

2020-2021



**SPORT MEDICINE &
RESEARCH
SCIENCE
COMMITTEE REPORT**



1. Current Committee Members

ROLE	COMMITTEE MEMBER	INSTITUTION	MANDATE
Chair	Dr. Taryn Taylor	Carleton University	2017-2023
CCUPEKA Rep	Brian Roy	Brock University	2017-2023
Mental Health Specialist	Dr. Carla Edwards	McMaster University	2017-2023
Medical Representative			
CW Rep	Dr. Steve Martin	U Victoria	2019-2022
OUA Rep	Dr. Lindsay Bradley	Carleton University	2017-2023
RSEQ Rep	Dr. Penny Baylis	McGill University	2017-2023
AUS Rep	Dr. David Cudmore	St. Francis Xavier University	2017-2023
Therapist Representatives			
CW Rep	Natalie Ghobrial	Trinity Western University	2017-2023
OUA Rep	Andrea Prieur	York University	2017-2023
RSEQ Rep	Sean Christensen	Concordia	2019-2022
AUS Rep	Colin King	Acadia University	2017-2023

2. Mandate

The Committee will 'provide expertise and leadership to U SPORTS in order to promote a healthy and safe environment for student athletes and coaches through research, education, collaboration and policy development'. The committee will collaborate with medical and sports medicine organizations, experts in the field and member schools to create best practices, recommendations, research agendas and educational resources to assist member schools in providing for student athlete health and safety. The committee will seek approval on recommendations and procedure revisions from expert advisors and its sub-committees and working groups.

"To promote and develop safety, excellence and wellness in university student athletes, and to foster lifelong physical and mental development."



3. Main Accomplishments in 2020-2021 season

- 1) **Committee Meetings:** Held 3 committee teleconferences (3hr each) in Sept, January, and March. Communicated regularly via email throughout the year and a scheduled teleconference/virtual meeting to replace the annual face to face meeting that usually occurs in May or June.
- 2) **Terms of Reference:** Continued to update and finalize the Terms of Reference of the U SPORTS Sport Medicine & Research Science Committee
- 3) **COVID 19 Return to Training/Play**
 - COVID Projects:
 - Webinar with CASEM in May 2020
 - COVID-19 Townhall for USPORTS Therapists Oct 1, 2020
 - COVID-19 and Mental Health newsletter
 - U SPORTS Guiding Principles in COVID and Return to Train document
 - Mental Health in COVID research had responses from 5 universities. Data being analyzed and will be sent to participating institutions and this committee prior to possible publication (Dr. Lindsay Bradley).
 - Website/Resources for COVID – updated
<https://usports.ca/hq/covid-19-resources/covid-19-information>
 - a) The COVID-19 pandemic has resulted in significant restrictions on high performance sport in Canada. Sport organizations and participants will be faced with complex decisions regarding return to training and competition in the current circumstances. Dr. Taryn Taylor served as a medical consultant on the U SPORTS Fall Sport Feasibility Committee 2020 that met via teleconference/virtual every Tuesday. The Committee will assist with the discussions and planning for the 2021 Fall Season.
 - b) Each conference developed a COVID committee to assist with regional discussions and planning. Members of the U SPORTS Sport Medicine & Research Science Committee sit on these committees to assist with communication across the country:
AUS – Dr. David Cudmore, Colin King
RSEQ – Currently Gabby Nickoluk (AT from Carleton University is invited as a bilingual rep)
OUA – Dr. Lindsay Bradley, Andrea Prieur, Dr. Taryn Taylor
Can West – Dr. Steve Martin, Bonnie Suter (regular communication to keep communications consistent)
 - c) Dr. Taryn Taylor was selected as the U SPORTS Representative on the Own the Podium Return to Sport Task Force (COVID 19) which is currently developing a National Framework for Return to Sport. Virtual Meetings have been held 2-3 Tuesdays per month from 3-4pm.
Mandate: to develop a framework to inform the resumption of high-performance sport for Olympic and Paralympic National Sport Organizations (NSOs).
 - d) A webinar was held on May 13, 2020 to provide assistance to institutions in wanting to implement a return to play assessment tool in a university setting. The Return to Play Assessment Tool was created by the World Health Organization (WHO) and adapted by OTP and sport stakeholders. Slides from the webinar are available and the webinar was



recorded and can be accessed on the Canadian Academy of Sport and Exercise Medicine (CASEM) website.

- e) **COVID-19 Return to Play/Hosting an Event Document** has been developed by the committee to help institutions prepare to host a game/competition during the COVID-19 pandemic. It includes over riding principles and a check list of factors to consider when hosting. Each conference and institution will need to adapt according to local and regional Public Health guidelines.
- 4) **Medical Guidelines/Standards for National Championships:** Continued to update/revise the **Medical Guidelines/Standards for National Championships** to be included in the bid package when hosting a National Event.
 - a) COVID-19 recommendations to be added to the document as an Appendix to help guide host institutions during the COVID-19 Pandemic to ensure safety protocols are in place during the competition.
 - b) COVID testing protocols should be considered when planning a National Championship.
 - c) COVID protocols can only be adjusted once all participants are fully vaccinated.
- 5) **Concussion Projects**
 - a) The U SPORTS Sport Medicine & Research Science Committee recommends that there be mandatory annual concussion education for all athletes, coaches, and support staff at every institution. Rowan's Law will need to be respected in Ontario, which includes an awareness & education component.
 - i) A new FREE, trackable, bilingual, online education course on concussion has been developed and is now available to all U SPORTS organizations in time for the start of the Fall 2021 semester. **The Concussion Awareness Training Tool (CATT) for High-Performance Athletes** both complements and supplements Ontario's *Rowan's Law*. This course provides detailed information on concussion recognition, reporting, and management in the context of varsity and high-performance athletes, delivered in an interactive and engaging format. Modules include information on the signs and symptoms of concussion, navigating the reporting process, advice on management, how to address mental health challenges, and managing a successful return to school and sport.
 - ii) **Funding** for this project was generously provided by the Canadian Academy of Sports and Exercise Medicine (CASEM, \$10,000), U SPORTS (Sport Canada Grant \$7500 for development and \$7500 for French Translation), Canadian Athletic Therapists Association (CATA \$6000), Ontario Athletic Therapist Association (OATA \$3000), Atlantic Provinces Athletic Therapists' Association (APATA \$1000), and Faculty of Health Sciences at Brock University (\$1000). There has also been considerable work in kind provided by CATT and our committee.
 - iii) **Study:** The development of the CATT for athletes had embedded development and evaluation research projects. The Committee completed a needs assessment survey with head therapists, clinicians and players and focus groups/interviews with players to identify primary targets for education and key design elements. As well, a pre-experimental study with athletes who completed a knowledge, beliefs and behaviour questionnaire before and after completing the education was completed. Finally, the Committee is currently in the process of evaluating implementation challenges and intention with U SPORTS institutions. This final project is ongoing, we are hoping for responses from the remaining 20/56 institutions.



- iv) **Roll out** for the module is being communicated by email to all the head therapists. Dr. Taylor also participated in an OATA podcast to introduce the module. The module was shared with the Canadian Colleges and many have decided to make the module a mandatory part of their concussion education.
- 6) **Medical Handbook:** The development of the **U SPORTS Medical Handbook** is underway.
- a) The Table of contents has been created and can be found in Appendix A.
 - b) Chapter topics were assigned to committee members and expert authors in the field. Over 85% of the chapters are now complete and we are waiting on final drafts for a few remaining chapters
 - c) The COC and CanWest have agreed for the committee to reference some of their sections.
 - d) *Target Audience* – Medical staff & Integrated Support Team but helpful resource to coaches/athletes
 - e) *Length* – <5 pages/chapter, concise and to the point.
 - f) *Timelines* – Goal to have a draft complete by September 2021
 - g) *Publication* – Online version vs. print
- 7) **Injury Surveillance:** *Report from Brian Roy & Amanda Black*
- a) U SPORTS formed a steering committee in 2016 representing all four conferences that worked diligently to determine the best available platform for the collection and analysis of injury data combined with an electronic medical management system for therapist charting. The steering committee selected Player's Health® software based on intense scrutiny and strict criteria. Some highlights include:
 - **NEW REDUCED PRICE FOR U SPORTS INSTITUTIONS (\$500/university)**
 - Integrated Pre-participation Evaluation (PPE)
 - On-line mobile access by athletes, coaches, and members of the medical team to retrieve and enter injury data
 - Electronic medical records (EMR) to allow for therapist charting, file & report uploads, to maintain a comprehensive athlete file
 - Seamless communication with athletes, coaches & medical team with real-time notifications the instant an injury is documented
 - Concussion assessment and management protocols
 - b) Although participation in the Injury Surveillance & Management Initiative is not mandatory, its implementation would greatly enhance efforts to monitor, record & reduce injury in university athletes. To date, the majority of data on sports injuries in varsity athletes have been collected by the NCAA demonstrating value of this program to institutions, conferences and Canadian athletes..
 - c) Creation of an **Injury Surveillance Sub-committee** as part of the Medical Committee, led by Brian Roy. Dr. Amanda Black from the University of Calgary joined the committee and assisted with proper collection of injury surveillance data and lead the development of a Canadian wide study. Amanda Black has been in regular communication with Players Health and current users (11 USPORTS Institutions) of the database to optimize its utility improve the current platform and ensure feasible access by helping to negotiate a reduced rate that is affordable for institutions.
 - d) **Project Development and Funding:** The Committee worked with Dr. Black, Player's Health and the Clinical Research Unit at the University of Calgary to be able to integrate multiple EMR platforms to create a national study platform. The Canadian Integrated



Injury and Health Surveillance System (Can-IIHSS) platform aims to inform the prevention, early-identification and prognosis of all injuries, concussions specifically, and mental health concerns within Canadian university athletes. There are five main research objectives associated with the platform: 1) to establish injury rates, risk factors for injury and consequences of injury for university athletes, 2) to inform the development and evaluation of translatable evidence-based primary prevention strategies for injuries and concussions specifically (e.g. neuromuscular training, equipment rule changes, training programs) to reduce the burden of injury in sport and recreational activities, 3) to inform and evaluate early interventions to address mental health concerns, 4) to evaluate early management and rehabilitation techniques for injuries and 5) to improve training and injury reporting standards related to injury for allied health professionals nationwide.

The platform aims to pool data from U SPORTS institutions using electronic data to capture standardized pre-injury demographics, mental health status, injury reporting and exposure time for their varsity program. Each university is responsible for their own data as part of their typical care of athletes. Data sharing agreements will be set up for each institution. Specific de-identified data will be sent to the platform located on a secure server (RED-CAP) housed at the University of Calgary by a data steward at each institution.

It is hoped that there is a better understanding of the most popular EMRs used by U SPORTS institutions to target the top 5 systems for integration.

Dr. Black recently submitted a CIHR project grant to provide funding for this project. The grant had 12 scientific investigators, U SPORTS and Player's Health as partners, 16 clinical collaborators with letters of support, and an additional 3 letters of support from the Centre for Health Informatics, the O'Brien Institute for Public Health and the Clinical Research Unit at the University of Calgary. Dr. Black is currently investigating other funding opportunities to support the study administrative costs for this initiative.

8) Mental Health:

- a) **Mental Health Best Practices Document** was developed and released in conjunction with Bell Let's Talk and is available on the website.
- b) The U SPORTS Sport Medicine & Research Science Committee recognizes that many student-athletes have been challenged during these unprecedented times during the COVID-19 pandemic. And while some know where to turn for support during COVID-19, others do not. As such, the Committee developed a resource to assist student-athletes. The **COVID-19 U SPORTS Mental Health Resource** discusses the evolution of emotional response during COVID-19, mental wellness, questions regarding return to sport, nutrition and know where to turn to in need (Appendix C).
- c) **Mental Health Meeting** On March 3, 2021 the Sport Medicine and Research Science Mental Health sub-committee met with representatives from the Canadian Center for Mental Health in Sport, Student Athlete Mental Health Initiative and Bench the Barriers to discuss development, delivery and dissemination of mental health information and resources to athletes, coaches and athletic departments. Discussions regarding webinars and modules are in development and the organizations are looking to pool and share resource and capacity. Members of the subcommittee also met with the Center for



Innovation in Campus Mental Health to discover ways in which we can partner to ensure campuses are providing appropriate and relevant mental health care to athletes.

9) FISU GAMES

- a) The committee was consulted on the feasibility of the FISU Summer Games 2021 in China. These games are larger than the Olympics in terms of number of athletes and unfortunately, it was not felt that the state of the world will be at the stage where it can host this kind of event in a safe manner during the COVID pandemic.. It is anticipated that daily COVID testing would be required and that vaccines will not be widely dispersed to young healthy athletes by that time. There is concern around the the medical care that will be available for athletes that contract the virus and the lack of insurance to provide coverage for the potential disease management required while in China.
- b) The FISU Health Services Team applications are submitted to CASEM, CATA & SPC.
- c) Short lists have been submitted to the Chair of the U SPORTS Sport Medicine & Research Science Committee to assist in the selection of the Chief Medical Officer (CMO) and the Chief Therapist (CT). Selection meetings included the Chair (Dr. Taryn Taylor), U SPORTS representative (Charonne Thomasos) and Antoine Atallah (Major Games Canada MGC). MGC is responsible for the management and coordination of Health Services Team for the Olympic and Paralympics Games, the Commonwealth Games, the Games of La Francophonie, the Pan American and Parapan American Games, the Universiades, and the Canada Games. This new process for final selection was successfully applied for the 2019 Winter FISU Games in Russia and the 2019 Summer FISU in Naples, Summer FISU 2020 & Winter 2021 (cancelled due to COVID) & Summer 2021 (TBD).
- d) Post Game Reports from FISU events will now be submitted to the Committee to review and ensure action is taken based on recommendations and feedback.
- e) The development of FISU Documents for the Canadian Team have been revised and finalized:
 - FISU HST Medical Response plan in case of emergency
 - FISU Protocol and Job Descriptions
 - FISU Withdrawal from play
 - FISU Concussion Algorithm and Policy
 - Exit Injury Reporting Form (to improve communication with home university)

4. Committee Goals

Short Term (now)	Mid Term 2-3 years	Long Term 5 years
National Concussion Guidelines/Best Practices check list Mental Health Best Practices publication	Mandatory concussion education for athletes and coaches Free access, bilingual concussion education module for university athletes	Injury Surveillance Database/Injury Prevention Strategy Position Statements on various health and safety topics



<p>Mental Health EAP</p> <p>Mental Health Resource during COVID</p> <p>Medical Standards for hosting National Championship</p> <p>Formalize FISU documents</p> <p>Amend the selection process for the FISU CMO</p> <p>Formalize intake process for survey/research requests</p> <p>Provide COVID-10 Resources, Education & Templates</p>	<p>USPORTS Medical Handbook</p> <p>Shareable EAP's per site</p> <p>Endorsement of existing guidelines e.g. Cardiac guidelines for pre-season screening in university athletes</p>	<p>Cross Conference Research Initiatives</p> <p>Sport Medicine Symposium held in association with a national event</p>
<p>Green = complete Yellow = active project Red = future goal</p>		



APPENDIX A: U SPORTS MEDICAL HANDBOOK TABLE OF CONTENTS

ADMINISTRATIVE ISSUES

1. Intro by Chair of the Medical Committee (Taryn Taylor)
2. Terms of Reference for the Sport Medicine & Research Science Committee
3. Interdisciplinary Health Care Teams – Taryn Taylor
4. Preseason Medical Evaluations –
5. Cardiac Screening (Dr. Andrew Pipe)
6. Emergency Care planning and Coverage (Andrea Prieur)
7. Environment Policies (Weather & Lightning Safety, Hot/Cold Temperature, Air Quality Index) (Natalie Ghobrial)
8. Catastrophic Injury (Dr. Penny Bayliss)
9. Strength and Conditioning Principles: Foundations for Athlete Development (V. Bendus/Brian Roy)
10. Medical Coverage at National Events (attach document)
11. Canadian Anti-Doping Program Overview – Melanie Lavigne
12. FISU Games & International Events (Dr. Taryn Taylor, FISU Documents)
13. Health Insurance & Risk Management (including out of country, when policy starts, prior to school starting, FISU, Quebec) USPORTS Staff (Lisa Beatty) to liaise with Andrea Prieur
14. Safe Sport statement - IOC/CCES/Sport Canada), role of practitioners, 1st point of contact & disclosure (Carla Edwards)

MEDICAL ISSUES

1. RTP Decision Making –
2. Sport-Related Concussion (Taryn Taylor)
3. Training in the Heat, prevention strategies (Lindsay Bradley)
4. Nutrition and Athletic Performance, Supplements (Colin King)
5. Skin Infections, Skin Check Guidelines & Policy (CW Handbook)
6. Infectious Disease (mono, gastro, contact precautions etc) (Dr. MJ Klett)
7. PANDEMIC – Dr. Andy Marshall & Dr. Mike Wilkinson (author accepted)
8. Bleeding Disorders – (eg. Sickle Cell Trait, Hemophilia) (Jess Curran, almost complete)
9. Mental Health Guidelines (Carla Edwards & Dr. Lindsay Bradley)
10. Student-Athlete with Impairment/Disability (Dr. Lindsay Bradley) – short stem and refer to resources on CASEM site
11. Women's Health Issues in Sport (Dr. Jane Thornton & Darryl Putzer)
12. REDS (Dr. Jane Thornton & Darryl Putzer)
13. Sleep – Best Practices for Athletes (Lindsay Bradley)
14. Eye Injuries & Safety in Sports – Optometrist (Dave White & Nadine Guerette)
15. Dental Injuries in Sport/Mouthguards – Dr. Peter Fritz

EQUIPMENT

1. Protective Equipment (Sean Christensen)



APPENDICES

- 1. WADA/CCES Banned Substances**
- 2. USPORTS Policies Involving Health and Safety Issues**
- 3. USPORTS Policy on Harassment**
- 4. USPORTS Concussion Guidelines**
- 5. USPORTS Mental Health Best Practices**
- 6. Mental Health EAP**
- 7. USPORTS Transgender Policy**
- 8. USPORTS Cannabis Policy**
- 9. FISU Games Documents**