

**SUBJECT: CONCUSSION MANAGEMENT POLICY (Protocols, Guidelines, and Procedures)**

The Levittown School District recognizes that concussions and head injuries are commonly reported injuries in children and adolescents who participate in athletic, physical education and recreational activities. Therefore, the District adopts the following policy and procedures to assist in the proper evaluation and management of concussions and head injuries.

**Purpose**

To comply with the New York State Assembly's Concussion Management and Awareness Act:

- Directs the commissioners of education and health to adopt and implement rules and regulations for the treatment and monitoring of students with traumatic brain injuries (TBIs) otherwise known as Concussions
- Requires school personnel to receive training regarding Concussions
- Applies such rules and regulations for the school districts and boards of cooperative educational services
- Requires provisions of an information checklist on Concussions to parents of pupils who have suffered a Concussion
- Provides for establishment of concussion management teams to implement such provisions

**Concussions Defined**

A concussion is an injury to the brain which can be caused by a single incidence of trauma or repetitive blows to the head. The disturbance in brain function can be a result of direct or indirect force to the head.

The concussions themselves cannot be seen by the eye. However a concussion should be suspected with the presence of symptoms, physical signs, impaired brain function, or abnormal behavior. The Signs & Symptoms of a concussion may occur immediately or may take time, days or weeks, to appear.

**If a student displays signs or symptoms synonymous of a concussion, they should be REMOVED FROM PLAY, seek medical attention, and be monitored for changes in signs & symptoms.**

**Signs & Symptoms**

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"><li>• Attention Disorders</li><li>• Blurred Vision</li><li>• Change in Sleep Pattern</li><li>• Difficulty Concentrating</li><li>• Dizziness</li><li>• Fatigue</li><li>• Feeling "Foggy" or "Slow"</li><li>• Glassy Eyes</li></ul> | <ul style="list-style-type: none"><li>• Headache</li><li>• Inappropriate Emotion</li><li>• Irritability</li><li>• Loss of Consciousness</li><li>• Loss of Orientation</li><li>• Memory Problems</li><li>• Nausea</li><li>• Nervousness</li></ul> | <ul style="list-style-type: none"><li>• Personality Changes</li><li>• Poor Balance</li><li>• Ringing in the Ears</li><li>• Sadness</li><li>• Seeing Stars</li><li>• Sensitivity to noise</li><li>• Vacant Stare</li><li>• Vomiting</li></ul> |
|---|--|--|

**Any staff member who observes or learns of a student with a possible concussion must immediately remove the student from physical and/or athletic activity and institute the District Procedure. At no time should the student suspected of sustaining a concussion be returned to physical activities until at least 24 hours have passed without symptoms and the student has been assessed and cleared by a medical provider to begin a graduated return to play.**

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**Administrative Protocol:**

- Levittown Districts Coaching Staff will take part in Concussion Education in addition to their yearly coaching requirements. They will view a video on concussions as well as take part in the Center of Disease Control's HeadsUp Online Education. The coaches must read and sign the Coaches Acknowledgement Statement, in which they have read and understand the concussion management protocol and that they accept the responsibility of referring any athlete suspected of sustaining a concussion to the athletic trainer. As well as be responsible for contacting the parents in the event of an injury.
- The Concussion Management Team (CMT) will consist of the Athletic Director, Athletic Coordinators, School Nurse, Certified Athletic Trainer, Guidance Counselors and School Physician. The CMTs job will be to coordinate the distribution, signing, and collection of all necessary documentation. All signed documents will be kept on file for the current academic school year. The District's CMT shall also be responsible for making available, and coordinating, training for administrators, teachers, coaches, and parents.
- Concussion training shall include: the definition of a concussion, signs and symptoms of concussions, how concussions occur, information on post concussion and second impact syndromes, return to play and school protocol guidelines, emergency protocols and procedures to be followed, and information on available area resources for concussion management and treatment.
- The chief medical director, who is the Levittown District Physician, will have the final approval of all student-athletes Return to Play (RTP)

**District Procedure:**

- Any positive signs and symptoms, the student is held out of physical and athletic activity
- No student will be allowed to return-to-play (RTP) on the same day they show signs or symptoms of a concussion, regardless if signs and symptoms return to normal.
- During school hours the staff member who observes the possible concussion will immediately contact the buildings school nurse
- During home athletic events, practice or competition, the athletic coach who observes the possible concussion will immediately contact the schools certified athletic trainer
- During away athletic events the athletic coach will ask for assistance from the local medical staff and then notify the schools certified athletic trainer
- During school hours the student will be assessed at the time of injury and then monitored by the school nurse
- After school hours the student-athlete will be assessed at the time of injury and then monitored by the certified athletic trainer
- It is the responsibility of the nurse, certified athletic trainer, and/or coach to contact the student's parents in the event of a possible concussion. Each parent will be given a Concussion Home Care Instructions Sheet (Appendix B) and directions on how to obtain information from the districts website.
- A student who is suspected of a concussion must be evaluated by an allied health care professional and must provide written and signed authorization from a physician of the evaluation before starting the district's RTP protocol.
- A student-athlete will only RTP after they complete the six steps of the district RTP protocol supervised by the Certified Athletic Trainer.
- Per New York State Law, the district Physician will review all authorizations and have the final approval of all student-athletes RTP status

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## Concussion Management Procedure:

### -On-Field Evaluation

- Signs and Symptoms (S/S's) Assessment (Noticed and recorded by coach or ATC)
- Neurological Exam (Performed by Certified Athletic Trainer (ATC))
- Mental Status Testing (Performed by ATC)
- Note any S/S's requiring 'day of' referral to doctor (Appendix A)
- Note any S/S's requiring immediate medical care (Appendix A)

Any positive signs and symptoms, the athlete will be held out of competition and/or practice.

***No student-athlete shall be allowed to RTP on the same day they display signs or symptoms of a concussion, regardless if the signs and symptoms subside.***

Monitor athlete's status every five (5) minutes, until athlete's condition stabilizes and improves.

Contact parents about child's condition. (Performed by ATC or M.D is present)

### Follow-up Evaluation

- Within 24-72 hours post injury
- Re-evaluation of S/S's
- Rest Until Asymptomatic
- Once symptom free for 24 hours and has obtained written clearance from a physician, student-athlete can start RTP protocol

## Post Concussion Management

Students who have been diagnosed with a concussion require both physical and cognitive rest. Physical rest requires that a student avoid participation in any activity that will increase heart rate and/or blood pressure including but not limited to: PE classes, recess, and interscholastic sports. Cognitive rest requires that a student avoid participation in and/or limit activities requiring concentration or mental stimulation including but not limited to: using the computer, watching television, texting, reading, writing, listening to loud music, test taking, and studying. The duration and quantity of both physical and cognitive rest varies depending upon the severity of the concussion and will be determined on an individual basis. Noncompliance to such rest may prolong recovery.

Returning to activity prematurely poses many risks. It increases the risk for a second concussion as well as second impact syndrome, can exacerbate current symptoms, and has the potential to cause additional injury due to the cognitive and coordination deficits caused by the concussion. Therefore it is imperative that a student who has sustained a concussion be symptom free before returning to physical and athletic activity. If any signs and symptoms reoccur after a physician has given clearance and/or physical activity has began, all activity should cease and the school nurse and/or certified athletic trainer should be informed. Whenever there is a question of safety all parties will err on the side of caution.

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## **Interscholastic Athletics Return to Play Protocol**

**Stage 1** – Rest until symptom-free (asymptomatic)

- Once the student-athlete is symptom-free for a full 24 hour period they may move on to stage 2

**Stage 2** – Fast walking/stationary bike 15-20 minutes under supervision

- Any S/S's stop for the day and start Stage 2 over again after symptoms are gone for 24 hours
- If symptomatic post exertion within 24 hours, rest until asymptomatic and start Stage 2 over again
- When asymptomatic for 24 hours after clean completion of Stage 2, proceed to Stage 3

**Stage 3** – Jogging/running 20 minutes,

- Any return in S/S's stop
- If symptomatic post exertion within 24 hours, rest until asymptomatic and start Stage 3 over again

**Stage 4** – Non-Contact Sports Drills for 30-45 minutes

- Any return in S/S's stop
- If symptomatic post exertion within 24 hours, rest until asymptomatic start again with Stage 4
- If asymptomatic for 24 hours proceed to Stage 5

**Stage 5** - Full Participation in practice without contact

- Any return in S/S's stop
- When asymptomatic for 24 hours proceed to Stage 6
- If symptomatic post exertion within 24 hours, rest until asymptomatic start again with Stage 5

**Stage 6** - Full Practice No Restrictions

- Any return in S/S's stop
- When asymptomatic for 24 hours proceed to Stage 7
- If symptomatic post exertion within 24 hours, rest until asymptomatic start again with Stage 6

**Stage 7** - Cleared for RTP No Restrictions for Competition by district physician and certified athletic trainer

## **Physical Education Return to Activity Protocol**

**Stage 1** – Rest until symptom-free (asymptomatic)

- Student must be asymptomatic for at least 24 hours prior to returning to activities
- Any return/lingering of S/S's, after scheduled return date, contact MD

**Stage 2** – Light Aerobic Exercise (Bike, Arc Trainer)

- 15 Minutes under direct supervision
- Any return in S/S's stop participation
- In the event of symptoms, revert back to stage 1
- If asymptomatic for 24 hours, proceed to Stage 3

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**Stage 3 – Moderate Aerobic Exercise (Jogging Running)**

- 20 Minutes under direct supervision
- Any return in S/S's stop participation
- Wait 24 hours and start Stage 3 again

**Stage 4 – Non-Contact Exercises**

- 30 Minutes of PE Specific Skills
- i.e. increased running intensity, skills development
- Any return in S/S's stop participation
- Wait 24 hours and start Stage 4 again

**Stage 5 – Non-Contact PE Activities**

- Participation in all Non-Contact PE Activities
- Any return in S/S's stop participation
- Wait 24 hours and start Stage 5 again

**Stage 6 – Full Contact PE Activities**

- After final clearance from overseeing physician
- Any return in S/S's stop participation
- Wait 24 hours and start Stage 6 again

**Stage 7 – Cleared for Return to Full PE**

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## **Appendix A**

### **Referral Checklist**

#### **Immediate Referral to ER**

1. Deterioration of neurological function (feeling, sensation, limb movement)
2. Decreasing level of consciousness
3. Decrease or irregularity in respirations
4. Decrease or irregularity in pulse
5. Unequal, dilated, or un-reactive pupils
6. Any signs or symptoms of associated injuries (spine or skull fracture or bleeding)
7. Seizure Activity

#### **Day of Injury Referral**

1. Loss of consciousness
2. Amnesia (lasting longer than 15 minutes)
3. Increase in blood pressure
4. Mental status changes, confusion, or agitation
5. Vomiting
6. Motor deficits subsequent to initial on-field assessment
7. Sensory deficits subsequent to initial on-field assessment
8. Cranial nerve deficits subsequent to initial on-field assessment
9. Post-concussion symptoms that worsen
10. Additional post-concussion symptoms as compared with those on the field
11. Athlete is still symptomatic at the end of the game

#### **Next Day Referral**

1. Any of the findings in the "day of" injury category
2. Post-concussion symptoms worsen or do not improve over time
3. Increase in the number of post-concussion symptoms reported
4. Post-concussion symptoms interfere with daily activities (i.e. sleep, cognitive difficulties)

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## Appendix B

**Student:** \_\_\_\_\_ **Phone #:** \_\_\_\_\_

**Parent/Guardian:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Concussion Home Care Instructions

It is the belief of the MacArthur Athletics Department that your child may have sustained a Concussion while participating in his/her sport. At times, the signs and symptoms of a concussion do not occur for several hours after the initial injury takes place. Please be observant for the following signs and symptoms:

1. Headache (especially for *increasing intensity*\*)
2. Nausea and *vomiting*\*
3. Differing pupil sizes from right to left eye, dilated
4. Mental confusion/behavior changes
5. Dizziness
6. Memory Loss
7. Ringing in the ears
8. Changes in gait (walking) or balance
9. *Blurred or double vision*\*
10. *Slurred Speech*\*
11. *Noticeable changes in level of consciousness (difficulty awakening, or losing consciousness suddenly)*\*
12. *Seizure Activity*\*
13. *Decreased or irregular pulse or respiration*\*
14. Sensitivity to light or noise

\*An asterisk denotes a possible medical emergency. Please seek the nearest emergency medical attention\*

## Concussion recommendations:

1. Your son/daughter must be evaluated by a physician.
2. Have your son/daughter report to the Athletic Trainer the next day they are in school for a follow-up examination.
3. Please review the information below and on the accompanying hand outs. If symptoms worsen, or new ones arise, please contact your child's physician or seek the closest emergency medical system.
4. Follow the instructions outlined below if your physician has not given you other directions:

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**It is ok to:**

- Use acetaminophen (Tylenol) for headaches as directed on the bottle
- Use ice packs on head and neck as needed for comfort
- Eat a light diet
- Go to sleep
- Rest (no strenuous activity)

**There is NO need to:**

- Check eyes with a flashlight
- Wake up every hour
- Test reflexes
- Stay in bed

**Do NOT:**

- Drink alcohol
- Drive while symptomatic
- Exercise or lift weights
- Play video games/watch excessive TV/excessive computer usage
- Take ibuprofen, aspirin, naproxen, or another non-steroidal anti-inflammatory medications

**Adopted: August 26, 2015**