



Birch Wathen Lenox Concussion Management Plan

I. Purpose

The Birch Wathen Lenox School is committed to the safety and well being of its student-athletes, specifically those who sustain a concussion inside or outside of school. As a direct result of this commitment the following guidelines have been constructed to prevent, educate, identify, and manage traumatic brain injuries of these students.

II. Definition of Concussion

Concussion is the most common form of traumatic brain injury (TBI) seen in athletics. The symptoms of a concussion result from a temporary change in the brain's function. Characteristics of a concussion can include but are not limited to:

- ◆ A direct blow to the head or other body structures that results in a massive force transmitted to the head.
- ◆ A rapid onset of neurological impairments that are often short-termed and resolves within a quick manner of time.
- ◆ Acute symptoms largely reflect functional disturbances rather than structural brain injuries.
- ◆ Result in a graded set of clinical symptoms that may or may not involve loss of consciousness
- ◆ Clinical and cognitive symptoms and functions resolve following a sequential progression, keeping in mind, that post-concussive symptoms may be prolonged.
- ◆ No evidence of abnormality is present on a standard neuroimaging studies.

Children and adolescents are more susceptible to concussions and take longer than adults to fully recover. Therefore, it is imperative that any student who is suspected of having sustained a concussion be immediately removed from athletic activity (e.g., recess, PE class, sports) and remains out of athletic activities until evaluated and cleared to return to athletic activity by a physician.

III. Responsibility

The parents, athletic trainer, nurse, coaches, athletic director, physical education teachers, and school staff collaboratively share responsibility in the proper execution of this plan.

IV. Education

The athletic trainer will annually educate student-athletes and coaches on the recognition, management, and reporting of a concussion.

Coaches will sign a statement confirming they received the educational material and that they are aware of their responsibilities in reporting concussions to the athletic trainer.

All athletes will receive a concussion fact sheet, a copy of the return to play protocol and a concussion home instruction sheet.

V. Pre-participation Assessment

In order to participate in any sport at Birch Wathen Lenox School student-athletes *must* complete an ImPACT baseline examination. They **will not be allowed** to participate in any contests until this exam has been completed.

VI. Recognition, Diagnosis, and Management of Concussion

Concussions can lead to many different classifications of symptoms. See below for a few examples.

Table 1. Signs and Symptoms of Concussion

Physical	Cognitive	Emotional	Sleep
Headache	Feeling "in a fog"	Irritable	Drowsiness
Nausea or vomiting	Amnesia	Nervous	Sleep more
Balance disturbance	Confusion	Sad/depressed	Sleep less
Sensitivity to light or noise	Disorientation	Emotional lability	
Dazed or vacant stare	Difficulty concentrating		
Loss of consciousness	Delayed verbal responses		

Any student exhibiting symptoms of a concussion will be immediately removed from play and evaluated by the present athletic trainer or physician. If the athlete is displaying symptoms of a concussion they will not be allowed to return to activity. **The athlete will be referred to a physician and not be allowed to return to activity until cleared by the physician. A complete physical and mental status examination will be performed by the physician and be compared to their baseline ImPACT test.**

All students diagnosed with a concussion will be provided with written home instructions by the athletic trainer.

VII. Return to Activity

Any student suffering from a concussion must return to his/her baseline of symptoms, cognitive function, and balance before starting any exertional activity.

Students who have returned to their baseline *must* complete a return to play activity progression before returning to full, unrestricted activity. The return to play protocol may be preformed by an athletic trainer, diagnosing physician or physical therapist.

Table 2. Return to Play Protocol

Phase 1	Phase 2	Phase 3
<ul style="list-style-type: none"> • Treadmill/stationary Bike Test • Patient must complete test at age appropriate maximal heart rate with no symptoms to move to phase 2 • If patient has symptoms, stop test and refer for exertion therapy 	<ul style="list-style-type: none"> • Dynamic Exercise (three exercises, 2x15, uni-directional) • If patient completes with no increased symptoms proceed to phase 3 • If patient has symptoms with dynamic exercise, stop and refer for exertion therapy 	<ul style="list-style-type: none"> • Sport specific exercise (2x1min for 4 exercises) • If patient completes this with no increased symptoms, patient has complete assessment • If patient has symptoms with sports specific activity, stop and refer for exertion therapy

In New York State, the diagnosis of a concussion remains within the scope of practice of the following medical providers: physicians, nurse practitioners, and physician assistants. The physician or the athletic trainer in consultation with the physician will determine medical clearance of the student following a concussion.

VIII. Return to Learn

Concussed students will complete a return to learn progression in parallel with his/her return to play activity program.

Relative cognitive rest through the minimizing of stressors such as video games, reading, and texting, watching television, and listening to music through headphones should begin immediately following the diagnosis of a concussion, including no classroom activity on the day of injury.

Student-athletes who cannot tolerate light cognitive activity (~30 min) will remain at home

Student-athletes who tolerate light cognitive activity (~45 min) without symptoms can return to the classroom in graduated increments while working closely with an advisor

The amount of time needed for a student-athlete to avoid class or homework will be individualized. A multi-disciplinary team that may include the team physician, athletic trainer, psychologists, academic advisors, and coach will be utilized as appropriate to determine the extent of academic adjustments.

Student-athletes experiencing cognitive difficulties for longer than two weeks post-concussion will be medically re-evaluated and may need more extensive academic accommodations

XI. Multiple Concussions

Athlete suffering from three or more concussions within their time at Birch Wathen Lenox will need to obtain clearance from their physician in order to participate.

X. Risk Factors to Recovery

According to the CDC's Heads Up, Facts for Physicians About Mild Traumatic Brain Injury (MTBI), students with these conditions are at a higher risk for prolonged recovery from a concussion:

- ◆ · History of concussion, especially if currently recovering from an earlier concussion
- ◆ · Personal and/or family history of migraine headaches
- ◆ · History of learning disabilities or developmental disorders
- ◆ · History of depression, anxiety, or mood disorders

APPENDIX

1. Concussion Fact Sheet
2. Concussion Home Instruction Sheet

HEADS+UP

CONCUSSION IN HIGH SCHOOL SPORTS

A FACT SHEET FOR **ATHLETES**

What is a concussion?

A concussion is a brain injury that:

- Is caused by a bump, blow, or jolt to the head or body.
- Can change the way your brain normally works.
- Can occur during practices or games in any sport or recreational activity.
- Can happen even if you haven't been knocked out.
- Can be serious even if you've just been "dinged" or "had your bell rung."

All concussions are serious. A concussion can affect your ability to do schoolwork and other activities (such as playing video games, working on a computer, studying, driving, or exercising). Most people with a concussion get better, but it is important to give your brain time to heal.

What are the symptoms of a concussion?

You can't see a concussion, but you might notice **one or more** of the symptoms listed below or that you "don't feel right" soon after, a few days after, or even weeks after the injury.

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Bothered by light or noise
- Feeling sluggish, hazy, foggy, or groggy
- Difficulty paying attention
- Memory problems
- Confusion

What should I do if I think I have a concussion?

- **Tell your coaches and your parents.** Never ignore a bump or blow to the head even if you feel fine. Also, tell your coach right away if you think you have a concussion or if one of your teammates might have a concussion.
- **Get a medical check-up.** A doctor or other health care professional can tell if you have a concussion and when it is OK to return to play.
- **Give yourself time to get better.** If you have a concussion, your brain needs time to heal. While your brain is still healing, you are much more likely to have another concussion. Repeat concussions can increase the time it takes for you to recover and may cause more damage to your brain. It is important to rest and not return to play until you get the OK from your health care professional that you are symptom-free.

How can I prevent a concussion?

Every sport is different, but there are steps you can take to protect yourself.

- Use the proper sports equipment, including personal protective equipment. In order for equipment to protect you, it must be:
 - The right equipment for the game, position, or activity
 - Worn correctly and the correct size and fit
 - Used every time you play or practice
- Follow your coach's rules for safety and the rules of the sport.
- Practice good sportsmanship at all times.

If you think you have a concussion:
Don't hide it. Report it. Take time to recover.

It's better to miss one game than the whole season.

For more information and to order additional materials **free-of-charge**, visit: www.cdc.gov/Concussion.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION





Birch Wathen Lenox
Concussion Home Instruction Sheet

You have experienced a concussion or head injury and need to be watched closely for the next 24-48 hours.

Symptoms of a concussion often appear immediately, but some may not be noticed for hours or days following the injury.

Watch for any of the following problems:

- Repeated vomiting
- Headache that gets worse or does not go away
- Loss of consciousness or unable to stay awake during times you would normally be awake
- Becoming more confused, restless, or agitated
- Convulsions or seizures
- Difficulty walking or difficulty with balance
- Weakness or numbness
- Difficulty with your vision

If you experience any of these symptoms go to the emergency room immediately. Do not conceal your symptoms or problems.

While at home it is safe to:

- Take Tylenol
- Go to sleep
- Eat a light meal

DO NOT:

- Drink Alcohol
- Take aspirin, ibuprofen, naproxen or similar products

Contact your athletic trainer tomorrow and update him/her on your current status:

Name: _____ Phone Number: _____

Birch Wathen Lenox Return to Play Protocol

Table 2. Return to Play Protocol

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