

Levittown Public Schools

Concussion Management Policy

&

Return to Play Procedure

2017-2018





LEVITTOWN PUBLIC SCHOOLS

Division Avenue High School

120 Division Ave.
Levittown NY 11756
(516) 434-7150

General Douglas MacArthur High School

3369 Old Jerusalem Rd.
Levittown NY 11756
(516)434-7225

Jonas E. Salk Middle School

3359 Old Jerusalem Rd.
Levittown NY 11756
(516) 434-7350

Wisdom Lane Middle School

120 Center Lane
Levittown, NY 11756
(516) 434-7300

"Success For Every Student"

To all Levittown Parents/Guardians, Students, and Coaches,

On July 1, 2012 NYS enacted a law titled "The Concussion Management and Awareness Act". This act outlines rules and regulation related to students who sustain a concussion, also known as traumatic brain injury (TBI), at school and at any district sponsored event or related activity.

In regards to law stated above, the Levittown School District has adopted a specified Concussion Management policy along with a "return to play policy". Such policy will be implemented for every reported concussion.

It is imperative that the information provided in the policy is read and understood for the safety of all students and athletes. All Levittown coaches, school nurses, and certified athletic trainers have been trained in the prevention, symptoms, and protocols regarding concussions.

If there are any questions or concerns please feel free to call

Sincerely,

Levittown School District



Levittown School District

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

- Attention Disorders
- Blurred Vision
- Change in Sleep Pattern
- Difficulty Concentrating
- Dizziness
- Fatigue
- Feeling "Foggy" or "Slow"
- Glassy Eyes
- Headache
- Inappropriate Emotion
- Irritability
- Loss of Consciousness
- Loss of Orientation
- Memory Problems
- Nausea
- Nervousness
- Personality Changes
- Poor Balance
- Ringing in the Ears
- Sadness
- Seeing Stars
- Sensitivity to noise
- Vacant Stare
- Vomiting

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.

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 [Heads Up 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

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 begun, 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. Return to play refers to the point of return after getting cleared from a concussion. Following clearance from a physician, this is when a person has to progress through gradual stages in order to fully return to his or her sport For the safety and well being of the patient
- To ensure a patient can physically and mentally handle the load of physical exertion prior to returning to the sport/activity.
 - This provides safety to not only the patient but to his/her fellow teammates and competitors.
- New York State Concussion Management and Awareness Act, 2012
 - Mandated for all New York State Public High Schools Athletic Association and Public School Athletic League
 - Act does not impact children who are in middle schools and younger, or adults who are no longer in high school.
- Direct Access to Athletic Trainer

Interscholastic Athletics Return to Play Protocol Any individual who has sustained a concussion must have a physician clearance note, stating that the patient may begin "RTP Protocol"

Stage 1	Low impact, non-strenuous, light aerobic activity such as walking or riding a stationary bike. If tolerated without return of symptoms over a 24 hour period proceed to;
Stage 2	Higher impact, higher exertion, and moderate aerobic activity such as running or jumping rope. No resistance training. If tolerated without return of symptoms over a 24 hour period proceed to;
Stage 3	Sport specific non-contact activity. Low resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;
Stage 4	Sport specific activity, non-contact drills. Medium resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;
Stage 5	Full contact training drills and intense aerobic activity. High resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to athletic trainer sending the letter of completion to the Levittown School Physician only.
Stage 6	Levittown Physician gives clearance for Athlete to Return to Sports

- The athlete must successfully complete each stage without any concussion like symptoms in order to pass the RTP

Return to Play: Stage 1/2

Attempt Number: _____

Symptom Evaluation

Rate on a scale of 0-6 (0 is none, 1-2 is mild, 3-4 is moderate, 5-6 is severe)

	Before Activity	Post Activity		Before Activity	Post Activity
Headache			"Don't feel right"		
"Pressure in Head"			Difficulty concentrating		
Neck Pain			Difficulty remembering		
Nausea or vomiting			Fatigue or low energy		
Dizziness			Confusion		
Blurred vision			Drowsiness		
Balance Problems			Trouble falling asleep		
Sensitivity to light			More emotional		
Sensitivity to noise			Irritability		
Feeling slowed down			Sadness		
Feeling like "in a fog"			Nervous/Anxious		

Standardized Assessment of Concussion

Immediate Memory	Before Activity	Post Activity			
			List 1: Elbow, apple carpet, saddle, bubble		
Trial 1	/5	/5	List 2: Candle, paper, sugar, sandwich, wagon		
Trial 2	/5	/5	List 3: Baby, monkey, perfume, sunset, iron		
Trial 3	/5	/5	List 4: Monkey, penny, blanket, lemon, insect		

Orientation	Before Activity	Post Activity	Concentration	Before Activity	Post Activity
Month?	/1	/1	4-9-3 • 6-2-9	/1	/1
Date today?	/1	/1	3-8-1-4 • 3-2-7-9	/1	/1
Day of the week?	/1	/1	6-2-9-7-1 • 1-5-2-8-6	/1	/1
Year?	/1	/1	7-1-8-4-6-2 • 8-3-1-9-6-4	/1	/1
Time (within an hour)?	/1	/1	Months in reverse order	/1	/1

	Before Activity	Post Activity
Delayed Memory Recall	/5	/5

Overall Score Before Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Overall Score Post Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Age Predicted

HR Max BPM 60%: _____ BPM

Resting Heart Rate: BPM

Resting BP: mmHg

Resting O2: _____%

Activity (choose ONE) Time

Stationary Upright Bike 20' Heart Rate BPM 20' _____ BPM
Time Taken 10' 20'

Elliptical 20' Heart Rate BPM _____ BPM
Time Taken 10' 20'

Walking (treadmill) 20' Heart Rate BPM 20' _____ BPM
Incline level(s) _____ Time Taken 10' 20'

Post Activity

Heart Rate: BPM **BP:** mmHg **O2:** _____%
Time Taken: 10' 10'

Notes and Comments: _____

ATC Signature _____

Date _____

Return to Play: Stage 3

Attempt Number: _____

Symptom Evaluation

Rate on a scale of 0-6 (0 is none, 1-2 is mild, 3-4 is moderate, 5-6 is severe)

	Before Activity	Post Activity		Before Activity	Post Activity
Headache			"Don't feel right"		
"Pressure in Head"			Difficulty concentrating		
Neck Pain			Difficulty remembering		
Nausea or vomiting			Fatigue or low energy		
Dizziness			Confusion		
Blurred vision			Drowsiness		
Balance Problems			Trouble falling asleep		
Sensitivity to light			More emotional		
Sensitivity to noise			Irritability		
Feeling slowed down			Sadness		
Feeling like "in a fog"			Nervous/Anxious		

Standardized Assessment of Concussion

Immediate Memory	Before Activity	Post Activity
Trial 1	/5	/5
Trial 2	/5	/5
Trial 3	/5	/5

- List 1: Elbow, apple carpet, saddle, bubble
- List 2: Candle, paper, sugar, sandwich, wagon
- List 3: Baby, monkey, perfume, sunset, iron
- List 4: Monkey, penny, blanket, lemon, insect

Orientation	Before Activity	Post Activity	Concentration	Before Activity	Post Activity
Month?	/1	/1	3-4-9 • 9-6-2	/1	/1
Date today?	/1	/1	4-3-8-1 • 9-3-2-7	/1	/1
Day of the week?	/1	/1	1-6-2-9-7 • 6-1-5-2-8	/1	/1
Year?	/1	/1	2-7-1-8-4-6 • 4-8-3-1-9-6	/1	/1
Time (within an hour)?	/1	/1	Months in reverse order	/1	/1

	Before Activity	Post Activity
Delayed Memory Recall	/5	/5

Overall Score Before Activity:
 Immediate Memory _____
 Orientation _____
 Concentration _____
 Delayed Memory Recall _____

Overall Score Post Activity:
 Immediate Memory _____
 Orientation _____
 Concentration _____
 Delayed Memory Recall _____

Age Predicted HR Max: _____ BPM **70%:** _____ BPM

Resting Heart Rate: _____ BPM

Resting BP: _____ mmHg

Resting O2: _____ %

Activity (Select one)	Aerobic Training			
	Time	Heart Rate	BPM	BPM
Treadmill (jog)	20'			
Bike	20'	Time Taken	10'	20'
Elliptical	20'			

Light Resistance Training					
Activity	Set	Reps	Activity	Set	Reps
Push ups		x			x
Sit ups		x			x
BW Squats		x			x
Lunges		x			x
Burpees		x			x
Pull Ups/Modified Pull Ups		x			x

Heart Rate after light resistance completion: _____ BPM

Post Activity

Heart Rate: _____ BPM
Time Taken: _____ 10'

BP: _____ mmHg

O2: _____ %

Notes and
Comments:

ATC Signature: _____

Date _____

Return to Play: Stage 4

Attempt Number: _____

Symptom Evaluation

Rate on a scale of 0-6 (0 is none, 1-2 is mild, 3-4 is moderate, 5-6 is severe)

	Before Activity	Post Activity		Before Activity	Post Activity
Headache			"Don't feel right"		
"Pressure in Head"			Difficulty concentrating		
Neck Pain			Difficulty remembering		
Nausea or vomiting			Fatigue or low energy		
Dizziness			Confusion		
Blurred vision			Drowsiness		
Balance Problems			Trouble falling asleep		
Sensitivity to light			More emotional		
Sensitivity to noise			Irritability		
Feeling slowed down			Sadness		
Feeling like "in a fog"			Nervous/Anxious		

Standardized Assessment of Concussion

Immediate Memory	Before Activity	Post Activity
Trial 1	/5	/5
Trial 2	/5	/5
Trial 3	/5	/5

- List 1: Elbow, apple carpet, saddle, bubble
- List 2: Candle, paper, sugar, sandwich, wagon
- List 3: Baby, monkey, perfume, sunset, iron
- List 4: Monkey, penny, blanket, lemon, insect

Orientation	Before Activity	Post Activity	Concentration	Before Activity	Post Activity
Month?	/1	/1	9-3-4 ● 2-9-6	/1	/1
Date today?	/1	/1	1-4-3-8 ● 7-9-3-2	/1	/1
Day of the week?	/1	/1	7-1-6-2-9 ● 8-6-1-5-2	/1	/1
Year?	/1	/1	6-2-7-1-8-4 ● 6-4-8-3-1-9	/1	/1
Time (within an hour)?	/1	/1	Months in reverse order	/1	/1

	Before Activity	Post Activity
Delayed Memory Recall	/5	/5

Overall Score Before Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Overall Score Post Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Age Predicted HR

Max BPM 80%: _____BPM

Resting Heart Rate: BPM **Resting BP:** _____mmHg

Resting O2: %

Aerobic Training

Treadmill (jog/run) 20' Heart Rate BPM BPM
Time Taken 10' 20'

Medium resistance training

Examples: Bench press, leg press, lat pull down, etc.

Agility

Agility ladder
5-10-5

Box drill

Non-contact sport specific training drills

Post Activity

Heart Rate: BPM **BP:** _____mmHg **O2:** %
10' 10' 10'

Time Taken:

Notes and
Comments:

ATC Signature

Date

Return to Play: Stage 5

Attempt Number: _____

Symptom Evaluation

Rate on a scale of 0-6 (0 is none, 1-2 is mild, 3-4 is moderate, 5-6 is severe)

	Before Activity	Post Activity		Before Activity	Post Activity
Headache			"Don't feel right"		
"Pressure in Head"			Difficulty concentrating		
Neck Pain			Difficulty remembering		
Nausea or vomiting			Fatigue or low energy		
Dizziness			Confusion		
Blurred vision			Drowsiness		
Balance Problems			Trouble falling asleep		
Sensitivity to light			More emotional		
Sensitivity to noise			Irritability		
Feeling slowed down			Sadness		
Feeling like "in a fog"			Nervous/Anxious		

Standardized Assessment of Concussion

Immediate Memory	Before Activity	Post Activity
Trial 1	/5	/5
Trial 2	/5	/5
Trial 3	/5	/5

- List 1: Elbow, apple carpet, saddle, bubble
- List 2: Candle, paper, sugar, sandwich, wagon
- List 3: Baby, monkey, perfume, sunset, iron
- List 4: Monkey, penny, blanket, lemon, insect

Orientation	Before Activity	Post Activity	Concentration	Before Activity	Post Activity
Month?	/1	/1	4-9-3 • 6-2-9	/1	/1
Date today?	/1	/1	3-8-1-4 • 3-2-7-9	/1	/1
Day of the week?	/1	/1	6-2-9-7-1 • 1-5-2-8-6	/1	/1
Year?	/1	/1	7-1-8-4-6-2 • 8-3-1-9-6-4	/1	/1
Time (within an hour)?	/1	/1	Months in reverse order	/1	/1

	Before Activity	Post Activity
Delayed Memory Recall	/5	/5

Overall Score Before Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Overall Score Post Activity:

Immediate Memory _____
Orientation _____
Concentration _____
Delayed Memory Recall _____

Age Predicted HR

Max BPM 85%: _____ BPM

Resting Heart Rate: BPM **Resting BP:** _____ mmHg **Resting O2:** %

Aerobic Training

Treadmill Interval Running	20-30'	Heart Rate	BPM	BPM
		Time Taken	10'	30'

Heavy Resistance Training

Examples: hang cleans, jerk press, SL squats, etc.

Agility

- Agility ladder
- 5-10-5
- Box drill
- Non-contact sport specific training drills
- SL bounding
- Sprints
- Box jumps

Full Contact Sports Specific Practice:

Post Activity

Heart Rate: BPM **BP:** _____ mmHg **O2:** %
Time Taken: 10' 10' 10'

Notes and
Comments:

ATC Signature _____

Date _____



Clearance Form Completion of Return to Play Protocol

Student _____ (name) has successfully completed the return to play protocol on _____ (date) without any concussion like symptoms. Student is ready for full clearance including return to sport activities.

Certified Athletic Trainers

- Matei Manu- MHA, ATC- MacArthur High School
- Kayla Sippin- ATC-Division Avenue High School
- Michael Reddington- MS, ATC- Salk Middle School
- James, Labartino- ATC- Wisdom Middle School

Signature: _____

Date: _____

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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)

Appendix B

Student: _____ **Phone #:** _____

Date: _____

Concussion Home Care Instructions

It is the belief of the Levittown District 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:

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