



SCAT6™

Sport Concussion Assessment Tool
For Adolescents (13 years +) & Adults



Athlete Name:		ID Number:	
Date of Birth:	Date of Examination:	Date of Injury:	
Time of Injury:	Sex: Male <input type="checkbox"/> Female <input type="checkbox"/> Prefer Not To Say <input type="checkbox"/> Other <input type="checkbox"/>		
Dominant Hand: Left <input type="checkbox"/> Right <input type="checkbox"/> Ambidextrous <input type="checkbox"/>	Sport/Team/School:		
Current Year in School (if applicable):	Years of Education Completed (Total):		
First Language:	Preferred Language:		
Examiner:			

Concussion History

How many diagnosed concussions has the athlete had in the past?:

When was the most recent concussion?:

Primary Symptoms:

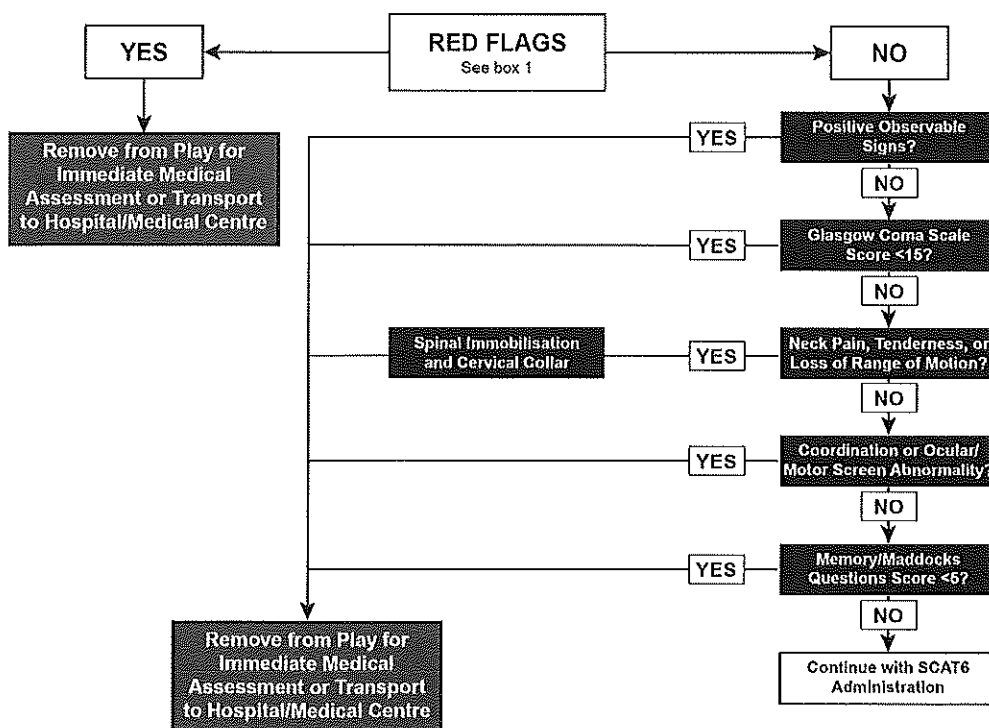
How long was the recovery (time to being cleared to play) from the most recent concussion?: (Days)

Immediate Assessment/Neuro Screen (Not Required at Baseline)

The following elements should be used in the evaluation of all athletes who are suspected of having a concussion prior to proceeding to the cognitive assessment, and ideally should be completed "on-field" after the first aid/emergency care priorities are completed.

If any of the observable signs of concussion are noted after a direct or indirect blow to the head, the athlete should be immediately and safely removed from participation and evaluated by an HCP.

The Glasgow Coma Scale is important as a standard measure for all patients and can be repeated over time to monitor deterioration of consciousness. The Maddocks questions and cervical spine exam are also critical steps of the immediate assessment.





Step 1: Observable Signs

Witnessed <input type="checkbox"/>	Observed on Video <input type="checkbox"/>		
Lying motionless on playing surface	Y	N	
Falling unprotected to the surface	Y	N	
Balance/gait difficulties, motor incoordination, ataxia: stumbling, slow/laboured movements	Y	N	
Disorientation or confusion, staring or limited responsiveness, or an inability to respond appropriately to questions	Y	N	
Blank or vacant look	Y	N	
Facial injury after head trauma	Y	N	
Impact seizure	Y	N	
High-risk mechanism of injury (sport-dependent)	Y	N	

Step 2: Glasgow Coma Scale

Typically, GCS is assessed once. Additional scoring columns are provided for monitoring over time, if needed.

Time of Assessment:

Date of Assessment:

Best Eye Response (E)

No eye opening	1	1	1
Eye opening to pain	2	2	2
Eye opening to speech	3	3	3
Eyes opening spontaneously	4	4	4

Best Verbal Response (V)

No verbal response	1	1	1
Incomprehensible sounds	2	2	2
Inappropriate words	3	3	3
Confused	4	4	4
Oriented	5	5	5

Best Motor Response (M)

No motor response	1	1	1
Extension to pain	2	2	2
Abnormal flexion to pain	3	3	3
Flexion/withdrawal to pain	4	4	4
Localized to pain	5	5	5
Obeys commands	6	6	6

Glasgow Coma Score (E + V + M)

Box 1: Red Flags

- Neck pain or tenderness
- Seizure or convulsion
- Double vision
- Loss of consciousness
- Weakness or tingling/burning in more than 1 arm or in the legs
- Deteriorating conscious state
- Vomiting
- Severe or increasing headache
- Increasingly restless, agitated or combative
- GCS <15
- Visible deformity of the skull

Step 3: Cervical Spine Assessment

In a patient who is not lucid or fully conscious, a cervical spine injury should be assumed and spinal precautions taken.

Does the athlete report neck pain at rest?	Y	N
Is there tenderness to palpation?	Y	N
If NO neck pain and NO tenderness, does the athlete have a full range of ACTIVE pain free movement?	Y	N
Are limb strength and sensation normal?	Y	N

Step 4: Coordination & Ocular/Motor Screen

Coordination: Is finger-to-nose normal for both hands with eyes open and closed?	Y	N
Ocular/Motor: Without moving their head or neck, can the patient look side-to-side and up-and-down without double vision?	Y	N
Are observed extraocular eye movements normal? If not, describe:	Y	N

Step 5: Memory Assessment Maddocks Questions¹

Say "I am going to ask you a few questions, please listen carefully and give your best effort. First, tell me what happened?"

Modified Maddocks questions (Modified appropriately for each sport; 1 point for each correct answer)

What venue are we at today?	0	1
Which half is it now?	0	1
Who scored last in this match?	0	1
What team did you play last week/game?	0	1
Did your team win the last game?	0	1
Maddocks Score		/5

Note: Appropriate sport-specific questions may be substituted



Off-Field Assessment

Please note that the cognitive assessment should be done in a distraction-free environment with the athlete in a resting state after completion of the Immediate Assessment/Neuro Screen.

Step 1: Athlete Background			
Has the athlete ever been:			
Hospitalised for head injury? (If yes, describe below)	Y	N	Diagnosed with attention deficit hyperactivity disorder (ADHD)?
Diagnosed/treated for headache disorder or migraine?	Y	N	Diagnosed with depression, anxiety, or other psychological disorder?
Diagnosed with a learning disability/dyslexia?	Y	N	
Notes:		Current medications? If yes, please list:	

Step 2: Symptom Evaluation										
Baseline:	<input type="checkbox"/>	Suspected/Post-Injury:	<input type="checkbox"/>							
		Time elapsed since suspected injury:	mins/hours/days							
The athlete will complete the symptom scale (below) after you provide instructions. Please note that the instructions are different for baseline versus suspected/post-injury evaluations.										
Baseline: Say "Please rate your symptoms below based on how you typically feel with "1" representing a very mild symptom and "6" representing a severe symptom."										
Suspected/Post-Injury: Say "Please rate your symptoms below based on how you feel now with "1" representing a very mild symptom and "6" representing a severe symptom."										
PLEASE HAND THE FORM TO THE ATHLETE										
Symptom	Rating									
Headaches	0	1	2	3	4	5	6	Do your symptoms get worse with physical activity?	Y	N
Pressure in head	0	1	2	3	4	5	6	Do your symptoms get worse with mental activity?	Y	N
Neck pain	0	1	2	3	4	5	6	If 100% is feeling perfectly normal, what percent of normal do you feel?		
Nausea or vomiting	0	1	2	3	4	5	6			
Dizziness	0	1	2	3	4	5	6	If not 100%, why?		
Blurred vision	0	1	2	3	4	5	6			
Balance problems	0	1	2	3	4	5	6			
Sensitivity to light	0	1	2	3	4	5	6			
Sensitivity to noise	0	1	2	3	4	5	6			
Feeling slowed down	0	1	2	3	4	5	6			
Feeling like "in a fog"	0	1	2	3	4	5	6			
"Don't feel right"	0	1	2	3	4	5	6			
Difficulty concentrating	0	1	2	3	4	5	6			
Difficulty remembering	0	1	2	3	4	5	6			
Fatigue or low energy	0	1	2	3	4	5	6			
Confusion	0	1	2	3	4	5	6			
Drowsiness	0	1	2	3	4	5	6			
More emotional	0	1	2	3	4	5	6			
Irritability	0	1	2	3	4	5	6			
Sadness	0	1	2	3	4	5	6			
Nervous or anxious	0	1	2	3	4	5	6			
Trouble falling asleep (if applicable)	0	1	2	3	4	5	6			
PLEASE HAND THE FORM BACK TO THE EXAMINER										
Once the athlete has completed answering all symptom items, it may be useful for the clinician to revisit items that were endorsed positively to gather more detail about each symptom.										
Total number of symptoms:	of 22			Symptom severity score:	of 132					



Step 3: Cognitive Screening (Based on Standardized Assessment of Concussion; SAC)²

Orientation

What month is it?	0	1
What is the date today?	0	1
What is the day of the week?	0	1
What year is it?	0	1
What time is it right now? (within 1 hour)	0	1

Orientation Score _____ of 5

Immediate Memory

All 3 trials must be administered irrespective of the number correct on Trial 1. Administer at the rate of one word per second.

Trial 1: Say "I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order."

Trials 2 and 3: Say "I am going to repeat the same list. Repeat back as many words as you can remember in any order, even if you said the word before in a previous trial."

Word list used: A B C

List A	Trial						Alternate Lists	
	Trial 1	Trial 2	Trial 3	Trial 1	Trial 2	Trial 3	List B	List C
Jacket	0	1	0	1	0	1	Finger	Baby
Arrow	0	1	0	1	0	1	Penny	Monkey
Pepper	0	1	0	1	0	1	Blanket	Perfume
Cotton	0	1	0	1	0	1	Lemon	Sunset
Movie	0	1	0	1	0	1	Insect	Iron
Dollar	0	1	0	1	0	1	Candle	Elbow
Honey	0	1	0	1	0	1	Paper	Apple
Mirror	0	1	0	1	0	1	Sugar	Carpet
Saddle	0	1	0	1	0	1	Sandwich	Saddle
Anchor	0	1	0	1	0	1	Wagon	Bubble
Trial Total								

Immediate Memory Score _____ of 30 **Time Last Trial Completed:** _____



Step 3: Cognitive Screening (Continued)

Concentration

Digits Backward:

Administer at the rate of one digit per second reading DOWN the selected column. If a string is completed correctly, move on to the string with next higher number of digits; if the string is completed incorrectly, use the alternate string with the same number of digits; if this is failed again, end the test.

Say "I'm going to read a string of numbers and when I am done, you repeat them back to me in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7. So, if I said 9-6-8 you would say? (8-6-9)"

Digit list used: A B C

List A	List B	List C				
4-9-3	5-2-6	1-4-2	Y	N		
6-2-9	4-1-5	6-5-8	Y	N	0	1
3-8-1-4	1-7-9-5	6-8-3-1	Y	N		
3-2-7-9	4-9-6-8	3-4-8-1	Y	N	0	1
6-2-9-7-1	4-8-5-2-7	4-9-1-5-3	Y	N		
1-5-2-8-6	6-1-8-4-3	6-8-2-5-1	Y	N	0	1
7-1-8-4-6-2	8-3-1-9-6-4	3-7-6-5-1-9	Y	N		
5-3-9-1-4-8	7-2-4-8-5-6	9-2-6-5-1-4	Y	N	0	1
			Digits Score		of 4	

Months in Reverse Order:

Say "Now tell me the months of the year in reverse order as QUICKLY and as accurately as possible. Start with the last month and go backward. So, you'll say December, November... go ahead"

Start stopwatch and CIRCLE each correct response:

December November October September August July June May April March February January

Time Taken to Complete (secs):

Number of Errors:

1 point if no errors and completion under 30 seconds

Months Score: of 1

Concentration Score (Digits + Months) of 5

Step 4: Coordination and Balance Examination

Modified Balance Error Scoring System (mBESS)³ testing

(see detailed administration instructions)

Foot Tested: Left Right (i.e. test the non-dominant foot)

Testing Surface (hard floor, field, etc.):

Footwear (shoes, barefoot, braces, tape etc.):

OPTIONAL (depending on clinical presentation and setting resources): For further assessment, the same 3 stances can be performed on a surface of medium density foam (e.g., approximately 50cm x 40cm x 6cm) with the same instructions and scoring.



Step 4: Coordination and Balance Examination (Continued)

Modified BESS (20 seconds each)

Double Leg Stance: of 10
 Tandem Stance: of 10
 Single Leg Stance: of 10
 Total Errors: of 30

On Foam (Optional)

Double Leg Stance: of 10
 Tandem Stance: of 10
 Single Leg Stance: of 10
 Total Errors: of 30

Note: If the mBESS yields normal findings then proceed to the Tandem Gait/Dual Task Tandem Gait.

If the mBESS reveals abnormal findings or clinically significant difficulties, Tandem Gait is not necessary at this time.

Both the Tandem Gait and optional Dual Task component may be administered later in the office setting as needed (see SCOAT6).

Timed Tandem Gait

Place a 3-metre-long line on the floor/firm surface with athletic tape. The task should be timed. Please complete all 3 trials.

Say "Please walk heel-to-toe quickly to the end of the tape, turn around and come back as fast as you can without separating your feet or stepping off the line."

Single Task:

Time to Complete Tandem Gait Walking (seconds)				
Trial 1	Trial 2	Trial 3	Average 3 Trials	Fastest Trial

Dual Task Gait (Optional. Timed Tandem Gait must be completed first)

Place a 3-metre-long line on the floor/firm surface with athletic tape. The task should be timed.

Say "Now, while you are walking heel-to-toe, I will ask you to count backwards out loud by 7s. For example, if we started at 100, you would say 100, 93, 86, 79. Let's practise counting. Starting with 93, count backward by sevens until I say "stop". Note that this practice only involves counting backwards.

Dual Task Practice: Circle correct responses; record number of subtraction counting errors.

Task											Errors	Time
Practice	93	86	72	65	58	51	44	37				

Say "Good. Now I will ask you to walk heel-to-toe and count backwards out loud at the same time. Are you ready? The number to start with is 88. Go!"

Dual Task Cognitive Performance: Circle correct responses; record number of subtraction counting errors.

Task											Errors	Time (circle fastest)	
Trial 1	88	81	74	67	60	53	46	39	32	25	18	11	4
Trial 2	90	83	76	69	62	55	48	41	34	27	20	13	6
Trial 3	98	91	84	77	70	63	56	49	42	35	28	21	14

Alternate double number starting integers may be used and recorded below.

Starting Integer: Errors: Time:



Step 4: Coordination and Balance Examination (Continued)

Were any single- or dual-task, timed tandem gait trials not completed due to walking errors or other reasons?

Yes No

If yes, please explain why:

Step 5: Delayed Recall

The Delayed Recall should be performed after at least 5 minutes have elapsed since the end of the Immediate Memory section: Score 1 point for each correct response.

Say "Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order."

Time started:

Word list used: A B C

Alternate Lists

List A	Score	List B	List C
Jacket	0 1	Finger	Baby
Arrow	0 1	Penny	Monkey
Pepper	0 1	Blanket	Perfume
Colton	0 1	Lemon	Sunset
Movie	0 1	Insect	Iron
Dollar	0 1	Candle	Elbow
Honey	0 1	Paper	Apple
Mirror	0 1	Sugar	Carpet
Saddle	0 1	Sandwich	Saddle
Anchor	0 1	Wagon	Bubble
Delayed Recall Score	of 10		

Total Cognitive Score

Orientation: of 5
 Immediate Memory: of 30
 Concentration: of 5
 Delayed Recall: of 10
 Total: of 50

If the athlete was known to you prior to their injury, are they different from their usual self?

Yes No Not applicable (If different, describe why in the clinical notes section)

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British Journal of Sports Medicine



Step 6: Decision

Domain	Date:	Date:	Date:
Neurological Exam (Acute Injury evaluation only)	Normal/Abnormal	Normal/Abnormal	Normal/Abnormal
Symptom number (of 22)			
Symptom Severity (of 132)			
Orientation (of 5)			
Immediate Memory (of 30)			
Concentration (of 5)			
Delayed Recall (of 10)			
Cognitive Total Score (of 50)			
mBESS Total Errors (of 30)			
Tandem Gait fastest time			
Dual Task fastest time			

Disposition

Concussion diagnosed?

Yes No Deferred

Health Care Professional Attestation

I am an HCP and I have personally administered or supervised the administration of this SCAT6.

Name:

Signature: Title/Specialty:

Registration/License number (if applicable): Date:

Additional Clinical Notes

Note: Scoring on the SCAT6 should not be used as a stand-alone method to diagnose concussion, measure recovery, or make decisions about an athlete's readiness to return to sport after concussion. Remember: An athlete can score within normal limits on the SCAT6 and still have a concussion.