Complete Concussion Management Stages Reference

The Concussion Return to School Plan was developed in partnership with Parachute and is based on the most recent research and recommendations of the expert scientific community on concussion, that is, The Canadian Guidelines on Concussion in Sport, July 2017 and the Berlin Consensus Statement on Concussion in Sport, October 2016. The format has been adapted by the LKDSB for ease of use for schools and parents.

Should a student be diagnosed with a concussion, the student will be required to follow a Return to School Plan which includes a Return to Learning (RTL) plan and Return to Physical Activity (RTPA) plan. There are two parts to a student's RTL plan. The first part, Initial Rest to Stage 2, occurs at home and the second part, Stage 3a to 4b, occurs at school.

The RTL and RTPA plans are inter-related, however, they are not interdependent. A student's progress through the stages of RTL is independent from their progression through the RTPA stages. Each stage must last a minimum of 24 hours.

Return to Learning (RTL) - Initial Rest - Stage 2 that occurs at Home

Initial Rest

24 – 48 hours of relative cognitive rest

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Short board/card games Short phone calls Photography (with a camera) Crafts 	 TV Technology use (for example, computer, laptop, tablet, iPad, cell phone) Video games Reading Attendance at school or school-type work

The student moves to Stage 1 when symptoms start to improve or after resting 2 days maximum (whichever occurs first).

Stage 1

Light cognitive (thinking/memory/ knowledge) activities.

Gradually increase cognitive activity up to 30 minutes.

Take frequent breaks.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage Easy reading (for example, books, magazines, newspaper) Limited TV Limited cellphone conversations Drawing/building blocks/puzzles Some contact with friends 	 Technology use (for example, computer, laptop, tablet, cell phone) Attendance at school or school type work

The student moves to Stage 2 when:

- the student tolerates 30 minutes of light cognitive activity (for example a student should be able to complete 3-4 of the permitted activities in Stage 1) and has not exhibited or reported a return of symptoms, new symptoms, or worsening symptoms.
- The student has completed a minimum of 24 hours at Stage 1.

However:

- The student must return to the previous stage for a minimum of 24 hours when they have exhibited or reported a return of symptoms, or new symptoms.
- The student must return to a medical doctor or nurse practitioner when they have exhibited or reported a worsening of symptoms.

Stage 2

Gradually add cognitive activity (as per activities permitted). When light cognitive activity is tolerated, introduce school work (at home and facilitated by the school).

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage School-type work in 30-minute increments Crosswords, word puzzles, Sudoku, word search Limited technology use (for example, computer, laptop, tablet, cell phone (for example, texting/games/photography)) starting with shorter periods and building up as tolerated. 	School attendance

The student moves to Stage 3a when:

- The student tolerates the additional cognitive activity (for example a student should be able to complete 3-4 of the activities permitted in Stage 2) and has not exhibited or reported a return of symptoms, new symptoms, or worsening symptoms.
- The student has completed a minimum of 24 hours at Stage 2.

However:

- The student must return to the previous stage for a minimum of 24 hours when they have exhibited or reported a return of symptoms, or new symptoms.
- The student must return to a medical doctor or nurse practitioner when they have exhibited or reported a worsening of symptoms.

When the student has successfully completed stages 1 and 2 of the Concussion Return to School Plan for RTL and RTPA, parent/guardian must sign and date Appendix 3a: Home Concussion Management Plan and communicate to the school principal/designate that the student is ready to begin the school portion of the RTL and RTPA plan.

Return to Learning (RTL) - Stage 3 - 4 that occurs in collaboration between Home and School

Stage 3a

The student begins with an initial time at school of 2 hours. The individual RTL plan is developed by Collaborative Team following the student conference and assessment of the student's individual needs determining possible strategies and/or approaches for student learning.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage School work for up to 2 hours per day in smaller chunks (completed at school) working up to a 1/2 day of cognitive activity 	
 Adaptation of learning strategies or approach 	Field trips

Stage 3b

The student continues attending school half time with gradual increase in school attendance time, increased school work and a decrease in the adaptation of learning strategies and/or approaches.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage School work for 4-5 hours per day, in smaller chunks (for example, 2-4 days of school/week) Homework – up to 30 minutes per day Decrease adaptation of learning strategies and/or approaches Classroom testing with accommodations 	Standardized tests/exams

Stage 4a

Full day school, minimal adaptation of learning strategies and/or approaches. Nearly normal workload.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage Nearly normal cognitive activities Routine school work as tolerated Minimal adaptation of learning strategies and/or approaches Start to eliminate adaptation of learning strategies and/or approaches Increase homework to 60 minutes per day Limit routine testing to one test per day with accommodations (for example, supports - such as more time) 	Standardized tests/exams

Stage 4b

At school: full day, without adaptation of learning strategies and/or approaches

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Normal cognitive activities Routine school work Full curriculum load (attend all classes, all homework, tests) Standardized tests/exams Full extracurricular involvement (nonsport/non-physical activity, for example, debating club, drama club, chess club) 	

Return to Physical Activity (RTPA) - Initial Rest - Stage 2 that occurs at Home

Initial Rest

24 - 48 hours of relative physical rest

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Limited movement that does not increase heart rate or break a sweat Moving to various locations in the home Daily hygiene activities 	 Physical exertion (increases breathing and heart rate and sweating) Stair climbing other than to move locations throughout the home Sports/sporting activity

The student moves to Stage 1 when symptoms start to improve or after resting 2 days maximum (whichever occurs first).

Stage 1

Light physical activities (as per activities permitted) that do not provoke symptoms.

Movements that can be done with little effort (do not increase breathing and/or heart rate or break a sweat).

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Daily household tasks (for example, bed-making, dishes, feeding pets, meal preparation) Slow walking for short time 	 Physical exertion (increases breathing and heart rate and sweating) Sports/sporting activity Stair climbing, other than to move locations throughout the home

The student moves to Stage 2a when:

- The student tolerates light physical activities (completes both activities from Stage 1) and has not exhibited or reported a return of symptoms, new symptoms, or worsening symptoms.
- o The student has completed a minimum of 24 hours at Stage 1.

However:

- The student must return to the previous stage for a minimum of 24 hours when they have exhibited or reported a return of symptoms, or new symptoms.
- The student must return to a medical doctor or nurse practitioner when they have exhibited or reported a worsening of symptoms.

Stage 2a

Daily activities that do not provoke symptoms.

Add additional movements that do not increase breathing and/or heart rate or break a sweat.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage Light physical activity (for example, use of stairs) 10-15 minutes slow walking 1-2x per day inside and outside (weather permitting) 	 Physical exertion (increases breathing and/or heart rate and sweating) Sports

The student moves to Stage 2b when:

- The student tolerates daily physical activities (completes activities permitted in Stage 2a) and has not exhibited or reported a return of symptoms, new symptoms, or worsening symptoms.
- The student has completed a minimum of 24 hours at Stage 2a.

However:

- The student must return to the previous stage for a minimum of 24 hours when they have exhibited or reported a return of symptoms, or new symptoms.
- The student must return to a medical doctor or nurse practitioner when they have exhibited or reported a worsening of symptoms.

Stage 2b

Light aerobic activity

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage 20-30 minutes walking/stationary cycling/recreational (that is, at a pace that causes some increase in breathing/heart rate but not enough to prevent a student from carrying on a conversation comfortably) 	 Resistance or weight training Physical activities with others Physical activities using equipment

The student moves to Stage 3 when:

- The student tolerates light aerobic activities (completes activities permitted from Stage 2b) and has not exhibited or reported a return of symptoms, new symptoms, or worsening symptoms
- The student has completed a minimum of 24 hours at Stage 2b.

However:

- The student must return to the previous stage for a minimum of 24 hours when they have exhibited or reported a return of symptoms, or new symptoms.
- The student must return to a medical doctor or nurse practitioner when they have exhibited or reported a worsening of symptoms.

When the student has successfully completed stages 1 and 2 of the Concussion Return to School Plan for RTL and RTPA, parent/guardian must sign and date Appendix 3a: Home Concussion Management Plan and communicate to the school principal/designate that the student is ready to begin the school portion of the RTL and RTPA plan.

Return to Physical Activity (RTPA) - Stage 3 - 6 that occurs in collaboration between Home and School

Stage 3

Simple locomotor activities/sport-specific exercise to add movement.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage (20-30 minutes walking/stationary cycling/elliptical/recreational dancing at a moderate pace) Simple individual drills (for example, running/throwing drills, skating drills in hockey, shooting drills in basketball) in predictable and controlled environments with no risk of reinjury Restricted recess activities (for example, walking) 	 Full participation in physical education or Daily Physical Activity Participation in intramurals Full participation in interschool practices Interschool competitions Resistance or weight training Body contact or head impact activities (for example, heading a soccer ball) Jarring motions (for example, high speed stops, hitting a baseball with a bat)

Stage 4

Progressively increase physical activity. Non-contact training drills to add coordination and increased thinking.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Activities from previous stage More complex training drills (for example, passing drills in soccer and hockey) Physical activity with no body contact (for example, dance, badminton) Participation in practices for non-contact interschool sports (no contact) Progressive resistance training may be started Recess – physical activity running/games with no body contact Daily Physical Activity 	 Full participation in physical education Participation in intramurals Body contact or head impact activities (for example, heading a soccer ball) Participation in interschool contact sport practices, or interschool games/competitions (non-contact and contact)

At this point a Concussion Medical Clearance Form is sent home to parent/guardian to be completed by a medical doctor/nurse practitioner.

Before progressing to Stage 5, the student must:

- have completed Stage 4a and 4b of the RTL Plan (full day at school without adaptation of learning strategies and/or approaches);
- o have completed Stage 4 and be symptom-free; and
- o obtain a signed medical clearance from a medical doctor or nurse practitioner.

Please Note: Premature return to contact sports (full practice and game play) may cause a significant setback in recovery.

Stage 5

Following medical clearance, full participation in all non-contact physical activities (that is, non-intentional body contact) and full contact training/practice in contact sports.

Activities Permitted at this Stage	Activities Not Permitted at this Stage
 Physical Education Intramural programs Full contact training/practice in contact interschool sports 	Competition (for example, games, meets, events) that involves body contact

Stage 6

Unrestricted return to contact sports. Full participation in contact sports games/competitions