Objective To assess the current state of knowledge and practice regarding SRC (diagnosis, treatment, return to play) within the French-speaking sports community in order to tailor the prevention approaches.

Design Multicentric cross sectional survey.

Setting An online survey (~ 15 minutes completion time) was sent through mailing lists and social networks. The survey was available for three months and monthly reminders were sent.

Patients (or Participants) Athletes, sports healthcare professionals, and coaches through the ReFORM network

Interventions (or Assessment of Risk Factors) N/A

Main Outcome Measurements Reported level of knowledge regarding SRC and access to educational resources.

Results 2072 participants took part in the survey and 1704 finished it (completion rate: 82%). The sample included 48% of athletes, 33% of coaches and 19% of healthcare professionals. The main countries represented were France (35%), Canada (32%) and Belgium (12%). The main results show a discrepancy in the level of SRC knowledge between athletes, 33% of coaches and 19% of healthcare professionals. The main reasons reported for this discrepancy were the lack of access to education, the lack of knowledge about SRC programmes in the setting against others. More than 40% of athletes rated their knowledge as ‘poor’ or ‘none’. Only 17% of athletes reported knowing about a SRC education programme in their setting against 63% for healthcare professionals and 45% for coaches. Regarding coaches, 54% do not feel having sufficient professional resources to correctly manage a SRC over the return to play continuum.

Conclusions There seems to be a great interest from field stakeholders reflected by the completion rate. These preliminary results show a discrepancy in the level of SRC knowledge and the access to educational resources between athletes, coaches and healthcare professionals.

Interventions Players who were diagnosed with an ice hockey-related concussion completed preseason and RTP measures.

Main Outcome Measurements Cervical spine measures (cervical flexor endurance test, head perturbation test, anterolateral strength, cervical flexion rotation test, joint position error), VOR tests [head thrust test, dynamic visual acuity (clinical and computerized)], dynamic balance tests (functional gait) and divided attention tasks (walking-while-talking-test WWTT) were included. Non-parametric (Wicoxon signed-rank, Stuart-Maxwell) analyses compared preseason to RTP scores.

Results Symptoms of dizziness, neck pain, and headache were reported by 29%, 18% and 20% fewer players at RTP than pre-season respectively. Anterolateral cervical muscle strength (z=-5.16, p<0.0001) and joint position error (left) (z=2.91, p=0.0036) were poorer at RTP compared to pre-season. The WWTT time (z=-2.66, p=0.0079) and FGA scores were improved at RTP (z=-2.55, p=0.011).

Conclusions Anterolateral cervical spine strength and joint position error (left) did not return to pre-season values at RTP and may suggest incomplete recovery not indicated by symptoms at RTP. WWTT and dynamic balance were improved at RTP. Further evaluation of clinical outcomes on risk of subsequent injury following concussion is warranted.