

Hampton City Schools Traumatic Brain Injury/Concussion Protocol

Purpose:

Hampton City Schools is committed to ensuring the health and safety of our students. The following Traumatic Brain Injury (TBI)/Concussion Protocol utilizes the latest in medical research to prevent, treat injuries and provide a smooth transition back to school. This protocol was written to ensure that students who sustain a traumatic brain injury are properly diagnosed, given adequate time to heal, and are comprehensively supported until they are symptom free or are stable medically to be in school. This protocol does not address non-traumatic brain injuries.

Definitions:

Traumatic brain injuries – result from an external cause and are divided into two categories:

- Closed Brain Injuries are a result of a non-penetrating blow to the head.
- Open Brain Injuries are when the skull has been crushed or seriously fractured.

This typically requires a long period of rehabilitation

Non-traumatic brain injuries – (also referred to as acquired brain injuries) result from an internal cause such as a stroke, brain tumor, meningitis, kidney disease and drug abuse.

Concussion - is a brain injury that is characterized by an onset of impairment of cognitive and/or physical functioning, and is caused by a blow to the head, face or neck, or a blow to the body that causes a sudden jarring of the head (i.e., a helmet to the head, being knocked to the ground). A concussion can occur with or without a loss of consciousness, and proper management is essential to the immediate safety and long-term future of the injured individual. A concussion can be difficult to diagnose, and failing to recognize the signs and symptoms in a timely fashion can have dire consequences.

Most athletes who experience a concussion can recover completely as long as they do not return to play prematurely. The effects of repeated concussions can be cumulative, and after a concussion, there is a period in which the brain is particularly vulnerable to further injury. If an athlete sustains a second concussion during this period, the risk of permanent brain injury increases significantly and the consequences of seemingly mild second concussion can be very severe, and even result in death (i.e., “second impact syndrome”).

Second Impact Syndrome - Experiencing a second concussion before signs and symptoms of a first concussion have resolved which may result in rapid and usually fatal brain swelling.

Appropriate licensed health care provider - means a physician, physician assistant, osteopath or athletic trainer licensed by the Virginia Board of Medicine; a neuropsychologist licensed by the Board of Psychology; or a nurse practitioner licensed by the Virginia State Board of Nursing.

Return to Play [RTP] - means participate in a non-medically supervised practice or athletic competition.

ImPACT Concussion Management Program - ImPACT is a state-of-the-art computer-based program developed to help clinicians evaluate recovery during a concussion. The goal of this program is to create a safer environment for our student athletes through education, awareness, and clinical care.

Traumatic Brain Injury (TBI) Team: This team should consist of, the school counselor, the school psychologist, the school SPED instructional counselor, the occupational and physical therapist (if indicated), student teacher(s), if had been on homebound, homebound teacher, school nurse and the health services coordinator. If the student participates in athletics the following should be on the team as well: the school athletic trainer, the athletic training coordinator, the school athletic director, the school principal over athletics, and the city coordinator of athletics, as appropriate.

Educational Implications:

The effects of a brain injury, TBI or concussion, are dependent on the location and severity of the injury. Resulting impairments can be multi-faceted and can include cognitive, behavioral, and/or physical deficits.

Cognitive Deficits:

- Difficulty focusing and sustaining attention
- Delayed response time
- Decreased ability to organize information
- Difficulty with simultaneous processing
- Rigid/concrete problem solving
- Decreased judgment
- Difficulty with mental endurance
- Amnesia for the event
- Difficulty with speech

Behavioral Issues:

- Poor self control, impulsivity
- Limited insight into deficits
- Lack of initiative/motivation
- Non-compliance
- Depression
- Decreased understanding of social rules
- Easily frustrated and angered
- Low frustration tolerance
- Change in the student's nature

Motor-Sensory Deficits:

- Vision and Hearing Loss
- Headache
- Reduced Stamina
- Loss of or change in motor, sensory and/or perceptual abilities
- Seizures - rare

Guidelines if student suffered a traumatic brain injury (TBI):

1. As soon as the school is aware a student has experienced a brain injury, the TBI team should meet to determine a plan for when the student returns to school. The student may require a transitional period, with half days progressing to full days. The TBI team will work with the parent/guardian and physician to determine this period. Health Services Coordinator should be notified when a student is diagnosed with TBI or concussion and plans to return to school, 727-2363.
2. Because TBI is the only disability related to a specific event, accommodations on an IEP may not be immediately available. It is appropriate to start with a 504 plan and then, if the symptoms remain and reflect educational deficiencies, move to an IEP. See Appendix H Reasonable Accommodations for Return to Classroom Post TBI and Appendix I Brain Injury Deficit Management Strategies

3. If a student already has an IEP for another disability, then an addendum may need to be made to accommodate present disability.
4. Once the plan has been developed, it is important that all staff that interact with the student are aware of present issues and the plan. The nurse will address any medical issues through Individualized Healthcare Plan, Emergency Classroom Plan and any other medical interventions ordered for this student. Teachers can utilize the attached Appendix I Brain Injury Deficit Management Strategies, to assist in classroom management.

Guidelines for Sports Related Concussion/TBI:

1. Annual training on concussion management is required for all coaches (paid and volunteer), athletic trainers, team physicians, school nurses and physical education (PE) teachers. The Athlete Director will be responsible for ensuring that all coaches, athletic trainers, and team physicians have completed this requirement. The Coordinator of Health Services will ensure that all nurses have completed this requirement and the Curriculum Leader for Health and Physical Education will ensure that all PE teachers have completed this requirement. The concussion management program is The National Federation of State High School Associations' (NFHS) - *Concussion in Sports-What You Need To Know*. This Center for Disease Control (CDC) endorsed program provides a guide to understanding, recognizing, and properly managing concussions in high school sports. It is available at www.nfhslearn.com. A copy of the certificate of completion is to be kept on file.
2. In order to participate in any extracurricular athletic activity, each student athlete and the student athlete's parent/guardian shall annually review information on concussions provided by Hampton City Schools via lecture, video, handouts or a combination thereof. The information provided will include the short - and long-term health effects of concussions. After the parent/guardian has reviewed the information provided regarding concussions and the health effects of concussions, they shall sign a statement acknowledging receipt, review, and understanding of such information, see Appendix A – Concussion Information for Parents and Athletes. If it is determined that English is a second language for the athlete and/or parent/guardian, appropriate translation will be provided. It will be the responsibility of each Athletic Director to ensure that each student athlete and his/her parent/guardian has received the appropriate concussion material and signed that they have received, reviewed and understood the information. The signed "Concussion Information for Parents and Athletes" form will be attached and kept on file with the Virginia High School League (VHSL) physical in the Athletic Director's office.
3. A student athlete suspected by the student's coach or athletic trainer of sustaining a concussion or brain injury in a practice or game shall be removed from the activity immediately. A student athlete who has been removed from play, evaluated and suspected to have a concussion or brain injury shall not return to play that same day, see Appendix B - HCS Sideline Concussion Assessment. The athletic trainer will provide the parent/guardian with further medical instruction, which could include immediate transportation to the ER, see Appendix C- Concussion Information and Referral Form. The parent/guardian will receive 2 copies of Appendix C – Concussion Information and Referral Form with one copy needing to be returned to the athletic trainer signed by the parent/guardian prior to beginning the RTP protocol. The athletic trainer will be responsible for documenting that the parent received the correct information regarding each concussion. The school nurse should be notified when a concussion occurs by the next school day. She/he will document in the Health Alert database that a concussion has

occurred. If a student sustains a concussion, non-sports related, the school nurse will inform the athletic trainer. At the end of each year, the athletic trainer will be responsible for giving a copy of all concussion reports on athletes to the school nurse. The school nurse will add the reports to each individual's health record.

4. The athlete should be referred for immediate medical care if any of the following are present, including but not limited to:
 - On field loss of consciousness
 - Cervical spine complaints
 - Focal neurological symptoms
 - Recurrent vomiting
 - Bleeding/clear fluid leakage from ears and nose
 - Unresolved balance or gait disturbance
 - Headaches that worsen
 - Looks drowsy/can't wake up
 - Can't recognize people/places
 - Seizures
 - Weakness/numbness in arms/legs
 - Slurred speech

5. If your athletic trainer is not available for assessment, the athlete's eligibility to play will be determined by the presiding coach using Appendix F – Coach's Concussion Card as a tool in determining a possible concussion. The coach will call his or her school's athletic trainer and the athletic trainer will inform the TBI/Concussion team. If a suspected concussion occurs during the summer months, the coach should contact the Athletic Training Coordinator immediately and Health Services Coordinator (727-2363).
A player suspected of having a concussion shall never be left alone or allowed to transport themselves off the premises.

6. When the athletic trainer is present to make the assessment, he/she will notify the TBI/Concussion team by calling Health Services Coordinator, 727-2363, of any athlete that has sustained a concussion, brain injury or head injury during practice or a game. When a school nurse is presented with a suspected concussion, he/she will notify the TBI/Concussion team by calling Health Services Coordinator, 727-2363.

7. **The return to play progression will not begin until the athlete is completely symptom free.** All of the following criteria is required for return after a concussion/brain injury/head injury:
 - a. Written clearance to return to play from the student's licensed health care provider (refer to definitions). **GRADUATED RETURN TO PLAY MUST BE SUPERVISED BY A LICENSED HEALTH CARE PROVIDER OR APPROPRIATE HEALTH CARE PROVIDER.**
 - b. Completely asymptomatic - no symptoms at all.
 - c. Normal ImPACT Testing as read by a trained ImPACT personnel.
 - d. Completed supervised graduated return to play procedure, Appendix D – Concussion Graduated Return To Play. Each step in this procedure should take a minimum of 24 hours. The steps must be completed without return of any symptoms. If any symptoms occur, the athlete returns to the previous asymptomatic step.
 - e. If symptoms continue to occur for 2 consecutive days, the athlete will be referred back to the physician for a follow up evaluation.
 - f. A written clearance from the certified athletic trainer from the athlete's school.

- g. Appendix C – Concussion Information and Referral Form signed by parent/guardian.
- h. Appendix G – Return To Learn signed by licensed health care provider.

8. If a head injury occurs or continues on or past June 6th to August 1st, the coach should contact the athletic trainer coordinator to guide the athlete through the RTP guidelines.

9. Documentation: Parents/guardians must report all concussions sustained prior to each year on the Virginia High School League Physical Form. The Athletic Trainer will maintain documentation on students that have sustained a concussion during athletic competition at the athlete's current high school. At the end of the school year, the Athletic Trainer will give the School Nurse the concussion reports. The reports will be put in the student's cumulative health folder located in the School Nurse office at the end of the school year. A safe return to play is the ultimate goal regardless of age and level of play.



Appendix A

Concussion Information for Parents and Athletes

ALL athletes who suffer a concussion must be cleared by the athletic trainer and the student's licensed healthcare provider before returning to play. The athlete must be symptom free, communicate daily with the athletic trainer, and complete a functional return-to-play progression before being cleared to participate to ensure a safe return to sport.

What is a concussion?

A concussion is an injury to the brain that temporarily changes how the brain normally works. It is usually caused by a direct blow or jolt to the head, face, or body with an “impulsive force” transmitted to the head. Signs and symptoms of a concussion can include dizziness, headache, vomiting, confusion, acting dazed, forgetting what happened before or after the injury, and/or loss of consciousness. A person does NOT need to be “knocked out” or lose consciousness to have a concussion. Other words or terms for a concussion include *mild traumatic brain injury* (mild TBI) and *mild closed-head injury*.

What are the possible short term effects of concussions?

Most young people will recover completely from a single concussion within one to two weeks. However, some people can take longer to recover than others. Common problems seen after a concussion are listed below. You should watch for these problems. Talk with your child's licensed healthcare provider about any changes that you notice in these areas:

Physical

Headaches
Sick to Stomach
Dizziness
Low Energy Level
Trouble with vision
Bothered by Light
Sleeping Problems

Thinking (Cognitive)

Slowed Thinking
Trouble Paying Attention
Difficulty Remembering
Acting like “in a fog”
Easily Confused
School Performance Suffers

Behavioral or Emotional

Irritability or Grouchiness
Easily Upset /Frustrated
Nervousness
Sadness
Acting without thinking
Personality changes

** Please note that with a concussion your child may only display one of the above symptoms or a combination of symptoms. Regardless of the number of symptoms experienced, management of the concussion will remain the same.*

What are the possible long term effects of a concussion?

There is a possibility of long term effects on a person's health when a concussion is sustained. These effects can include Post-concussion syndrome, Dementia Pugilistica, and the possibility that the affected person may suffer from cumulative effects of multiple concussions. In Post-concussion syndrome, symptoms do not resolve for weeks, months, or years after a concussion, and may occasionally be permanent. Symptoms may include headaches, dizziness, fatigue, anxiety, memory and attention problems, sleep problems, and irritability. Dementia Pugilistica, or chronic encephalopathy, is an example of the cumulative damage that can occur as the result of multiple concussions or less severe blows to the head. The

condition can result in cognitive and physical deficits such as Parkinsonism, speech and memory problems, slowed mental processing, tremor, and inappropriate behavior. It shares features with Alzheimer's disease. Cumulative effects may include psychiatric disorders and loss of long-term memory. Three or more concussions are also associated with a fivefold greater chance of developing Alzheimer's disease earlier and a threefold greater chance of developing memory deficits. After the initial concussion, there is a period in which the brain is particularly vulnerable to further injury. If an athlete sustains a second concussion during this period, the risk of permanent brain injury increases significantly and the consequences of a seemingly mild second concussion can be very severe, and even result in death (i.e., "second impact syndrome").

If your child has sustained a suspected concussion, the athletic trainer and/or coach at your athlete's school will provide you with further medical instruction, which could include immediate transportation to the ER. Before your child can return to play, he/she must have a written medical release from the student's licensed healthcare provider and a "return to play" release from the Athletic Trainer. An information sheet will be provided to you as will our return to play guidelines. For more information or educational resources, please contact the Hampton City Public Schools Athletic Department or the Certified Athletic Trainer at your athlete's school.

By signing this form, you are acknowledging that you have received, read, and understand this information provided to you regarding concussions.

I, _____, parent/guardian of _____, have received, read, and understand the information provided to me on concussions. If I have further questions, I will contact the appropriate personnel listed above.

Signature (Parent/Guardian)

Date

Signature (Student Athlete)

Date

Sideline Concussion Assessment

Name: _____

Date: _____

School/Org: _____

Sports/Team: _____

Have you ever had a concussion or been “knocked out” before? Y / N

1) GCS

(E)		(V)		(M)
No eye opening 1	No verbal response 1	No motor response 1		
Eyes open to pain 2	Incomprehensible sounds 2	Extension to pain 2		
Eyes open to speech 3	Inappropriate words 3	Abnormal flexion to pain 3		
Eyes open spontaneously 4	Confused 4	Flexion/withdrawal to pain 4		
	Orientated 5	Localizes pain 5		
		Obeys commands 6		

2) SIGNS

Was there loss of consciousness or unresponsiveness? **Y / N** How long? _____

Was there amnesia (retrograde or anterograde)? **Y / N** How long? _____

Was there seizure or convulsive activity? **Y / N**

Was there a balance problem/unsteadiness? **Y / N**

3) ORIENTATION P / F

What venue are we at today? **Y / N**

What team did you play last week? **Y / N**

Which half is it now? **Y / N**

Did your team win the last game? **Y / N**

Who scored last in this game/match? **Y / N**

4) SYMPTOMS

Do you have any of these symptoms?

Headache	Y / N	Feeling like “in a fog”	Y / N
“Pressure in head”	Y / N	Confusion	Y / N
Neck pain	Y / N	Fatigue or low energy	Y / N
Nausea or vomiting	Y / N	More emotional than usual	Y / N
Dizziness	Y / N	Irritability	Y / N
Balance problems	Y / N	Difficulty concentrating	Y / N
Vision problems	Y / N	Difficulty remembering	Y / N
Sensitivity to light	Y / N	Sadness	Y / N
Sensitivity to noise	Y / N	Nervous or anxious	Y / N
“Don’t feel right”	Y / N	Other _____	Y / N

Do any of these symptoms get worse with physical activity? Y / N
Overall Rating (How different is the athlete acting compared to his/her usual self?)

Very different

No different

Unsure

5) Cognitive Assessment P / F

5 word recall

Immediate

Delayed

Word 1 _____ Cat _____

Word 2 _____ pen _____

Word 3 _____ shoe _____

Word 4 _____ book _____

Word 5 _____ car _____

Months in reverse order (circle incorrect)

Digits Backwards (check correct)

Jun-May-Apr-March-Feb-Jan-Dec-Nov-Oct-Sept-Aug-July

5-2-8 3-9-1 _____

Or

6-2-9-4 4-3-7-1 _____

Sun-Sat-Fri-Thur-Wed-Tues-Mon

8-3-2-7-9 1-4-9-3-6 _____

7-3-9-1-4-2 5-1-8-4-6-9 _____

6) BALANCE EXAMINATION P / F

Balance testing is to be performed for 20 seconds each.

Instruct the athlete to place the hands on the hips and close the eyes.

- a) Double leg stance: **Errors:** _____
- b) Single leg stance: **Errors:** _____
- c) Tandem stance: **Errors** _____

Balance testing: Types of errors (max. 10 per trial)

- 1. Hands off iliac crest
- 2. Opening eyes
- 3. Step, stumble, or fall
- 4. Moving hip into >30 deg. Of abduction
- 5. Lifting forefoot or heel
- 6. Remaining out of test position > 5 seconds

Which foot was tested?

Left

Right

7) COORDINATION EXAM

P / F

Finger to nose task: Ask the athlete to touch their nose and then to extend out to touch your finger. Position yourself so that the athlete has to fully extend the elbow to reach your finger. Athlete fails the test if they do not touch their nose, do not fully extend their elbow, or do not perform five repetitions in <4 seconds. Athlete may choose which arm to use.

Which arm was tested?

Left

Right

Signature: _____

This form is not designed as a stand-alone tool to diagnose concussion. Any athlete with a suspected concussion should be removed from play or practice immediately. Symptoms should be monitored for progression and the athlete should not be left alone unobserved. Adapted from SSCP, 2010

Remember: Notify Health Services Coordinator if concussion suspected.



Appendix C

Concussion Information and Referral Form

ALL athletes who suffer a concussion must be cleared by the athletic trainer and the student's licensed healthcare provider before returning to play. The athlete must be symptom free, communicate daily with the athletic trainer, and complete a functional return-to-play progression before being cleared to participate to ensure a safe return to sport.

What is a concussion?

A concussion is an injury to the brain that temporarily changes how the brain normally works. It is usually caused by a direct blow or jolt to the head, face, or body with an "impulsive force" transmitted to the head. Signs and symptoms of a concussion can include dizziness, headache, vomiting, confusion, acting dazed, forgetting what happened before or after the injury, and/or loss of consciousness. A person does NOT need to be "knocked out" or lose consciousness to have a concussion. Other words or terms for a concussion include *mild traumatic brain injury* (mild TBI) and *mild closed-head injury*.

What Should Parents Do In The First Days After A Concussion?

Serious problems after a concussion are rare, but may occur. In the first 1-2 days after the injury, you should watch your child very carefully. After the first 24 hours, you can give acetaminophen (Tylenol) for headaches, but no other medications should be given at this time without a doctor's approval. You should get **IMMEDIATE** medical help if your child displays any of the signs or symptoms listed on the back of the page under the **Physician Referral Checklist**.

What Should Generally Be Expected?

Most young people will recover completely from a single concussion within one to two weeks. However, some people can take longer to recover than others. Common problems seen after a concussion are listed below. You should watch for these problems. Talk with your child's licensed healthcare provider about any changes that you notice in these areas:

Physical

Headaches
Sick to Stomach
Dizziness
Low Energy Level
Trouble with vision
Bothered by Light
Sleeping Problems

Thinking (Cognitive)

Slowed Thinking
Trouble Paying Attention
Difficulty Remembering
Acting like "in a fog"
Easily Confused
School Performance Suffers

Behavioral or Emotional

Irritability or Grouchiness
Easily Upset /Frustrated
Nervousness
Sadness
Acting without thinking
Personality changes

** Please note that with a concussion your child may only display one of the above symptoms or a combination of symptoms. Regardless of the number of symptoms experienced, management of the concussion will remain the same.*

What Can a Parent do to Help?

- **Have your child rest.** Doing too much too soon after a concussion can make problems worse. In the first days after a concussion, don't expect too much from your child. He or she will probably need lots of "down time" to rest and relax.
- **Make sure your child gets enough sleep and eats properly.** Some children will need more sleep than usual. Allowing naps during the day and making sure they get plenty of sleep at night should help. You should also make sure your child is eating healthy foods and drinking plenty of water.
- **Be patient.** After a concussion, your child might seem cranky, more easily upset, or more tired and forgetful. This behavior is probably being caused by the concussion. Try to be patient and understanding when this happens. If the behavior continues, talk with a doctor.

Physician Referral Checklist

Day of Injury Referral

1. Loss of consciousness on the field
2. Amnesia lasting longer than 15 minutes
3. Deterioration of neurologic function*
4. Decreasing level of consciousness*
5. Decrease or irregularity in respirations*
6. Decrease or irregularity in pulse*
7. Unequal, dilated, or unreactive pupils*
8. Increase in blood pressure
9. Cranial nerve deficits
10. Any signs or symptoms of associated injuries, spine, or skull fracture, or bleeding*
11. Mental status changes: lethargy, difficulty maintaining arousal, confusion, or agitation*
12. Seizure activity*
13. Vomiting*
14. Motor deficits subsequent to initial on-field assessment
15. Sensory deficits subsequent to initial on-field assessment
16. Balance deficits subsequent to initial on-field assessment
17. Cranial nerve deficits subsequent to initial on-field assessment
18. Postconcussion symptoms that worsen
19. Additional postconcussion symptoms as compared with those on the field
20. Athlete is still symptomatic at the end of the game (especially at high school level)

*Requires that the athlete be transported immediately to the nearest emergency department.

Delayed referral (after the day of the injury)

1. Any of the findings in the day-of-injury referral category
2. Postconcussion symptoms worsen or do not improve over time
3. Increase in the number of postconcussion symptoms reported
4. Postconcussion symptoms begin to interfere with the athlete's daily activities (ie, sleep disturbances, or cognitive difficulties)

Concussion Home Instructions

I believe that _____ sustained a concussion on _____.

1. Before your child can return to play, he/she must have a written medical release from the student's licensed healthcare provider **and** the athletic trainer at the athlete's school.
2. **Please remind** your child to report to the athletic training room on _____ for a follow-up evaluation.
3. **Please review** the items outlined on the **Physician Referral Checklist**. If any of these problems develop prior to his/her visit, please contact the local emergency medical system or your student's licensed healthcare provider. Otherwise, you can follow the instructions outlined below until your athlete is seen by his/her licensed healthcare provider

It is OK to:

- Use acetaminophen (Tylenol) for headaches after 24 hours
- Use ice pack on head and neck as needed for comfort
- Eat a light diet
- Return to school
- Go to sleep
- Rest (no strenuous activity or sports)

There is NO need to:

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

Do NOT:

- Drink alcohol
- Eat spicy foods

Specific Recommendations:

Recommendations Provided to:

Recommendations Provided by:

Date:

Time:

Please feel free to contact me if you have any questions. I can be reached at:

Parent/Guardian Signature: _____

Date:



Appendix D

CONCUSSION GRADUATED RETURN TO PLAY

When an athlete has been evaluated by an athletic trainer and/or a physician for a concussion, the following graduated functional return to play will be followed. *The return to play progression will not begin until the athlete is completely symptom free.* Each step is a 24 hour period; therefore the return to play progression will be a minimum of 6 days.

If the athlete experiences any symptoms, at any point during the rehabilitation steps, the progression will stop immediately and the cycle will resume at the previous asymptomatic rehabilitation step after 24 hours of rest. If symptoms continue to occur for 2 consecutive days, the athlete will be referred back to the physician for a follow up evaluation.

When the athlete has successfully completed Step 4 (Non-Contact Drills) of the progression, they will be IMPACT tested using the computerized neuropsychological testing battery to help assist in a safe return to play. The IMPACT results will be reviewed by the physician and return to play status will be determined at this point. Please note that the IMPACT test results will not be the sole determining factor for return to play.

Rehabilitation Steps	Functional Exercise	Objective of Each Stage
Step 1 -- No Activity	Physical / Cognitive Rest	Recovery
Step 2 -- Light Aerobic Exercise	Walking, Swimming, Bike	Increase Heart Rate
Step 3 -- Sport-Specific Exercise	Running Drills, NO Impact	Add Movement
Step 4 -- Non-Contact Drills	Complex Drills, Resistance Training	Exercise, Coordination, Cognitive Load
Step 5 -- Full Contact	Following Clearance, Normal Training Activities	Restore Confidence, Assess Functional Skills by Staff
Step 6 -- Return to Play	Normal Game Play	

*Adapted from Table 1 McCrory et al. Consensus Statement on Concussion in Sport 3rd International Conference on Concussion in Sport, Zurich, November 2008.

The treatment, management, and return to play determinations will be individualized to each athlete and dependent on circumstances of each specific case and injury. A safe return to play is the ultimate goal regardless of age and level of play.

For more information regarding concussion, please visit the following websites:

- http://www.cdc.gov/concussion/HeadsUp/high_school.html
- http://www.vhsl.org/sports_medicine
- www.nata.org



Appendix E

Hampton City Schools Concussion Clearance

I certify that _____ has successfully completed and passed all the requirements to return to full competition after sustaining a concussion injury. The below actions have been completed:

- _____ Email TBI/Concussion Team
- _____ Appendix B – Sideline Concussion Assessment
- _____ Appendix G – Return to Learn signed by a licensed health care provider
- _____ Received a written note from their private licensed health care provider clearing them to return to full competition after sustaining a concussion injury.
- _____ Successfully complete the Return To Play steps
- _____ Received a written note from the Certified Athletic Trainer at their high school clearing them to return to full competition after sustaining a concussion injury.
- _____ Appendix C- Concussion Info and Referral Form signed by parent/guardian

Print Name of HCS Athletic Trainer

Date

Signature of HCS Athletic Trainer

Remember: Notify Health Services Coordinator



Appendix F

HAMPTON CITY SCHOOLS ATHLETIC DEPARTMENT

COACHES CONCUSSION CARD

If a head injury occurs while a Certified Athletic Trainer is not present please follow these steps:

Step 1: Call Athletic Trainer. If your Athletic Trainer is not available contact Scott Allyn @757-692-5962

Step 2: Call Parent

Step 3: Complete the following information:

Athlete's Name: _____ **Sport:** _____ **School:** _____

Injury Date/Time: _____ : _____ am/pm

Activity: _____

Injury Type

___ Fall ___ Hit on head by other player ___ Hit head on ground or ice ___ Struck by object

Screening

Memory Loss Y/N What was your last meal?
Disorientation Y/N Date? Location?

Balance (Single leg stance for 10 sec) Eyes open: **P/F** Eyes closed: **P/F**

Symptoms

___ Loss of Consciousness (approx. time: _____) ___ Vomiting ___ Nausea
___ Headache
___ Sensitivity to light ___ Dizziness ___ "don't feel right" ___ Neck pain
___ Vision issues

If athlete has any of the symptoms above or has difficulty with any of the screening procedures, do not allow the athlete to return to play and have them fully assessed by the associated Certified Athletic Trainer.



Appendix G

Concussion Referral Form

Patient Information:

Name: _____

D.O.B: _____

History of Injury (include mechanism, signs & symptoms, prior concussion history):

Referred by: _____

Physician Section:

Diagnosis: _____

Home/Return to Play/Return To Learn Care Plan:

Follow up Visit: Yes ___ When? _____ No ___

Physician Name (print): _____

Signature: _____

*****Return this completed form to your athletic trainer as soon as possible**



Appendix H

Reasonable Accommodations for Return to Classroom Post TBI

As a professional educator, there is much you can do to help your students recover from traumatic brain injury and help their brains heal. Symptoms may impede information processing speed and the ability to handle a full load of work. You can provide accommodations for these *temporary learning difficulties*.

<p>The mental effort to prepare for and then take tests may worsen with symptoms</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Postpone or stagger tests. Avoid doubling up on tests. Provide shortened tests or extend time to take tests. <input type="checkbox"/> Modify assignments and homework. Limit the number of problems, questions or pages to read. Emotional pressure can increase symptoms. <input type="checkbox"/> Concussed students will often exhibit temporary learning difficulties similar to those associated with ADHD (see below). <input type="checkbox"/> Modify assignments—Select the most important concepts. Deliver instructions in smaller “chunks.” <input type="checkbox"/> Excuse from (or un-weight) specific tests and assignments. Remove or adjust large projects during the first critical three weeks. <input type="checkbox"/> Allow more time to complete tests.
<p>Some students with symptoms exhibit the same characteristics as seen in ADHD.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Use a reader or recorded books for assignments and testing. A buddy might be used to read assignments aloud. <input type="checkbox"/> Provide pre-printed class notes or allow other students to share their notes. <input type="checkbox"/> Use a smaller, quieter exam room or use a quiet part of the classroom. <input type="checkbox"/> Move the student to a seat in front of the class. Seat away from windows, doors other distractors. <input type="checkbox"/> Allow for a temporary tutor to assist in organizing and planning work. Allow another student to help access school resources
<p>Physical exertion may increase symptoms.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Excuse from sports, PE, weight-lifting, cheer, band. <input type="checkbox"/> Reduce backpack weight by keeping textbooks in the classroom. May need an extra set at home.
<p>Students report that one of the scariest things they experience after TBI is changes in mood</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Allow time to visit the school counselor, nurse or psychologist. <input type="checkbox"/> Assign a buddy to help talk to the student, listen and calm the student when upset. <input type="checkbox"/> Make arrangements to provide the student with a quiet supervised place to go to regain composure; often this can be the clinic. <input type="checkbox"/> Let students know that this is one of the symptoms they may experience.
<p>Some students are sensitive to light and/or noise after a concussion.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Permit sunglasses or caps with visors indoors. <input type="checkbox"/> Permit ear protectors (not music). <input type="checkbox"/> Provide a quiet alternative place to eat. Cafeterias are loud and bright. <input type="checkbox"/> Allow extra hall passing time or allow student to leave early to the next class to avoid hallway chaos. <input type="checkbox"/> Turn down lights in one area of the classroom when possible

Information adopted from Gloucester County Public Schools Concussion Protocol, 2016.



Brain Injury Deficit

Management Strategies

Information by Brain Injury Association of Virginia

Deficit	Problems Arising	Management Strategies
	The person may.....	You can.....
Speed of information Processing	<ul style="list-style-type: none"> *take longer to complete tasks *take longer to answer questions *be unable to keep track of lengthy conversations 	<ul style="list-style-type: none"> *make allowances and give the person extra time *present only one thing at a time *not interrupt or answer for the person *verify that the person is keeping up with the conversation
Fatigue	<ul style="list-style-type: none"> *tire quickly (physically & mentally) *have reduced tolerance and ability to cope *become irritable *have other problems exacerbated 	<ul style="list-style-type: none"> *encourage the person to take breaks *schedule more demanding or essential tasks when the person is at their best
Mental Tracking	<ul style="list-style-type: none"> *have difficulty following instructions *lose track of what they are thinking or doing *get information confused 	<ul style="list-style-type: none"> *keep activities short and uncomplicated *ask specific questions *provide reminders of the next step or task
Memory	<ul style="list-style-type: none"> *have difficulty learning new things *be forgetful *lose things *have difficulty recalling what they've learned 	<ul style="list-style-type: none"> *repeat information as necessary *encourage use of external memory aids (journals, calendars, time tables) *maintain 'special places' for belongings *give reminders and prompts to assist recall

Attention	<ul style="list-style-type: none"> *appear not to listen *miss details *forget what people have said *have difficulties concentrating *be unable to cope with more than one thing at a time *be easily distracted *change the subject often *get bored easily 	<ul style="list-style-type: none"> *shorten instructions/activities so they can be completed *write down instructions accurately and in a way that can be easily understood later *encourage the person to engage in only one activity at a time *reduce external distractions *bring the person's focus back to the current task
Problem Solving	<ul style="list-style-type: none"> *have difficulty working out solutions to problems *be unable to generate new ideas *have a disordered approach to problem solving 	<ul style="list-style-type: none"> *help identify an achievable outcome for the task, ensure there is a purpose *avoid giving open-ended tasks *assist the person to break a task down into smaller components *reduce the demands made upon the person(one thing at a time)
Communications	<ul style="list-style-type: none"> *have trouble initiating conversation *have trouble understanding non-verbal communication/body language; take statements literally 	<ul style="list-style-type: none"> *encourage participation by asking "What do you think about that?", use open-ended statements such as "Tell me about..." *give verbal cues to communicate intent of conversation *use simple and direct language and avoid talking in abstract terms; avoid the use of sarcasm
Planning & Organizing	<ul style="list-style-type: none"> *have difficulty preparing for a task *be unable to work out the steps involved in a task *have problems with organizing their own thoughts and explaining things to others *encourage the person to take time to think before they speak 	<ul style="list-style-type: none"> *provide a written structure or guideline outlining the steps in order *help develop a timetable (weekly, daily) to establish a routine of activities *encourage the person to take time to think before they speak
Reasoning	<ul style="list-style-type: none"> *have a rigid and concrete thinking style; take statements literally *be resistant to change *have a simplistic understanding of emotions *show poor judgement and 	<ul style="list-style-type: none"> *explain changes in routine in advance, giving reasons *avoid using emotional undertones *provide real life examples when offering explanations

	poor decisions making skills	
Self-Monitoring	<ul style="list-style-type: none"> *show poor adherence to rules *not realize they have made errors *'hog' conversations; be verbose and keep talking when others are no longer interested *have lower tolerance for frustrating situations 	<ul style="list-style-type: none"> *provide feedback promptly and in a respectful manner when errors occur *create and use signals to let them know when they are talking too much *encourage turn-taking in conversations *gently redirect behavior to a different topic or activity

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Resources for Educators Working with Students with TBI/Concussion

1. VDOE TBI Webpage:

http://www.doe.virginia.gov/special_ed/disabilities/traumatic_brain_injury/

2. Center for Brain Injury Research and Training:

<http://cbirt.org/tbi-education/instruction-strategies/>

3. Brain Injury and the Schools: Educator's Guide:

http://www.doe.virginia.gov/special_ed/disabilities/traumatic_brain_injury/brain_injury_schools.pdf

4. National Federation of State High School Association NFHS:

<https://nfhslearn.com/courses/61037/concussion-in-sports>