

A Graduated Return-to-Play (RTP)

FAMILY TEAM is the student/athlete 100% back to pre-concussion function?

SCHOOL ACADEMIC TEAM is the student/athlete 100% back to pre-concussion academic functioning

WHEN ALL FOUR TEAMS AGREE

The student/athlete is 100% recovered, the MEDICAL TEAM can then approve the starting of the Graduated RTP steps. The introduction of physical activity (in the steps outlined in order below) is the last test of the brain cells to make sure they are healed and that they do not “flare” symptoms. This is the final and formal step toward “clearance” and the safest way to guard against a more serious injury.

MEDICAL TEAM approves the start of the RTP steps

SCHOOL PHYSICIAN TEAM often the ATC at the school takes the athlete through the RTP steps.

If there is no ATC available, the MEDICAL TEAM should teach the FAMILY TEAM to administer and supervise the RTP steps.

A Graduated Return-to-Play (RTP) Recommended by The 2012 Zurich Consensus Statement on Concussion in Sport *

STAGE	ACTIVITY	FUNCTIONAL EXERCISE AT EACH STAGE OF REHABILITATION	OBJECTIVE OF STATE
1	No activity <i>When a 100% symptom free for 24 hours proceed to Stage 2. (Recommend longer symptom-free period at each stage for younger student/ athletes)</i>	Symptoms limited physical and cognitive rest.	Recovery
2	Light aerobic exercise <i>If symptoms re-emerge with this level of exertion, then return to the previous stage. If the student remains symptom free for 24 hours after this level of exertion, then proceed to the next stage.</i>	Walking, swimming, or stationary cycling keeping intensity <70% maximum permitted heart rate. No resistance training.	Increase heart rate
3	Sport-specific exercise <i>If symptoms re-emerge with this level of exertion, then return to the previous stage. If the student remains symptom free for 24 hours after this level of exertion, then proceed to the next stage.</i>	Skating drills in ice hockey, running drills in soccer. No head-impact activities.	Add movement
4	Non-contact training drills <i>If symptoms re-emerge with this level of exertion, then return to the previous stage. If the student remains symptom free for 24 hours after this level of exertion, then proceed to the next stage.</i>	Progression to move complex training drills, e.g., passing drills in football and ice hockey. May start progressive resistance training.	Exercise, coordination and cognitive load
5	Full-contact practice <i>If symptoms re-emerge with this level of exertion, then return to the previous stage. If the student remains symptom free for 24 hours after this level of exertion, then proceed to the next stage.</i>	Following medical clearance, participate in normal training activities.	Restore confidence and assess functional skills by coaching staff
6	Return to play	Normal game play.	No restrictions

The healthcare professional should give the responsibility of the graduated RTP steps over only to trained professional such as an ATC, PT or should teach the parents. A coach, school nurse or PE teacher does NOT need to be responsible for taking concussed student/athlete through these steps.

Research Notes: Earlier introduction of physical activity is being researched and may become best practice. However, at this time, any early introduction of physical exertion should only be conducted in a supervised and safe environment by trained professionals.