

The GRTP Protocol is six-stage rehabilitation programme that returns players to rugby following a concussion or suspected concussion.

Benefits of GRTP



Returns players to rugby participation and performance efficiently and safely



Important part of the management guidelines to treat concussion



Low intensity exercise in first 48 hours prevents persisting symptoms and promotes recovery



Detects symptoms early that may require additional medical treatment



Minimises risk of injury recurrence or subsequent injury

Name:

Date of injury:

Stage	Date competencies achieved
1	
2	
3	
Symptom-free and assessed by a healthcare professional to progress	
4	
5	
6	

Return to play takes minimum 21 days adults & 23 days for U20s

For more information on concussion and GRTP, including video guides, click here.



IRFU GRTP Protocol

Symptom Scale (Visual Analogue Scale)	0	1	2	3	4	5	6	7	8	9	10	
Pre-activity (at rest)	No Symptoms											Severe Symptoms (as bad as possibly can be)
During/Post-Activity												

Stage 1 to 3

Focus on physical activity as a treatment to aid recovery.

Stage 1

🕒 0-48 hours

Activity Guidelines

- Stop playing immediately after sustaining a concussion
- Seek medical advice early
- Early light physical and mental activity helps treat symptoms
- Avoid STRICT absolute physical and mental rest – this delays recovery
- Avoid HIGH intensity exercise in first 48 hours

Lifestyle Guidelines

- Maintain regular sleeping pattern
- Maintain your normal eating regime
- Remain socially interactive
- Reduce screentime in the first 48 hours

Stage 2

🕒 Days 2-6

Light to moderate activity recommended, see Activity Chart overleaf.

Players can increase activity only when:

- Symptoms at rest are <7/10
- Only mild symptom exacerbation occurs (<2 point increase)
- Any symptom exacerbation resolves in <60 minutes

If the above criteria are not met, **STOP** new activity and try again the following day.

Stage 3

🕒 Days 7-9

Continue with light to moderate activity recommended, see Activity Chart overleaf.

Players can increase activity only when:

- Symptoms at rest are <7/10
- Only mild symptom exacerbation occurs (<2 point increase)
- Any symptom exacerbation resolves in <60 minutes

If the above criteria are not met, **STOP** new activity and try again the following day.

Stage 4 and 5

Focus on specific rugby activities to prepare players for full return to play.

Stage 4

🕒 Days 10-13 (adults)
🕒 Days 10-15 (U20s)

Controlled contact activities with no or minimal risk of head impacts, see Activity Chart overleaf.

To progress to Stage 4:

You MUST:

- ✓ Be symptom-free at rest and after activity
- ✓ Have returned to school/college/work

You SHOULD:

- ✓ Be assessed by a healthcare professional

If any symptoms arise **STOP** and **RETURN to Stage 3** until symptom-free.

Stage 5

🕒 Days 14-21 (adults)
🕒 Days 16-23 (U20s)

Return to full contact training, including activities that may put you at risk of a head impact in i.e., uncontrolled contact, tackles, collisions and falls, see Activity Chart.

If any symptoms arise **STOP** and **RETURN to Stage 3** until symptom-free.

Players should NOT return to play until they:

- ✓ Have returned to learn / work
- ✓ Are symptom-free
- ✓ Have been assessed by a healthcare practitioner
- ✓ Have completed the GRTP Protocol.

Stage 6

Full return to match play.

Stage 6

🕒 Days 21+ (adults)
🕒 Days 23+ (U20s)

Return to full contact play.

Timelines:

Under 20yrs:
23 days minimum

Over 20yrs:
21 days minimum

Timings are a guide only. GRTP protocol should not replace advice given to an individual by their healthcare practitioner.

Graduated Return to Play (GRTP) Protocol

- Get medical advice if:**
- You're on medications such as pain killers, anti-depressants and / or sleeping medication.
 - You have 2 or more concussions in a 12-month period.
 - You have symptoms beyond Day 10-14 of the GRTP Protocol.
 - You have symptoms continuing to occur with a specific activity within the GRTP Protocol.
 - You're failing to improve or progress through the GRTP.



G RTP Activity Chart

Click here to access exercise ideas at IRFU ENGAGE

Click here to access Rugby Contact Skills videos



Stage	Timeline		Aerobic Fitness	Resistance	Balance	Agility	Rugby Contact Skills	Performance Skills	Systems Challenged	
	Adult	U20								
Stages 1-3: Concussion Treatment	1 Symptom-limited Exercise	0-1 day	0-1 day	Light aerobic linear exercise: E.G. 5-15 min on stationary bike <50% HRmax	Isometric exercise: E.G. Static neck strengthening	Static/stable exercise: E.G. Double leg balance with small base of support or tandem stance with eyes open or closed	Mobility and movement exercise: E.G. Static stretching with head in stable position			Cardiovascular Musculoskeletal Balance/Vestibular
	2 Aerobic Exercise	2-6 days	2-6 days	Light to moderate aerobic exercise: E.G. 20-30 min jogging <70% HRmax	Bodyweight exercise: E.G. Bodyweight squats, hip hinges	Static/unstable exercise: E.G. Single leg balance with eyes open or closed	Single direction movement exercise: E.G. Forwards or backwards jogging	RECONNECT PHASE: E.G. Static tackle profile with resistance, change of profile angles		Cardiovascular Musculoskeletal Balance/Vestibular
	3 Rugby-specific Exercise	7-9 days	7-9 days	Moderate exercise: E.G. 30-40min running 70-80% HRmax	Light resistance exercise: E.G. Gym work at 60-70% of normal load	Dynamic/stable exercise: E.G. Double leg jumps, single leg hops, arabesque	Multi-direction movement exercise: E.G. Change of direction, T-test, side-stepping	MOVEMENT PHASE: E.G. Tackle profile at speed, varied approach & entry angles	Simple position-specific skills: E.G. Lineout throwing, passing drills, kicking	Musculoskeletal Balance/Vestibular Visual/Ocular

Player MUST be symptom-free and should have an assessment by a healthcare professional before entering Stage 4

Stages 4-6: Rugby Performance	4 Non-contact Drills	10-13 days	10-15 days	Intense exercise: E.G. Interval training 90% HRmax, acceleration & deceleration drills	Moderate resistance training: E.G. Gym work at 70-80% of normal load	Dynamic/unstable exercise: E.G. Hopping drills, ladder drills, bear crawls	Complex movement exercise: E.G. T-test to coloured or numbered cones, down ups, cariocas	CHALLENGE PHASE: E.G. Tackle profile at speed, open chain decision-making & entries	Dynamic position-specific skills: E.G. Passing drills, partner pummel & mat wrestling	Balance/Vestibular Visual/Ocular Cognition
	5 Full-contact Practice	14 days	16 days	Intense exercise & conditioning: E.G. Full training session	Dynamic/complex exercise: E.G. Gym work up to pre-injury strength & power loads	Dynamic/complex exercise: E.G. Plank press-up wrestling, mat wrestling	Dynamic/complex positions-specific: E.G. Down-ups, sprint drills with varying starting positions	PERFORMANCE PHASE: E.G. Linear approach to entry Vs tackle shield, angled approach to entry Vs tackle shield	Dynamic/complex skills: E.G. Full contact training session, ball fend, back-to-back wrestling	Cognition Decision-making
	6 Return to Play	21 days	23 days	Full aerobic fitness	Full strength & power	Full balance ability & control	Full co-ordination & decision-making	FULL TACKLE PERFORMANCE COMPETENCE: E.G. Tackle at speed with intent & confidence	Full performance competence	Psychological (fear avoidance, confidence)