HEALTHCARE PROVIDERS TOOLKIT IN-OFFICE USE

USE THE LINKS BELOW TO VIEW A SPECIFIC RESOURCE

ACE: Acute Concussion Evaluation Physician/Clinician Office Version - tool to screen for concussion

Post Concussion Symptom Inventories – Choose one age-appropriate child version and the parent version, or the adult version. All request information on symptoms. Note: A scale for children 0-5 does not currently exist.

Post Concussion Symptom Inventory for Children Pre/Post Version Ages 5-12 - completed by the 5-12 year old child

Post Concussion Symptom Inventory Ages 13-18 - completed by the 13-18 year old child

Post Concussion Symptom Inventory Parent - completed by the parent of the child

Post Concussion Symptom Scale - completed by an adult



ACUTE CONCUSSION EVALUATION (ACE) Physician/Clinician Office Version

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Patient Name		
DOB:	Age:	
Date:	ID/MR#	

A. Injury Cha		Time	of Inju	ury		Rep	orter:PatientParer	tS	βροι	ıseOther_	
1b. Is there ev 1c. Location of 2. <u>Cause</u> :N 3. <u>Amnesia Be</u> 4. <u>Amnesia Af</u> 5. <u>Loss of Co</u> 6. EARLY SIG	idence of intracranial in f Impact:FrontalI IVCPedestrian-MVC <u>efore</u> (Retrograde) Are t ter (Anterograde) Are the nsciousness: Did you/ NS:Appears dazed	jury or _ft Ter CF here a nere a perso or stur	skull mporal all any even lose on lose onned	ls confused about events	esNo arietalF that you/ po at you/ pers sAnswe	Unkn	own alOccipitalNeckOther s no memory of (even brief) o memory of (even brief)? ons slowlyRepeats Qu)? 	_Yes _Yes _Yes	sNo Dura sNo Dura sNo Dura	tiontion
				Detailas the person experienced as				today	or i	n the past day	?
-	Indicate presence of	each	symp	tom (0=No, 1=Yes).	-		•	*Lov	ell &	Collins, 1998	IHTR
	PHYSICAL (10)			COGNITIVE (4)			SLEEP (4)				
	Headache	0	1	Feeling mentally foggy	0 1	Drows	` ′	0	1		
	Nausea	0	1	Feeling slowed down	0 1		ing less than usual	0	1	N/A	
	Vomiting	0	1	Difficulty concentrating	0 1	Sleepi	ing more than usual	0	1	N/A	
	Balance problems	0	1	Difficulty remembering	0 1		le falling asleep	0	1	N/A	
	Dizziness	0	1	COGNITIVE Total (0-4)			SLEEP Total (0-4)				
	Visual problems	0	1	EMOTIONAL (4)			OLLLI Total (0-4)				
	Fatigue	0	1	Irritability	0 1	Exert	tion: Do these symptoms	wors	sen v	with:	
	Sensitivity to light	0	1	Sadness	0 1		sical ActivityYesN				
	Sensitivity to noise	0	i	More emotional	0 1	1 1	nitive ActivityYes!				
	Numbness/Tingling	0	1	Nervousness	0 1	1 1 -					
	PHYSICAL Total (0-1	0)		EMOTIONAL Total (0-4)			all Rating: How different pared to his/her usual self			son acting	
	(Add Physica	al, Co		e, Emotion, Sleep totals) al Symptom Score (0-22)		11 .	al 0 1 2 3 4 5	•	,	Different	
	tors for Protracted	Reco	very								
	n History? Y N	-	V	Headache History? Y	_ N	V	Developmental Histor	y	$\sqrt{}$	Psychiatric	History
	1 2 3 4 5			Prior treatment for headac			Learning disabilities			Anxiety	
	nptom duration eeks Months Years	2		History of migraine heada Personal	cne		Attention-Deficit/ Hyperactivity Disorder	-		Depression	
	oncussions, less force			Family		-	Other developmental			Sleep disord	iatric disorder
	ury? Yes No						disorder_			Other psyci	liatric disorder
	<u> </u>			,				<u> </u>			
List other com-	orbid medical disorders	or me	edicatio	on usage (e.g., hypothyroid	, seizures <u>)</u>						
D. RED FLAG * Headaches the *Seizures * Focal neurologe	at worsen * Looks * Repea	very c	lrowsy miting	* Incre	t recognize easing conf	people o	r places * Neck pai rritability * Unusual	n behav	/iora	_	5
E. Diagnosis	(ICD-10):Concuss No diagnosis		o LOC	C S06.0X0AConcussion	w/ LOC S	06.0X1A	Concussion (Unspeci	ied) S	S06.	0X9AOthe	er (854)_
Physician Referral: Neuro Phys	Action Plan Com y-Up Needed y Clinician Office Mon ppsychological Testing ician: Neurosurgery_ gency Department	itorin			e copy to		t/family.				

A concussion (or mild traumatic brain injury (MTBI)) is a complex pathophysiologic process affecting the brain, induced by traumatic biomechanical forces secondary to direct or indirect forces to the head. Disturbance of brain function is related to neurometabolic dysfunction, rather than structural injury, and is typically associated with normal structural neuroimaging findings (i.e., CT scan, MRI). Concussion may or may not involve a loss of consciousness (LOC). Concussion results in a constellation of physical, cognitive, emotional and sleep-related symptoms. Symptoms may last from several minutes to days, weeks, months or even longer in some cases.

ACE Instructions

The ACE is intended to provide an evidence-based clinical protocol to conduct an initial evaluation and diagnosis of patients (both children and adults) with known or suspected MTBI. The research evidence documenting the importance of these components in the evaluation of an MTBI is provided in the reference list.

A. Injury Characteristics:

- 1. Obtain <u>description of the injury</u> how injury occurred, type of force, location on the head or body if force transmitted to head. Different biomechanics of injury may result in differential symptom patterns (e.g., occipital blow may result in visual changes, balance difficulties).
- 2. Indicate the <u>cause of injury</u>. Greater forces associated with the trauma are likely to result in more severe presentation of symptoms.
- 3/ 4. <u>Amnesia</u>: Amnesia is defined as the failure to form new memories. Determine whether amnesia has occurred and attempt to determine length of time of memory dysfunction <u>before</u> (retrograde) and <u>after</u> (anterograde) injury. Even seconds to minutes of memory loss can be predictive of outcome. Recent research has indicated that amnesia may be up to 4-10 times more predictive of symptoms and cognitive deficits following concussion than is LOC (less than 1 minute).¹
- 5. Loss of consciousness (LOC) If occurs, determine length of LOC.
- 6. <u>Early signs</u>. If present, ask the individuals who know the patient (parent, spouse, friend, etc) about specific signs of the concussion/ MTBI that may have been observed. These signs are typically observed early after the injury.
- 7. Inquire whether **seizures** were observed or not.

B. Symptom Checklist: 2

- 1. Ask patient (and/ or parent, if child) to report presence of the four categories of symptoms since injury. It is important to assess all listed symptoms as different parts of the brain control different functions. One or all symptoms may be present depending upon mechanisms of injury.³ Record 1 for Yes or 0 for No for their presence or absence, respectively.
- 2. For all symptoms, indicate presence of symptoms as experienced within the past 24 hours. Since symptoms can be present premorbidly/at baseline (e.g., inattention, headaches, sleep, sadness), it is important to assess <u>change</u> from their typical presentation.
- 3. <u>Scoring</u>: Sum total <u>number</u> of symptoms present per area, and sum all four areas into Total Symptom Score (score range 0-22). (Note: most sleep symptoms are only applicable after a night has passed since the injury. Drowsiness may be present on the day of injury.) If symptoms are new and present, there is no lower limit symptom score. Any <u>score > 0</u> indicates <u>positive symptom</u> history.
- 4. <u>Exertion:</u> Inquire whether any symptoms worsen with physical (e.g., running, climbing stairs, bike riding) and/or cognitive (e.g., academic studies, multi-tasking at work, reading or other tasks requiring focused concentration) exertion. Clinicians should be aware that symptoms will typically worsen or re-emerge with exertion, indicating incomplete recovery. Over-exertion may protract recovery.
- 5. Overall Rating: Determine how different the person is acting from their usual self. Circle 0 (Normal) to 6 (Very Different).
- C. Risk Factors for Protracted Recovery: Assess the following risk factors as possible complicating factors in the recovery process.
 - 1. <u>Concussion history</u>: Assess the number and date(s) of prior concussions, the duration of symptoms for each injury, and whether less biomechanical force resulted in re-injury. Recent research indicates that cognitive and symptom effects of concussion may be cumulative, especially if there is minimal duration of time between injuries and less biomechanical force results in subsequent concussion (which may indicate incomplete recovery from initial trauma).⁴⁻⁸
 - 2. <u>Headache history:</u> Assess personal and/or family history of diagnosis/treatment for headaches. Recent research indicates headache (migraine in particular) can result in protracted recovery from concussion. 8-11
 - 3. <u>Developmental history</u>: Assess history of learning disabilities, Attention-Deficit/Hyperactivity Disorder or other developmental disorders. Recent studies indicate the possibility of a longer period of recovery with these conditions. ¹²
 - 4. Psychiatric history: Assess for history of depression/mood disorder, anxiety, and/or sleep disorder. 13-16
- <u>D. Red Flags</u>: The patient should be carefully observed over the first 24-48 hours for these serious signs. Red flags are to be assessed as <u>possible signs</u> of deteriorating neurological functioning. Any positive report should prompt strong consideration of referral for emergency medical evaluation (e.g. CT Scan to rule out intracranial bleed or other structural pathology). 17
- **E. Diagnosis**: The following ICD-10 diagnostic codes may be applicable.
 - **S06.0X0A** (Concussion, with no loss of consciousness) Positive injury description with evidence of forcible direct/ indirect blow to the head (A1a); plus evidence of active symptoms (B) of any type and number related to the trauma (Total Symptom Score >0); no evidence of LOC (A5), skull fracture or intracranial injury (A1b).
 - **S06.0X1A** (Concussion, with brief loss of consciousness < 30 minutes) Positive injury description with evidence of forcible direct/ indirect blow to the head (A1a); plus evidence of active symptoms (B) of any type and number related to the trauma (Total Symptom Score >0); positive evidence of LOC (A5), skull fracture or intracranial injury (A1b).
 - **S06.0X9A** (Concussion, unspecified) Positive injury description with evidence of forcible direct/ indirect blow to the head (A1a); plus evidence of active symptoms (B) of any type and number related to the trauma (Total Symptom Score >0); unclear/unknown injury details; unclear evidence of LOC (A5), no skull fracture or intracranial injury.
 - Other Diagnoses If the patient presents with a positive injury description and associated symptoms, but additional evidence of intracranial injury (A 1b) such as from neuroimaging, a moderate TBI and the diagnostic category of S06.890A (Intracranial injury) should be considered.
- F. Follow-Up Action Plan: Develop a follow-up plan of action for symptomatic patients. The physician/clinician may decide to (1) monitor the patient in the office or (2) refer them to a specialist. Serial evaluation of the concussion is critical as symptoms may resolve, worsen, or ebb and flow depending upon many factors (e.g., cognitive/ physical exertion, comorbidities). Referral to a specialist can be particularly valuable to help manage certain aspects of the patient's condition. (Physician/clinician should also complete the ACE Care Plan included in this tool kit.)
 - 1. **Physician/clinician serial monitoring-** Particularly appropriate if number and severity of symptoms are steadily decreasing over time and/or fully resolve within 3-5 days. If steady reduction is not evident, referral to a specialist is warranted.
 - 2. Referral to a specialist Appropriate if symptom reduction is not evident in 3-5 days, or sooner if symptom profile is concerning in type/severity.
 - Neuropsychological Testing can provide valuable information to help assess a patient's brain function and impairment and assist with treatment planning, such as return to play decisions.
 - <u>Physician Evaluation</u> is particularly relevant for medical evaluation and management of concussion. It is also critical for evaluating and managing focal neurologic, sensory, vestibular, and motor concerns. It may be useful for medication management (e.g., headaches, sleep disturbance, depression) if post-concussive problems persist.

Post-Concussion Symptom Inventory for Children (PCSI-C) Pre/Post Version 5 to 12

Instructions: We would like to know if you have had any of these symptoms before your injury. Next, we would like to know if these symptoms have changed after your injury.

I am going to ask you to tell me about your symptom at two points in time - Before the Injury and Yesterday / Today. Interviewer: Please circle only one answer.

	0 = No 1 = A little 2 = A lot	lnj	fore t ury /P Injury	re-	Syn Ye:	urren nptor sterd d Tod	ns/ ay
1	Have you had headaches? Has your head hurt?	0	1	2	0	1	2
2	Have you felt sick to your stomach or nauseous?	0	1	2	0	1	2
3	Have you felt dizzy? (like things around you were spinning or moving)	0	1	2	0	1	2
4	Have you felt grumpy or irritable? (like you were in a bad mood)	0	1	2	0	1	2
5	Has it been hard for you to pay attention to what you are doing? (like homework or chores, listening to someone, or playing a game)	0	1	2	0	1	2
	Continue if age 8 or older						
6	Have you felt more drowsy or sleepy than usual?	0	1	2	0	1	2
7	Have bright lights bothered you more than usual? (like when you were in the sunlight, when you looked at lights, or watched TV)	0	1	2	0	1	2
8	Have loud noises bothered you more than usual? (like when people were talking, when you heard sounds, watched TV, or listened to loud music)	0	1	2	0	1	2
9	Have you had any balance problems or have you felt like you might fall when you walk, run or stand?	0	1	2	0	1	2
10	Have you felt sad?	0	1	2	0	1	2
11	Have you felt nervous or worried?	0	1	2	0	1	2
12	Have you felt like you are moving more slowly?	0	1	2	0	1	2
13	Have you felt like you are thinking more slowly?	0	1	2	0	1	2
14	Has it been hard to think clearly?	0	1	2	0	1	2
15	Have you felt more tired than usual?	0	1	2	0	1	2
16	Has it been hard for you to remember things? (like things you heard or saw, or places you have gone)	0	1	2	0	1	2
17	Have things looked blurry?	0	1	2	0	1	2

All Ages- Do you feel "different" than usual? (Circle one) 0=No 1=A little 2=A lot

PCSI Total Symptom Score	Pre=	Post=
rosi rotai symptom score	F16-	F05t-

Subscale scores	Physical	Cognitive	Emotional	Fatigue
(Age 8-12) Pre/Post	1	1	1	1



Post-Concussion Symptom Inventory Ages 13-18 (PCSI-SR13)

	F	re/P	ost	Vers	ion		•										
tient I	Name:					7	oda	ay's da	ate	:				_			
	e:					A	\ge:					_					
ptoms	ns: We would like to know if you had any of the have changed after your injury. Please rate the mptoms/ Yesterday and Today.					efore	e you	ır injury	/. N	ext,	we v	voul					
	wer all the items the best that you can. Do not as been for you.	skip	any	item	is. C	ircle	the	numbe	r to	tell	us h	ow n	nuch	of a	prol	olem t	
		0 =	Not	a pr	oble	m	3 =	= Mode	erat	e pr	oble	m	6 =	Se	vere	prob	
			E	Befoi P	re th re-Ir			,		,			nt Symptoms/ lay and Today				
1	Headache	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
2	Nausea	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
3	Balance problems	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
4	Dizziness	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
5	Visual problems (double vision, blurring)	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
6	Move in a clumsy manner	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
7	Sensitivity to light	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
8	Sensitivity to noise	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
	[Office Use Only] Physical	Tota	al Pre	=						Tota	al Pos	t=					
9	Irritability	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
10	Sadness	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
11	Nervousness	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
12	Feeling more emotional	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
	[Office Use Only] Emotional		al Pre							Tota	al Pos						
13	Feeling mentally "foggy"	0	1				5			0		2				6	
14	Difficulty concentrating		1		3			6	_			2				6	
15	Difficulty remembering			2				6				2				6	
16	Get confused with directions or tasks	0	1	2		4		6		0	1	2		4		6	
17	Answer questions more slowly than usual	0	1	2		4		6		0	1	2		4		6	
18	Feeling slowed down	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
- 10	[Office Use Only] Cognitive	_	al Pre								al Pos						
19	Fatigue	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
20	Drowsiness	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
21	Sleep more than usual	0	1	2	3	4	5	6		0	1	2	3	4	5	6	
	[Office Use Only] Sleep/ Fatigue	Tota	al Pre		.,,						al Pos		D:#				
22	In general, to what degree do you feel "differently" than before the injury (not			No D e you			0 th "0"	1 2 indicatir	3 ng "l'			lajor No Dii				1"	

PCSI Total Symptom Score	Pre (sum 4 domains) =	Post (sum 4 domains) =
[Office Use Only]	PCSI Total Adjusted Symptom Sc	ore (Post-Pre) =

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indicating "Very Different" (Major Difference)



feeling like yourself)?

Post-Concussion Symptom Inventory Parent - Ages 5 to 18 (PCSI-P)

Pre/Post Version

Student's Name:	Today's date: Age/ Grade:	
Person Completing Form:	Relation: Mother Father_	Other
Instructions: We would like to know if your child had would like to know if these symptoms have changed a Before the Injury/ Pre-Injury and Current Symptom	after the injury. Please rate the problem at two points	
Please <u>answer all the items</u> the best that you can. Do	not skip any items. Circle the number to tell us how r	much of a

0 = Not a problem 3 = Moderate problem 6 = Severe problem

		Before the Injury/ Pre-Injury									Current Symptoms/ Yesterday and Today									
1	Complains of headaches	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
2	Complains of nausea	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
3	Has balance problems	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
4	Appears or complains of dizziness	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
5	Has or complains of visual problems (blurry, double vision)	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
6	Appears to move in a clumsy manner	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
7	Sensitivity to light	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
8	Sensitivity to noise	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
	[Office Use Only] Physical	Tota	al Pre	=						Total Post =										
9	Acts irritable	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
10	Appears sad	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
11	Acts nervous	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
12	Acts more emotional	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
	[Office Use Only] Emotional	Tota	al Pre	=						Total Post =										
13	Acts or appears mentally "foggy"	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
14	Has difficulty concentrating	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
15	Has difficulty remembering	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
16	Becomes confused with directions or tasks	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
17	Answers questions more slowly than usual	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
	[Office Use Only] Cognitive	Tota	al Pre	=						Tot	al Pos	st =								
18	Appears more tired or fatigued	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
19	Appears drowsy	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
20	Sleeping more than usual	0	1	2	3	4	5	6		0	1	2	3	4	5	6				
	[Office Use Only] Sleep/Fatigue	Tota	al Pre	=						Tot	al Pos	st =								
21	In general, to what degree is your child acting "differently" than before the injury (not acting like himself or herself)?	C	Sircle	you		ting	with	0 1 "0" indi "Very [g "N	orma	٠,	lo D	iffere	ence) and				

PCSI Total Symptom Score	Pre (sum 4 domains) =	Post (sum 4 domains) =
[Office Use Only]	PCSI Total Adjusted Symptom Score	(Post-Pre) =

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Post-Concussion Symptom Inventory Adult

		Pre	/Pos	st Ve	rsio	n										
tient I	Name:					7	oda	ay's da	ate	:						
rthdat	e:					4	\ge:					_				
ptoms	ons: We would like to know if you had any of the have changed after your injury. Please rate the mptoms/ Yesterday and Today.															
	swer all the items the best that you can. Do not has been for you.	skip	any	item	ıs. C	ircle	the	numbei	r to	tell	us h	ow n	nuch	of a	prol	olem t
		0 =	Not	a pr	oble	m	3 =	Mode	rat	e pr	oble	em	6 =	= Se	vere	probl
		Before the Injury/ Pre-Injury								,		rrent erda				
1	Headache	0	1	2	3	4	5	6		0	1	2	3	4	5	6
2	Nausea	0	1	2	3	4	5	6		0	1	2	3	4	5	6
3	Balance problems	0	1	2	3	4	5	6		0	1	2	3	4	5	6
4	Dizziness	0	1	2	3		5	6		0	1	2	3	4	5	6
5	Visual problems (double vision, blurring)	0	1	2	3	4	5	6		0	1	2	3	4	5	6
6	Move in a clumsy manner	0	1	2	3	4	5	6		0	1	2	3	4	5	6
7	Sensitivity to light	0	1	2	3	4	5	6		0	1	2	3	4	5	6
8	Sensitivity to noise	0	1	2	3	4	5	6		0	1	2	3	4	5	6
	[Office Use Only] Physical	Tot	al Pre	=							al Pos					
9	Irritability	0	1		3			6		0	1	2	3	4	5	6
10	Sadness	0	1		3			6		0	1	2	3	4	5	6
11	Nervousness	0	1	2	3	4	5	6		0	1	2	3	4	5	6
12	Feeling more emotional	0	1	2	3	4	5	6		0	1	2	3	4	5	6
	[Office Use Only] Emotional		al Pre								al Pos					
13	Feeling mentally "foggy"		1				5	6				2				6
14	Difficulty concentrating			2				6				2				6
15	Difficulty remembering			2								2				6
16	Get confused with directions or tasks		1			4		6		0	1					6
17	Answer questions more slowly than usual					4		6		0	1			4		6
18	Feeling slowed down	0	1	2	3	4	5	6		0	1	2	3	4	5	6
40	[Office Use Only] Cognitive		al Pre					•		_	al Pos					
19	Fatigue	0	1	2	3	4	5	6		0	1	2	3	4	5	6
20	Drowsiness	0	1	2	3	4	5	6		0	1	2	3	4	5	6
21	Sleep more than usual	0	1	2	3	4	5	6		0	1	2	3	4	5	6
	[Office Use Only] Sleep/ Fatigue	1 ot	al Pre					4 ^			al Pos		D:"		_	_
22	In general, to what degree do you feel "differently" than before the injury (not feeling like yourself)?			No D ∍ you	r ratir	ig wi	th "0"	1 2 indicatin	_	Vorm	al" (N		ferer			!"

PCSI Total Symptom Score	Pre (sum 4 domains) =	Post (sum 4 domains) =
[Office Use Only]	PCSI Total Adjusted Symptom Score (Post-Pre) =	

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indicating "Very Different" (Major Difference)





TRAUMATIC BRAIN INJURY/CONCUSSION

CHANGES TO WATCH FOR OVER TIME:

- Headaches
- Changes in sleep patterns
- Fatigue
- Changes in vision
- Balance, coordination changes, dizziness
- Mood swings, gets mad easily
- Changes in personality
- Not feeling like themselves
- Trouble with attention and thinking
- Memory problems, especially short term
- Depression/Anxiety
- Difficulty handling stress
- Inappropriate behavior
- Grades dropping, falling behind in class
- Changes in work performance





Bringing together professionals to recognize the far-reaching and unique nature of brain injury and to improve services for survivors.









