

Cross-Country Skiing Return-to-Sport Strategy
Developed with Nordic Combined Ski Canada

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms. -walking, stationary bike, low intensity	Movement, blood flow Gradual re-introduction of work/school activities
2	Light aerobic activity	-longer duration stationary bike, stationary nordic track machine *no jogging, no outdoor/roller skiing -mild resistance training -core, walking lunges, static squats, and balance training	Increase heart rate Building intensity but remain sub-symptom threshold.
3	Sport-specific exercise	-increase time + intensity stationary bike -introduce roller skiing, XC skiing, jogging (=environmental component); **Time/intensity parameters < parameters accomplished on stationary bike -build time/intensity on roller skiing, XC skiing, jogging to match bike parameters -moderate resistance training	Add movement
4	Sport-specific practice	incorporate interval training in cardio routine -return to full time/intensity training session (skiing/rollerskiing/XC skiing) -return to regular resistance training drills/routine	Exercise, coordination and increased thinking
5	Full intensity practice	-progress to pre-injury race parameters (time + intensity + strategy + endurance)	Restore confidence and assess functional skills by coaching staff
6	Medical clearance	- Return to XC competition	

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