All Schools - All Concussions Toolkit

BRAIN INJURY ASSOCIATION OF VERMONT

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Concussion Task Force

Current Members/Contributors

Denise Alosa, MS, ATC
Athletic Trainer
South Burlington High School

Abby Beerman
UVM Medical Ctr
Safe Kids VT Coordinator

Reese Boucher, MS, ATC
Athletic Training Education Program Director
Castleton University

Sonja Crowe
Brain Injury Program Manager; QDDP
Green Mountain Support Services

John J Feenick, MS, ATC
Chairperson, Physical Education (retired)
Castleton University

Matthew Gammons, MD,
Vermont Orthopaedic Clinic
Killington Medical Clinic
Rutland Regional Medical Center

Karen Harlow BSN, RN
School Nurse
Essex High School and Center for Technology Essex, VT

Deborah Hirtz, MD
Prof. – Neurological Sciences & Pediatrics
University of Vermont Medical Center

Danielle Kent, SLP
Central Vermont Medical Center

Sara Lane
TBI Program
VT Dept. of Aging & Independent Living

Rebecca Louko,
PT/OT Supervisor - UVMMC
Out-patient Rehab Center

Aimee Pascale, PhD
Assistant Professor-ATC
Lyndon State College

Amy B. Ridlon, RN, BSN
School Nurse
Wells & Middletown Springs elementary

Trevor Squirrell, MS
Executive Director, BIAVT

Sharonlee Trefry MSN, RN, NCSN
Vermont Department of Health
Maternal and Child Health Division
State School Nurse Consultant

Kathryn Vreeland, Ed.D, M.B.A., ATC
UVM Clinical Associate Professor
Dept. of Rehabilitation and Movement Science

Tanya Wells, MSEd, CHES, CPST-I
Injury Prevention Chief
Vermont Department of Health

Barbara Winters, BA, OTA/L, CBIST

Sue Zamecnik, MS, CBIST
VR Counselor II
VocRehab-VT

Past members/contributors

Joy Barrett, RN
VT Dept. of Aging & Independence

Jocelyn Bouyea, RN, BSN
Shelburne Community School

Rebecca H. Choquette, ATC
Dept. of Orthopedics & Rehabilitation
University of Vermont College of Medicine

Michael Ferguson
VT Agency of Education

William Frey, PhD
Private Practice

Linda King, MA, EdS
Special Educator
Missiquoi Middle/High School in Swanton

Suzanne Lawrence, PT
Rehab Therapy Clinical Research Educator
UVMMC
In-patient Rehab Center

Kellie Martin, BA, CBIS
Neuro Resource Facilitator - BIAVT

Kimberly Patten, OTL, CBIST
Possibilities Occupational Therapy

Christa Zehle, MD
Pediatrician, UVM Medical Ctr.
UVM Assoc. Dean for Students

Kristin M. Gehsmann, Ed.D.
Associate Professor of Education
Saint Michael's College

Chrissy Keating
UVM Medical Ctr.
Safe Kids VT Coordinator

Lauren Prinzing, MPH, CPH
CSTE Fellow / Vermont Dept. of Health

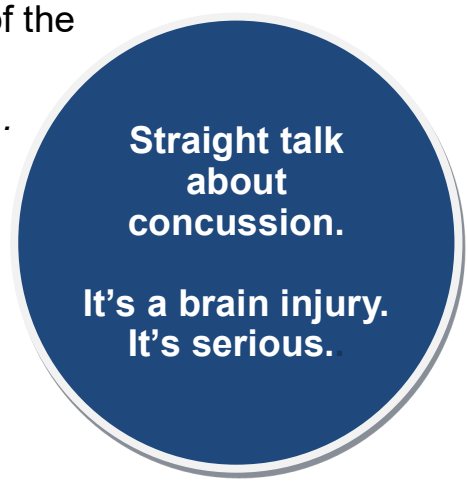
Table of Contents

1	Introduction
2	Vermont State Concussion Law Executive Summary
3	How to Implement a Concussion Management Plan
4	Concussion Action Plan for Students
5 - 7	**Return to Learn Protocol**
8	**Return to Physical Activity**
9	Return to Physical Activity Release
10	Return to Physical Activity Protocol
11	**Return to Play**
12	Return to Play Release
13 - 14	Return to Play Protocol
15	Graded Return-to-Play (non-contact drills) Protocol
16	Return to Full Contact Physical Activity
17	**For the Classroom**
18	A Student in Your Class Has a Concussion
19 - 22	Learning Accommodation Resource
23	**For the Nurse**
24	School Nurse Communication Tool for Concussion
25	Letter/Email to Parents
26	Healthcare Professional Information and Resources
27	**For the Field**
28	Concussion Education and Resource Materials
29	Concussion Acknowledgment Statement
30	**Concussion Resources**

Introduction

The All Schools All Concussions toolkit is designed as a guide for school staff (k-12) in assisting students to return to academic and recreational activities after a concussion/mild traumatic brain injury. Because each school and each brain injury is unique, different parts of the plan may be adapted, however the basic concepts of how a concussion will be treated will be the same. The Concussion Task Force, a subcommittee of the State TBI Advisory Board strongly recommends that each school have a concussion management plan and, if possible, participate in a Supervisory District level plan. It is most effective to have a program-based team coordinate the implementation of a school's concussion management policy. Ideally, a school's concussion management team would include all applicable stakeholders involved in the medical, athletic, and academic aspects of the concussion management process.

Vermont State law states *"The principal or headmaster … shall ensure that each school has a concussion management action plan that describes the procedures the school shall take when a student athlete suffers a concussion." (16 V.S.A. § 1431)* The law applies to middle and high school student athletes in school sponsored sports but can apply to any concussion, no matter the age or cause of injury.



What is a concussion?

A concussion is a type of brain injury caused by a bump, blow, or jolt to the head that causes the brain to move rapidly back and forth. The sudden movement from a fall or blow to the body can cause the brain to bounce around inside the skull creating chemical changes and sometimes damaging brain cells. Loss of consciousness is not required to have a concussion, even what seems to be a mild bump to the head can have serious effects. Immediately after an injury, the brain is more vulnerable. Proper recognition and response to concussion can prevent further injury and help with recovery.

A concussion is not an injury that can be seen. Students often appear and sound just fine but are struggling. Chemical changes from the damage to brain cells can result in physical, emotional, and cognitive symptoms -see full symptom list at : www.cdc.gov —Concussion Signs and Symptoms Gradual build up of physical activity is important in the healing process, as long as symptoms are not worsening.

This Toolkit includes materials that can be edited to be specific to your school. If you have any questions or concerns please contact the Brain Injury Association of VT www.biavt.org or email admin@biavt.org.

Vermont State Concussion Law V.S.A. § 1431, Act No.68.
An act relating to health and schools

Executive Summary

Educate:
All coaches (every 2 years) and officials of "collision sports" must receive training in recognizing the symptoms of concussion and how to reduce the risks of concussion. New coaches and officials of "collision sports" must receive this training before either coaching or officiating. Information concerning concussion and its impacts must be provided to student athletes and their parents at least once per school year.

Acknowledge:
Student-athletes and parent must acknowledge (sign and return school form) receipt of the school's Action Plan.

Remove:
Student-athletes suspected of having a concussion must be removed from play.
Parents/guardians must be informed within 24 hours if student sustains a concussion.

Return:
Student-athlete must be evaluated by and have written permission from a health care provider (as defined by Act 68) prior to returning to training or competition.

Action Plan:
Each school must have an action plan with the following policies:
- School must designate an individual who make the initial decision to remove a student athlete from play when it is suspected the athlete may have suffered a concussion
- School must outline the steps required before a student athlete can return to athletic or learning activity
- School must designate an individual who will make the final decision regarding the student's return to athletic activity
- School must designate the responsibility for informing parents/guardians if a student athlete sustained a concussion.

Effective Dates:
Act 68 shall take effect July 1, 2013, except for the presence of health care provider at school sports activities Sec.7.(f) shall take effect July 1, 2015.

Best Practice
Beyond the minimum legal requirements, best practice suggests:

- Educate <u>all</u> school staff in concussion management. Extending training to staff can ensure prudent return-to-play/academics decisions and cooperation from all stakeholders.
- Develop a clear concussion management plan/policy. Explicit policy guidelines can protect coaches, students, and administrators from backlash for unpopular decisions regarding removal from play.
- Identify a school staff member to lead the concussion management plan.
- Identify licensed healthcare provider with experience in concussion management in your area.
- Once cleared by a license medical provider all student-athletes should follow the return to play protocol.
- Return the student to full activity using an individualized graduated plan to guard against symptom exacerbation or second injury.

How to Implement a Concussion Management Plan

Sound policy will support sensible decisions.

Proper concussion recognition and management can lead to difficult or unpopular decisions. Parents and coaches may strongly disagree with possible varying opinions by healthcare professionals regarding whether an athlete should return to play. To limit conflict, proper concussion recognition and management needs sound policy and administrative support.

At a minimum, clear guidelines should be specified for:

- coach/athlete/parent training
- recognition and removal protocol
- medical referral protocol
- documentation of the concussion incidence and follow-up
- Return to Learn and Return to Activity/Play protocol

Starting out:

It is important to remember that each school is different and there is not a "one size fits all" approach. Some parts of the plan will be necessary to comply with **Vermont State Law, however, other suggestions are for *Best Practice.

Create the school point person and concussion management team:

- **Create the school's concussion management team:** i.e.: Administrative, Athletics, Nurse, Classroom, Counselor, etc.
- **Team should review the requirements** Vermont Concussion Law V.S.A. § 1431, Act No. 68
- ****Schools should identify who will be the lead** for the concussion management plan. This person makes the final decision for return to play for the student. Athletic trainers when available are the ideal individuals to oversee the management plan, otherwise this role may fall to a school nurse or administrator.

Define the following persons:

- ****Who makes initial decision** to remove an athlete from play.
- ****Who is responsible for informing the parents/guardians** if a student sustains a concussion?
- ****Develop an educational curriculum** for coaches, parents and athletes.
- ***Define a return to learn process.** (See Return to Learn)
- ***Develop a clear communication chain** so that all stakeholders are aware of students injury.
- ****Define the steps necessary for an athlete to return to play.** (See Return to Play)
- **Identify community healthcare providers.** Contact the Brain Injury Association of Vermont for help if needed (www.biavt.org).

Concussion Action Plan for Students

AND Management of Sports-Related Concussions

_____ School District has developed this protocol to address the issue of the identification and management of concussion for students. A safe return to activity protocol (learning and physical activity) is important for all students following any injury, but it is essential after a concussion. The goal of this concussion protocol is to ensure that students with a concussion are identified, treated and referred appropriately for return to learn and return to physical activities. Consistent use of a concussion management protocol will ensure the safety and the appropriate follow-up and/or academic accommodations.

This action plan will be reviewed annually by _____. Changes and modifications will be reviewed, and written notifications will be provided to all appropriate personnel, including but not limited to, athletic department staff and coaches

Any student with a concussion should be removed from physical activities until such activity is approved by the Healthcare Professional identified by the school.

Recognition of Concussion

These signs and symptoms – following a witnessed or suspected blow to the head or body – are indicative of a probable concussion.

Specific to V.S.A. s 1431 – Act 68, (which applies to middle and high school students)

Signs (observed by others)	Symptoms (reported by athlete)
Forgets plays	
Appears dazed or stunned	Headache
Exhibits confusion	Fatigue
Unsure about game, score, opponent	Nausea or vomiting
Moves clumsily (altered coordination)	Double vision, blurry vision
Balance problems	Sensitive to light or noise
Personality change	Feels sluggish
Responds slowly to questions	Feels “foggy”
Forgets events prior to hit	Problems concentrating
Forgets events after the hit	Problems remembering
Loss of consciousness (not required)	

Act 68 requires that schools must outline the steps required before a student athlete can return to athletic or learning activity, and;

- All middle and high school coaches are required to participate in concussion management training every two (2) years. The written documentation of coaches annual training shall be kept in the coaches personnel file.
- It is recommended that all coaches be trained in concussion identification and management.
- Parents and athletes must be educated about concussions annually. The documentation of the student/parent education shall be kept in the student file.
- Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion must be removed from competition or practice and will not be allowed to train or compete with a school athletic team until the athlete has been examined by and received written permission to participate in athletic activities from a health care provider (per Act 68, approved by the VT Legislature in 2013).
- School must notify parents/guardians as soon as possible and within 24 hours if a student sustains a concussion.
- It is recommended that athletes with suspected concussions should not be permitted to drive themselves home.
- _____ (name & title) has been designated as the individual who can make the initial decision to remove a student athlete from play when it is suspected the athlete may have suffered a concussion.
- **Return to Learn (RTL) Protocol:** The following steps are recommended before the student can return to full academic activity.

SAMPLE

Return To Learn Protocol

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Return to Learn Protocol

After Concussion/mild TBI

Progression is individual and all concussions are different.

Student should progress as symptoms dictate, remaining at any step as long as needed. If symptoms worsen, return to previous step.

STEP	PROGRESSION	DESCRIPTION
1.	**HOME** **Light physical and mental activity as tolerated**	• None to minimal mental exertion– reduce computer, texting, video games or homework staying below symptom level • Stay at home except for walks as tolerated • No driving
2.	**HOME** **Light physical and mental activity as tolerated**	• Up to 30 minutes mental exertion • No prolonged concentration • Stay at home except for walks as tolerated • No driving
Progress to the next level ***When able to tolerate up to 30 minutes mental exertion without worsening of symptoms*** ***When parent indicates student is ready to return to* school *send : "*Letter/Email to Parents "** **All teachers who interact with the student should receive:** (see "For the Classroom") • *"Your Student Has a Concussion"* • *"Learning Accommodations Checklist"*		
3.	**SCHOOL** **Part time** **(Maximum Accommodations)**	• Shortened Days/Schedule • Built-in Breaks –provide quiet place for scheduled mental rest • No significant classroom or standardized testing • Modify rather than postpone academics • Provide extra time, extra help, modified assignments
Progress to the next level ***When able to tolerate 30 – 40 minutes mental exertion without worsening of symptoms*** ****NOTE: Physical activity is part of healing, activity should be encouraged as long it does not exasperate symptoms***		
May be considered for **Return to Play or Return to Physical Activity Protocol** With appropriate healthcare professional approval.		
4.	**SCHOOL** **Part Time- Full Time** **(Moderate Accommodations)**	• No standardized testing • Modified classroom testing • Moderate decrease of extra time, help, and modification of assignments • PE class as tolerated

Return to Learn Protocol (Cont.)

After Concussion/mild TBI

STEP	PROGRESSION	DESCRIPTION
Progress to the next level ***When able to tolerate <u>60 minutes</u> mental exertion without worsening of symptoms***		
5.	**<u>SCHOOL</u>** **Full Time** **(Minimal Accommodations)**	• No standardized Testing, Routine tests OK • Continue to decrease extra time, help, and modification of assignments • May require more supports in academically challenging subjects • PE class as tolerated
6.	**<u>SCHOOL</u>** **Full Time** **(No Accommodations)**	• Attends all classes • Full homework

*****If persistent symptoms are interfering with academic performance, the students educational support needs should be reassessed.***

Return to Physical Activity

Physical Education/Recess

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Return to Physical Activity Release

To be completed by designated member of concussion management team for student file.

_____ is cleared to begin the Return to Physical Activity protocol as of the date indicated below.

Student Name: _____ DOB: ___/___/_____

School: _____

Date of Injury: ___/___/____

Date Returned to school: ___/___/____

I attest that _____ has completed the Return to Learn protocol through Step 6 and has been symptom free for 24 hours as dated above.

*Approved School Contact Name: _____

Signature: _____Date: ___/___/_____

Title/Position: _____

Phone: (____)_____ Email: _____

If the student experiences a return of any of their concussion symptoms while attempting return to play, stop play immediately and notify a parent, licensed athletic trainer or coach.

*** Approved School Contact is that person designated to approve return to physical activities.*

SAMPLE

Return to Physical Activity Protocol

Physical Education Class/Recess

It is not healthy for the student to be isolated from their friends or activities that they enjoy, but it is important to allow the brain to heal.

STEP	PROGRESSION	DESCRIPTION
1.	**Symptom Limited Activity** **Light physical activity as tolerated**	• Daily activities that do not provoke symptoms
2.	**Light Aerobic Activity** **Light aerobic activity as tolerated**	• Walking, swimming or stationary cycling • Slow to medium pace • No Resistance
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 2***		
3.	**PE Class** **Physical Education and recreational activity as tolerated**	• No activities that have potential for head impact
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 3***		
4.	**FULL Return** **Full return to physical activity**	• No restrictions of activity during recess or Physical Education classes

If the student experiences a return of any concussion symptoms while attempting physical activity they should stop play immediately and notify a parent, school nurse, teacher, licensed athletic trainer or coach.

Return to Play

School Sports and Athletics

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Return to Play Release

To be completed by designated member of Concussion Management Team
for student file.

_____ is cleared to begin the Return to Play protocol as of the date indicated below.

Student Name: _____ DOB: ___/___/_____

School: _____

Date of Injury: ___/___/____

Date Returned to school: ___/___/____

I attest that _____ has completed the Return to Learn protocol through Step 6 and has been symptom free for 24 hours as dated above.

*Approved School Contact Name:
_____

Signature: _____Date: ___/___/_____

Title/Position: _____

Phone: (____)_____ Email: _____

If the student experiences a return of any of their concussion symptoms while attempting return to play, stop play immediately and notify a parent, licensed athletic trainer or coach.

*** Approved School Contact is that person designated to approve return to physical activities.*

SAMPLE

Return to Play Protocol

School sports and Athletics

It is important to allow 24 hours between each step to assure symptoms do not return.

STEP	PROGRESSION	DESCRIPTION
1.	**Symptom Limited Activity** **Light physical activity as tolerated**	• Daily activities that do not provoke symptoms
2.	**Light Aerobic Activity** **Light aerobic activity as tolerated**	• Walking, swimming or stationary cycling • Slow to medium pace • No resistance
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 2***		
3.	**Sport Specific Drills**	• No head impact activities • No Scrimmages or potential for contact
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 3***		
4.	**Non-Contact Drills**	• Progressive resistance training • No Head or potential body impact

If the student experiences a return of any concussion symptoms while attempting physical activity they should stop play immediately and notify a parent, school nurse, teacher, licensed athletic trainer or coach.

Return to Play Protocol

School Sports and Athletics

STEP	PROGRESSION	DESCRIPTION
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 4***		
5.	**Full Contact Practice**	• NEED RELEASE • No intensity/duration restrictions
Progress to the next level ***When symptom free for 24 hours*** ***If symptoms return, wait until symptom free for 24 hours then repeat Step 5***		
6.	**Return to Sport**	• No restrictions • Normal game play

If symptoms persist for more than 10-14 days student should be referred to a concussion management expert.

Graded Return-to-Play (non-contact drills) Protocol
For Student Athletes

To begin the Return to Play Step 2 the student athlete should be participating in academics with minimum accommodations (Step 5 of the Return to Learn Protocol) and must have been symptom free for 24 hours.

Each step listed below should take at least 24 hours to complete.

This protocol **must be carried out under supervision of the Approved School Contact if the student is participating in a team sport**. Please initial and date the box next to each completed step.

Stage	Functional Exercise at Each Stage	Objective	Date Completed	Initials
Aerobic conditioning	Walking, swimming, stationary bike **Intensity**: 4 out of 10 **Duration**: no more than 30 minutes	Increased heart rate		
Sport-specific drills	Non-contact drills **Intensity**: 5-6 out of 10 **Duration**: no more than 60 minutes	Add movement		
Non-contact training drills	Complex (non-contact) drills/practice; can initiate resistance training. No head contact or body impact. **Intensity**: 7 out of 10 **Duration**: no more than 90 minutes	Exercise, coordination and cognitive load		

If the student experiences a return of any concussion symptoms they must immediately stop activity, wait at least 24 hours or until asymptomatic, and drop back to the previous asymptomatic level

Once the athlete has completed non-contact training, sign and date below and return this form to the student-athlete's healthcare provider for review and request that the healthcare provider complete the return to full contact physical activity form for the athlete to resume full activity.

Intensity levels: 1 = very easy; 10 = very hard

I attest that _____ has completed the graded return-to-play protocol (non-contact drills) as dated above.

*Approved School Contact Name: _____

Signature: _____Date: ___/___/_____

Phone: (____)_____ (if ATC) AT License Number: _____

***Approved School Contact is that person designated to approve the return to non-contact physical activities. If the student develops symptoms during Step 2 they should be evaluated by a Healthcare Provider*

RETURN TO FULL CONTACT PHYSICAL ACTIVITY

This completed form must be kept on file.

Return to Play Affidavit

Student-Athlete's Name: _____

Date of Birth: ____/____/_____ Injury Date: ____/____/_____

Formal Diagnosis: _____

School: _____

Sport: _____

This athlete is cleared for a complete return to full-contact physical activity as of ____/____/_____.

This student-athlete is instructed to stop play immediately and notify a parent, licensed athletic trainer or coach and refrain from activity should their symptoms return.

*Healthcare Provider Name: _____

*Healthcare Provider Signature: _____ License No: _____

Date: ____/____/_____

Phone: (_____) _____ E-mail: _____

*Health care provider as defined in Act 68, Sec. 2.(4)

SAMPLE

For the Classroom

Teacher Resources

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

A Student In Your Class Has A Concussion

Student's Name _____ **Date** _____

As a teacher you are a very important part of the Multi-Disciplinary Team who helps to manage this concussion. Here is some information that will be very helpful to you:

- ✔ Concussions are a traumatic brain injury
- ✔ It may take a child/adolescent several weeks or more to recover fully from a concussion
- ✔ The symptoms of a concussion may be seen in your classroom in any of these four ways.

It can affect how a student might experience SLEEP or ENERGY LEVELS:	It can affect how a student FEELS EMOTIONALLY:	It can affect how a student might FEEL PHYSICALLY:	It can affect how a student might LEARN:
Cognitive Symptoms	**Maintenance Symptoms**	**Physical Symptoms**	**Emotional Symptoms**
Fatigue Drowsiness Excess sleep Too little sleep Trouble falling or staying asleep	Personality change Inappropriate emotions Overly emotional Irritable Sad Nervous Lack of motivation	Headaches Blurry vision Dizziness Seeing "double" Disorientation Nausea Sensitivity to noise	Feel mentally "foggy" Easily confused Feel "slowed down" Slowed speech (may be due to word finding difficulty) Difficulty remembering Difficulty concentrating

The majority of students recover quite well from a single concussion with rest and reduction of physical and academic demands. This recovery *may take several* weeks or more. The changes you might see in a student following a concussion are generally temporary. However, if you have any concerns about this student, please report them immediately to the school nurse and the people listed below:

Name _____ Phone _____ E-mail _____

Name _____ Phone _____ E-mail _____

Throughout this process, your input on this student's performance in your classroom is essential. Please coordinate your on-going feedback with person(s) listed above.

Thank you!

From REAP Concussion Management Program, copyright 2012. Adapted with permission of Rocky Mountain Hospital for Children at PSL, Center for Concussion, Centennial. Colorado.

Learning Accommodation Resource

For file

Student's Name _____

Facets of Brain Function	Difficulties	Strategies/Accommodations	Possible Adaptations
Memory	♦ Remembering names ♦ Remembering schedule ♦ Remembering previous learning ♦ Remembering novel learning ♦ Orienting in school building ♦ Sequencing events/ steps in process	♦ Provide written documentation to supplement verbal ♦ Present new information in small, concise chunks ♦ Encourage student to keep a notebook ♦ Provide cues to help student remember information ♦ Review information often ♦ Require recognition rather than recall for testing ♦ Provide class notes by teacher or peer ♦ Allow use of notes for testing ♦ Identify most important concepts for student to learn ♦ Exempt student from routine work and tests ♦ Emphasize comprehension over memorization ♦ Allow student's supplies to be kept in classroom ♦ Use a home-school communication tool	♦ Cue cards ♦ Notebook ♦ E-mail ♦ Smart Phone/ Tablet
Attention	♦ Attending to conversations ♦ Focusing attention ♦ Sustaining focus on task ♦ Dividing attention ♦ Concentrating on ideas	♦ Work on one task at a time ♦ Limit distractions ♦ Work in quiet location ♦ Provide adequate transition time between tasks ♦ Only one person speaks at a time ♦ Limit demands on attention ♦ Redirect student ♦ Provide copy of class notes by teacher or peer ♦ Reduce reading demands ♦ Provide audio formats for texts/ literature ♦ Record class lectures ♦ Identify most important concepts for student to learn ♦ Eliminate busy work	♦ "Speaking" stick ♦ Recorder ♦ Computer ♦ Kurzweil ♦ Study carrel

Facets of Brain Function	Difficulties	Strategies/Accommodations	Possible Adaptations
Processing	♦ Processing information ♦ Responding to directions ♦ Responding to questions	♦ Provide additional time to answer questions ♦ Have student repeat directions ♦ Use alternative reading materials ♦ Identify most important concepts for student to learn ♦ Slow down!!! ♦ Provide visual cues ♦ Provide adequate "wait time"	♦ Visuals
Organization	♦ Organizing school supplies ♦ Organizing written work ♦ Organizing oral responses ♦ Organizing ideas	♦ Provide solutions to problems for making choices ♦ Provide written step-by-step directions ♦ Structure projects for students ♦ Provide study materials for test preparation ♦ Provide graphic organizers ♦ Provide visual cues ♦ Provide choices for organizing tasks or ideas	♦ Graphic organizers ♦ Visuals
Executive Functioning	♦ Self-evaluating ♦ Monitoring own ideas ♦ Monitoring own behaviors ♦ Monitoring own emotions ♦ Monitoring learning ♦ Planning ♦ Self-correcting ♦ Initiating tasks ♦ Setting reasonable goals	♦ Visual schedule ♦ Goals sheet – break down into steps ♦ Set deadlines for tasks – plan, do, review sheets ♦ Focus on 1 thing at a time – no multi-tasking ♦ Schedule contingencies, like travel, into calendar	*Apps such as:* • Dragon Anywhere • Wonderlist • Mindly • Evernote • Google Keep • Freedom • It's Done!

Facets of Brain Function	Difficulties	Strategies/Accommodations	Possible Adaptations
Communication	♦ Understanding others ♦ Expressing ideas orally ♦ Expressing ideas in writing ♦ Word-finding ♦ Understanding non-verbal cues ♦ Using non-verbal cues ♦ Allowing others to talk ♦ Managing volume ♦ Managing tone	♦ Limit use of open-ended questions ♦ Use multiple choice, structured, or yes/no questions ♦ Cue student with beginning sounds of words ♦ Provide outlines ♦ Cue student re: appropriate volume ♦ Explain to student how tone sounds to others ♦ Slow down!!! ♦ Provide adequate "wait time"	♦ Computer files
Emotional	♦ Monitoring mood changes ♦ Managing anxiety ♦ Managing irritability ♦ Managing anger ♦ Managing disappointment ♦ Personality changes ♦ Appropriate public behavior	♦ Minimize anxiety with reassurance and education ♦ Provide stable environmental structure for student ♦ Provide neutral, but direct, feedback ♦ Encourage student to take breaks ♦ Change tasks to diffuse student's stress ♦ Respond calmly ♦ Identify a safe person and plan for student ♦ Provide written notes of praise and encouragement	♦ Visual cues ♦ "Safe space"
Stamina and Endurance	♦ Falling asleep ♦ Staying asleep ♦ Managing drowsiness ♦ Maintaining pace cognitively ♦ Maintaining pace physically	♦ Establish priorities ♦ Abbreviate the daily class schedule ♦ No physical education classes ♦ Reduce make-up work ♦ Reduce homework ♦ No testing ♦ Stress quality over quantity ♦ Provide extended time to complete work ♦ Provide extended time to take tests ♦ Provide adequate breaks to visit school nurse ♦ Provide rest breaks and quiet space ♦ Exempt student from routine work and tests ♦ Exempt student from time-consuming projects	

Facets of Brain Function	Difficulties	Strategies/Accommodations	Possible Adaptations
Sensory: Auditory	♦ Trouble with noisy settings ♦ Lunchroom ♦ Shop classes ♦ Music classes (band, choir) ♦ Physical education classes ♦ Hallways ♦ Organized sports practice	♦ Allow students to eat in a quiet space for lunch ♦ Limit or avoid band, choir or shop classes ♦ Excuse students from loud activities ♦ Allow early dismissal from class to avoid crowded, noisy hallways ♦ Allow students to wear headphones or earplugs to mute noise	♦ Alternative seating options ♦ Headphones or earplugs
Sensory: Visual	♦ Light sensitivity ♦ Double vision ♦ Blurry vision ♦ Visual attention deficits	♦ Reduce brightness on screens ♦ Allow student to wear a hat with a brim ♦ Sunglasses in class –as recommended by OT ♦ If vision blurry seat student in center of room ♦ Provide handouts to avoid need to change visual fields (looking up to board and down) ♦ Turn off florescent lights	♦ Ambient lighting ♦ Sunglasses at times ♦ Hat with brim ♦ Ambient lighting ♦ Variety of seating options
Physical	♦ Maintaining balance ♦ Writing ♦ Carrying school supplies/books ♦ Sitting ♦ Walking ♦ Using stairs ♦ Vision ♦ Hearing ♦ Numbness/tingling ♦ "Feeling normal"	♦ Allow passing time when halls are not crowded ♦ Allow student's supplies to be kept in classroom ♦ Encourage student to change position(s) as needed ♦ Provide preferential seating, if necessary ♦ Rearrange schedule to minimize travel distances ♦ Provide word processor or scribe ♦ Provide "assistant" to carry school supplies/books ♦ Arrange for all classes to be on one floor of building ♦ Provide access to elevator	♦ Variety of seating options ♦ Computer ♦ Elevator ♦ Walker ♦ Cane

For The Nurse

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

School Nurse Communication Tool for Concussion

(To be sent to students school nurse)

Student name: _____ DOB: _____

Today's Date: _____ Date of Injury: _____

School name: _____

Diagnosis: _____

Academics

☐ May return to school with accommodations as required.

☐ Is excused from academics for _____ school days.

☐ May return to learning and physical activities per the "Return to Learn/Physical Activity Protocol"

Sports

☐ May return to sports per the "Return to Play Protocol"..

☐ **Must remain out of sports and physical activities until further evaluation a healthcare professional.**

☐ **Must be re-evaluated prior to returning to sports or game participation by a healthcare professional.**

SAMPLE

Additional Notes:

_____

_____

_____

Clinician signature: _____ Date: _____

Please print Clinician's name and name of Medical Practice:

_____

LETTER/EMAIL TO PARENTS:

Dear Parent,

We are happy to hear that your child is feeling well enough to return to school and start the Return to Learn process after their concussion. We want this transition to be successful and stress-free for everyone. To make sure teachers and staff are prepared, we would like your insight on the following symptoms. Please check the answer that best fits your student.

Fatigue:

☐ tires easily ☐ has their normal amount of energy.

Has the most energy

☐ in the morning ☐ in the afternoon ☐ in the evening.

Behavior:

They ☐ are easily frustrated ☐ are not easily frustrated

They have been acting

☐ the same ☐ different

Memory:

Their memory seems ☐ fine ☐ Impaired

Cognition:

They seem to be able to understand complex thoughts and ideas.

☐ Yes ☐ No

Stamina:

They are able to make it through a day without a period of rest.

☐ Yes ☐ No

Social:

I've noticed social changes in my child(for example, they are becoming isolated or have different friends than before the concussion).

☐ Yes ☐ No

Awareness

☐ They feel like there is nothing wrong with them after the concussion.

☐ They understand that there have been changes and would like help.

Headaches

☐ They are suffering from headaches regularly since their concussion.

Please elaborate on the back of this letter any other changes you've noticed in your child. We want to be ready to support your child's Return To Learn process and make accommodations to ensure success.

Sincerely,

School contact person & title_____

Telephone/email:_____

SAMPLE

Healthcare Professional Information and Resources

Resources

CDC Pediatric mTBI Guideline

British Journal of Sports Medicine—Sport concussion assessment tool (SCAT5)

British Journal of Sports Medicince—Child (5-12) Sport concussion assessment tool (SCAT5)

Children's Hospital of Philadelphia (Video) – Concussion diagnosis and management.

Spots Concussion South Africa—Sport Concussion Office Assessment Tool

US National Library of Medicine— A Practical Concussion Physical Examination Toolbox

ImPACT Concussion Management ImPACT provides computerized neurocognitive assessment tools and services

Consensus Statements

American Academy of Pediatrics – Sport-Related Concussion in Children and Adolescents

American Medical Society for Sports Medicine 2019— American Medical Society for Sports Medicine position statement on concussion in sport

British Journal of Sports Medicine—Concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016

Concussion Research

Why We Should Back Up Before We Move Forward! Matthew Gammons, MD

For The Field

Coaches Resources

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Concussion Education and Resource Materials
For Coaches Officials, Athletes and Parents

Coaches:

Act 68 requires that all coaches receive training every 2 years and or for new coaches, prior to first coaching assignment.

- **National Federation of High Schools (Required) —Concussion Certification**
- **Sports Neuropsychology Society Fact Sheet** on Chronic Traumatic Encephalopathy

Officials:

Officials of "collision sports" must receive training as well but the Vermont Principals Association (VPA) is working with the "collision sports" officials associations to set the parameters to meet the law. Football officials association is required to give the VPA a sign-off indicating that all officials have received concussion training.

- **Concussion Recognition Tool 5**
  Resource provided by BIAVT for on the field recognition of concussion. To obtain this tool either fixed to a clipboard or as a permanent sticker contact admin@biavt.org.

Parents and Athletes:

Each youth athlete and parent must annually sign a "Concussion Acknowledgment Statement" confirming receipt of concussion education materials. **and return to school prior to athlete's participation in training or competition with a school athletic team. See below for some distributable educational materials.**

- **CDC HEADS UP to School Sports: Athletes**
- **CDC HEADS UP to Parents**
- **Brain Injury 101 (Oregon)**
- **ImPACT Concussion Management** ImPACT provides computerized neurocognitive assessment tools and services . Here you can find a baseline assessment tool for preseason use.
- **CVMC Baseline Concussion Assessment Clinic** provided free to middle and high school athletes

School Letterhead

Concussion Acknowledgment Statement

We have received and read concussion information provided to me by ___(Athletic Director/Coach_____. We have read and understand the information provided by the _____(school name here)_____athletic department and agree to the following:

1. Report any concussion or concussion like symptoms that occur during practice or games.
2. Report any concussion or concussion like symptoms that occur as a result of injury outside of school.
3. We have read and understand the school policy regarding concussion management and return to sports.
4. We understand that medical clearance after a concussive injury clears me to start the return to play protocol not to immediately return to full participation.

Student Name (please print) _____

Student signature _____ Date _____

Parent/Guardian Name (please print) _____

Parent/Guardian signature _____ Date_____

I have provided ___Student Name_____and ___Parent/Guardian Name_____with concussion information and educational materials.

Athletic Director/Coach Name (please print) _____

Athletic Director/Coach signature _____ Date_____

SAMPLE

Concussion Resources

Developed by the VT Concussion Task Force, a standing committee of the VT TBI Advisory Board

Concussion Resources

Community Resources

- Brain Injury Association of VT
- American Association of Pediatricians VT chapter
- Dartmouth Hitchcock Medical Center Sports Concussion Program
- University of Vermont Medical Center Injury Prevention
- Rutland Regional Medical Center Concussion Clinic

National Resources

- American Academy of ED physicians
- Center for Disease Control (CDC)
- Brainline
- Brain Injury Association of America

Helmet Information

National Highway Traffic Safety Administration

Bicycle Safety

Fitting Your Bicycle Helmet

Motorcycle Safety

CDC Injury-Control Recommendations: Bicycle Helmets