

Return To Learn

After Concussion

Concussion Monitoring: Return to Learn

Each Local Education Agency (LEA) must develop a plan for addressing the needs of students preschool -12th grade suffering from concussion

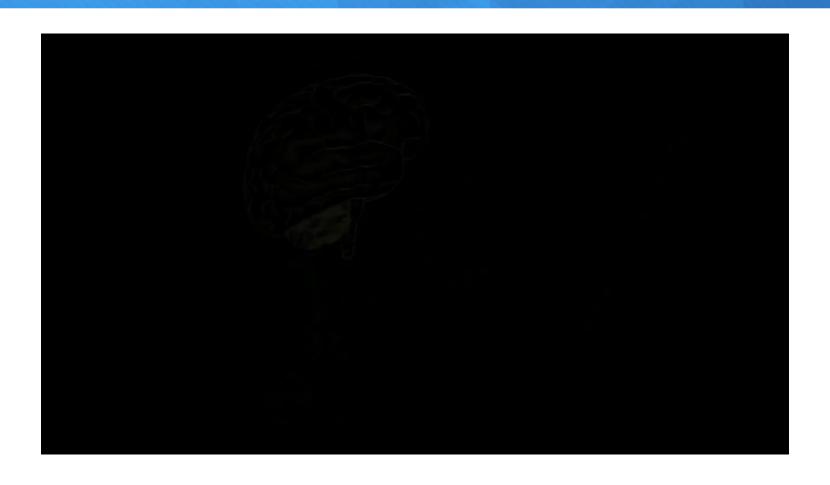
- 1. Guidelines for removal of a student from physical and mental activity when there is suspicion of concussion
- A notification procedure to educate staff regarding removal from learn to play
- 3. Expectations regarding annual medical care update from parents, medical care plan/school accommodations in the event of concussion; and
- 4. Delineation of requirements for safe return-to-learn or play following concussion

Concussion Monitoring: Return to Learn

In accordance with the LEA or charter school plan each school must appoint a team of people responsible for identifying the return-to-Learn or play needs of a student who has suffered a concussion. This team may include the student, student's parents, the principal, school nurse, school counselor, school psychologist, or other appropriate designated professional

Each LEA must provide information and staff development on annual basis to all teachers and other school personnel in order to support and assist students who have sustained a concussion in accordance with their learning and behavioral needs. This training should include information on concussion and other brain injuries with particular focus on return- to-learn issues and concerns.

What is a Concussion? (video-press play below)



What is a concussion?

The CDC defines Concussion or mild traumatic brain injury as follows:

Definition of Mild Traumatic Brain Injury (MTBI): The term mild traumatic brain injury (MTBI) is used interchangeably with the term concussion. An MTBI or concussion is defined as a complex pathophysiologic process affecting the brain, induced by traumatic biomechanical forces secondary to direct or indirect forces to the head. MTBI is caused by a blow or jolt to the head that disrupts the function of the brain. This disturbance of brain function is typically associated with normal structural neuroimaging findings (i.e., CT scan, MRI).

Click below to Watch Concussions 101

ANNUAL HEALTH QUESTIONNAIRE

Annually parents/guardians will complete
Annual Health Questionnaire. This
information will assist the school team in
recognizing students who have suffered from
medical conditions including head
injury/concussion the student may have
incurred during the past year

Annual Health Questionnaire

ANNUAL STUDENT HEALTH HIS	TORY FORM:				2/18/93	
School: School year: 20 - 20		ID	IDEA-E		Revised: 06/12, 04/14, 04/15, 02/16	
					rovided will be reviewed annually by the	
			mation	Willi (ESS)	ist us in meeting your child's health needs in th	
assroom, in physical education activit	ies, or for emerger	ncy purposes.				
be Completed by Parent or Guardian						
art 1						
tudent Name: Last Name	First	Middle			DOB: Month/day/year	
arent's Name/ Guardian's Name:				7	Daytime Phone/ Cell phone:	
ame of Physician/ Clinic:					Phone:	
mergency Contact in the event parent/gu	ardian can not be re-	ached:			Daytime phone/ Cell phone:	
st Allergies					Grade/ Homeroom Teacher:	
ithin the past 2 years - checking this	will require an ac	tion plan to be written ar	d imple	mented		
Allergies, Severe *		Cardiac Conditions / Hear	t proble	ms	Hydrocephalus	
ADD or ADHD (circle one)		Cerebral Palsy			Hypertension	
Autistic Disorder/ Asperger's Syr		Convulsions/ Seizure/ Epil	epsy		Orthopedic Disability (permanent)	
Anemia (include Sickle Cell)		Cystic Fibrosis	V-1		Scoliosis	
Arthritis, Rheumatoid		Diabetes Type 1 or Type 2	(circle o	one)	Spina Bifida	
Asthma* Bladder / Kidney disease		Down's Syndrome			Thyroid problems	
Bladder / Kidney disease		Eating disorder		Traumatic Brain/Head Injury/ Concussion		
Bleeding/ Clotting Disorder/ Hen		Emotional/ Behavior Disorder/ Psychological or Psychiatric Problem		Ulcers / Gastric Reflux		
Bowel disorder (Crohn's, Celiac, gluten intolerance)	IBS,	Headaches/ Migraines		Vision Problems, specify		
Cancer / Leukemia		Hearing Problems / Hearing	ng Aids		Others	
ease specify any other health conditions		t relate to your child:				
	estions		Yes	No	Explain/Comment	
as your child had a recent serious illne		ne week's duration?				
oes your child have to follow a specia						
oes your child need to take any medio oes your child take medication at hon						
lease list	ne on a regular or	daily basis: if yes,				
art 3 Statement on Physical Education	an .					
at 5 Statement on Frightal Education	,,,					
udents in Grade 1-9 and advanced n	hysical education	will be given a Health Rel	ated Fit	ness tes	st. Items include the mile or half-mile run, sit-	
s, flexed arm hang, or modified pull	•				, , , , , , , , , , , , , , , , , , , ,	
and the second s	aps, soay compo	are on and are are				
shild able to posticionto in the	aborical fitness to	-+3 WEE		***		
your child able to participate in the lease Note: a Doctor's note is require				NO		
I have read and understand the Statemen	t on Physical Educati	on and have completed this I	Aedical H	listory Fo	arm as accurately as possible. If there are any	
medical changes in my child during the sc						
Parent/Guardian Signature:					Date:	



What happens when an injury occurs?

What should I do if I think a student has sustained a concussion? If you suspect a student is experiencing any of the signs and symptoms listed above, you immediately remove them from participation, let their parents know, and/or refer them to the appropriate medical personnel. Complete Head Injury Report.

Head Injury Report

HEAD INJURY REPORT:			JGF	GA-E(3)	Revised: May	2016
HEAD INJURY REPORT						
Date:	Time:		School:			
Dear Parents:						
This is to inform you that yo	our child				has su	uffered a suspected
head injury.						
DOB:	Age:	Sex:		Grade:	Teache	r:
First Responder:						
The following events occurr	ed:					
Area of head affected:				PERRLA	: YES	NO
Circle all that apply:		No sym	ptoms		Symptoms as r	noted
 a. Weakness of either arm 	or leg		i.	Blood or cle	ear dripping fro	m ears or nose.
 b. Nausea/ Vomiting 			j.	Seizures		
 Increasing drowsiness or 	r hyperactivit	y	k.	Irritability		
 d. Slowing of pulse or rapid 	and weak		 Difficulty with speech 			
e. Continued headache			m.	Fuzzy or blu	urry vision	
f. Stiffness of neck			n. Balance problems/ unsteadiness		diness	
g. Dizziness			 Difficulty concentrating or thinking clearly 			
h. Confusion/disorientation	1		p.	Others:		
Listed above are some of th your child's usual source of medical care is required, pla	medical care	today rega	rding any	instructions	or recommend	
Describe treatment and disp	position:					
Child's condition before leaving school:						
Parents notified by an adult Circle all that apply: By pho			person _		By Injury Repo	ort
School Personnel Signature:	:				Date:	
Parent/ Guardian Signature	:				Date:	

What are the warning signs that a more significant head injury may have occurred?

If they have a headache that gets worse over time, experience loss of coordination or abnormal body movements, have repeated nausea, vomiting, slurred speech, or you witness what you believe to be a severe head impact, you should refer them to appropriate medical personnel immediately.



CONCUSSION

INFORMATION FOR TEACHERS/ COACHES/ ATHLETIC TRAINERS/ FIRST RESPONDERS/ SCHOOL NURSES/ SCHOOL VOLUNTEERS

What is a concussion? A concussion is a traumatic brain injury caused by a direct or indirect impact to the head that results in disruption of normal brain function, which may or may not result in loss of consciousness. It can occur from a fall, a blow to the head, or a blow to the body that causes the head and the brain to move quickly back and forth.

How do I recognize a concussion? There re many signs and symptoms a person may experience following concussion that can affect their thinking, emotions or moods, physical abilities, or sleep.

Thinking/Remembering	Physical	Emotional/ Mood	Sleep
-Difficulty thinking clearly	-Headache	-Irritability	-Sleeping more than usual
-Feeling slowed down	-Fuzzy or blurry vision	-Sadness	-Sleeping less than usual
-Difficulty concentrating	-Nausea/ Vomiting	-More emotional than normal	-Trouble falling asleep
-Difficulty remebering new information	-Dizziness	-Feeling nervouse or anxious	
	-Balance problems	-Crying more	
	-Sensitivity to noise or light		

Table from the Centers for Disease Control and Prevention (http://www.cdc.gov/concussion/)

What should I do if I think a student has sustained a concussion? If you suspect a student is experiencing any of the signs and symptoms listed above, you immediately remove them from participation, let their parents know, and/or refer them to the appropriate medical personnel. Complete Head Injury Report.

What are the warning signs that a more significant head injury may have occurred? If they have a headache that gets worse over time, experience loss of coordination or abnormal body movements, have repeated nausea, vomiting, slurred speech, or you witness what you believe to be a severe head impact, you should refer them to appropriate medical personnel immediately.

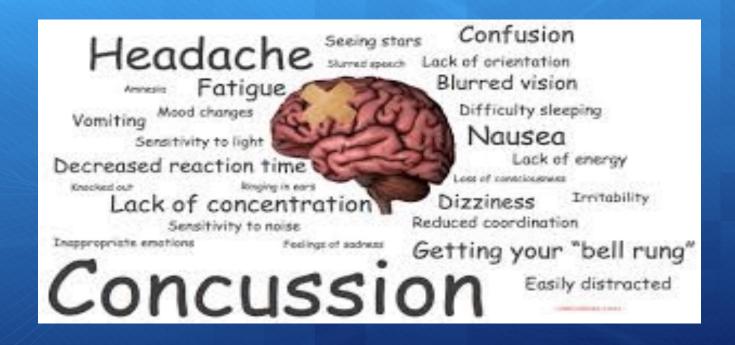
What are some of the long-term or cumulative issues that may result from a concussion? Individuals may have trouble in some of their classes at school or even with activities at home. Down the road, especially if their injury is not managed properly, or if they return to play too early, they may experience issues such as being depressed, not feeling well, or have trouble remembering things for a long time. Once an individual has a concussion, they are also more likely to sustain another concussion.

How do I know when it's ok for a student to return to participation after a suspected concussion? Any student experiencing signs and symptoms consistent with a concussion should be immediately removed from class activities, play or practice and referred to appropriate medical personnel. They should not be returned to any class activities, play or practice on the same day. To return to learn, play or practice, they will need clearance from a medical professional trained in concussion management.

No student should be returned to learn, play or practice while experiencing any concussion-related signs or symptoms following rest or activity.

This information is provided to you by the UNC Matthew Gfeller Sport-Related TBI Research Center, North Carolina Medical Society, North Carolina Athletic Trainers' Association, Brain Injury Association of North Carolina, North Carolina Neuropsychological Society, and North Carolina High School athletic Association.

SYMPTOMS.....



Physical	Cognitive	Emotional	Sleep
 Nausea Vomiting Balance problems Dizziness Visual problems Fatigue Sensitivity to light Sensitivity to noise Numbness/ Tingling Dazed or stunned 	 Feeling mentally "foggy" Feeling slowed down Difficulty concentrating Difficulty remembering Forgetful of recent information or conversations Confused about recent events Answers questions slowly Repeats questions 	 Irritability Sadness More emotional Nervousness 	 Drowsiness Sleeping less than usual Sleeping more than usual Trouble falling asleep



Do you have more headaches than you used to?

Do you feel more tired than you used to?

Do you feel more dizzy more often than you used to?

√ academic

Do you find it harder to concentrate in class?

Do you find it harder to take tests?

Do you have trouble organizing your thoughts when writing papers?

√ cognitive

Do you feel slower mentally?

Do you have trouble remembering and following simple instructions?

Do you take longer to learn things?

social

Are you avoiding friends and family more than you used to?

Do you feel that most people don't understand you anymore?

√ emotional

Are you more irritable than you used to be?

Do you have more frequent mood swings?

Are you more irritated by others than usual?

Do you feel less smart than you used to?

Post-Concussion syndrome can contribute to learning challenges in the classroom.

If you answered **yes to five or more of the above questions**, you may be at risk for academic adjustment difficulties.

Concussion Occurred AWAY from Campus
NON-SCHOOL RELATED INCIDENT
Reported by Parent
(Rec. Ball, Injury Over-the Weekend, Accident)

Reported on Annual Medical History Questionnaire

Received Handwritten Note or Note from MD Office

OUESTION????
Is the student currently
having symptoms or
under care of a
physician for concussion
management?

YES or NO?

IfYES

Return to Learn School Recommendation Form should be obtained from health care provider If NO-does the student have long term deficits that require a 504 plan?

School Based Team (SST team)
Discusses Return to Learn or Play Needs
Appropriate Accommodations Identified

Injury to Head Occurred During the School Day (PE class, classroom, playground, altercation)

Head Injury Report Form Completed School Nurse/School Administration Notified

Even if student shows NO or few symptoms or seems fully recovered,

contact parent or guardian to explain nature of incident.

Send Head Injury Report Home with Student!

Call 911 IF.....

Any of the following symptoms present:

Pupils do not appear equal
Witnessed severe head impact
with loss of consciousness
Headache that is worse over time
Loss of coordination
Abnormal body movements
Repeated nausea or vomiting
Slurred speech

If medical care is required,
Return to Learn or Play
Paperwork may be needed.

URGE parent to monitor for delayed symptoms noted on Injury Report Form

Parent should consult the child's usual source of medical care for instructions or recommendations, <u>if needed</u>.

Evaluation and Care of Athlete Following Suspected Concussion Injury During Practice or Game

Refer Student to Appropriate Medical Personnel Gfeller-Waller Concussion Clearance Protocol NCHSAA Return to Play Form Must Be Done

> Emergency Room or Urgent Care Physicians typically DO NOT make clearance decisions at the time of the first visit

More than 1 MD evaluation may be necessary for medical clearance for concussion.

BECAUSE..... Symptoms may not fully present for several days

Return to Play should occur in GRADUAL steps-moving only to the next level of physical activity

if NO symptoms are experienced at the current level.

* USE CAUTION TO INSURE RECOVERY*

All high school and middle school athletes must have written clearance from a medical professional trained in concussion management to return to play or practice.

Physicians Recommendations...

How do I know when it's ok for a student to return to participation after a suspected concussion?

Any student experiencing signs and symptoms consistent with a concussion should be immediately removed from class activities, play or practice and referred to appropriate medical personnel. They should not be returned to any class activities, play or practice on the same day. To return to learn, play or practice, they will need clearance from a medical professional trained in concussion management.

Please complete the recommendation form and return it to the school nurse. (RETURN TO LEARN FORM) SCHOOL RECOMMENDATIONS FOLLOWING CONCUSSION

		ate of Birth:		
Date of Evaluation: Referred by:				
The student will be reasses	sed for revision of these recommend	dations in week	s.	
chool today due to the me suggestions for academic ac	osed with a concussion (a brain inju dical appointment. Flexibility and ac djustments to be individualized for th as needed as the student's symptom	dditional supports are needed on the student as deemed appropri	during recovery. The following are	
Attendance No school forschool Attendance at school Full school days as tolerate Partial days as tolerated by fisual Stimulus Allow student to wear sur Pre-printed notes for class Limited computer, TV scre	day(s) per week ted by the student the student siglasses/hat in school material or note taker ten, bright screen use	Breaks Allow the student to go to increase Allow student to go home Allow other breaks during and appropriate by school per Audible Stimulus Lunch in a quiet place with Avoid music or shop class Allow to wear earplugs a	g school days as deemed necessary sonnel th a friend ses s needed	
Reduce brightness on monitors/screens Change classroom setting as necessary Workload/ Multi-Tasking Reduce overall amount of make-up work, class work and homework Prorate workload when possible Reduce amount of homework given each night		Allow class transitions before bell Testing Additional time to complete tests No more than one test a day No standardized testing until Allow for scribe, oral response, and oral delivery of questions, if available		
hysical Exertion No physical exertion/ athl Walking in gym class only Begin return to play proto	etics/gym/ recess	Additional Recommendation	s	
Current Symptoms List (the Headache Nausea Dizziness	student is complaining of these tod Visual Problems Balance problems Sensitivity to light	Sensitivity to Noise Feeling foggy Irritability	Memory issues Fatigue Difficulty concentrating	
tudent is reporting most d All subjects Science Listening	ifficulty with/in: Reading/Language Arts Music Using computers	Foreign Language History Others:	Math Focusing	
	give permission to share tween the school and Dr.			

What are some of the long-term or cumulative issues that may result from a concussion?

Individuals may have trouble in some of their classes at school or even with activities at home. Down the road, especially if their injury is not managed properly, or if they return to play too early, they may experience issues such as being depressed, not feeling well, or have trouble remembering things for a long time. Once an individual has a concussion, they are also more likely to sustain another concussion.



What is Return-to-Learn?

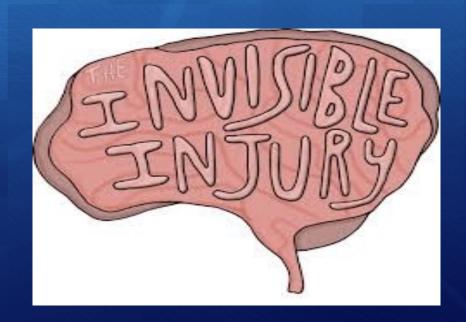
• Just like a Return-to-Play (RTP) protocol, current recommendations include a graduated Return-to-Learn (RTL) plan.

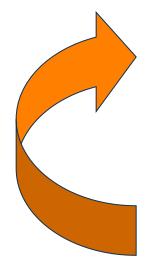
No one approach will work for everyone; must be tailored.

They are NOT parallel processes.

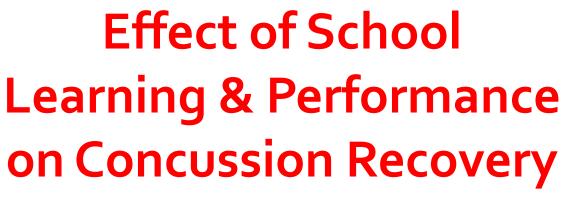
- Step-wise increase in cognitive activity.
- What might it look like? Who is involved?

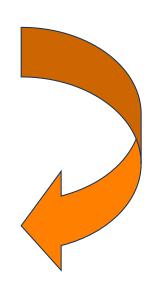
A team of individuals including the student, student's parents, the principal, and school professions which may include school nurse, school counselor, and school social worker will work together to identify the return-to-learn or play needs of a student who has suffered a concussion.





Effect of Concussion on School Learning & Performance





The Role of the Medical Team

Educate the child or adolescent and family on the nature and typical course of concussion, and the importance of rest, cognitive and physical, during recovery.

Designate an office staff member as the contact person who can serve as the liaison between the medical home, the family, and the school, and communicate concerns back to the pediatrician.

Verify symptoms that might interfere with learning and communicate with the school, and reassess the student as indicated based on family

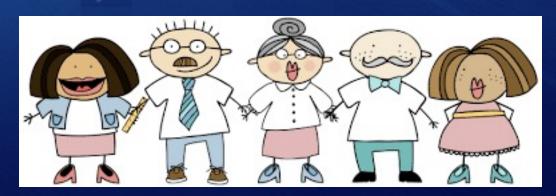
and school feedback.

The Role of the School Teams

Allow a student to rest and return to learning at a pace consistent with recommendations from the medical home, based on verified signs and symptoms.

Designate a staff member as the contact person who can serve as the liaison between the medical home, the family, and the school, and communicate concerns back to the pediatrician and parent.

Report back to family and pediatrician on how the child or adolescent is managing, and work as a team to advance, regress, or hold the student steady in his/her return efforts.



The Role of the Family Team

Enforce rest and reduce stimulation as prescribed by the pediatrician.

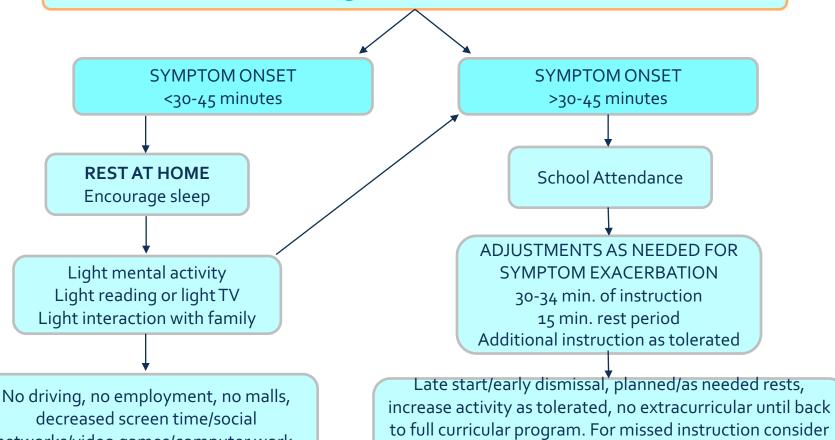
Work with the school to develop a plan for return to learning and sign essential releases to allow communication between the school and the medical homes.

Monitor the child for readiness to begin a return to learning process and keep the medical and school homes updated.



Guidance for Determining Student Readiness to Return to Learning

Student tolerance of cognitive stimulation or concentration.



class notes, easing assignments, reduced course load,

networks/video games/computer work.

Sample Six Step "Return to Learning" Model Based on Six Step "Return to Play" Model

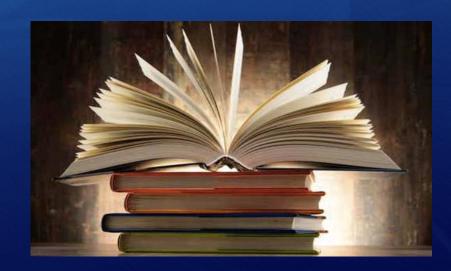
Step 1	Rest and recovery at home without any academics
Step 2	Light mental activity in quiet environment (30-45 min.)
Step 3	More sustained mental activity in more stimulating environments for longer periods and shorter breaks
Step 4	Increased mental activity in regular school setting with continued adjustments only as needed
Step 5	Full day in all academic classes with adjustments as needed
Step 6	Regular school attendance full time with no restrictions

Strategies to Help in the School Setting based on Symptoms

Adjustments

Accommodations

Modifications



Academic Adjustments

Can be implemented immediately

Are temporary, for up to usually 3 weeks or less

Are easily adjusted and changed based on need

Are done at building level by principal and teaching team

Can address all aspects of instruction except standardized

testing

Involves General Education



Sign/Symptom	Potential Adjustments in School Setting
Headache	 Frequent breaks Identifying aggravators and reducing exposure to them Rests, planned or as needed, in nurse's office or quiet area
Dizziness	 Allow student to put head down if symptoms worsen Give student early dismissal from class and extra time to get from class to avoid crowded hallways
Light sensitivity	 Reduce exposure to computers, smart boards, videos Reduce brightness on the screens Allow the student to wear a hat or sunglasses in school Consider use of audio tapes of books Turn off fluorescent lights as needed

Noise sensitivity	 Limit or avoid band, choir, or shop classes Avoid noisy gyms and organized sports practices/games Consideration of the use of ear plugs Give student early dismissal from class and extra time to get from class to class to avoid crowded hallways during pass time
Difficulty with memory	 Avoid testing or completion of major projects during recovery when possible Provide extra time to complete non-standardized tests Postpone standardized testing (may require that a 504 Plan is in place)

Consider one test per day during exam periods
 Consider the use of preprinted notes, note taker, scribe, or reader for oral test taking

Sleep problems

 Allow for late start or shortened school day to catch up on sleep

Allow rest breaks

Academic Adjustments vs. Accommodations vs. Modifications

Interventions:	Provided in:	Affects:
Adjustments – Informal, flexible day- to-day interventions. Can be applied immediately and lifted easily when no longer needed.	General Education classroom.	80% to 90% of students with a concussion for the typical 3 week recovery.
	Student still required to progress through General Education curriculum.	Apply for days to weeks.
Accommodations – More formal process for longer interventions; often called a 504 Plan. Requires a meeting to enter and exit.	General Education classroom; occasional extra support/targeted interventions outside of General Education.	5% to 15% of students with prolonged symptoms from a concussion.
	Student still required to progress through General Education curriculum with accommodations to the environment (i.e., extra time, large print, rest).	Apply for weeks to months.
Modifications – Very formal process to document a chronic and permanent disability of brain injury; referred to as Special Education or Individuals with Disabilities Education Act (IDEA).	Primary services provided in Special Education classroom; student in General Education classroom as much as possible.	1% to 5% of students with permanent brain damage; brain damage sustained as a concussion.
Disability makes it so that student cannot benefit from General Education alone.	Allows for modification of the General Education curriculum. Often requires specialized instruction and specialized placement.	Apply for months to years.

PHYSICAL:

"Strategic Rest"- scheduled 15 to 20 minute "head on desk" breaks (midmorning; mid-afternoon and/or as needed)

Sunglasses (inside and outside)

Quiet room/environment, quiet lunch, quiet recess

More frequent breaks in classroom and/or in clinic

Allow quiet passing in halls

Remove from PE, physical recess, & dance classes without penalty

Sit out of music, orchestra and computer classes if symptoms are provoked

SYMPTOM WHEEL

Suggested Academic Adjustments

McAvoy, 2011

Physical:

headache/sick to stomach dizziness/balance problems light sensitivity/blurred vision noise sensitivity neck pain

Cognitive:

trouble with: concentration remembering mentally "foggy" slowed processing

EMOTIONAL:

Allow student to have "signal" to leave room

Help staff understand that mental fatigue can manifest in "emotional meltdowns"

Allow student to remove him/herself to de-escalate

Allow student to visit with supportive adult (counselor, nurse, advisor)

Emotional:

feeling more: emotional
nervous
sad
angry
irritable

Sleep/Energy:

mentally fatigued
drowsy
sleeping too much
sleeping too little
can't intitate/ maintain
sleep

COGNITIVE:

Workload reduction in the classroom/homework

Remove non-essential work

Reduce repetition of work

Adjust "due" dates; allow for extra time

Allow student to "audit" classwork

Exempt/postpone large test/projects; alternative testing (quiet testing, oneon-one testing, oral testing)

Allow demonstration of learning in alternative fashion

Provide written instructions

Allow for "buddy notes" or teacher notes, study guides, word banks

Allow for technology (tape recorder, smart pen) if tolerated

SLEEP/ENERGY:

Allow for rest breaks

Allow student to start school later in the day

Allow student to leave school early

Alternate "mental challenge" with "mental rest"

QUESTIONS?



Contact your school nurse for questions.

References

- + American Acadamey of Pediatrics
- + CDC.Cnter for Disease Control
- + http://www.cdc.gov/traumaticbraininjury/basics.html
- http://www2.aap.org/pcorss/webinars/pco/PCOWebConcussionReturntoLearn.ppt
- + https://www.youtube.com/channel/UCiMgo6DjcUk5FRiM3g5 sqoQ
- https://www.youtube.com/watch?v=zCCD52Pty4A