THE GRADUATED RETURN TO SPORT (GRTS) 'INDIVIDUALISED REHABILITATION' PROTOCOL

EACH STAGE PROGRESSION IS A MINIMUM OF 24 HOURS.



PLEASE USE A COMMON SENSE handbook to identify a suspected concussion. If you suspect one, take the player off, it's really that simple.

Operationally, Stages 1-3 of the individualised rehabilitation, forms part of the **two-week stand-down period** away from contact-rugby. During these stages, the player **may still experience some symptoms**. The day the player sustained the suspected or confirmed concussion is considered 'Day 0'

STAGES 4-6

Stages 4-6 begins after completion of Stages 1-3 and the 2-week contact-rugby stand-down period. Stages 4-6 prepare the player gradually for contact fitness and to get them ready to play again. To start Stages 4-6, the player must have no symptoms remaining.

STAGE	REHABILITATION	OBJECTIVE	EXERCISE ALLOWED
1	SYMPTOM-LIMITED ACTIVITY (RELATIVE REST)	RECOVERY. GRADUAL REINTRODUCTION OF WORK/SCHOOL	 Complete body and brain rest for the first 24-48 hours Daily activities that do not exacerbate symptoms (e.g., walking)
2	AEROBIC EXERCISE (20 MINUTES) 2A—LIGHT (UP TO APPROXIMATELY 55% MAX HR) THEN 2B—MODERATE (UP TO APPROXIMATELY 70% MAX HR)	INCREASE HEART RATE	 Stationary cycling or walking at slow to medium pace May start light resistance training that does not result in more than mild and brief exacerbation* of concussion symptoms
3	INDIVIDUAL SPORT-SPECIFIC EXERCISE (25-30 MINUTES). NOTE: IF SPORT-SPECIFIC TRAINING INVOLVES ANY RISK OF INADVERTENT HEAD IMPACT; MEDICAL GLEARANCE SHOULD OCCUR PRIOR TO STAGE 3	ADD MOVEMENT, Change of Direction	 Sport-specific training away from the team environment (e.g., running, change of direction and/or individual training drills away from the team environment) No activities at risk of head impact Running drills
STAGES 4-8 SHOULD BEGIN AFTER THE RESOLUTION OF ANY SYMPTOMS, ABNORMALITIES IN COGNITIVE FUNCTION AND ANY OTHER CLINICAL FINDINGS RELATED TO THE CURRENT CONCUSSION, INCLUDING WITH AND AFTER PHYSICAL EXERTION			
4	NON-CONTACT TRAINING DRILLS	RESUME USUAL INTENSITY OF EXERGISE, Goordination and increased thinking	 Exercise to high intensity including more challenging training drills (e.g., passing drills, multiplayer training) Can integrate into a team environment May start progressive resistance training Player MUST be medically cleared at the end of this Stage before going to Full-contact training or Stage 5 If player remains sign and symptom-free for the full 24 hours, they then move onto Stage 5
5	FULL-GONTACT PRACTICE	RESTORE CONFIDENCE AND ASSESS Functional skills by Coaching Staff	 Participate in normal training activities If player remains sign and symptom-free for the full 24 hours, they then move onto Stage 6
6	RETURN TO MATCH PLAY/SPORT	RECOVER. NORMAL GAME PLAY	Player rehabilitated and can be progressively re-introduced into full match play

Mild and brief exacerbation of symptoms (i.e., an increase of no more than 2 points on a 0-10-point scale for less than an hour when compared with the baseline value reported prior to physical activity).

Athletes may begin Stage 1 (i.e., symptom-limited activity relative rest) within 24 hours of injury, then moving to Stages 2 and 3 within the 14-day or 2-week stand-down period away from contact-rugby, with progression through each subsequent Stage thereafter typically taking a minimum of 24 hours.

If more than mild exacerbation of symptoms (i.e., more than 2 points on a 0-10 scale) occurs during Stages 1-3, the athlete should stop and attempt to exercise the next day

Athletes experiencing concussion-related symptoms during Stages 4-6 should return to Stage 3 to establish full resolution of symptoms with exertion before engaging in at-risk activities.

Written determination of readiness to Return To Sport (RTS) should be provided by a medical doctor before unrestricted RTS as directed by local laws and/or sporting regulations.



Max HR, predicted maximal heart rate according to age (i.e., 220-age).

NOTES:

- A player may only start the individualised rehabilitation Stages 4-6 once cleared by a medical doctor and all symptoms have cleared before, during, and after exercise in all three Stages 1-3
 In individualised rehabilitation Stages 4-6 a player may only progress to the next stage if no symptoms occur before, during, and after exercise in each stage
 A player must again be cleared by a medical doctor before starting full-contact training

EARLIEST RETURN TO SPORT:

= 2 weeks (14 days) stand-down period away from contact-rugby post injury + individualised rehabilitation. (May only be cleared for play earliest on Day 21 post injury)

COMPULSORY STAND-DOWN PERIOD AWAY FROM CONTACT-RUGBY POST CONCUSSION

Minimum of 2 weeks (14 days) off from contact-rugby, while starting the Individualised rehabilitation Stages 1-3, can even be longer if any signs or symptoms remain

CAUTION!

CAUTION! Individualised rehabilitation Stages 4-6 can be started only if the player is symptom free and off medication that modifies symptoms of concussion. MEDICAL CLEARANCE REQUIRED

INDIVIDUALISED REHABILITATION

Individualised rehabilitation
Stages 4-6 with progression to
each next Stage if no symptoms
experienced before, during, or after
exercise, with a minimum duration
of 24 hours per Stage

CAUTION!

CAUTION! Contact Sport should be authorized only if the player is symptom free and off medication. MEDICAL CLEARANCE REQUIRED

NUMBER OF MISSED FULL WEEKS

Earliest Return To Sport
= 2 weeks (14 days) stand-down
period away from contact-rugby
post injury + individualised
rehabilitation.
(May only be cleared for play
earliest on Day 21 post injury)



GAUTION: Any player with a history of multiple concussions, players with unusual presentations or prolonged recovery should be assessed and managed by health care providers (multidisciplinary) with experience in sports-related concussions.

However, the medical doctor clearance is non-negotiable and must always be provided before entering the individualised rehabilitation Stages 4-6, and before starting full-contact training, regardless of who is available to manage or monitor the individualised rehabilitation process.





