow a medically supervised stepwise process.

As part of the Concussion Management Plan, student-athletes can complete the 5 Phase RTP exertion program with the athletic trainers at Penn-Trafford, if designated by a healthcare professional trained in the evaluation and management of concussions.

- h. Final authorization for Return-to-Play shall reside with the team physician or the physician designee.
- 6. Institutions should document the incident, evaluation, continued management, and clearance of the student-athletewith a concussion.
- 7. Although sports currently have rules in place; athletics staff, student-athletes and officials should continue to emphasize that purposeful or flagrant head or neck contact in any sport should not be permitted and current rules of play should be strictly enforced. Due to passage of the SB 200 "Safety in Youth Sports Act" on November 9, 2011, the Penn Manor Sports Medicine Department has adopted the following policy for its athletics program:

"Section 1. Short title. This act shall be known and may be cited as the Safety in Youth Sports Act. Section 2. Definitions. The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise: "Appropriate medical professional." All of the following: (1) A licensed physician who is trained in the evaluation and management of concussions or a licensed or certified health care professional trained in the evaluation and management of concussions and designated by such licensed physician. (2) A licensed psychologist neuropsychologically trained in the evaluation and management of concussions or who has postdoctoral training in neuropsychology and specific training in the evaluation and management of concussions. "Athletic activity." All of the following: (1) Interscholastic athletics. (2) An athletic contest or competition, other than interscholastic athletics, that is sponsored by or associated with a school entity, including cheerleading, clubsponsored sports activities and sports activities sponsored by school-affiliated organizations. (3) Noncompetitive cheerleading that is sponsored by or associated with a school entity. (4) Practices, interschool practices and scrimmages for all of the activities listed under paragraphs (1), (2) and (3). "Interscholastic athletics." As defined in section 1602-A of the act of March 10, 1949 (P.L.30, No.14), known as the Public School Code of 1949. "School entity." As defined in section 1602-A of the act of March 10, 1949 (P.L.30, No.14), known as the Public School Code of 1949. Section 3. Concussions and traumatic brain injuries. (a) Educational materials. The Department of Health and the Department of Education shall develop and post on their Internet websites guidelines and other relevant materials to inform and educate students participating in or desiring to participate in an athletic activity, their parents and their coaches, about the nature and risk of concussion and traumatic brain injury, including the risks associated with continuing to play or practice after a concussion or traumatic brain injury. In developing the guidelines and materials, the departments shall utilize existing materials developed by the Centers for Disease Control and Prevention. A student participating in or desiring to participate in an athletic activity and the student's parent or guardian shall each school year, prior to participation by the student in an athletic activity, sign and return to the student's school an acknowledgment of receipt and review of a concussion and traumatic brain injury information sheet developed under this subsection. (b) Informational meeting. A school entity may hold an informational meeting prior to the start of each athletic season for all ages of competitors regarding concussions and other head injuries, the importance of proper concussion management and how preseason baseline assessments can aid in the evaluation, management and recovery process. In addition to students, parents, coaches and other school officials, informational meetings may include physicians, neuropsychologists, athletic trainers and physical therapists. (c) Removal from play. A student who, as determined by a game official, coach from the student's team, certified athletic trainer, licensed physician, licensed physical therapist or other official designated by the student's school entity, exhibits signs or symptoms of a concussion or traumatic brain injury while participating in an athletic activity shall be removed by the coach from participation at that time. (d) Return to play. The coach shall not return a student to participation until the student is evaluated and cleared for return to participation in writing by an appropriate medical professional. The governing body of a school entity may designate a specific person or persons, who must be appropriate medical professionals, to provide written clearance for return to participation. In order to help determine whether a student is ready to return to participation, an appropriate medical professional may consult any other licensed or certified medical professionals. (e) Training course. Once each school year, a coach shall complete the concussion management certification training course offered by the Centers for Disease Control and Prevention, the National Federation of State High School Associations or another provider approved by the Department of Health. A coach shall not coach an athletic activity until the coach completes the training course required under this subsection. (f) Penalties. The governing body of a school entity shall establish the following minimum penalties for a coach found in violation of the requirements under subsection (c) or (d), which penalties shall take effect two years following the effective date of this section: (1) For a first violation, suspension from coaching any athletic activity for the remainder of the season. (2) For a second violation, suspension from coaching any athletic activity for the remainder of the season and for the next season. (3) For a third violation, permanent suspension from coaching any athletic activity. (g) Other youth athletic activities. The sponsors of youth athletic activities not specifically addressed by this act are encouraged to follow the guidance set forth in this act. (h) Construction. Nothing in this act shall be construed to abridge or limit any rights provided under a collective bargaining agreement or any rights provided under the act of July 23, 1970 (P.L.563, No.195), known as the Public Employee Relations Act. (i) Civil liability. (1) Except as provided under paragraph (2), nothing in this act shall be construed to create, establish, expand, reduce, contract or eliminate any civil liability on the part of any school entity or school employee. (2) Any coach acting in accordance with subsections (c) and (d) shall be immune from any civil liability. Section 4. Effective date. This act shall take effect JULY 1, 2012, or immediately, whichever is later."

The following are the recommendations and implemented policies for a Concussion Management Plan according to the 2011 Safety in Youth Sports Act:

#### 1. Education Materials.

Penn Manor Sports Medicine make available concussion educational material both in written and electronic form to teachers, coaches, administrators, parent(s)/guardian(s) and student-athletes.

# 2. Informational Meeting.

Penn Manor Athletic Department in conjunction with the Sports Medicine Department, hold yearly informational meetings regarding head injuries, the importance of proper concussion management, and how preseason baseline assessments can aid in the evaluation, management and recovery process.

# 3. Removal from Participation

Removal of any student-athlete from participation due to a suspected concussion will be the responsibility of the physician, if available, or the Licensed Athletic Trainer.

# 4. Return to Participation

Any student-athlete who has suffered a suspected concussion must be evaluated by a licensed healthcare professional trained in the evaluation and management of concussions. All student-athletes are encouraged to complete a Return-to-Participation program with the Licensed Athletic Trainer at Penn Manor before they return to any sports participation.

# 5. **Training Course**

All coaching staff personnel must complete the training course from an approved provider and submit a completion certification after July 1st of each year to be eligible to coach any sport.

# Penn Manor Sports Medicine Department's Concussion Management Plan

# **Definitions**

Concussion or Mild Traumatic Brain Injury (MTBI)- A concussion or MTBI is the common result of a blow to the head or body which causes the brain to move rapidly within the skull. This injury causes brain function to change which results in an altered mental state (either temporary or prolonged). Physiologic and/or anatomic disruptions of connections between some nerve cells in the brain occur. Concussions can have serious and long-term health effects, even from a mild bump on the head. Symptoms include, but are not limited to, brief loss of consciousness, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration or mentally slow, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. These symptoms may be temporary or long lasting.

<u>Second Impact Syndrome-(SIS)</u>- Refers to catastrophic events which may occur when a second concussion occurs while the athlete is still symptomatic and healing from a previous concussion. The second injury may occur within days or weeks following the first injury. Loss of likely to cause brain swelling with other widespread damage to the brain. This can be fatal. Most often SIS occurs when an athlete returns to activity without being symptom-free from the previous concussion.

# **Prevention Strategies**

- 1. All headgear must be NOCSAE certified.
- 2. Make sure the headgear fits the individual.
- For all sports that require headgear, a coach or appropriate designate with knowledge of equipment fitting should check headgear before use to make sure air bladders work and are appropriately filled. Padding should be checked to make sure they are in proper working condition.
- 4. Make sure helmets are secured properly at all times.
- 5. Mouth guards should fit and be used at all times for those sports that they are required.
- 6. All coaching staff personnel must take a concussion training course each year, beginning July 1<sub>st</sub>.
- 7. Neuro-psychological testing (Standardized Assessment of Concussion) on all studentathletes that participate in sports prior to the season start.

# **Evaluation for Concussion/MTBI**

- 1. At time of injury administer one of these assessment tests:
  - a. Sideline Functional & Visual Assessments
  - b. On-field Cognitive Testing
- 2. Observe athlete 15-20 minutes and re-evaluate.

- 3. Student-athlete will not return to a game or practice if he/she displays any signs or symptoms consistent with a concussion.
- 4. Referral to licensed health care professional trained in the evaluation and management of concussions.
- 5. Dispense "Home Instructions" sheet to parent(s)/guardian(s).
- 6. A Return-To-Participation program can be completed with the Licensed Athletic Trainer at Penn Manor.
- 7. Note- If in doubt, athlete is referred to a licensed physician trained in the evaluation and management of concussions and does not return to play until that health care professional gives a written release for the student-athlete to begin a Return-to-Participation program or return to athletics.

# Concussion Management

- 1. School Modifications
  - a. Notify school nurse and all classroom teachers of the student that he/she has MTBI.
  - b. Notify teachers of post-concussion symptoms.
  - c. Student may need special accommodations such as limited computer work, reading activities, testing, assistance to class, etc until symptoms subside.
  - d. Student may only be able to attend school for half days or may be need daily rest periods until symptoms subside.
- 2. Student must be symptom free for 24 hours and not be on school modifications before beginning a return-to-participation program, if designated by a licensed healthcare professional trained in the evaluation and management of concussions.

Suggested Return to Participation (RTP) Program for student-athletes at Penn Manor

- 1. Activity Progressions
  - a. No activity for one week
  - b. Athlete must be symptom-free
  - c. Light aerobic exercise with no resistance training
  - d. Sports-specific activity
  - e. Non-contact training drills with resistance training
  - f. Full contact training drills (must have physician clearance)
  - g. Note- Student-athlete's progression continues as long as student-athlete is asymptomatic at current phase. If the student-athlete experiences any post-concussion symptoms, a waiting period of 24 hours is implemented and they begin the progression at the last phase there was no symptoms, not the phase the symptoms appeared.
- 2. Repeat IMPACT tests are completed and compared with previous scores
- 3. Athletic Trainer documents and files completion of the 5 Phase RTP program and/or clearance from a licensed healthcare professional trained in the evaluation and management of concussion to return to athletic participation.



# **Return to Participation for Concussions**

Name:	Date of E	valuation:
	te has been diagnosed with a concust filled one of the following requireme	•
The above named s	student-athlete must comple	te the 5 Step Return to
Participation Program wit	h the licensed athletic traine	r at Penn Manor High
School before returning to	o full contact sport participat	ion ( See attached page for
exertional program)		
Comments :		
	een instructed to stop participation imme if they should become symptomatic with	
The above named s	student-athlete is cleared for n without restrictions:	a complete return to full
as of	(date)	
when they have co	ompleted the following requi	rement(s)
be trained in the management, diag student-athlete is able to return to a recovery process include a graduate symptoms return with exercise. By a	Sports Act, enacted 7/1/12, requires that gnosis, and treatment of concussions and contact sports with no restrictions. It is red exertional program for return to partichoosing the second option, the physicial to include a graduated exertional program	I the physician must determine that the ecommended that an appropriate cipation to determine if concussion in named below understands the
Physician Name (Printed)	Physician Signature	Office Number

NAME:	

# 5 Step Return-to-Participation Program for Concussions

Athlete must be symptom free for 24 hours to begin step 1 & continues to progress if symptom-free at 24 hr intervals, unless otherwise noted by physician If symptoms present athlete must stop and wait until symptom-free for 24 hrs to return to the step that initiated symptoms

# Step 1

- \* No strenuous concentration tasks
- \* THR of 30-40%
- \* No impact
- \* Exercise in a quiet room w/minimal distractions, no bright lights
- \* Stationary Bike 10-15 minutes
- \* Open-chain exercises, ie. SLRs, all directions, no weight
- \*Lower extremity static stretching
- \*Rhomberg or single leg balance (beginning)

#### Step 2

- \*Mild challenges in concentration (texting, music, movies, etc)
- \* THR of 40-60%
- \* Closed-chain exercises-minimal impact
- \* Interval stationary bike 20-30 minutes
- \* Light weight training
- \* Dynamic stretching
- \*Proprioception w/head movement and multi-tasking

# Step 3

- \* More concentration including video games
- \* THR 60-80%
- \* Integrated strength and conditioning program (Normal lifting)
- \* Normal exercise environment
- \* 25-30 minutes interval training on treadmill or elliptical
- \* Active sport-specific warm-up
- \* Agilities
- \* High level balance activity while multi-tasking (BOSU Ball balance with picking up pieces of paper)

### Step 4

- \* Sports performance training levels
- \*THR @ 80%
- \* Non-contact sports
- \* Normal practice and meeting environment
- \* Elevated and graded interval training
- \* Basic plyometric training
- \* Skill patterns, foot skills, drills, etc
- \* Aggressive strength program

# Step 5

- \* Sports performance training levels, THR at full exertion levels
- \* Initiate contact or return to contact practice
- \* Full lifting, running, and training activities
- \* Full practice and intensity
- \* Then return to game after completion of Step 5

PHYSICIAN SIGNATURE	
Return to full participation (CONTACT) on	(date)

# **Penn Manor Sports Medicine**

# **HEAD INJURY: PARENT INFORMATION**

The following are potential signs & symptoms of a concussion. It is not a comprehensive list and should not take the place of a proper evaluation by your certified athletic trainers or a licensed physician:

- 1. Increased drowsiness/foggy feeling
- 2. Vomiting/Nausea
- 3. Increased headaches
- 4. Stiffness of the neck
- 5. Discharge of blood or clear fluid from nose, ears or mouth
- 6. Decrease in appetite
- 7. Sensitivity to light/noise
- 8. Difficulty maintaining proper balance

- 9. Convulsions/seizures
- 10. Change in sleep patterns
- 11. Slowing of pulse
- 12. Weakness of arms or legs
- 13. Confusion/difficulty concentrating
- 14. Dizziness
- 15. Trouble w/speech or swallowing
- 16. Blurred or double vision
- 17. Fatigue or no energy
- 18. Amnesia

Also be aware if your athlete becomes:

- 1. Unsure of events of game/practice, score, or opponent
- 2. Can't recall events from before the injury
- 3. Can't recall events after the injury
- 4. Shows behavior or personality changes

# **Further Recommendations**

\*No Tylenol, Advil, Aleve, Aspirin, etc... for headaches, this may mask symptoms or decrease the body's ability to coagulate blood, body's ability to clot, if there is bleeding in the brain. Sometimes signs & symptoms of a concussion do not appear until 8-12 hours after the injury occurs. For this reason, we suggest waking the athlete every 2 hours during the night to monitor their symptoms.

\*If any of the above symptoms worsen follow-up with a licensed physician, remembering to secure a release with a diagnosis. Please remember that post-injury IMPACT testing is available for every athlete. The baseline IMPACT test results, along with the post-injury IMPACT test results, can be sent with your athlete to the physician's office to assist the physician in return-to-play.

\*Athlete should refrain from playing video games, texting, watching TV & computer use. The brain needs an opportunity to rest, just like any other injured body part.

\*Academic accommodations can be arranged if the physician feels it is medically necessary. This should be included in the release from the physician.

What happens if your athlete continues to play with a concussion or returns too soon?

Athletes with signs/symptoms of a concussion should be removed from play immediately. Continuing to play while experiencing signs or symptoms of a concussion leaves the athlete especially vulnerable to greater injury. There is increased risk of significant brain damage from a concussion for a period of time after that concussion occurs, particularly if the 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 know that teenage athletes will underreport symptoms of injuries-concussions are no different. We urge parents to be especially vigilant and watchful, as they know their athlete best, and are able to notice changes in the athlete that may result from a concussion.

# If you think your athlete has suffered a concussion

If you notice signs or symptoms of a concussion in your athlete, seek medical attention right away from a licensed physician trained in the evaluation and management of concussions, or your hospital's emergency department. Any athlete suspected of suffering a concussion must be removed from the game or practice immediately, and may not return until the athlete is evaluated (and cleared in writing) by a licensed physician. This only includes physicians (MD or DO), Certified Athletic Trainers (ATC), Nurse Practitioners (CRNP) and Physician Assistants (PA-C).