

CREATING

Rowan's Law

REPORT OF THE **ROWAN'S LAW ADVISORY COMMITTEE**

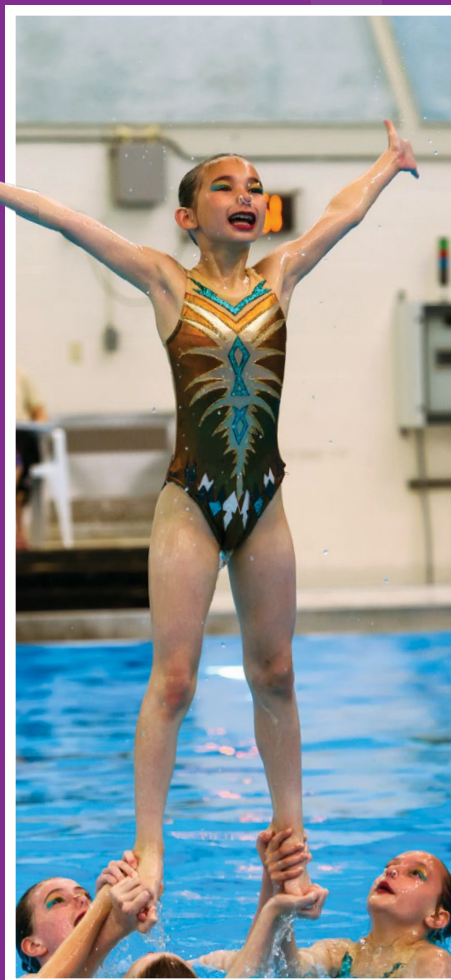


Table of Contents

| | |
|---|----|
| Letter of Transmission | 1 |
| Executive Summary | 3 |
| Introduction | 7 |
| The Concussion Landscape | 10 |
| Changing the Culture | 15 |
| Themes and Recommended Actions | 17 |
| Baseline Testing | 31 |
| Conclusion | 32 |

APPENDIX A

| | |
|---|----|
| Coroner's Inquest Jury Recommendations | 36 |
|---|----|

APPENDIX B

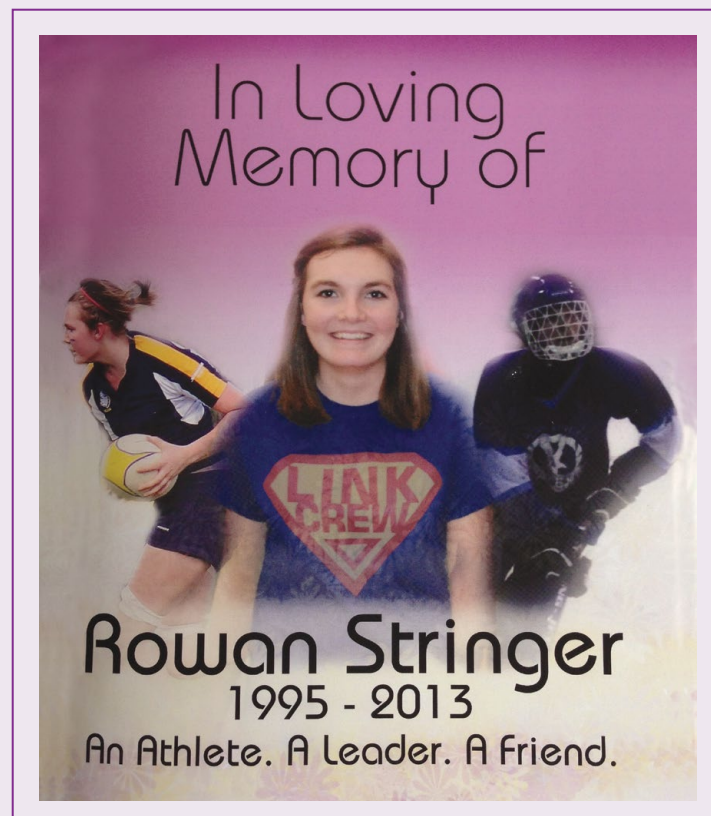
| | |
|------------------------------|----|
| Terms of Reference | 45 |
|------------------------------|----|

APPENDIX C

| | |
|-----------------------|----|
| Biographies | 53 |
|-----------------------|----|

APPENDIX D

| | |
|---|----|
| Consolidated Recommended Actions | 65 |
|---|----|



Letter of Transmission

September 2017

**The Honourable Eleanor McMahon,
Minister of Tourism, Culture and Sport**

Ministry of Tourism, Culture and Sport
9th Floor, Hearst Block, 900 Bay Street
Toronto, Ontario M7A 2E1

Dear Minister McMahon,

It is my great pleasure to present this report of the Rowan's Law Advisory Committee. It has been a year since we first came together, a disparate group of health providers, athletes, coaches and educators. Our Committee was created in the name of a girl, Rowan Stringer, who died as a result of concussions she suffered playing rugby—more specifically, she died because she played after sustaining two concussions, and then suffered another head injury. Her death led to a coroner's inquest, and the jury recommendations arising out of that inquest shone a very bright light on concussion practices and protocols—or the lack thereof—in amateur sport in Ontario.

Our Committee was struck to provide advice to government on the best ways to implement the coroner's jury recommendations. Over and above that, we were to look at the concussion landscape, in Ontario and in Canada, and ensure that what we were proposing made sense in that broader context. We were all very aware, as we worked on this report, that our aim was to encourage safe participation in amateur sport, something all our members believe is tremendously important.


I believe I can speak for every member of our Committee when I say that the year of work that we put in was both challenging and rewarding. Challenging, because we had an extremely important job to do, a short time in which to do it, and we felt a great deal of pressure to get it right. Concussions are usually short-lived and resolve on their own, but they do have the potential to result in long-term effects, even death, if not managed correctly. Amateur sport has not always been an environment, or a culture, in which these consequences of concussion are properly understood and acknowledged. It was our job to try to find ways of changing that culture.

The reward was that we enjoyed working together, and we believe we did our work well. Building on the recommendations from the coroner's jury—every single one of which is addressed in this report—we were able to craft a set of recommended Actions that, if adopted, will build a solid foundation for world-class concussion prevention and management in Ontario. It is our profound hope that the province will move forward with what we have proposed, and that the country will use what we are doing here as a model. We would like to see Rowan's Law, and the accompanying guidelines and protocols, set the standard right across Canada.

I'd like to extend my heartfelt thanks to every member of the Rowan's Law Advisory Committee. We were, as I noted above, a group of people from diverse backgrounds and perspectives, most of whom might never have crossed paths had we not been selected for this work. But we all had one thing in common—a strong passion for encouraging safe participation in amateur sport by creating the best concussion awareness and management system in the world. It was a pleasure working with each and every member of this Committee, and I believe they would all echo that sentiment. I believe also that they would agree with me when I say that our inspiration—our determination to get this right—was the memory of a 17-year old girl who loved playing rugby.

Finally, I'd like to thank one member of the Committee in particular. **Gordon Stringer** is Rowan's father. He was an inspiration simply by virtue of the fact that he was there, but he was also an extraordinarily important member of our Committee because he worked so hard, so thoughtfully, and with such courage. He reminded us of our purpose. He challenged us to be bold, and I believe we have risen to that challenge. It was an honour to work with him.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Cass', with a stylized flourish at the end.

Dan Cass, BSc, MD, FRCPC

Chair, Rowan's Law Advisory Committee

Executive Summary

In May 2013, 17-year old Rowan Stringer died as the result of a head injury she sustained while playing rugby with her high school team.

In the week prior to her final game, Rowan had been hit twice, and likely sustained a concussion each time. These concussions were not recognized, and she continued to play. When she was hit again in her last game, she suffered what is known as **Second Impact Syndrome**—catastrophic swelling of the brain caused by a second injury that occurs before a previous injury has healed. Rowan collapsed on the field, and died four days later in hospital.

A coroner's inquest was convened in 2015 to look into the circumstances of Rowan's death. The coroner's jury made 49 recommendations for how the federal government, as well as Ontario's government ministries, school boards and sports organizations, should improve the manner in which concussions are managed in this province. Those recommendations can be found in Appendix A of this report.

The Rowan's Law Advisory Committee was created through a private member's bill in the Ontario legislature, with all-party support. Its mandate was to review the jury recommendations, as well as the broader concussion landscape, and to provide advice to government on how to implement the jury's recommendations. In addition, our Committee was empowered to make other recommendations intended to prevent, mitigate and create awareness of head injuries in sport in Ontario.

Over the course of nine months, our Committee met eight times. We conducted a jurisdictional scan of concussion legislation and policy frameworks in Canada and in other countries. Committee members also monitored federal initiatives and maintained linkages with the Federal-Provincial/Territorial (F-P/T) work on concussions. Each of the coroner's jury recommendations was reviewed, and the Committee developed a series of recommended Actions to ensure that each of the jury's recommendations could be implemented.

THEMES

The Committee established five themes, each of which was tied to a number of recommended Actions. These themes align with the Harmonized Approach adopted by the F-P/T Working Group on Concussions in Sport. They are: **Surveillance; Prevention; Detection; Management;** and **Awareness.**

In addition to these themes, our Committee makes a recommendation for legislation—**Rowan's Law**—which crosses all five themes; and additional recommendations to ensure that all of our proposed Actions would be both broad in their reach and sustainable.

RECOMMENDED ACTIONS

The Rowan's Law Advisory Committee recommends 21 different Actions, the full text of which can be found in Appendix D of this report.

Legislation – “Rowan's Law”

1. The Committee recommends the enactment of legislation, to be called “Rowan's Law,” which would govern all organized amateur sport—school-based (both public and private) and non-school-based—in Ontario. Key components of Rowan's Law would include:
 - Mandatory concussion education for athletes, parents/guardians, coaches, officials and educators
 - Immediate removal from play for any athlete suspected of having sustained a concussion

- Medical diagnosis and a progressive return to learn and return to play based on Canadian and international concussion guidelines
- Codes of Conduct for all amateur sport
- Collection of data about suspected and confirmed concussion; sharing that information with parents/guardians and with other teams/sports partners with consent; and analysis of data to make sure we are improving safety in amateur sport
- Declaration of an annual “Rowan's Law Day”

Surveillance

2. Public reporting to gauge the effectiveness of measures to improve safety in amateur sport
3. Collection of data about removal from play for suspected concussions at the field of play
4. Continued monitoring of existing concussion policy in our schools while legislation is enacted

Prevention

5. Development and implementation of Codes of Conduct for all organized amateur sport, including Zero Tolerance policies for dangerous behaviours with high risk of causing concussions, and mandatory expulsions from play for violating the policy
6. Standards and accountability for ensuring that playing surfaces are safe

Detection

7. Requirement for at least one person, in addition to the coach(-es), with specific training in concussion identification and management, at all games and practices
8. Annual training for all coaches in concussion identification and management

Management

9. Investment in an electronic solution for capturing, sharing and reporting information about incidents of suspected concussion at the field of play, and implementation of a manual, paper-based system in the interim

10. Creation of special fee codes to ensure that physicians and nurse practitioners have the time to complete the necessary assessments and documentation for athletes sustaining a suspected or confirmed concussion, so that there is no charge to patients or their families for completion of these forms
11. Creation of a "Coach's Toolkit" with all necessary tools, protocols and forms to support best practices and ensure consistency across all amateur sport settings in Ontario



Awareness

12. Inclusion of concussion prevention, detection and management in all teacher education training
13. Re-branding of the existing Ontario.ca Concussion Portal under the name "Rowan's Law," to serve as a repository for tools, resources and links related to concussion, and efforts to increase public awareness and use of this site
14. Investment in a sustained public awareness campaign related to concussion
15. Annual concussion education in our schools at all levels
16. An annual concussion awareness education event for all Ontario schools, on or around Rowan's Law Day
17. Mandatory annual concussion education for all teachers and administrators at the start of each school year
18. Enhanced education for health professionals around concussion detection, diagnosis and management, to ensure the use of a consistent, evidence-based approach and to increase capacity in our health care system to support the legislation and other Actions

Additional Actions

19. Recommendation to the Federal government to expand its work on a national harmonized approach to concussion to both school-based and non-school based amateur sports
20. Working with First Nations leaders and stakeholders to encourage and support the dissemination and implementation of these or similar Actions in all First Nations communities
21. Creation of a Rowan's Law Concussion Partners Committee to ensure that the momentum which began with the creation of the Rowan's Law Advisory Committee is sustained

Lastly, the Committee wants to stress that our aim is to encourage the safe participation in amateur sport—in fact, physical activity in general—by all Ontarians. We believe that Ontario, and Canada, can have the best concussion prevention and management system in the world, and that these Actions, if implemented together, will go a long way to getting us there. But we also believe that what is required, more than anything else, is culture change. Through increasing awareness, and changing the conversations that occur at our schools, on our fields of play, and in our homes, we can change the culture and make it easier for athletes to say when they are injured, and to get the help they need to return to play safely—athletes like Rowan Stringer.

Introduction

On May 8th, 2013, Rowan Stringer took to the field near Ottawa, Ontario, to do one of the things she loved most: to play rugby.



Rowan was captain of her varsity high school team. She was a talented, competitive and enthusiastic player. However, for several days prior to that fateful game, she had suffered from headaches. She did not seem quite herself. This was because twice in the previous six days, Rowan had played rugby and been hit in the head.

Rowan suspected she might have a concussion. Certainly, she knew something wasn't right. She confided in a few close friends. However, the only people who might have been able to stop the determined, energetic young athlete from playing rugby that day—her parents, her teachers or her coaches—had no idea that there was even a problem.

On May 8th, Rowan played rugby for the third time in six days. For the third time in six days, she was tackled and hit in the head. She went down on the field, sat back up briefly, and then collapsed. She was taken to the Children's Hospital of Eastern Ontario where, four days later, on May 12th, 2013, she died. Rowan Stringer was 17.

CORONER'S INQUEST

Rowan died from what is known as **Second Impact Syndrome**—catastrophic swelling of the brain caused by a second injury that occurs before a previous injury has healed. Simply put, she was concussed but didn't know that her brain needed time to heal, so she played and got hit again. That final impact caused her death. The obvious questions that followed on this tragedy were: *How could this have happened? How could this have been prevented?*

It would not be fair to say that the system failed Rowan Stringer, because in 2013, there was no concussion system governing youth sport in Ontario, or in the rest of the country. The closest we came was in 2012, when the Ontario government announced a multi-ministry concussion strategy, and tabled Bill 39, The Education Amendment Act (Concussions). However, the bill died on the order paper when parliament was prorogued and a provincial election was called. It was not reintroduced during the next session of parliament. By contrast, all 50 U.S. states have laws dictating the management of youth concussions, some dating back as far as 2009.

The absence of concussion laws and of a coherent youth sport concussion system was noted during a coroner's inquest into Rowan's death in 2015. Over the course of nine days, the coroner's jury heard from 19 witnesses and viewed 36 exhibits. After three days of

deliberation, they released a verdict which contained 49 recommendations to, amongst others, the federal government as well as Ontario's ministries, school boards and sports organizations. Those recommendations can be found in Appendix A of this report. The full verdict can be found online at:

<https://www.mcscs.jus.gov.on.ca/sites/default/files/content/mcscs/docs/ec168381.pdf>

ROWAN'S LAW ADVISORY COMMITTEE

The very first of the jury's recommendations is that the government of Ontario pass a law, to be called "Rowan's Law", to govern all youth sport in Ontario. This law would establish a standard of practice in this province for concussion identification and management.

The coroner's inquest established a clear and worthy goal, one which was immediately adopted by the Ontario government. In late 2015, a private member's bill was introduced in the Ontario Legislature, establishing the Rowan's Law Advisory Committee. The bill, which had all-party support, received Royal Assent in June 2016, and in September 2016 our Committee was born. We were given one year in which to complete our work and issue this report.

Our Committee's Terms of Reference can be found in Appendix B of this report, and our members and their biographies are shown in Appendix C. Our Committee's mandate is as follows:

MANDATE / Rowan's Law Advisory Committee

- Review the recommendations made by the jury as part of the coroner's inquest into the death of Rowan Stringer
- Review legislation, policies and best practices from other jurisdictions with respect to head injuries, including concussions
- Make recommendations on how to implement the jury recommendations, and how to prevent, mitigate and create awareness about head injuries in sport in Ontario
- Make any other recommendations that are advisable with respect to head injury prevention or treatment
- Within one year of beginning work, provide recommendations in a report to the Minister of Tourism, Culture and Sport

The Rowan's Law Advisory Committee got to work almost immediately. Over the course of nine months, we met eight times. There were also countless phone conversations and email exchanges. We were supported in our work by the provincial ministries that are most implicated in the concussion issue: Tourism, Culture and Sport; Education; Health and Long-Term Care; Children and Youth Services; and Advanced Education and Skills Development. A Working Group composed of senior leadership from those ministries was formed to assist us with any research or other support that we needed.

We conducted a jurisdictional scan to ensure that we understood existing concussion legislation and policy frameworks here in Canada and in other countries. We monitored

federal initiatives and maintained linkages with the Federal-Provincial/Territorial (F-P/T) Working Group on concussions. We also met with stakeholders such as Public Health Ontario, Sport Canada and the Canadian Institute for Health Information. At the same time, members of our Committee worked to raise public awareness, and solicit public input, about concussions in general and Rowan's story in particular. Over and above all else, we never lost sight of the fact that we were working to change the culture that exists around head injuries in sport through the introduction of guidelines and best practices, and through the creation of a law—one named for a young woman who might have been saved had that law existed back in 2013.

The Concussion Landscape

WHAT IS A CONCUSSION?

If we are to talk about preventing and managing concussions, it is important to ensure we understand what we mean. There are many definitions of concussion, and some are highly technical and medical in nature. Perhaps one of the most helpful to the lay person is the definition used by the Canadian injury prevention organization, Parachute:



A **concussion** is a common form of head and brain injury, and can be caused by a direct or indirect hit to the head or body (*for example, a car crash, fall or sport injury*). This causes a change in brain function, which results in a variety of symptoms. With a concussion there is no visible injury to the structure of the brain, meaning that tests like MRI or CT scans usually appear normal.¹

Throughout the report, a distinction is made between head injuries and concussions. In this context, “head injury” would include everything from minor injuries, such as a bruise or cut without a concussion, to very severe injuries such as a skull fracture or bleeding in the brain. Not all head injuries are concussions; and not all concussions are caused by injuries directly to the head.

INTERNATIONAL CONSENSUS STATEMENT ON CONCUSSION IN SPORT

The coroner’s inquest jury recommended that Ontario adopt the International Consensus Statement on Concussion in Sport. These international consensus statements were first established at a conference in Vienna, Austria in 2001. They are refreshed periodically, most recently at the Fifth International Consensus Conference on Concussion in Sport, which was held in Berlin, Germany in October, 2016. Two of our committee members, Dr. Charles Tator and Warren Hoshizaki, attended the conference, and Dr. Tator presented at the conference and co-authored the consensus statement.

¹ <http://www.parachutecanada.org/injury-topics/topic/C9>

Broadly, these statements focus on improving the education of athletes, coaches and parents, ensuring that athletes are removed from the field of play if a concussion is even suspected, and mandating that they not be permitted to return to play until they have been medically cleared to do so. If they are diagnosed with a concussion, they progress through a step by step return-to-learn and return-to-play process, using evidence-based guidelines under the supervision of trained professionals.

CANADA

Currently there is no common approach in Canada for addressing concussions across the many sports settings in which they can occur, including schools, fields of play, and recreation centres. This, however, is beginning to change.

In November, 2015, the Right Honourable Prime Minister Justin Trudeau included in his mandate letters to the Minister of Health and the Minister of Sport and Persons with Disabilities the development of “a national strategy to raise awareness for parents, coaches and athletes on concussion treatment”.

In March 2016, the federal budget committed \$1.4 million over two years to the Public Health Agency of Canada (PHAC) to work with the provinces and territories on the harmonization of concussion management guidelines, with a focus on athlete and student return-to-learn and return-to-play protocols. The goal of harmonizing concussion guidelines is to provide caregivers, including parents, and front-line professionals, including teachers, coaches,

and health professionals, with consistent and evidence-based information.

At the June, 2016 conference of the Federal, Provincial and Territorial (F-P/T) Ministers responsible for sport, physical activity and recreation, there was unanimous acknowledgment that concussions are an important public health issue.

On December 6, 2016, His Excellency David Johnston convened the Governor General's Conference on Concussion in Sport: We Can Do Better. This one-day conference assembled leaders in sport, health and public policy at Rideau Hall, and challenged all of us to make this issue a priority in order to advance the safe participation in sport for all Canadians. Five members of the Rowan's Law Advisory Committee attended and participated in this inspiring event.

PHAC directed funding to Parachute, a leading Canadian not-for-profit injury prevention organization formed in 2012, to develop a Canadian concussion guideline, based on the Berlin Consensus Statement, that achieves the same goals while reflecting the Canadian reality. An Expert Advisory Committee was created to lead this work. The Canadian Guideline on Concussion in Sport was released by Parachute in July 2017.

Parachute is also working with national sport organizations to review their sport-specific concussion protocols. A Concussion Protocol Harmonization Event was held in Ottawa on May 8, 2017, with Parachute and the national sport community discussing the shaping of protocol development. The guidelines and protocols will focus on

children, youth and older athletes in sport and recreational settings, and are expected to be complete by the Fall of 2017.

In addition, the Canadian Institutes of Health Research is currently funding 19 research projects on mild traumatic brain injuries, with a focus on improving the prevention, diagnosis and treatment for populations most at risk of suffering from these injuries, including children and youth, athletes and seniors.

On May 29, 2017, the Manitoba Government introduced Bill 37, The Concussion in Youth Sport Act. At the time of this report, Bill 37 has received first reading, and is expected to proceed through public consultation in the Fall of 2017.

ONTARIO

Ontario is considered to be the leading jurisdiction in Canada when it comes to concussion management. We are the first province to pass any form of concussion-related legislation, thanks to the Rowan's Law Advisory Committee Act, 2016. In addition, our province has Policy/Program Memorandum 158 (PPM 158), "School Board Policies on Concussion". This memorandum was issued in 2014, and mandates school boards across the province to develop and implement

concussion policies that include strategies to raise awareness of concussions, as well as strategies for the prevention and identification of concussions, and training for board and school staff.

Notably, PPM 158 requires school boards to implement concussion management procedures (return to learn and return to physical activity) for students with diagnosed concussions. The Ontario Physical and Health Education Association (Ophea) developed a concussion protocol as part of their Ontario Physical Education Safety Guidelines. This protocol was considered the minimum standard for all school boards in Ontario when implementing PPM 158. All 72 publicly funded school boards in Ontario now have a concussion policy in place, and while this is an important step forward, similar requirements do not exist for private or First Nations schools, or for amateur sports taking place outside of schools.

It is the view of this Committee that while Ontario should take pride in having taken the lead on concussion management in Canada, we have a lot of work still to do. What follows in this report is our advice to government for getting started on that work, and making Rowan's Law a reality in this province, and a model for this country.

MAKING PROGRESS

Since the Rowan Stringer coroner's inquest, Ontario has already implemented several of the jury's recommendations:

RECOMMENDATION #4

The Ontario Ministry of Tourism, Culture and Sport should acquire and make available information and resources to support parent, coach, player, referee and trainer education using resources from Parachute Canada, Ontario Physical and Health Education Association (Ophea), the Canadian Concussion Collaborative and the U.S. Centre for Disease Control.

RESPONSE: Addressed through the Ontario.ca Concussion Web Portal. It will be enhanced through Action 13 in this report.

RECOMMENDATION #10

The Ontario Ministry of Education should provide funding to school districts to support the full implementation of PPM 158. This should include funding to cover the costs associated with proposed changes to the Ontario Safety Guidelines (OSG) effective Sept/16 re: certifications and requirements for coaching and first aid.

RESPONSE: Funding has been provided.

RECOMMENDATION #13

The Ontario Ministry of Education should facilitate the implementation of PPM 158 to support the unique needs of families whose first language is other than English or French by making resources available to school districts, such as a concussion identification tool, in multiple languages.

RESPONSE: Resources have already been translated into nine different languages and are available on the Ontario.ca Concussion Web Portal.

RECOMMENDATION #17

When implementing PPM 158, all school boards in Ontario should adopt the International Concussion Consensus Guidelines (Zurich) on Management of Concussion in Sport as the standard of practice for concussion management.

RESPONSE: The latest International Concussion Consensus Guidelines (Berlin, which updated Zurich) are used as the standard of practice for concussion management.

RECOMMENDATION #19

When implementing Policy/Program Memorandum No. 158 (PPM 158) all school boards in Ontario should acquire and make available information and resources to support education by using resources from Parachute Canada, Ontario Physical and Health Education Association (Ophea), the Canadian Concussion Collaborative and the US Centre for Disease Control.

RESPONSE: Addressed through the ontario.ca Concussion Portal. It will be enhanced through Action 13 in this report.

RECOMMENDATION #28

When implementing PPM 158, all school boards in Ontario should ensure that all First Aid kits in schools contain an appropriate Concussion Recognition Tool.

RESPONSE: Recommendation will be fully implemented in September 2017, when the updated concussion recognition tool from the Berlin Conference is available.

RECOMMENDATION #46

The Canadian Red Cross Society, St. John Ambulance, and the Lifesaving Society should ensure concussion awareness and management is included in all First Aid training. This should include the signs and symptoms of concussion, potential catastrophic results of improper concussion management and the use of the International Concussion Consensus Guidelines (Zurich).

RESPONSE: Recommendation has already been implemented.

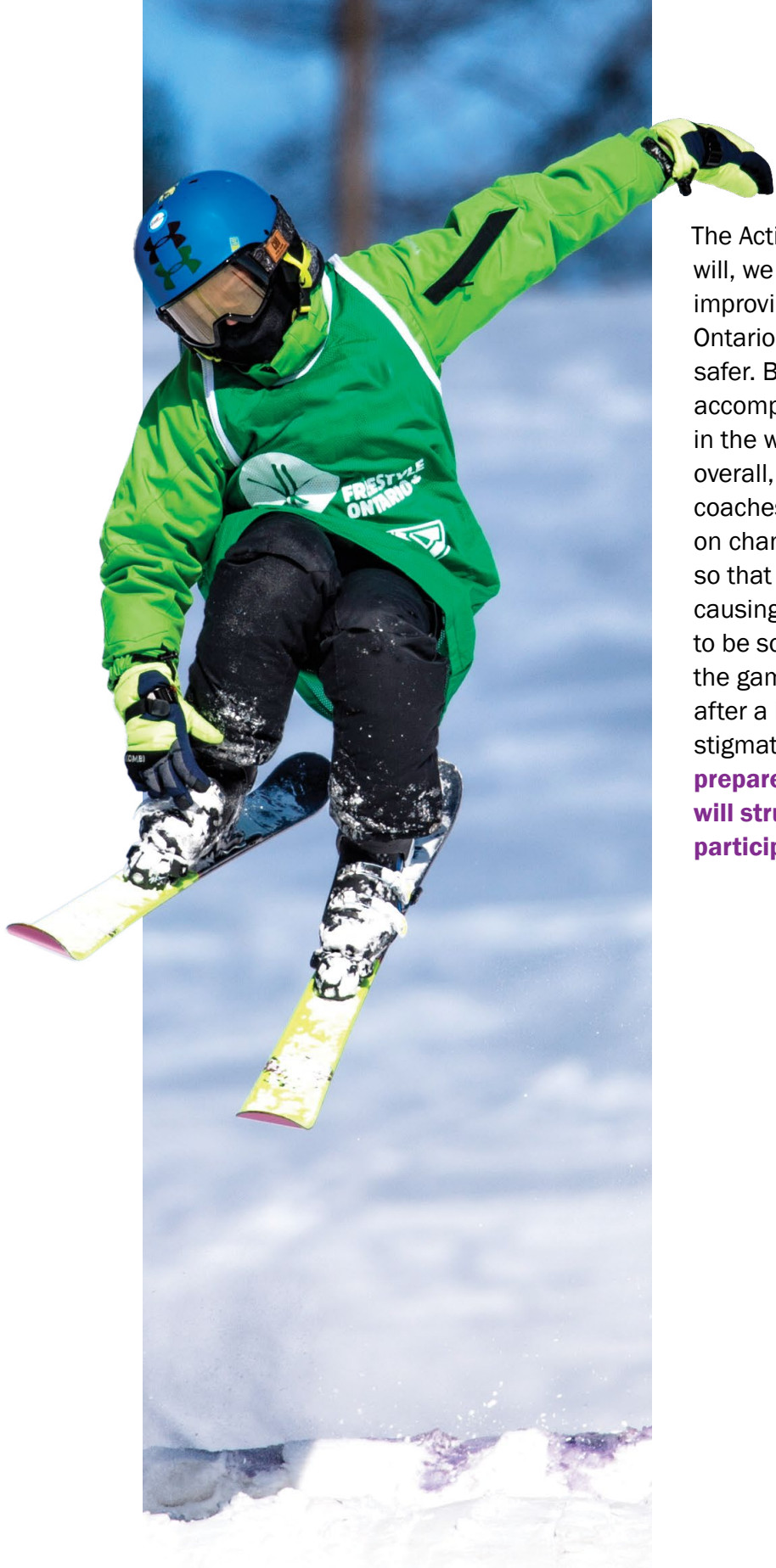
Changing the Culture

Through this report, the Rowan's Law Advisory Committee recommends a number of Actions on how Ontario should approach the prevention and management of concussions in amateur sport.

Our starting point was the coroner's jury recommendations, some of which we broadened and adapted to include sports other than rugby. Our recommended Actions are outlined below. Separate from these, we want to call attention to what we believe is the single most important thing that must happen in Ontario, and in Canada, to keep people safe from concussions. **The culture around head injuries must change.**

There was a time not very long ago when “getting your bell rung” was almost a badge of honour among athletes. It was something to be laughed off and left behind. Clearly, that is less and less the case today. We know much more than we used to about the effects, and dangers, of concussion. But for too many people, concussions are still not openly acknowledged and talked about. They are, in fact, an invisible injury. They are concealed, their effects hidden from coaches, teammates and family. This may particularly be true in the case of competitive, driven athletes who want more than anything else to “get back out there and play.”

Rowan Stringer wanted to get back out there and play. It is hard to imagine any 17-year old, with the sense of invincibility that is so common in youth, feeling any differently. What is needed to counter that feeling, and that sense of invincibility, is knowledge and awareness about concussions, and the dangers if they are not managed properly. Concussions are not like sprains and bruises—you can't “push through” them without risking devastating consequences. This requires a significant culture shift, and a change in the conversations that happen at every school, on every field of play, and in every home.



The Actions we recommend in this report will, we believe, take us a long way towards improving concussion management in Ontario. They will help keep young athletes safer. But they will work best if they are accompanied by a fundamental change in the way we all think about head injuries overall, and concussion in particular. Parents, coaches, players, fans—we *all* need to work on changing the culture in and around sports, so that sustaining a potential concussion-causing injury is immediately considered to be something serious. An athlete leaving the game or competition for assessment after a hit should be commended, not stigmatized. **Until we, as a society, are prepared to change the conversation, we will struggle in our aim to increase the safe participation in sport.**

Themes and Recommended Actions

The coroner's inquest jury examining Rowan Stringer's death made 49 recommendations to, among others, the federal government, as well as Ontario's ministries, school boards and sports organizations.

Some of these recommendations, as outlined, have already been acted upon. Our mandate was to examine the remaining recommendations, and to provide our advice to government on how best to proceed. In order to do that, we established five themes: **Surveillance; Prevention; Detection; Management; and Awareness**. These align with the Harmonized Approach adopted by the Federal-Provincial/Territorial Working Group on Concussions in Sport. While there is some unavoidable overlap between themes, for the most part we were able to fit each of the coroner's jury recommendations into one of the five themes, along with our proposed Actions for implementation.

What follows are our Committee's recommended Actions, theme by theme, on how to prevent, mitigate and create awareness about concussion in amateur sport in Ontario. Taken together, they are a guide to implementing all of the remaining coroner's jury recommendations.

For each theme, we indicate which of the jury recommendations are addressed. In addition, our Committee has chosen to propose a few additional Actions, the importance of which became clear to us in the course of doing our work. It is our hope that the government will consider these Actions carefully, and implement them all.

It is important to note that, by virtue of our mandate and Terms of Reference, this report and our recommended Actions focus on amateur sport. However, the Committee recognizes that the issues identified, and the potential solutions offered by these Actions, are much broader than amateur sport. It is our hope that these principles and Actions will be applied in a way that encourages the safe participation in all types of physical activity by all Ontarians.

LEGISLATION

(Action #1)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #1, 3, 5, 12, 18, 20, 29, 30, 32, 37 AND 48

In the Verdict Explanation of the Rowan Stringer inquest jury's recommendations, the presiding coroner, Dr. Louise McNaughton-Filion, explains that while PPM 158 was useful in promoting an awareness of concussions and the importance of having strategies to prevent, identify and manage them, the memorandum did not carry the force of law and did not apply to activities outside of public schools.

She states, "The jury appears to support the idea that a law would bring with it coverage of these areas missing in PPM 158, as well as a consistent approach and enforcement of the approach to concussion across the province." Our Committee agreed wholeheartedly.

To this end, we are proposing legislation: Rowan's Law. Since the impact of Rowan's Law would cross all five themes, we have elected to list it separately, as an overarching recommended Action. Many of the other Actions which follow are enablers of Rowan's Law—the "how", to be enacted in regulation or policy, that will make Rowan's Law effective and practical.

Action #1

The Province of Ontario should enact legislation ("Rowan's Law") governing all organized amateur sport—public, private, school-based and non-school-based (including those delivered by not-for-profit or for-profit entities where there is a fee charged for participation)—in Ontario. This legislation would include, at a minimum, the following key components:

- a) Mandatory education, at least annually, and prior to the start of the season, for all athletes, parents/guardians of child/youth athletes, educators/school staff, coaches and officials in concussion prevention, recognition and management.
- b) Mandatory immediate removal from play for assessment of any athlete who is suspected of having sustained a concussion. If the assessment by an appropriately trained individual confirms any signs or symptoms of concussion, the athlete may not return to play.
- c) If an athlete is removed from play for signs or symptoms of suspected concussion, a medical diagnosis by a physician or nurse practitioner must be obtained prior to return to play.

- d) The progressive return to learn and return to play process following concussion is guided by current evidence-based consensus guidelines [the Canadian Guideline on Concussion in Sport, the International Consensus Statement on Concussion in Sport, or equivalent], and overseen by an individual with the appropriate skill and expertise to implement this process.
- e) Codes of Conduct, as set out in Regulation, must be developed and utilized in all organized amateur sport activities in Ontario. These may be tailored to each sport, and to each type of participant (i.e., players, coaches, officials, organizers and parents/guardians). The Code of Conduct must include a Zero Tolerance policy for dangerous behaviours which are considered high risk for causing concussions or head injuries. The relevant Code of Conduct must be provided to each participant and parent/guardian, who must all sign the Code of Conduct as a condition of participating in the sport. This demonstration of commitment to a Code of Conduct must be renewed on a regular basis; and at a minimum, annually, prior to the start of the season.
- f) Mandatory collection of data on all incidents of suspected concussion on the field of play and/or removal from play for suspected concussion. These data would be provided as prescribed to the Ministry of Health and Long-Term Care to oversee the analysis and dissemination of this information to the public and to researchers, in order to evaluate the impact of measures taken to improve the safety of amateur sport in Ontario.
- g) Requirement that information about incidents of suspected concussion be shared (i) immediately with parents/guardians (in the event of athletes under the age of 18), and (ii), with other sport delivery partners relevant to the athlete, with the consent of the athlete or their parent/guardian.
- h) Declaration of an annual "Rowan's Law Day", to fall on a consistent weekday between Labour Day and October 31st.

THEME #1 / SURVEILLANCE

(Actions #2, 3 and 4)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #2, 11, 33 AND 40

It has been said that you can't manage what you can't measure, and this is as true of concussions as it is with anything else.

It became clear through the Committee's work that we currently do not have a complete picture of concussion in Ontario. While we have some (likely incomplete) data on people diagnosed with concussion by their family physician or in an emergency department, we have no way of knowing how many suspected concussions occur, and the circumstances of these events.

Only through the proper collection and analysis of data can we assess the extent of the problem we are facing with respect to concussions, the degree to which the policies and programs we put in place are in fact being followed, and, the effectiveness of the measures being implemented.

Action #2

The Ministry of Health and Long-Term Care (MOHLTC) should create and disseminate a publicly-available report on a regular

basis, and at least annually, on concussion incidence which includes data from the point of injury, primary care and the hospital sector, as well as self-reporting/survey data from the public. This report would include information about the nature, severity and circumstances of the injuries, such that the effectiveness of injury prevention measures can be assessed over time.

Action #3

All amateur sport delivery partners in Ontario must ensure the collection and reporting of data regarding the incidence of head injuries (including suspected concussion) and high-risk play, including, but not limited to, all incidents where a player was removed from play due to a suspected head injury, and where a player was expelled/suspended for violating the sport's zero tolerance policy.

Action #4

Until superseded by legislation, the Ministry of Education should continue to evaluate and ensure compliance with PPM 158.

THEME #2 / PREVENTION

(Actions #5 and 6)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #5, 6, 7, 20, 21, 22, 31, 33 AND 34

The simple truth is, as long as people play sports, particularly certain kinds of sports, there are going to be times when they get hit in the head or the body.

There are going to be times when they suffer concussions. There is no way to make any sport 100 percent concussion-proof without discouraging people from playing, and we have no intention of doing that. What we want to do is to ensure that reasonable measures are taken, by players and by others involved in the sports being played, to make those sports as safe as possible.

Some concussions can be prevented, through awareness and avoidance of high-risk hits, and by adopting a zero tolerance approach to behaviours which put athletes at risk. They can also be prevented through ensuring that the field of play—whether a rugby pitch, an ice rink, or a gymnasium—is in a safe condition.

Action #5

Codes of Conduct must be developed and utilized in all organized amateur sport activities in Ontario. These may be tailored to each sport, and to each type of participant (i.e., athletes, coaches, officials, organizers and parents/guardians).

Each Code of Conduct must include, as a minimum:

- i) A commitment to fair play and respect for all participants and officials
- ii) A commitment on the part of all to disclose honestly to coaches/trainers when an athlete is injured (including experiencing signs or symptoms of possible concussion), or when such injury is suspected in another athlete. This would include a commitment to participate in “check-ins” before and after each game and practice, to identify any injuries or concerns about every player’s well-being
- iii) The adoption and enforcement of a Zero Tolerance policy by all amateur sport delivery partners in Ontario for prohibited head hits, high tackles and other dangerous behaviours which are considered high risk for causing concussions or head injuries. This should apply equally whether the action was intentional or unintentional.

The organization with jurisdictional responsibility over a particular sport must determine the content of its own Zero Tolerance policy, and how the policy is enforced. However, as a minimum, a participant engaging in prohibited activities shall be expelled for the remainder of the game. If the infraction occurs in the last 25% of regulation playing time, the player should also be suspended for the next scheduled game. Each sport should also impose escalating penalties for repeat offenders.

Action #6

To ensure that the field of play is appropriate for safe play or practice:

- Each sport should set standards regarding the condition of the playing surface, and make these standards publicly available
- Venue owners must be accountable for ensuring that the field of play meets the established standards
- Match officials and coaches must not allow play to occur if these standards are not met.



THEME #3 / DETECTION

(Actions #7 and 8)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #35, 36, 38 AND 39

One of the biggest challenges in dealing with concussions is identification—how do we know when a player is concussed?

Clearly, we need to have people on the sidelines, who know what they're looking for and know what to do if they see it, paying close attention to the athletes on the field of play.

Action #7

All higher-risk sports* teams should ideally have both a coach and an assistant coach, as well as an athletic trainer/therapist, present at all games and practices, and ideally there should be an assistant referee at all games.

At a minimum, for all higher-risk sports*, there must be at least one person present at all games and practices, in addition to

the coach(-es), who has specific training in First Aid, and in concussion identification and management [such as the Making Head Way course or equivalent, as determined by the organization responsible for the delivery of the sport] and who is responsible for observing participants for potential head injury and removing them from play. Ideally, this should be a neutral party.

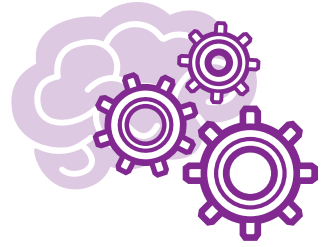
Action #8

At a minimum, all coaches must complete annual training in concussion identification and management [such as the Making Head Way course or equivalent, as determined by the organization responsible for the delivery of the sport].

* "Higher-risk sports" in this context refers to those sports which have a greater potential for concussions to occur among participants, by virtue of person-to-person or person-to-equipment contact, and/or speed of action.

THEME #4 / MANAGEMENT

(Actions #9, 10 and 11)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #8, 9, 16, 23, 24, 30, 37 AND 41

As previously noted, it is extremely important that we have data available to track the number of concussions that are occurring, and assess the manner in which we are responding.

This requires buy-in from athletes and their parents, who need to tell us, in effect, what happened and what they did.

Equally important, we need to ensure that when an athlete sustains a head injury in one sport or on one team (or even from a fall or motor vehicle collision), that this information is shared appropriately with those responsible for all sports in which the athlete is participating, so that their return to play can be coordinated. While this can be done in a manual way, this creates challenges in terms of the collection, sharing and reporting of accurate and timely data. Newer electronic solutions, such as apps and web-based products, may assist with this.

We also need to recognize that the requirement of a medical assessment after a potential concussion can represent an additional burden on health care providers; namely, physicians and nurse practitioners, who are the only medical professionals in Ontario permitted to diagnose or rule out a concussion. Ensuring that these professionals are appropriately compensated for the time necessary to complete and document such assessments, and to help guide the return to learn and return to play activities of athletes who sustain a concussion, is one way to support this best practice.

To support the communication between coaches, health professionals and educators, we need to use consistent tools and processes which ensure that the right information is captured, reported and shared.

Action #9

The Government of Ontario should invest in adapting, creating or acquiring an electronic solution, made available to all amateur athletes in Ontario, that supports:

- i) The acquisition of data regarding
 - a) head injuries at the field of play; and
 - b) concussion diagnosis and a return to learn/return to play plan
- ii) Sharing of data with parents/guardians
- iii) Sharing of data with other sport delivery partners relevant to the athlete, with the consent of the athlete or parent/guardian
- iv) Reporting of anonymized data to the Ministry of Health and Long-Term Care for surveillance and reporting purposes

Such a solution should be provided at no cost to the end users, and be implemented consistently across the province to facilitate information sharing within one solution in all locations.

In the interim, until such an electronic solution exists, the Government of Ontario should implement a paper-based passport system aimed at achieving these key goals in a manual way to address existing gaps in terms of information capture and sharing. At the present time, it remains the responsibility of the athlete or their parent/guardian to communicate information about suspected or confirmed concussion to all sport delivery partners with which the athlete is involved.

Action #10

The Ministry of Health and Long-Term Care should introduce appropriate fee codes in the OHIP Schedule of Benefits for the initial assessment and ongoing management of patients with suspected and proven concussions. These codes should include the completion of all necessary documentation on return to play/return to learn, such that there is no charge to patients or their families for completion of these forms.

Action #11

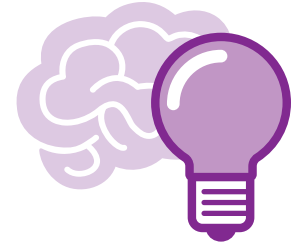
The Ministry of Tourism, Culture and Sport should task the Coaches Association of Ontario with creating and regularly updating a “Coach’s Toolkit” with relevant tools and materials to support the use of consistent concussion protocols across all sport settings, aligned with the Canadian Guideline on Concussion in Sport.

This Toolkit should be based on the relevant components of the Ophea Ontario Physical Education Safety Guidelines, and be made available free of charge to all coaches in all sport settings in Ontario. The toolkit should be maintained in electronic format, to ensure that the most current information is readily available to coaches at all times.

The Ministry of Tourism, Culture and Sport should require the use of these materials in all amateur sport settings in Ontario (both school-based and non-school-based).

THEME #5 / AWARENESS

(Actions #12 to 18)



ADDRESSES CORONER'S JURY RECOMMENDATIONS #3, 14, 15, 18, 25, 26, 27, 29, 32, 42, 43, 44, 45, 47 AND 48

If we are to be successful in bringing about any kind of culture change when it comes to concussion in amateur sport, it will be through increasing awareness about, and increasing the level of knowledge around, head injuries and concussions.

Key to this will be a multi-faceted public awareness campaign aimed at ensuring that all Ontarians know about concussions, and what to do if they suspect that they, a friend, a child, or a teammate may have one. It is only through this approach that we will change—or, in some cases, start—the conversation about concussion in Ontario.

The proposed Rowan's Law legislation will make it mandatory for any amateur athlete suspected of having a concussion to be assessed by a physician or nurse practitioner, who will either confirm or rule out the diagnosis, before they return to learn and play. If the diagnosis of concussion is made, the physician or nurse practitioner will play a role in the return to learn and return to play process. However, nurse practitioners and physicians in primary care, emergency, pediatrics and other specialties may not have the most

up to date knowledge necessary to perform this function. Our Actions include ways to increase the capacity for such assessment and management to occur in the health sector.

Our Committee also recognized that there are other regulated health professionals (including physiotherapists, chiropractors, and even dentists) who may assess and treat athletes after they have sustained a concussion. These providers need to know how to recognize the signs of a possible concussion, so that they consider this possibility and refer appropriately to physicians and nurse practitioners to confirm or rule out the diagnosis.

In the same way, all of our educators, coaches and school staff need to have an awareness and knowledge of concussion, so that everyone is on the same page when educating and supervising our children.

Action #12

The Government of Ontario, as part of all teachers' education training, should include exposure to basic coaching principles for all teacher candidates, as well as awareness about concussion prevention, detection and management.

Action #13

The Government of Ontario should re-brand the current Concussion Portal on the Ontario.ca website under the name "Rowan's Law". In doing so, the Government should engage expertise in branding and marketing to improve the public awareness and use of this site, and protect the integrity of the Rowan's Law brand. This site would be a repository for all tools, resources and links related to concussion awareness, prevention, detection, management, and surveillance, as well as personal stories such as Rowan's. The Rowan's Law resources can be created by multiple partners, who would be recognized for their work. In curating this site, the Government would be responsible for ensuring that the content is current, evidence-based, and available to all Ontarians. Ongoing efforts should be directed towards increasing awareness of this site among the general public, athletes and their families, coaches and educators.

Action #14

The Government of Ontario should commit to a net new investment in a sustained, multi-channel, integrated marketing campaign to increase public awareness of concussion, and the Rowan's Law brand, by people of all ages. Such a campaign should consider:

- Messaging to encourage participation in sport and physical activity
- Role models that resonate with different age groups
- Catch phrases/messaging
- Engagement of a diverse target audience (gender, culture, etc.)
- Exploration of corporate partnerships
- Use of personal stories (including Rowan's)
- Use of the Rowan's Law logo on school athletic clothing and equipment

Action #15

Concussion education modules should be developed and/or adapted for primary, junior, intermediate and senior school students, and be branded under Rowan's Law. These should be delivered annually, starting immediately, on or around Rowan's Law Day.

Action #16

School boards should implement an annual concussion awareness learning education event for all Ontario school students, starting immediately, on or around Rowan's Law Day.

Action #17

The Ministry of Education should work with Ophea to develop an e-learning module to review safety guidelines at the start of each school year. This would be a mandatory requirement for all teachers and administrators (similar to the Workplace Hazardous Materials Information System (WHMIS) and Offence Declaration currently).

Action #18

To enhance the level of knowledge regarding concussion detection, diagnosis and management by health care professionals:

- a) The Association of Faculties of Medicine of Canada (AFMC) should incorporate concussion awareness, diagnosis and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum in all medical schools.



- b) The College of Family Physicians of Canada should incorporate concussion awareness, diagnosis and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for all Family Medicine residencies (with further emphasis as part of the curriculum for CCFP-EM and Sports Medicine programs).
- c) The Royal College of Physicians and Surgeons of Canada should incorporate concussion awareness, diagnosis and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for the following residency programs:
 - Emergency Medicine
 - Pediatrics
 - Pediatric Emergency Medicine Fellowship
 - Neurology
 - Neurosurgery
 - Physical Medicine and Rehabilitation
- d) The College of Family Physicians of Canada should develop accredited educational programs/modules on concussion awareness, diagnosis and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time).
- e) The nurse practitioner education programs in Ontario, in collaboration with the College of Nurses of Ontario, should incorporate concussion awareness, diagnosis and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for all nurse practitioners.
- f) For all other Regulated Health Professions, concussion awareness, detection and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time, including indications for referral for assessment by a physician or nurse practitioner) should be incorporated into all education curricula.

ADDITIONAL ACTIONS

The Committee identified three additional overarching proposals aimed at promoting excellence in concussion awareness, prevention, detection, management and surveillance, for all amateur athletes in Ontario and across Canada.

Action #19

(Addresses Coroner's jury recommendation #49)

The Committee is supportive of the work underway at the Federal/Provincial/Territorial level towards achieving a national harmonized approach to concussion. It is recommended that the Federal government should play a leadership role in this area for sports that occur in both school and non-school environments.

Action #20

The Committee recommends that the Governments of both Ontario and Canada work with First Nations leaders and stakeholders to strongly encourage and support the dissemination and implementation of these or similar Actions to achieve the goals of increased safe participation in amateur sport, and excellence in concussion awareness, prevention, detection, management and surveillance in all First Nations communities.

Action #21

The Government of Ontario should create a Rowan's Law Concussion Partners Committee, comprised of key stakeholders from the sport, education, health, injury prevention and government sectors, to ensure that the momentum which began with the creation of the Rowan's Law Advisory Committee is sustained. This Committee would ensure coordination, support implementation, and provide oversight to the maintenance of these initiatives. At least annually, the Committee would also meet with the Ministers responsible for Sport, Health and Education.

Baseline Testing

Baseline testing refers to the practice of conducting neurological and cognitive testing on athletes before a season, so that a baseline is established for comparison should a possible concussion occur.

The testing is repeated after the injury, to compare the athlete's performance on these tests before and after the event.

While not addressed by the jury in the Rowan Stringer inquest, the issue of baseline testing is one that has generated significant controversy. The Committee discussed the potential value of baseline testing, as well as the potential challenges. The latter include the associated costs (to athletes or their families, or to school boards or other sport delivery partners), and the difficulties in utilizing baseline testing in the child and adolescent population, in which changes due to normal growth and development can render baseline test results of little value within a short period of time. The Committee also reviewed and discussed the position on baseline testing that was articulated in the Berlin consensus guidelines.¹

In the end, the Committee did not feel that there was sufficient evidence to support a recommendation for universal or even increased baseline testing for amateur athletes.

¹ McCrory P, Meeuwisse W, Dvorak J, et al. Consensus statement on concussion in sport-the 5th international conference on concussion in sport held in Berlin, October 2016. *Br J Sports Med.* 2017 Apr 26. pii: bjsports-2017-097699. doi: 10.1136/bjsports-2017-097699.

Conclusion

Rowan Stringer thought she might have a concussion, but she wasn't sure. Like many Ontarians, she did not know what to do, who to talk to, or where to get more information about concussions.

She was unaware of the serious consequences that can occur if concussions are not managed correctly. Perhaps most importantly, Rowan was part of a culture that exists in amateur sport that does not make it easy to “put up your hand” when you, or someone around you, may have sustained a concussion.

This report, and the coroner's inquest report on which it builds, came about because of all the things that weren't known on the day Rowan played her last game. Our Committee is proposing a new law, and several regulations, policies, programs and best practices, that will help ensure that we all know more about head injuries and concussions—how to prevent them, how to identify them and what to do about them. We feel that it is critical that all 21 of our recommended Actions be taken together, and that all must be implemented if we hope to be successful in developing a truly world-class system to prevent and manage concussions.

The members of the Rowan's Law Advisory Committee want to see more people, young and old, out on the field, the ice or the court, playing and having fun. Increasing the safety of these sports will allow that to happen. Building a culture of safety will allow that to happen. Building a culture in which young athletes feel empowered to raise their hand if they think there is any possibility that they, or a teammate, might have suffered a concussion, will allow that to happen.

There was a time when people acted very much the same way about drinking and driving as they do today about concussions. This is also true about using seatbelts and smoking. Culture change can happen. It just needs people to be aware of the risks, how to reduce those risks and how to make it easier and more socially acceptable to do the right thing.

The members of this Committee want "Rowan's Law" to be more than just a law. We want it to be a way of thinking. We want it to be a brand. Not just in Ontario, but in Canada. There is a lot of excellent work being done across this country on managing head injuries and concussions. The culture is already changing. But we can change faster. As His Excellency Governor General David Johnston has challenged us, we can do better. We can play, and send our kids to play, knowing that we are all protected by a system that ensures that we all understand head injuries and concussions, that we have done everything possible to reduce the chances of them happening, and that we are in a position to act immediately and effectively if they do. That's what we want Rowan's Law to be.



Appendices

APPENDIX A

Rowan Stringer Coroner's Inquest Jury Recommendations

- 1/** That the Government of Ontario adopt an Act ("Rowan's Law") governing all youth sport, both school-based and non-school based, which establishes the International Concussion consensus guidelines (Zurich) on Management of Concussion in Sports as the standard of practice for concussion management.

The Act should recognize the importance of four criteria in protecting children and youth:

- Providing education on sport-related concussions to athletes, coaches and parents;
- Removing a child or youth athlete from play if a concussion is suspected;
- Ensuring the child or youth does not return to play until he or she has received medical clearance; and
- Ensuring appropriate return to learn and return to play strategy is in place.

- 2/** The Canadian Institute for Health Information (CIHI) [which includes the Ontario Trauma Registry (OTR) and the National Ambulatory Care Reporting System (NACRS)], the Public Health Agency of Canada's Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), the Ontario Ministry of Health and Long Term Care and the Ministry of Tourism, Culture and Sport should enhance the existing reporting system(s) to improve the accuracy of injury categorization and details so that the number of incidents and the effectiveness of injury prevention measures can be assessed in sports.
- 3/** Ministry of Tourism, Culture and Sport should adopt and promote for all youth field sports the Zurich Guidelines on Management of Concussion in Sports as the standard of practice for concussion management. Opportunities to utilize public service announcements (PSAs) and media channels should be pursued.
- 4/** Ministry of Tourism, Culture and Sport should acquire and make available information and resources to support parent, coach, player, referee and trainer education using resources from Parachute Canada, Ontario Physical and Health Education Association (Ophea), the Canadian Concussion collaborative and the U.S. Centre for Disease Control.

- 5/** Ministry of Tourism, Culture and Sport should mandate that prior to the start of any higher risk (as defined by Ontario Physical and Health Education Association (Ophea)) youth sports activity, parents and athletes sign a participation agreement confirming that they have participated in a pre-season concussion awareness management session; they understand the signs and symptoms of concussion.
- 6/** Ministry of Tourism, Culture and Sport should foster a culture of fair play by mandating the use of codes of conduct for all players, coaches and parents.
- 7/** Ministry of Tourism, Culture and Sport should develop and mandate the use of pre and post-game/practice mechanisms to check with team members to identify any injuries or concerns about a player's well-being. In the event of suspected injuries, players/parents should be encouraged to seek medical attention.
- 8/** Ministry of Tourism, Culture and Sport should promote and encourage communication between community and high school sports coaches to support safe play and the well-being of student athletes. This should include consistent messaging and practice regarding Return To Play. This could be done by communicating through parents, a passport, electronic messaging or other method that respects the privacy of the individual, but ensures the key information is shared and actioned.
- 9/** Ministry of Tourism, Culture and Sport should require the use of a standardized Coach's Binder, containing sample forms and material such as: medical and emergency contact information forms, tracking tools for specific player injuries, a concussion recognition tool, contact information for coaches of other concurrent sports, forms to help track attendance at practices and mandatory injury prevention sessions, permission forms and other documentation of best practices in the particular sport.
- 10/** EDU should provide funding to school districts to support the full implementation of PPM 158.

This should include funding to cover the costs associated with proposed changes to the Ontario Safety Guidelines (OSG) effective Sept/16 re certifications and requirements for coaching and first aid.

- 11/** EDU should develop an evaluation program to ensure compliance with PPM 158 on concussions to monitor and measure effectiveness in all school-based sports activities.

The results of these evaluations should be publicly reported, and incentives should be considered to encourage high-quality implementation.

- 12/** EDU should develop a PPM similar to the current PPM 158 on concussions for private schools which includes the same concussion education activities and management guidelines as PPM 158.

- 13/** EDU should facilitate the implementation of PPM 158 to support the unique needs of families whose first language is other than English or French by making resources available to school districts, such as a concussion identification tool, in multiple languages.

- 14/** EDU should revise the Ontario curriculum to ensure that education regarding concussion awareness and management is a mandatory part of elementary and secondary school curriculum, integrated into science, health and physical education and other areas of study as appropriate for the age of the student.

Curriculum models should be developed by reviewing existing models and best practices of school boards across the province.

- 15/** EDU and Ophea should develop a training module for school district employees on concussion awareness, prevention, Return to Learn and Return to Play strategies.

- 16/** EDU, Ophea and OSBIE should develop a method of tracking student concussion injuries: to follow and ensure those students with concussions are treated appropriately, to ensure the Return to Learn and Return to Play process is respected and to provide clear data to assess the effectiveness of concussion prevention and management.

The anonymized data should be available for public reporting and assessment of the effectiveness of concussion prevention efforts.

- 17/** When implementing PPM 158, all school boards in Ontario should adopt the International Concussion Consensus Guidelines (Zurich) on Management of Concussion in Sport as the standard of practice for concussion management.
- 18/** When implementing PPM 158, all school boards in Ontario should ensure all students, parents/guardians, teachers, school administrators, coaches, trainers and referees are educated about the symptoms and signs of concussion.
- 19/** When implementing PPM 158, all school boards in Ontario should acquire and make available information and resources to support education by using resources from Parachute Canada, Ophea, the Canadian Concussion Collaborative and the U.S. Centre for Disease Control.
- 20/** When implementing PPM 158, all school boards in Ontario should ensure that prior to the start of any higher risk school team sports activity, parents and athletes sign an agreement confirming they have participated in a pre-season concussion awareness and management session.

In addition to the participation, the Agreement should: identify the sport, confirm that the sport is considered higher risk under the OSG, provide information about the OSG, provide details regarding the play and practice schedule and a reminder of their responsibility to report any injuries including concussion or suspected concussion.

- 21/** When implementing PPM 158, all school boards in Ontario should foster a culture of fair play by mandating the use of codes of conduct for all players, coaches and parents.
- 22/** When implementing PPM 158, all school boards in Ontario should develop and mandate the use of pre and post-game/practice mechanisms to check with team members to identify any injuries or concerns about a player's well-being.

In the event of suspected injuries, players/parents should be encouraged to seek medical attention and appropriate injury reporting undertaken.

- 23/** When implementing PPM 158, all school boards in Ontario should promote and encourage communication between community and high school sports coaches to support safe play and the well-being of student athletes. This should include consistent messaging and practice regarding Return to Play. This could be done by communicating through the parents, a passport, electronic messaging or other method that respects the privacy of the individual, but ensures the key information is shared and actioned.
- 24/** When implementing PPM 158, all school boards in Ontario should require the use of a standardized Coach's Binder, containing sample forms and material such as: medical and emergency contact information forms, tracking tools for specific player injuries, concussion recognition tool, a contact information form for coaches of other concurrent sports, forms to help track attendance at practices and mandatory injury prevention sessions, permission forms and other documentation of best practices in the particular sport.
- 25/** When implementing PPM 158, all school boards in Ontario should adopt an annual awareness and learning opportunity for students, such as "Brain Day" (by Parachute Canada), or a module designed by Ophea, to ensure all students are annually provided consistent and accurate information.
- 26/** When implementing PPM 158, all school boards in Ontario should implement a mandatory learning module on concussion as part of the Grade 9 Health and Physical Education curriculum.
- 27/** When implementing PPM 158, all school boards in Ontario should ensure that as OSG are renewed, all teachers involved with Sports programs and Physical Education are required to read and confirm their review of the guidelines with the Principal and/or Athletic Director of their school.
- The confirmation of its review should be mandatory and recorded.
- 28/** When implementing PPM 158, all school boards in Ontario should ensure that all First Aid kits in schools contain an appropriate Concussion Recognition Tool.
- 29/** When implementing PPM 158, all school boards in Ontario should ensure that information about concussion policy/procedure and management is part of NTIP.

- 30/** When implementing PPM 158, all school boards in Ontario should consider adopting a full school year rugby season to allow for the development of the necessary skills with the view that this could help address the noted issues around scheduling all the required games and practices into a limited time.
- 31/** Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE and Ophea should set a standard for rugby field quality to ensure that the surface is safe for youth athlete play.

▲ This recommendation should be applied as appropriate to other higher risk sports (e.g., football)

- 32/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, the Ontario Boards of Education, OSBIE, and Ophea should implement mandatory pre-season safety sessions for sport teams for athletes and their parents.

These sessions for higher risk sports should cover the symptoms and signs of concussion, reporting of the suspicion of concussion, exclusion of those suspected of concussion, and proper concussion management, including Return To Learn and Return To Play.

A personal story/video, such as that of Rowan Stringer, should be an integral part of the safety training. Attendance is to be taken and recorded.

Athletes should not be permitted to participate in play until this education has occurred.

▲ This recommendation should be applied as appropriate to other higher risk sports (e.g., football)

- 33/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should adopt a policy of zero tolerance of head hits and high tackles at any level of play in rugby, and should be penalized with progressive penalties, including expulsion for repeat offenders.

▲ This recommendation should be applied as appropriate to other higher risk sports (e.g., football)

- 34/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should give consideration to the use of snug fitting collarless rugby jerseys, to decrease the incidence of dangerous tackles (e.g., “swing” tackles) during play or practice.
- 35/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should give consideration to the presence of an assistant referee during all youth rugby games.
- 36/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should ensure that a minimum number of coaches (two at the least) be present for each youth rugby team playing on the field.
- 37/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should determine an optimum safe time interval between rugby games or practices involving contact to decrease the risk of concussion or other preventable injury, particularly for those youth athletes who compete in more than one league.
- 38/** To enhance the safe play of rugby in club sports and in schools, Rugby Canada, Rugby Ontario, the Eastern Ontario Rugby Union, OSBIE, and Ophea should give further consideration to requiring the presence of an athletic trainer/therapist in school higher risk sports, both during practice and during games.
- 39/** To enhance the safe play of rugby in schools, OSBIE and Ophea should ensure that the head coach of a high school rugby team attain a minimum of level 1 coach qualification, as per Work Rugby standards.

All rugby coaches should meet, at a minimum, the Ophea requirements for rugby coaching in the OSG.

- 40/** EDU and the Public Health Agency of Canada should gather, monitor and publish the response to the concussion questions placed in the Health Behaviour in School Aged Children Survey, administered by Queen's University and the Public Health Agency of Canada, with a view to assessing the impact of concussion prevention initiatives over the long term.
- 41/** Ministry of Health and Long-Term Care, the OMA, Ophea, Ontario School Boards should ensure that there will be no fee charged for documentation by a physician to assess a student for a suspected concussion when providing guidance for Return to Learn and Return to Play.
- 42/** EDU, OCT and TCU should ensure that all students enrolled in BEd programs have first aid certification, including concussion awareness, prevention and management.
- 43/** EDU, OCT and TCU should ensure that all students enrolled in BEd programs receive a mandatory athletic coaching course, to ensure standardized training of all new teachers whether or not they plan to coach athletics, and to encourage teacher participation as athletic coaches.
- 44/** The Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, the Canadian Medical Association and the Provincial Ministries of Colleges and Universities include specific components of sports related injuries including the diagnosis and management of concussions to the course content at all medical schools to ensure a more uniform standard of treatment.
- 45/** The Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, the Canadian Medical Association and the Provincial Ministries of Colleges and Universities require that accredited programs for family physicians are updated to emphasize concussion awareness, diagnosis and management as noted in the Zurich Guidelines.
- 46/** The Canadian Red Cross Society, St. John Ambulance, and the Lifesaving Society should ensure concussion awareness and management is included in all First Aid training. This should include the signs and symptoms of concussion, potential catastrophic results of improper concussion management and the use of the Zurich Guidelines.

- 47 /** Parachute Canada and Ophea should collaborate to develop multimedia learning resources on concussion awareness, based on the story of Rowan Stringer, ideally involving individuals closely associated with Rowan.

These resources should be widely available in a variety of media in order to motivate high school athletes and their teammates to report suspected concussions.

- 48 /** Parachute Canada and Ophea should collaborate to develop an online concussion information module that could be used as a pre-season awareness session, to make it easier to share the information at the beginning of a higher risk sports season.

- 49 /** The Federal, Provincial and Territorial Ministers Responsible for Sport should play a leadership role in raising awareness regarding the education of players, parents and officials and for the management of concussions in sports that occur in non-school environments. Guidelines similar to those in Policy/Program Memorandum No. 158 (PPM 158) of the Ontario Ministry of Education covering sports in schools could be used as a model.

APPENDIX B

Terms of Reference – Rowan's Law Advisory Committee

1.0 BACKGROUND

A coroner's inquest was held in the spring of 2015 as a result of the 2013 death of Rowan Stringer, a teenage rugby player in Ottawa who suffered multiple concussions. At the conclusion of the inquest, the coroner's jury submitted 49 recommendations intended to help prevent similar deaths in the future.

On November 25, 2015, a private Members bill was introduced in the Ontario Legislature by MPP Lisa MacLeod with all party support. Bill 149 establishes the Rowan's Law Advisory Committee (the Committee) to:

- Review the recommendations made by the jury as part of the coroner's inquest into the death of Rowan Stringer;
- Review legislation, policies and best practices from other jurisdictions with respect to head injuries, including concussions;
- Make recommendations on how to implement the jury recommendations, and how to prevent, mitigate and create awareness about head injuries in sport in Ontario;
- Make any other recommendations that are advisable with respect to head injury prevention or treatment; and
- Provide recommendations in a report to the Minister of Tourism, Culture and Sport within one year after the day the Act comes into force.

Bill 149 passed third reading on June 7, 2016 and received royal assent on June 9, 2016.

2.0 MANDATE AND SCOPE

2.1 Mandate

The Committee's mandate is to provide advice and recommendations to the government on how to implement the 49 recommendations that resulted from the coroner's inquest into the death of Rowan Stringer.

2.2 Scope of Committee

The Committee shall:

- Review the recommendations made by the jury as part of the coroner's inquest into the death of Rowan Stringer;

- Review legislation, policies and best practices from other jurisdictions with respect to head injuries, including concussions;
- Make recommendations on how to implement the jury recommendations, and how to prevent, mitigate and create awareness about head injuries in sport in Ontario; and
- Make any other recommendations that are advisable with respect to head injury prevention or treatment.

The Committee may make rules governing the conduct and administration of its affairs; including meeting dates, establishing sub committees and quorum for decisions.

The Committee will document and advise the Ministry of Tourism, Culture and Sport staff of all rules established to govern the conduct and administration of its affairs.

The Committee will be established by the Minister of Tourism Culture and Sport after the legislation comes into effect on September 9, 2016.

The Committee will provide its recommendations in a report to the Minister of Tourism, Culture and Sport within one year from the day the Act comes into force (September 9, 2017).

2.3 Nature of Advice

The Committee shall examine, discuss, provide advice and reach consensus on recommendations with respect to the 49 recommendations made by the coroner's jury inquest into the death of Rowan Stringer.

2.4 Committee Activities

In order to fulfill its mandate, the Committee may undertake a range of activities, including:

- Meeting as a Committee at a minimum quarterly between September 9, 2016 and September 9, 2017. Meetings will be held in person at a location agreed upon by Committee members. If a member cannot attend a meeting in person, they may join by teleconference;
- Holding public meetings and/or teleconferences;
- Scheduling meetings with government (ministers or officials of ministries);

- Soliciting delegations and presentations from experts and key stakeholders as deemed appropriate by the Committee; and
- Review legislation, regulations, policies, and best practices from other jurisdictions.

3.0 TIMELINES

The following timelines shall be met:

- The Committee will be established after the legislation comes into effect on September 9, 2016;
- The Committee will provide a progress update between the second and third meeting in a form prescribed by the Minister of Tourism, Culture and Sport and as agreed to by the Chair;
- The Committee will report back to the Minister of Tourism, Culture and Sport by September 9, 2017 with a final report; and
- As the Act will be repealed one year and three months after the day it comes into force, the Committee will be dissolved one year and three months after the Act comes into force.

4.0 DELIVERABLES

The Committee shall provide:

- Verbal advice at meetings in the context of general discussion;
- Progress update between the second and third meeting in a form prescribed by the Minister of Tourism, Culture and Sport and as agreed to by the Chair;
- Recommendations in a written report to the Minister by September 9, 2017 (one year after the Act comes into force);
- The Minister will table the report in the Legislature and will publish the report on a Government of Ontario website. As such, the Committee shall ensure that the content of the report is in a form appropriate for public release, and that the report does not contain personal information or personal health information; and
- The Committee shall also work with designated staff from the Ministry of Tourism, Culture and Sport as required, to ensure that the report is available in both English and French at the same time, in accessible electronic and printed versions, and in sufficient quantity for public release.

5.0 MEMBERSHIP AND ROLES

The Minister of Tourism, Culture and Sport will appoint all Committee members, and will designate a Chair.

The Committee will be composed of up to 15 members appointed by the Minister of Tourism, Culture and Sport.

The Committee will include:

- No more than three persons nominated by the Minister of Children and Youth Services;
- No more than three persons nominated by the Minister of Education;
- No more than three persons nominated by the Minister of Health and Long-Term Care;
- No more than three persons nominated by the Minister of Advanced Education and Skills Development; and
- No more than three persons nominated by the Minister of Tourism, Culture and Sport.

The Chair of the Committee will:

- Set agendas in consultation with the Ministry of Tourism, Culture and Sport;
- Oversee meetings;
- Facilitate discussion and collaboration/collaborative problem solving;
- Invite guests as appropriate;
- Convey the Committee's advice to the Minister;
- Bring to the Ministry's attention any ethical or conflict of interest situations arising from the Committee's work;
- Ensure the submission of the report to the Minister within the timelines specified in the Act; and
- Consult designated staff within the Ministry of Tourism, Culture and Sport on matters of administration, coordination and other advice required to conduct Committee business.

The **members of the Committee** will:

- Attend Committee meetings and respond within a reasonable timeframe by email to the invitation to participate, and make diligent effort to be available when notified and invited to participate in a meeting/teleconference/web conference;
- Review the agenda and meeting materials prior to each meeting, giving thought to any questions that may be posed in the materials so that productive dialogue may follow; and
- Convey advice to the best of their abilities.

Members may not send delegates to meetings in their place. If a member misses more than two meetings, the Chair will arrange a meeting with that member to discuss their attendance and future membership on the Committee.

The **Committee** will be accountable to the Minister of Tourism, Culture and Sport and will be responsible to keep the Minister informed and achieving the goals, objectives and deliverables set out in this Terms of Reference.

The **Minister** is accountable to the Legislative Assembly and Cabinet for the fulfillment of its mandate and its compliance with government administrative and operational policies and broad policy directions.

The **Deputy Minister** of Tourism, Culture and Sport will be accountable to the Minister of Tourism, Culture and Sport for the performance of Ministry of Tourism, Culture and Sport staff in providing administrative and organizational support to the Committee.

6.0 CONFLICT OF INTEREST

As detailed in the members' appointment letter from the Minister of Tourism, Culture and Sport, any actual, potential, or perceived conflict of interest arising in regard to any matter under discussion by the Committee must be disclosed as directed by the ministry and the chair.

Members of the Committee may currently or potentially in the future, be eligible to receive government funding (either directly or indirectly through their employer) through a transfer payment or grant. Committee members who currently receive funding from the Ontario Government, may be eligible to receive funding in the future, or have received funding in the past, will be required to disclose this information prior to their appointment.

Members of the Committee will be required to fulfill the duties of their appointment in a professional, ethical and competent manner and avoid any real or perceived conflict of interest.

In particular, and without limiting the generality of the foregoing obligations, Committee Members shall:

1. not use or attempt to use his or her appointment to benefit himself or herself or any person or entity;
2. not participate in or attempt to influence decision making as an appointee if he or she could benefit from the decision;
3. not accept a gift that could influence, or that could be seen to influence, the appointee in carrying out the duties of the appointment;
4. not use or disclose any confidential information, either during or after the appointment, obtained as a result of his or her appointment for any purpose unrelated to the duties of the appointment, except if required to do so by law or authorized to do so by the responsible Minister/Premier;
5. not use government premises, equipment or supplies for purposes unrelated to his or her appointment; and
6. comply with such additional requirements, if any, established by the responsible Minister/Government of Ontario.

For the purposes of the above "confidential information" means information that is not available to the public.

The Committee members must declare a personal or pecuniary interest that could raise conflict of interest concerns at the earliest opportunity to the responsible Minister or Minister's designate.

7.0 COMMUNICATIONS AND INFORMATION

7.1 Communications

Any media requests, both before and after any public launch of the Committee, should be directed to the Ministry of Tourism, Culture and Sport Media Relations Officer. Following the start of the Committee's work, public communications around the Committee's work and process will be conducted through the Chair. Any formal announcements or press releases by the Chair about the work of the Committee will be discussed with designated staff of the Ministry of Tourism, Culture and Sport before release.

7.2 Confidentiality and Protection of Personal Information

Individual Committee members shall acknowledge, as detailed in the Terms and Conditions of Appointment provided to each member, that the appointee will treat all information obtained through their work with the Committee—including advice, topics and options for discussion, questions, concerns, points of view, analysis and any written material prepared by or on behalf of a Committee member – as confidential, as subject to the provisions of Ontario's Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c.F.31 and Personal Health Information Protection Act, R.S.O. 2004 and that it may be disclosed only with the agreement of the ministry or as may be permitted or required in accordance with the Act.

The Chair is responsible for bringing any issues in this area to the attention of the Ministry of Tourism, Culture and Sport.

8.0 COMMITTEE ENGAGEMENT WITH THE GOVERNMENT

The Committee will be supported by an Assistant Deputy Minister's Working Group which will act as technical resource for the Committee and provide advice and information as requested by the Committee.

The Assistant Deputy Minister of the Sport, Recreation & Community Programs Division of the Ministry of Tourism, Culture and Sport will serve as the primary contact for the Committee.

The Ministry of Tourism, Culture and Sport will provide support for Committee activities, logistics, communications and research.

8.1 Remuneration

Committee members will not be remunerated for their work on behalf of the Committee.

8.2 Reimbursement of Expenses

Committee members will be reimbursed for reasonably incurred travel, meal and accommodation expenses in relation to the work of the Committee and as previously approved by the Ministry of Tourism, Culture and Sport, in accordance with Management Board of Cabinet's Travel, Meals and Hospitality Expenses Directive.

8.3 Costs of the Committee

All other costs of the Committee will be covered by the Ministry of Tourism, Culture and Sport at its discretion. Only expenditures approved by the Ministry of Tourism, Culture and Sport in advance, and made in accordance with all applicable Government directives, guidelines and policies, will be eligible for reimbursement.

APPENDIX C

BIOGRAPHIES / Rowan's Law Advisory Committee



DR. DAN CASS

**VICE PRESIDENT, MEDICAL AND CHIEF MEDICAL OFFICER
ST. JOSEPH'S HEALTH CENTRE, TORONTO**

Dr. Cass obtained his Bachelor of Science in 1984, and his Doctor of Medicine in 1988, both from the University of Toronto. After completing his internship at Toronto General Hospital, he entered the Royal College Residency Program in Emergency Medicine in Toronto, which he completed in 1993. He is an Associate Professor in the Division of Emergency Medicine, Department of Medicine at the University of Toronto.

Dr. Cass worked as a staff Emergency Physician at St. Michael's Hospital in Toronto for 16 years, from 1993 to 2009, for 10 of which he was Chief of Emergency Medicine. He became an Investigating Coroner in 2007, and in November, 2009, he left St. Michael's to become the Regional Supervising Coroner for Toronto West. In 2010, he was appointed Chair of the Patient Safety Review Committee of the Office of the Chief Coroner (OCC), a position he held for nearly five years. In 2012, Dr. Cass was appointed Deputy Chief Coroner—Investigations for the Province of Ontario, and from January to July, 2013, served as Interim Chief Coroner for Ontario. Dr. Cass provided leadership for two special death reviews (Cycling Death Review, and Review of Ornge Air Ambulance Transport Related Deaths), and presided over a number of coroner's inquests.

In March, 2015, Dr. Cass joined St. Joseph's Health Centre, Toronto in the role of Vice President, Medical. In addition to his administrative role, Dr. Cass has a clinical practice in Addiction Medicine.

Throughout his career, Dr. Cass has successfully taken on a broad range of clinical and administrative leadership roles at the local, regional, provincial and national level. He has been recognized for his commitment to undergraduate, postgraduate and continuing education with a number of teaching awards, and has led and participated in multiple clinical research projects.



WARREN HOSHIZAKI

DIRECTOR OF EDUCATION, DISTRICT SCHOOL BOARD OF NIAGARA

As Director of Education for the largest school board in the Niagara Region, Warren Hoshizaki leads a dedicated staff of over 3,000 teachers and 1,300 support staff with one goal in mind—improving student learning.

An educator for almost 40 years, Warren is a great believer in the power of education to help all students achieve their goals in life. He learned at an early age the need to help others and he has implemented many innovative programs throughout the District School Board of Niagara (DSBN) to support students and their learning.

Warren is keenly aware of the impact that concussions can have, not only on professional athletes, but also on students who are injured pursuing their love of sports.

Under Warren's direction, the DSBN has been at the forefront of developing a school board policy and administrative procedures on concussions in an effort to educate teachers, coaches, students and parents about concussions and mechanisms to manage them.

Warren is a huge supporter of the provincial government's decision to develop and lead an Ontario Concussion Strategy and proudly served on its *Healthy Schools Initiative—A Working Table Committee on Concussions*.



PAUL HUNTER
MANAGER, NATIONAL COACH DEVELOPMENT, RUGBY CANADA

Paul Hunter is employed as Rugby Canada's Manager National Coach Development, having previously served as a Rugby Development Officer with Scottish Rugby. Rugby Canada's coach development is targeting ongoing development of coaches. In addition, teaching coaches on leadership responsibility for youth rugby development programs. Paul has always ensured that player welfare is Rugby's number one priority for everyone involved, including players, parents, coaches, referee's and administration, Paul strongly believes that everyone in sport has a responsibility to make sport safe. Paul attended the Minister's Roundtable on concussions as some of the Coroner's Report related directly to Rugby Canada.



SUSAN KITCHEN
EXECUTIVE DIRECTOR, COACHES ASSOCIATION OF ONTARIO

Susan is the Executive Director of the Coaches Association of Ontario (CAO). She has led the CAO through its formative years to become a credible, multi-sport organization that serves the coaching community and enjoys the confidence of three levels of government partners.

Susan is currently serving on the Minister's Advisory Panel for GAME ON, the Ontario Government's Sport Plan of the Ministry of Tourism, Culture and Sport, as a result of various administrative and volunteer roles in the Sport and Recreation sector. She recently joined the Board of Directors of the Sport Dispute Resolution Centre of Canada (SDRCC), appointed by the Federal Minister of Sport. Previously, she served as Vice-Chair of the Board of Directors for the Coaching Association of Canada (2008-2013).

Susan has remained active in the sport of rowing for 30 years. She is an NCCP trained Coach, in able-bodied and Para, and certified RCA Umpire. Susan has applied her knowledge and experience from the sport of rowing to build an enduring, relevant and responsive team at the CAO.



LOUISE LOGAN
NATIONAL PROJECT DIRECTOR,
2020 WORLD CONGRESS ON SAFETY & HEALTH AT WORK

Louise Logan is past President & CEO of Parachute, and currently National Project Director for the 2020 World Congress on Safety & Health at Work. She is also the President of Logan & Associates Inc., a company focused on enabling leadership, public policy and strategy for social change. Louise has over 20 years of leadership experience advancing complex business, public policy, health, and social issues.

Louise has been the inaugural President & CEO and architect of two organizational mergers in the non-profit sector. Past positions include President & CEO of the Public Services Health & Safety Association, and Director General of policy and regulation at WorkSafeBC. In addition to the Rowan's Law Advisory Committee, Louise currently sits on the national advisory committee that worked with Parachute to develop the first ever 2017 Canadian Guideline on Concussion in Sport.

Louise holds a Juris Doctor, a Bachelor of Arts, and is a graduate of the Executive Program at the Ivey School of Business.



GORDON STRINGER

ROWAN STRINGER'S FATHER

Rowan Stringer, Gordon's 17 year old daughter, died in May 2013 after suffering three concussions in less than a week while playing high school rugby. The jury for the coroner's inquest into her death made 49 recommendations to prevent similar deaths in the future and to ensure greater awareness and better treatment for concussion related injuries in Ontario.

Nepean-Carleton Progressive Conservative MPP Lisa MacLeod introduced the Rowan's Law Advisory Committee Act in the Ontario legislature on November 25, 2015. Rowan's family launched a petition in support of the Rowan's Law legislation at an Ottawa rugby field along with athletes, coaches, medical professionals and politicians.

*"It's terrible and devastating to lose a child. What's even worse is that Rowan's death was preventable. This is why we've decided to do what we can to tell Rowan's story, educate children, athletes and all involved in child and youth sport. Our goal is to help to prevent future injury and death from concussion. Creating legislation, Rowan's Law, will help protect our youth and fulfill Rowan's dream of helping children." – **Stringer family***



KENT BASSETT-SPIERS
CEO, ONTARIO NEUROTRAUMA FOUNDATION

Since 1999, Kent has been serving as the Chief Executive Officer of the Ontario Neurotrauma Foundation. In 2014, he was appointed as the Executive Director of the Canadian Spinal Research Organization.

Kent has extensive experience in developing strategic linkages and partnerships, organizational restructuring and working with the Ministry of Health on policy and systems reforms.

His time with the Ontario Neurotrauma Foundation has allowed him to be involved in many partnership activities with the Rick Hansen Foundation and the Rick Hansen Institute including the SCI Solution Network, Canadian Neurotrauma Research Partnership and recently with the Best Practices Implementation Project.



ELISABETH WHITE

NURSE PRACTITIONER, NEUROSURGERY OUTREACH SICKKIDS

Elisabeth is a Nurse Practitioner for the Division of Neurosurgery. Her role encompasses Neurosurgical Outreach to support the continuum of care from hospital to community, providing education and support to patients, families and nurses on the management of diseases and disorders of the brain and spine along with transition and integration into adult neurosurgical care.

Elisabeth has been with SickKids since 1995 and has worked in various departments including the emergency department. With an interest in neurocognitive development, Elisabeth transitioned to the Neonatal Follow-Up Clinic working as a Nurse Practitioner with high risk neonates and toddlers with moderate to severe brain injury. In 2014 an exciting new role was established in Neurosurgery Outreach supported by the Ministry of Health and Long-Term Care to improve neurosurgical care in Ontario. Elisabeth has been working in this role since its inception.

As a hockey mom, Elisabeth began educating people about concussions in 2014. With research interests in concussion, Elisabeth is currently involved in a pilot project with the University of Toronto and works as a Nurse Practitioner in the MacIntosh Concussion Clinic.



DR. CHARLES TATOR, O.C.

PROFESSOR OF NEUROSURGERY, UNIVERSITY OF TORONTO

DIVISION OF NEUROSURGERY

CANADIAN CONCUSSION CENTRE, TORONTO WESTERN HOSPITAL

FOUNDER, THINKFIRST CANADA

BOARD MEMBER, PARACHUTE CANADA

Dr. Tator graduated from the Faculty of Medicine at The University of Toronto in 1961. He performed graduate studies in Neuropathology from 1961–1965 receiving his Masters and Ph.D. Degrees from the University of Toronto before entering the Neurosurgery Training program in 1965.

He became a Fellow of the Royal College of Physicians and Surgeons of Canada in 1969. Dr. Tator joined the Neurosurgical Staff at Sunnybrook Medical Centre in 1969. Having served as Neurosurgeon-in-Chief at Sunnybrook from 1974–1984, Dr. Tator moved to The Toronto Western Hospital where he became Neurosurgeon-in-Chief from 1985–1988. He was appointed Chairman of the Division of Neurosurgery at the University of Toronto for a 10 year term beginning 1989. He is an Officer of the Order of Canada.

He is currently Professor in the Department of Surgery at The University of Toronto, and Director of the Canadian Concussion Centre, Toronto Western Hospital. His main clinical interests are in trauma of the nervous system, especially concussions and spinal cord injury. His research is dedicated to the study of injury prevention and recovery from concussions and spinal cord injury.



CHRIS MARKHAM
EXECUTIVE DIRECTOR & CEO, OPEHA

Chris Markham is the Executive Director and CEO of Ophea (the Ontario Physical and Health Education Association). Over the past 20 years Chris has worked with outstanding staff and volunteers to build the knowledge, ability and confidence of educators, principals, school board administrators, public health and community leaders to deliver quality health and physical education programs in schools and communities across Ontario. Ophea manages the Ontario Safety Guidelines which represent the minimum standard for risk management practice for school boards and focus the attention of teachers, intramural supervisors and coaches onto safe practices, across all physical activities, in order to minimize the element of risk.



ERIC LINDROS
FORMER NHL HOCKEY PLAYER
ADVOCATE FOR CONCUSSION RESEARCH, CARE AND AWARENESS

Retired NHL great, Mr. Eric Lindros is a former Canadian National Hockey team member and Hockey Hall of Fame inductee.

As well as winning a Memorial Cup with the Oshawa Generals, Mr. Lindros has suited up for Canada nine times, winning four gold and two silver medals and being twice named “most valuable forward”, accumulating 113 points in 94 games. Appearing in six NHL All-Star Games and the Stanley Cup Finals, he has won the Hart Memorial Trophy and the Lester B. Pearson Award. Mr. Lindros suffered a series of concussions—at least eight by the time he retired in 2007.

In 2007, Mr. Lindros donated \$5 million in support of London Health Sciences Centre. The gift was inspired by Dr. Peter Fowler, co-founder of the Fowler Kennedy Sport Medicine Clinic. Mr. Lindros credits the care he received at the clinic for helping extend his NHL career. As the ongoing co-chair of the See the Line symposium, Mr. Lindros continues to make a difference with his support as an advocate of world-class sport concussion research, care and awareness.



DR. ROSANA SALVATERRA, MD, MSC, CCFP, FRCPC
MEDICAL OFFICER OF HEALTH, PETERBOROUGH PUBLIC HEALTH

Dr. Rosana Salvaterra has served as the Medical Officer of Health for Peterborough Public Health since 2008. Prior to coming to Peterborough, she worked in both Toronto and Stratford in similar positions. Before specializing in public health, Dr. Salvaterra worked as a Family Physician with marginalized, newcomer and low income populations. She has worked both internationally, and in First Nations communities in Canada.

Dr. Salvaterra currently holds an academic appointment with Queen's University. She participates locally and provincially in issues pertaining to health equity, poverty reduction and opioid safety. The prevention of injuries and chronic diseases remain a focus of her public health work.



JENNIFER KNOX
PRESIDENT, ONTARIO FEDERATION OF SCHOOL ATHLETIC ASSOCIATIONS (OFSAA)

In her third year in a service leadership role with OFSAA, the previous two as Vice President, Jennifer works with hundreds of volunteer teacher-coaches to promote education through sport. OFSAA's main priority is to work with volunteer teacher-coaches to provide 46 provincial championships and five festivals for Ontario's student-athletes. They also offer other programs and services that enhance school sport in the province. These include scholarships and awards, student leadership programs, coach development programs and resources, tournament sanctioning, and funding that is provided to support athletic programs at the school level. OFSAA takes proactive role in dealing with issues that affect students, coaches, schools and communities.

Jennifer is a Principal at Kenner Collegiate Vocational Institute in Peterborough, Ontario, where she grew up. She earned her Honours Bachelor of Arts at Wilfrid Laurier University and teaching certification at the University of Maine. Jennifer has two children and has an avid interest in athletics.



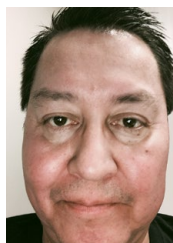
ROSIE MACLENNAN
OLYMPIC GOLD MEDALIST, TEAM CANADA

Rosie MacLennan made history at Rio 2016 when she became the first trampolinist to ever win back-to-back Olympic gold medals. She also became the first Canadian athlete to successfully defend an Olympic title at the summer Games and the first Canadian woman to win two gold medals in an individual event at the summer Games.

Four years earlier, MacLennan had won Canada's only gold medal at London 2012 where she performed the most difficult routine of the competition to earn a career-high score of 57.305 for Canada's first-ever Olympic trampoline gold medal. She had first gained multi-sport experience at the 2007 Pan Am Games where she won silver before stepping up to win gold at Guadalajara 2011. She successfully defended that gold medal at home at Toronto 2015, sharing the podium with teammate Karen Cockburn, after coming back from a concussion. MacLennan made her world championship debut in 2005 and won her first medal, a bronze, in 2007. She added another bronze in 2010 before winning silver in 2011. After her first Olympic triumph, MacLennan maintained her top international ranking, winning her first world title in 2013. She added another silver in 2014.

After suffering her second concussion of the year when she was accidentally hit on the head by a car trunk, MacLennan was happy just to be able to compete at the 2015 World Championships. Choosing to lower the technical difficulty in her routine, she trained it for one week and finished just off the podium in fourth place.

Acknowledgments



DUANE JACOBS **SPECIAL ADVISOR ON FIRST NATIONS ISSUES**

The Committee would like to recognize and extend their thanks to Mr. Duane Jacobs for acting as a Special Advisor to the Rowan's Law Advisory Committee on First Nations issues.

Duane is a lawyer and a former lacrosse player. He has coached lacrosse for many years, including coaching the Six Nations Senior A Chiefs Team to the National Mann Cup Championship. Duane was recently inducted into the Ontario Lacrosse Hall of Fame.



COLIN GRAY

The Committee would like to thank Mr. Colin Gray for his work in drafting this report. Colin attended our meetings in order to best capture and reflect the Committee's discussions, debates and decisions.

The Committee is indebted to the team from the Ministry of Tourism, Culture and Sport for their support of the Committee and its work. We would like in particular to thank Ms. Sanja Minic and Ms. Christina Seres for their invaluable assistance.

APPENDIX D

ROWAN'S LAW ADVISORY COMMITTEE CONSOLIDATED RECOMMENDED ACTIONS

Legislation—"Rowan's Law"

Action #1

The Province of Ontario should enact legislation ("Rowan's Law") governing all organized amateur sport—public, private, school-based and non-school-based (including those delivered by not-for-profit or for-profit entities where there is a fee charged for participation)—in Ontario. This legislation would include, at a minimum, the following key components:

- a) Mandatory education, at least annually, and prior to the start of the season, for all athletes, parents/guardians of child/youth athletes, educators/school staff, coaches and officials in concussion prevention, recognition and management
- b) Mandatory immediate removal from play for assessment of any athlete who is suspected of having sustained a concussion. If the assessment by an appropriately trained individual confirms any signs or symptoms of concussion, the athlete may not return to play
- c) If an athlete is removed from play for signs or symptoms of suspected concussion, a medical diagnosis by a physician or nurse practitioner must be obtained prior to return to play
- d) The progressive return to learn and return to play process following concussion is guided by current evidence-based consensus guidelines [the Canadian Guideline on Concussion in Sport, the International Consensus Statement on Concussion in Sport, or equivalent], and overseen by an individual with the appropriate skill and expertise to implement this process
- e) Codes of Conduct, as set out in Regulation, must be developed and utilized in all organized amateur sport activities in Ontario. These may be tailored to each sport, and to each type of participant (i.e., players, coaches, officials, organizers and parents/guardians). The Code of Conduct must include a Zero Tolerance policy for dangerous behaviours which are considered high risk for causing concussions or head injuries. The relevant Code of Conduct must be provided to each participant and parent/guardian, who must all sign the Code of Conduct as a condition of participating in the sport. This demonstration of commitment to a Code of Conduct must be renewed on a regular basis; and at a minimum, annually, prior to the start of the season

- f) Mandatory collection of data on all incidents of suspected concussion on the field of play and/or removal from play for suspected concussion. These data would be provided as prescribed to the Ministry of Health and Long-Term Care to oversee the analysis and dissemination of this information to the public and to researchers, in order to evaluate the impact of measures taken to improve the safety of amateur sport in Ontario
- g) Requirement that information about incidents of suspected concussion be shared (i) immediately with parents/guardians (in the event of athletes under the age of 18), and (ii), with other sport delivery partners relevant to the athlete, with the consent of the athlete or their parent/guardian
- h) Declaration of an annual "Rowan's Law Day", to fall on a consistent weekday between Labour Day and October 31st

THEME #1 / **Surveillance**

Action #2

The Ministry of Health and Long-Term Care should create and disseminate a publicly-available report on a regular basis, and at least annually, on concussion incidence which includes data from the point of injury, primary care and the hospital sector, as well as self-reporting/survey data from the public. This report would include information about the nature, severity and circumstances of the injuries, such that the effectiveness of injury prevention measures can be assessed over time.

Action #3

All amateur sport delivery partners in Ontario must ensure the collection and reporting of data regarding the incidence of head injuries (including suspected concussion) and high-risk play, including, but not limited to, all incidents where a player was removed from play due to a suspected head injury, and where a player was expelled/suspended for violating the sport's zero tolerance policy.

Action #4

Until superseded by legislation, the Ministry of Education should continue to evaluate and ensure compliance with PPM 158.

THEME #2 /

Prevention

Action #5

Codes of Conduct must be developed and utilized in all organized amateur sport activities in Ontario. These may be tailored to each sport, and to each type of participant (i.e., athletes, coaches, officials, organizers and parents/guardians). Each Code of Conduct must include, as a minimum:

- i) A commitment to fair play and respect for all participants and officials.
- ii) A commitment on the part of all to disclose honestly to coaches/trainers when an athlete is injured (including experiencing signs or symptoms of possible concussion), or when such injury is suspected in another athlete. This would include a commitment to participate in "check-ins" before and after each game and practice, to identify any injuries or concerns about every player's well-being.
- iii) The adoption and enforcement of a Zero Tolerance policy by all amateur sport delivery partners in Ontario for prohibited head hits, high tackles and other dangerous behaviours which are considered high risk for causing concussions or head injuries. This shall apply equally whether the action was intentional or unintentional.

The organization with jurisdictional responsibility over a particular sport must determine the content of its own Zero Tolerance policy, and how the policy is enforced. However, as a minimum, a participant engaging in prohibited activities shall be expelled for the remainder of the game. If the infraction occurs in the last 25% of regulation playing time, the player should also be suspended for the next scheduled game. Each sport should also impose escalating penalties for repeat offenders.

Action #6

To ensure that the field of play is appropriate for safe play or practice:

- Each sport should set standards regarding the condition of the playing surface, and make these standards publicly available
- Venue owners must be accountable for ensuring that the field of play meets the established standards
- Match officials and coaches must not allow play to occur if these standards are not met

THEME #3 /

Detection

Action #7

All higher-risk sports* teams should ideally have both a coach and an assistant coach, as well as an athletic trainer/therapist, present at all games and practices, and ideally there should be an assistant referee at all games.

At a minimum, for all higher-risk sports*, there must be at least one person present at all games and practices, in addition to the coach(-es), who has specific training in First Aid, and in concussion identification and management [such as the Making Head Way course or equivalent, as determined by the organization responsible for the delivery for the sport] and who is responsible for observing participants for potential head injury and removing them from play. Ideally, this should be a neutral party.

Action #8

At a minimum, all coaches must complete annual training in concussion identification and management [such as the Making Head Way course or equivalent, as determined by the organization responsible for the delivery of the sport].

THEME #4 /

Management

Action #9

The Government of Ontario should invest in adapting, creating or acquiring an electronic solution, made available to all amateur athletes in Ontario, that supports:

- i) The acquisition of data regarding
 - a) head injuries at the field of play; and
 - b) concussion diagnosis and a return to learn/return to play plan
- ii) Sharing of data with parents/guardians

* “Higher-risk sports” in this context refers to those sports which have a greater potential for concussions to occur among participants, by virtue of person-to-person or person-to-equipment contact, and/or speed of action.

- iii) Sharing of data with other sport delivery partners relevant to the athlete, with the consent of the athlete or parent/guardian
- iv) Reporting of anonymized data to the Ministry of Health and Long-Term Care for surveillance and reporting purposes

Such a solution should be provided at no cost to the end users, and be implemented consistently across the province to facilitate information sharing within one solution in all locations.

In the interim, until such an electronic solution exists, the Government of Ontario should implement a paper-based passport system aimed at achieving these key goals in a manual way to address existing gaps in terms of information capture and sharing. At the present time, it remains the responsibility of the athlete or their parent/guardian to communicate information about suspected or confirmed concussion to all sport delivery partners with which the athlete is involved.

Action #10

The Ministry of Health and Long-Term Care should introduce appropriate fee codes in the OHIP Schedule of Benefits for the initial assessment and ongoing management of patients with suspected and proven concussions. These codes should include the completion of all necessary documentation on return to play/return to learn, such that there is no charge to patients or their families for completion of these forms.

Action #11

The Ministry of Tourism, Culture and Sport should task the Coaches Association of Ontario with creating and regularly updating a “Coach’s Toolkit” with relevant tools and materials to support the use of consistent concussion protocols across all sport settings, aligned with the Canadian Guideline on Concussion in Sport.

This Toolkit should be based on the relevant components of the Ophea Ontario Physical Education Safety Guidelines, and be made available free of charge to all coaches in all sport settings in Ontario. The toolkit should be maintained in electronic format, to ensure that the most current information is readily available to coaches at all times.

The Ministry of Tourism, Culture and Sport should require the use of these materials in all amateur sport settings in Ontario (both school-based and non-school-based).

THEME #5 / Awareness

Action #12

The Government of Ontario, as part of all teachers' education training, should include exposure to basic coaching principles for all teacher candidates, as well as awareness about concussion prevention, detection and management.

Action #13

The Government of Ontario should re-brand the current Concussion Portal on the Ontario.ca website under the name "Rowan's Law". In doing so, the Government should engage expertise in branding and marketing to improve the public awareness and use of this site, and protect the integrity of the Rowan's Law brand.

This site would be a repository for all tools, resources and links related to concussion awareness, prevention, detection, management, and surveillance, as well as personal stories such as Rowan's. The Rowan's Law resources can be created by multiple partners, who would be recognized for their work. In curating this site, the Government would be responsible for ensuring that the content is current, evidence-based, and available to all Ontarians. Ongoing efforts should be directed towards increasing awareness of this site among the general public, athletes and their families, coaches and educators.

Action #14

The Government of Ontario should commit to a net new investment in a sustained, multi-channel, integrated marketing campaign to increase public awareness of concussion, and the Rowan's Law brand, by people of all ages. Such a campaign should consider:

- Messaging to encourage participation in sport and physical activity
- Role models that resonate with different age groups
- Catch phrases/messaging
- Engagement of a diverse target audience (gender, culture, etc.)
- Exploration of corporate partnerships
- Use of personal stories (including Rowan's)
- Use of the Rowan's Law logo on school athletic clothing and equipment

Action #15

Concussion education modules should be developed and/or adapted for primary, junior, intermediate and senior school students, and be branded under Rowan's Law. These should be delivered annually, starting immediately, on or around Rowan's Law Day.

Action #16

School boards should implement an annual concussion awareness learning education event for all Ontario school students, starting immediately, on or around Rowan's Law Day.

Action #17

The Ministry of Education should work with Ophea to develop an e-learning module to review safety guidelines at the start of each school year. This would be a mandatory requirement for all teachers and administrators (similar to WHMIS and Offence Declaration currently).

Action #18

To enhance the level of knowledge regarding concussion detection, diagnosis and management by health care professionals:

- a) The Association of Faculties of Medicine of Canada (AFMC) should incorporate concussion awareness, diagnosis, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum in all medical schools.
- b) The College of Family Physicians of Canada should incorporate concussion awareness, diagnosis, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for all Family Medicine residencies (with further emphasis as part of the curriculum for CCFP-EM and Sports Medicine programs).

- c) The Royal College of Physicians and Surgeons of Canada should incorporate concussion awareness, diagnosis, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for the following residency programs:
- Emergency Medicine
 - Pediatrics
 - Pediatric Emergency Medicine Fellowship
 - Neurology
 - Neurosurgery
 - Physical Medicine and Rehabilitation
- d) The College of Family Physicians of Canada should develop accredited educational programs/modules on concussion awareness, diagnosis, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time).
- e) The nurse practitioner education programs in Ontario, in collaboration with the College of Nurses of Ontario, should incorporate concussion awareness, diagnosis, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time) into the mandatory curriculum for all nurse practitioners.
- f) For all other Regulated Health Professions, concussion awareness, detection, and management (as reflected in the Canadian Guideline on Concussion in Sport and the International Consensus Statement on Concussion in Sport, as updated from time to time, including indications for referral for assessment by a physician or nurse practitioner) should be incorporated into all education curricula.

Additional Actions

Action #19

The Committee is supportive of the work underway at the Federal/Provincial/Territorial level towards achieving a national harmonized approach to concussion. It is recommended that the Federal government should play a leadership role in this area for sports that occur in both school and non-school environments.

Action #20

The Committee recommends that the Governments of both Ontario and Canada work with First Nations leaders and stakeholders to strongly encourage and support the dissemination and implementation of these or similar Actions to achieve the goals of increased safe participation in amateur sport, and excellence in concussion awareness, prevention, detection, management and surveillance in all First Nations communities.

Action #21

The Government of Ontario should create a Rowan's Law Concussion Partners Committee, comprised of key stakeholders from the sport, education, health, injury prevention and government sectors, to ensure that the momentum which began with the creation of the Rowan's Law Advisory Committee is sustained. This Committee would ensure coordination, support implementation, and provide oversight to the maintenance of these initiatives. At least annually, the Committee would also meet with the Ministers responsible for Sport, Health and Education.





“The members of this Committee want “Rowan’s Law” to be more than just a law. We want it to be a way of thinking. We want it to be a brand. Not just in Ontario, but in Canada. We can play, and send our kids to play, knowing that we are all protected by a system that ensures that we all understand head injuries and concussions, that we have done everything possible to reduce the chances of them happening, and that we are in a position to act immediately and effectively if they do.

That’s what we want Rowan’s Law to be.”

ROWAN’S LAW ADVISORY COMMITTEE