

## **Canoe Kayak Return-to-Sport Strategy**

Developed with Canoe Kayak Canada

For Clinical Consideration: Canoeing and Kayaking are sports that require a high level of functioning of the cervical (neck and head postural stability) and the visual-vestibular (visual and vestibular) systems, as well as the cardiovascular system with sport-based activities and training. After a concussion, athletes may have functional changes in each of these systems that will result in a variety of symptoms (headache, dizziness, feeling "off", balance issues, blurry vision, nausea, or fogginess). A multi-disciplinary assessment of these systems is recommended prior to beginning the following return to sport stages. If any of the above symptoms develop or increase with the return to sport stages, consider a re-assessment of the cervical, visual- vestibular, and cardiovascular systems. Note, that a return to onwater training too early can lead to increased nausea and headaches and that on-water training should only be done when an athlete feels comfortable enough to be in a boat. Furthermore, an athlete should only first return to on-water activities with a personal flotation device and under supervision.

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms	Gradual re- introduction of work/school activities
2	Light aerobic activity	Walking or flatwater paddling at a slow to medium pace for 15-20 minutes. No resistance or interval training	Increase heart rate
3	Sport-specific exercise	Paddling on flatwater and/or running. No risk of head impact activities - Moderate intensity paddling for 30-60 minutes at subsymptom threshold intensity.	Add movement
4	Full Intensity Training	Participation in high intensity paddling and drills. Participation in resistance training workouts. Full training at competition intensity and duration.  Participation in full practice without activity restriction  Medical Clearance Letter	Exercise, coordination and increased thinking
5	Return to sport	Normal participation in sport	

Adapted from: McCrory et al. (2017). Consensus statement on concussion in sport – the 5<sup>th</sup> international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, *51*(11), 838-847.