

HIA 2

This form should be completed on all players removed permanently from the field following a head injury and on all players who have had a HIA independent of the result.

It should also be completed on any player who develops concussive symptoms after the game.

Player's name:	Competition:	Date:
Team:	Form completed by: Team doc	otor MDD Other Time:
Was a HIA 1 form com	pleted for this event? Yes No, the m	ne player presented with symptoms after
Ask the player: "How You should score each		

	NONE	M	LD	MODE	RATE	SEV	ERE
Headaches	0	1	2	3	4	5	6
'Pressure in head'	0	1	2	3	4	5	6
Neck pain	0	1	2	3	4	5	6
Nausea or vomiting	0	1	2	3	4	5	6
Dizziness	0	1	2	3	4	5	6
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
Excessive tiredness	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
Number of symptoms*:	/22						
Severity of symptoms**:	/132						

^{*} This score is determined by counting the number of individual symptoms reported. The result should be compared to each individual's baseline score. **For athletes without a baseline score**, any symptom declared in the symptom list which is not usually experienced by the player following a Rugby match or training is strongly in favour of concussion.

^{**} This score is determined by adding up each number related to a reported symptom and is generally used to monitor recovery of a concussion.



STANDARDISED ASSESSMENT of CONCUSSION (SAC) AND BALANCE TESTS

ORIENTATION (1 point for each correct answer)								
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: out of 5								

IMMEDIATE MEMORY									
List		Trial 1		Tri	Trial 2		Trial 3		
1. Elbow		0	1	0	1	0	1		
2. Apple		0	1	0	1	0	1		
3. Carpet	0	1	0	1	0	1			
4. Saddle	0	1	0	1	0	1			
5. Bubble		0	1	0	1	0	1		
TOTAL									
Immediate memory score: out of 15									
Alternative word lists (use five words)									
1. Candle	2. Paper	3. 9	3. Sugar		4. Sandwich		ıgon		
1. Baby	2. Monkey	3. I	3. Perfume		4. Sunset		5. Iron		
1. Finger 2. Penny		3. I	3. Blanket		4. Lemon		5. Insect		

CONCENTRATION: DIGITS BACKWARD							
List	Tria	al 1	Alternative digit lists				
4 – 9 - 3	0	1	6-2-9	5-2-6	4 – 1 – 5		
3 – 8 – 1 – 4	0	1	3 – 2 - 7 - 9	1-7-9-5	4-9-6-8		
6 – 2 – 9 – 7 - 1	0	1	1-5-2-8-6	3-8-5-2-7	6-1-8-4-3		
7-1-8-4-6-2	0	1	5-3-9-1-4-8	8-3-1-9-6-4	7-2-4-8-5-6		
CONCENTRATION: MONTHS IN REVERSE ORDER (1 point for entire sequence correct)							

0

Concentration score: out of 5

Dec-Nov-Oct-Sep-Aug-Jul-Jun-May-Apr-Mar-Feb-Jan



HIA 2

STANDARDISED ASSESSMENT of CONCUSSION (SAC) AND BALANCE TESTS

UPPER LIMB CO-	ORDINAT	ION	BALANCE EXAMINATION					
	Left	Right			No. of errors			
Which arm was tested?			Double leg stance					
Co-ordination score:	ou	t of 1	Single leg stance	Single leg stance				
			Tandem stance					
			TOTAL BALANCE SCO Assessment of a population of concussive injury will usually • Tandem test - 3 or more end • Single leg stance - 4 or mo	m a				
			DELAYED RECALL					
Word								
Elbow				0		1		
Apple				0		1		
Carpet 0						1		
Saddle 0						1		
Bubble 0						1		
TOTAL								
		Altern	ative word lists (use five	words)				
1. Candle	2. Pap	er	3. Sugar	5	. Wagon			
1. Baby	2. Mon	key	3. Perfume	5. Iron				
1. Finger	2. Peni	ny	3. Blanket	5. Insect				
			SAC SCORE					
Orientation						/5		
Immediate memory						/15		
Concentration						/5		
Delayed recall						/5		
TOTAL Assessment of a population of Rugby players suffering from a concussive injury will usually elicit the following results: • Total SAC score 24 or below • Concentration score 2 or below (digits backward) • Delayed recall 3 or less words						/30		
At the end of HIA 2, the diagnosis of concussion is: Now confirmed Probable, but I prefer to consider the player concussed Excluded								



HIA 2

IMMEDIATE MEMORY

"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: "I am going to repeat the same list again. Repeat back as many words as you can remember in any order, even if you said the word before."

Complete all 3 trials regardless of score on trial 1 and 2. Read the words at a rate of one per second. Score one point for each correct response. Total score equals sum across all 3 trials. Do not inform the athlete that delayed recall will be tested.

CONCENTRATION

Digits backward:

"I am going to read you a string of numbers and when I am done, you repeat them back to me backwards, in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7."

If correct, go to next string length. If incorrect, read trial 2. One point possible for each string length. Stop after incorrect on both trials. The digits should be read at the rate of one per second.

Months in reverse order:

"Now tell me the months of the year in reverse order. Start with the last month and go backward. So you'll say December, November ... Go ahead." Score one point for entire sequence correct.

UPPER LIMB CO-ORDINATION Finger-to-nose (FTN) task:

"I am going to test your co-ordination now. Please sit comfortably on the chair with your eyes open and your arm (either right or left) outstretched (shoulder flexed to 90 degrees and elbow and fingers extended). When I give a start signal, I would like you to perform five successive finger-to-nose repetitions using your index finger to touch the tip of the nose as quickly and as accurately as possible."

Scoring: Able to complete 5 correct repetitions in less than 4 seconds = 1 point

Athletes fail the test if they do not touch their nose, do not fully extend their elbow or do not perform five repetitions. Failure should be scored as 0.

BALANCE TEST

This balance testing is based on a modified version of the Balance Error Scoring System (BESS). A stopwatch or watch with a second hand is required for this testing.

"I am now going to test your balance. Please take your shoes off, roll up your pant legs above ankle (if applicable), and remove any ankle taping (if applicable). This test will consist of three twenty second tests with different stances."

Double leg stance:

"The first stance is standing with your feet together with your hands on your hips and with your eyes closed. You should try to maintain stability in that position for 20 seconds. I will be counting the number of times you move out of this position. I will start timing when you are set and have closed your eyes."

Single leg stance:

"If you were to kick a ball, which foot would you use? [This will be the dominant foot] Now stand on your non-dominant foot. The dominant leg should be held in approximately 30 degrees of hip flexion and 45 degrees of knee flexion. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."

Tandem stance:

"Now stand heel-to-toe with your non-dominant foot in back. Your weight should be evenly distributed across both feet. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."

DELAYED RECALL

The delayed recall should be performed after completion of the balance and co-ordination examination.

"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."

Score one point for each correct response.

THIS TOOL MUST BE USED FOR POST-GAME, SAME DAY DIAGNOSIS