



When the data from the family and school (athletics AND academics) has been provided to the health care provider, the health care provider can then determine the safest time to start the graduated RTP. The health care provider may return the athlete *progressively* back to play per the graduated return to play guidelines. The 4<sup>th</sup> Zurich Guidelines outlines a six step, graduated RTP which stays consistent with the concept that the concussed brain will flare a symptom if it is asked to exert beyond its capacity physically or mentally (McAvoy, 2012a). As the athlete is asked to perform more and more rigorous physical activity (with 24 hours in between steps), a symptom will develop if the brain cells have not yet re-regulated themselves. If no symptoms return with increased exertion, the athlete will continue to move through RTP guidelines until eventually reaching the final step.

The graduated RTP guidelines are accepted as best practices for athletes. Best practice suggests that a graduated RTP is important for any and all students (not just an athlete) returning to activity.

The Graduated Return to Play Guidelines are as follows: (McCrorry et al., 2013):

Stage	Activity	Functional Exercise	Objective of Stage
1	No Activity	Symptom limited physical and cognitive rest	Recovery
2	Light aerobic activity	Walking, Swimming or stationary cycling keeping intensity <70% maximum permitted heart rate. No resistance training.	Increase heart rate
3	Sport-Specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities.	Add movement
4	Non-contact training drills	Progression to more complex training drills, (eg, passing drills in football and ice hockey). May start progressive resistance training.	Exercise, coordination and cognitive load
5	Full-contact practice	Following medical clearance, participate in normal training activities; full exertion	Restore confidence and assess functional skills by coaching staff
6	Return to play	Return to normal activity	

\*Review the Consensus Statement on Concussion in Sport: The 4<sup>th</sup> International Conference on Concussion in Sport for more specifics on implementing RTP Guidelines.