

# **Subcommittee on Sports-Related Concussions in Canada of the Standing Committee on Health**

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# **EVIDENCE**

Wednesday, April 10, 2019

Chair

Mr. Peter Fonseca

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**●** (1710)

[English]

The Chair (Mr. Peter Fonseca (Mississauga East—Cooksville, Lib.)): Welcome, everybody. We're delighted you're here.

This is the health subcommittee on sports-related concussions. Pursuant to the motion by the standing committee that was adopted on October 4, 2018, we started our proceedings and we have heard from many witnesses. We commenced with Ken Dryden, who has done extensive work on concussions, and listened to parents, coaches, experts and everybody in between. It has been quite eye-opening for us.

Today we have the federal-provincial-territorial concussion working group. I think they can tie it all together for us in terms of the pan-Canadian work they've done. With us today are Jocelyn East and Greg Guenther.

As well, from the Canadian Standards Association, we have Nancy Bestic and Dr. Patrick Bishop.

Before I turn over the floor, I will ask the members for unanimous consent, which I think I have gotten before, to continue through the bells if they start ringing, as we might have votes up in the House. We'll run up, get our votes done, and come back down to hear from the witnesses.

Thank you.

You now have the floor. We'll start with Nancy and we'll go across. I don't know if everybody has a statement to make.

Ms. Nancy Bestic (Director, Health and Safety Standards, Canadian Standards Association): Thank you, Mr. Chair and honourable members. We appreciate the opportunity to address the subcommittee today. We would like to express our support for your work in studying sports-related concussions.

My name is Nancy Bestic, and I am Director of Health and Safety Standards at Canadian Standards Association, operating as CSA Group. With me is a CSA Group volunteer member, Dr. Patrick Bishop. Dr. Bishop, a professor emeritus at the University of Waterloo, serves as chair of the CSA technical committee on equipment for ice hockey. He will provide his own perspectives on the topic of concussions, not necessarily those of CSA Group.

In our remarks, we would like to highlight the following key points. First, we will provide some background on CSA Group. Second, we will summarize our activities regarding protective sport equipment and the concern for concussion intervention. Finally, we will identify some future concerns and offer recommendations that may help guide this subcommittee's work.

CSA Group was established 100 years ago, in 1919, and it continues to be Canada's largest accredited standards development organization. We're a member-based association serving business, government and consumers with over 3,000 published standards and codes in more than 50 subject areas, including health care and wellbeing, public safety and worker safety. Our mission is to enhance the lives of Canadians through the advancement of standards in the public and private sectors. The technical and management standards developed with our 10,000 members help improve safety, health, the environment and economic efficiency in Canada and beyond.

Specifically related to sport and injury prevention, CSA has developed standards since the 1970s to help protect against head and face injury for hockey and other sports, such as lacrosse, ringette, skiing and snowboarding. A series of four standards address helmets and face protectors for their ability to withstand impact trauma to the head, to fit properly, to avoid penetration by pucks and sticks, and to stay on the head during play. These standards, which are systematically reviewed and updated, are referenced in Canadian legislation. Hockey Canada has mandated the use of helmets and face protectors certified to the CSA standards for use in hockey under its jurisdiction. Such certified products have been most successful in reducing the risk of catastrophic head injury and reducing eye injuries. We are now revisiting the helmet standard to address the concussion issue—more specifically, to determine whether we can find a way to help mitigate the problem.

**●** (1715)

**Dr. Patrick Bishop (Volunteer, Canadian Standards Association):** Thank you, Mr. Chair and honourable members.

I, too, would like to highlight a few key points as they relate to head trauma in sport.

As you already know, concussion is a complex injury caused by rotational motion of the brain. In hockey, there are four ways in which a player can be concussed by these rotational forces, namely, a shoulder or an elbow to the head, a collision with the boards, a collision with the ice or a puck to the head. I will return to this in a few minutes.

Concussion is not a new injury in sport. In the early days of head injury research, studies were concerned with what were then called "closed head injuries" sustained mainly in assaults and auto accidents. The injuries involved loss of consciousness without skull injury and the patient usually survived. These were concussions, and plenty of athletes sustained such injuries.

Today, concussion is defined by symptoms other than loss of consciousness, such as headaches, memory loss, motor dysfunction and other related signs and symptoms.

Because hockey players wear helmets to protect against catastrophic injury such as skull fracture, subdural hematoma and so on, there's an expectation that helmets should also play a role to protect against concussion. However, concussion in hockey—unlike in football—has many mechanisms, as I mentioned earlier. Reducing injury risk against all of these mechanisms is indeed a challenge.

CSA Group members have been working diligently to try to determine whether helmets and helmet standards can be modified to mitigate the concussive risk. This is not a trivial pursuit, as the conditions that cause concussion—namely, trauma induced by rotational motion of the head and the ensuing strain on the brain—are difficult to reproduce in a testing laboratory and are difficult to quantify as a safety metric. Work to find possible test conditions that are suitable for testing such injury-causing situations is ongoing.

For example, CSA Group, in collaboration with the University of Ottawa, undertook a research project to examine test protocols to help limit head rotation in hockey. After a full year of work, it was determined that although much was learned in regard to the different types of concussion-causing events, additional research is needed to learn more about mitigation and the ways to offer protection.

There are certainly opportunities to investigate improvement of the protective value of such equipment, especially with the study of these rotational forces and their role in concussions. We recommend that this research be continued and expanded.

Goaltenders are another group that has experienced an increase in concussion, and we recommend that research should be undertaken on this group's unique protective needs as well.

CSA Group is an established and experienced standards development organization with a history of developing important standards on protective equipment for various sports. These have helped reduce catastrophic head and eye injuries, but the complexities of concussion require more research to determine a role for such equipment.

We welcome the opportunity to work with members of this subcommittee, particularly where standards may be needed, to find a solution that leverages the work we have undertaken with the mandate of this committee.

Thank you, Mr. Chair and honourable members, for the opportunity to address you today. We will be happy to attempt to answer any questions you might have.

(1720)

The Chair: Thank you.

Now we're going to have an opportunity to hear from the FPT working group.

[Translation]

Mr. Jocelyn East (Co-Chair, Federal-Provincial-Territorial Concussion Working Group): Good afternoon, everyone.

My name is Jocelyn East.

[English]

I will do my introduction in French, and I will be happy to answer questions in the two official languages.

[Translation]

Mr. Chair and members of the Subcommittee on Sports-Related Concussions in Canada, good afternoon.

I'm Jocelyn East, and I am the manager of the new international unit on safety and integrity in sport at Sport Canada. My duties include co-chairing the Federal-Provincial-Territorial Concussion Working Group on concussions in sport. I have been doing that since the group was created in 2015.

On behalf of the working group, my colleague Mr. Guenther and I want to thank you for this invitation to come share with you, in all humility, accomplishments stemming from the hard work and dedication of members, to shed some light on your work.

It is a true privilege to be here and to have been co-chairing that working group since 2015. I feel fortunate to have contact with frontline experts and truly passionate leaders in this field who work tirelessly to make sport safer.

I would like to commend the work and dedication of all current and former members, including Michel Fafard, who was our first cochair. I also want to pay tribute to all the victims of concussion and their families, as well as the researchers who have educated us about taking action in this area.

Since we started our work, seven members of our working group have testified before you. Their appearances show the expertise and diversity of our group and the inclusion of various sectors, such as education, health and governments, including Sport Canada, the Public Health Agency of Canada, six provinces and one territory. That is a unique situation for this type of a working group.

It is important to point out that concussions are a complex problem and a public health issue—I believe you have heard this a number of times. Concussions are not unique to sport, but sport is in the hot seat because of repeated exposure to risk. It is on that premise that the working group began its work in 2015.

In 2014, the Federal-Provincial/Territorial Sport Committee, to which we report, wondered whether governments had a role to play in this area, given the many existing initiatives.

With the help of Sport Canada, in 2015, we invited those in charge of the national sport community, health and governments to a workshop here, in Ottawa, to answer that question. The answer came very quickly: yes, governments have a role to play, and it is one of harmonizing initiatives, protocols and key messages.

Sport organizations clearly told us two things at that workshop. First, they asked us to tell them what to do and said they would do it. Second, they said they needed support from all levels of government, so that their message and the information on their activities and their policies would get to clubs and families.

As a working group, we have a mandate to provide recommendations to the ministers responsible for sport, physical activity and recreation, and we have done so on three occasions: in 2016, in 2017 and recently in 2019, in Red Deer. Our objective is clear: support the harmonization of tools to ensure that Canadians have them and know how to use them, as concussions are a collective responsibility. In all, we have provided 16 recommendations to ministers since 2016. They have all been accepted by the provinces and territories.

Of course, the greatest accomplishment is still the acceptance of a harmonized Canada-wide approach, which includes awareness, prevention, detection, management and oversight components. That harmonized approach is our strategy and remains at the heart of our actions.

We have also developed a framework for action, so that all the provinces and territories, regardless of their approach—a piece of legislation, a framework for action, a strategy—would have the essential and minimum components for moving forward and having concerted action.

In 2019, in Red Deer, following a recommendation from the working group, the provinces and territories all accepted to dedicate one day a year to concussion awareness and to develop an action plan to facilitate tool dissemination.

Through our expertise, we have supported other important projects, including the Governor General's conference on concussions in sport in 2016, Parachute Canada's Canadian guidelines, which you have heard about frequently, and the national campaign "Headstrong Canada", which we could talk about later.

That was an overview of what the working group has done so far. You will find more details in a support document that will be submitted to you.

In closing, allow me to specify that, at the request of federal, provincial and territorial ministers responsible for sport, our working group will focus on two essential elements by 2021. First, we will work on tracking the implementation of the recommendations accepted since 2016 in order to continue to support governments in their advances, including when it comes to the Canadian guidelines, the framework for action and concussion awareness days. Second, we will work on making recommendations and implementing prevention measures by and for sport communities in order to combat this scourge.

It is with great pleasure that I yield the floor to my co-chair, Mr. Guenther, who will talk about the reality of the provinces and territories in relation to the implementation of these recommendations. Afterwards, we will be pleased to answer any questions you may have.

Thank you Mr. Chair and members of the subcommittee.

• (1725)

[English]

The Chair: Thank you.

Greg.

[Translation]

Mr. Greg Guenther (Co-Chair, Federal-Provincial-Territorial Concussion Working Group): Thank you, Mr. East.

[English]

Thank you for the opportunity to present.

Jocelyn has been doing great work since 2015. I've been fortunate to join the national working group more recently as it's a portfolio I hold in the province of Manitoba.

My presentation will focus a little more on the provincialterritorial perspective to give you an understanding of how some of this work is supporting what we do.

The Red Deer recommendations, the six recommendations that came forward from Red Deer endorsed by the ministers, are a tremendous opportunity for provinces and territories to continue the good work that's been done to date in the area of concussion prevention, education, awareness and management. Some of those good things that have been done are certainly the Canadian concussion guidelines. It's a key tool that we and other provinces and territories have used as a chance for us to ensure we standardize the pan-Canadian work that we're doing. The national sport organizations are also beginning to do good work in the area of increased coach education, athlete training and prevention methods. They are starting to look more at the rules, and how rules of the game need to be altered to ensure we have a safer sport experience.

Absolutely, the work on prevention needs to continue, and sport needs to take a leadership role in this area. It's really important in increasing the ongoing network of coach training, rule changes, equipment adaptations and facility management that make sure the sport environment is safe. The national sport bodies, NSOs, have a big role to play there.

In terms of the enhanced awareness, the leadership and work being done in the PT jurisdictions, many of the provinces and territories are now looking at the protocols that have been developed nationally and we're starting to see more provinces and territories come on board to adopt them. That is tremendous news because it ensures we're all singing from the same songbook.

Parachute is leading the work with the national sport organizations and has done a great job in the last year in making progress in that area. Jocelyn mentioned the national "We Are Headstrong" campaign. It is available to all the national, provincial and territorial sport bodies, and the messages of recognize, remove, refer and return are really important messages we need to get to everyone in the sport community. We've often heard, "When in doubt, sit them out". But once they sit out, where do we go from there? That's really important.

We're starting to see the concept of the creation of provincial-territorial sports-specific concussion working groups fall into place. Specific to my experience in Manitoba, we have created a working group. It includes sport medicine practitioners, physician expertise, provincial education representatives and experienced sport administrative staff. It has allowed us to make significant progress with our provincial sport governing bodies in the area of adopting concussion protocols.

The other thing the FPT working group has provided is the opportunity to share best practices and the opportunity to learn from good things that are happening from one province to another. It is a tremendous achievement that we can be proud of.

It's important to note that the work being done at the national level does help provinces and territories in moving toward a consistent harmonized approach, and again that we're all using the same tools.

One of the challenges we face at a provincial-territorial level is ensuring collaboration among sport, education and health. I think everyone can appreciate those portfolios reside in each province and territory, so it's really important that the communication is open and collaborative.

The other thing is that parents and athletes need help in navigating the health care system when they need care. That is an area we need to work on.

Many valuable tools have been developed around education and awareness. If you think about a national team, a university or a provincial team program, where they have access to comprehensive care through an integrated support team and medical practitioners, many tools can be used, but those models don't work at the community level.

## **●** (1730)

The reality of a community sport team or a community-level coach is very different from someone who has access to a physician, physio, AT and so on. We need to keep that in mind. As has been mentioned here before, drilling down to the community level, it is really a challenge, because we rely heavily on a volunteer sector to deliver community-level sport.

It's really important to end on a positive note, though. How far we've come in such a short time is really something we should be proud of in terms of some of the recommendations that have come forward. It's a tremendous opportunity to work with all the sectors, including education and health, towards the issue of prevention. Many folks have said, "We've talked about what we do when it happens, but how can we stop it from happening?"

There are good examples in terms of a number of national sport bodies—rugby, basketball, volleyball and hockey, just to name a few—that are already doing good work in this area of addressing how they might be able to ensure prevention is looked at.

The endgame has to be active for life; that's what we want for Canadians. We need to be smart and practical in our approach, because community sport is large, complex, and again, functions with a high number of volunteers. I speak from my own perspective, but in what we think sometimes is possible from our office, we always need to remember how we can implement in a realistic and

cost-effective manner. We have lots of great conversations in my shop, but we always need to think about how we're going to do this in terms of delivery.

Thank you very much. I'm happy to answer any questions during the question period.

The Chair: Thank you.

To the witnesses, thank you for your statements, your work and your service. I know the members are eager to ask you questions. We're going to move right to questions now.

To be able to get as many members as we can through, we will be holding questions to five minutes per party.

We'll start with Dr. Eyolfson from the Liberals.

Mr. Doug Eyolfson (Charleswood—St. James—Assiniboia—Headingley, Lib.): Thank you all for coming and for your valuable testimony.

Dr. Bishop, you were talking about helmets. I want to confirm: did you say in regard to hockey helmets that there has been a demonstrated decrease in concussions?

Dr. Patrick Bishop: No, I'm sorry, I don't think I said that.

Mr. Doug Eyolfson: I wasn't sure, so I wanted to double-check.

**Dr. Patrick Bishop:** The decrease is in traumatic brain injury such as skull fractures, subdural hematomas, and I didn't mention death.

**Mr. Doug Eyolfson:** Okay, so it was head injuries. Is this in comparison from pre-1973 when these were made mandatory?

Dr. Patrick Bishop: Yes.

**Mr. Doug Eyolfson:** However, you said there was no data really on concussions per se, on concussions prevented.

**Dr. Patrick Bishop:** We know there's a concussion problem. We do know that, and we do know what's happening to players who are wearing helmets. The question is, why is it happening, and is there a way in which the helmet can mitigate against these things?

My own personal approach to this is that there are two types of concussions: There are those that are unwarranted and those that are accidental. The unwarranted ones are intentional, really, caused when one player strikes another about the head. The accidental ones are when the youngsters fall and strike the ice or the boards with their heads unintentionally.

**Mr. Doug Eyolfson:** When we talk about standards for hockey helmets, I know there are a number of different tests they'll do to see how they withstand a force. When I was playing in the 1970s as a teenager, I was told that they were dropped from six feet with a 10-pound weight in them, or something such as that.

When they test them, is it testing the damage to the helmet, or are there more sophisticated ways now of testing what type of force is transmitted or not transmitted through the helmet? **●** (1735)

**Dr. Patrick Bishop:** The original tests were a 10-pound block of wood dropped onto a helmeted head form. Now we drop the head form. The sensors that are used now are three-dimensional accelerometers, so we measure the acceleration experienced by the head in striking the ground. That measure of acceleration has been linked with skull fracture, and that has really been our measure over the many years.

As I said, we have virtually eliminated that type of injury. The only time a skull fracture happens really is if the person loses their helmet

**Mr. Doug Eyolfson:** How often are these standards for helmets reviewed or revised?

Dr. Patrick Bishop: It's every five years.

**Mr. Doug Eyolfson:** You mentioned something interesting. You said that the incidence of concussion in goaltenders is increasing. Is that correct?

**Dr. Patrick Bishop:** Yes. Well, it's increasing at the pro level. In fact, just recently the NHL board of governors or general managers had a meeting in Florida, where that was one thing on their agenda, the number of goaltenders who had concussions this year and were out for a long time.

We haven't a good grip on that in amateur or minor hockey. We've asked Hockey Canada to see if it has data. Certainly at our next technical committee, which is next week, we plan to have a discussion, at least, on the rarity of the strikes on the head of the goaltender—that's either pucks or striking the goalpost.

Mr. Doug Eyolfson: Okay. Thank you.

The Chair: We're moving over to the Conservatives.

Dr. Kitchen.

Mr. Robert Kitchen (Souris—Moose Mountain, CPC): Thank you all for being here.

Dr. Bishop, it's just like it was back in 1976-81, when I learned from you back then. I appreciate your being here. It's good to see you. This time I think I get to ask the questions. I won't be grading you on this one, by the way.

I want to follow up a little bit more on what Doug was talking about, especially in dealing with goalies. We had a young hockey player here; his name was Carter Phair. He played junior hockey and sustained a number of concussions. He's still having issues. He's been having good days and bad days. I know the family fairly well. I'm interested a little bit more as to whether you've extrapolated or looked into the NHL occurrences with goalies versus going down into lower levels.

**Dr. Patrick Bishop:** It's a very interesting question. I did consult with the member of the NHL who sits on our technical committee and asked him if I could get some data. It had to be minimal data on numbers, types and where they were struck. His first response was, "I don't think they'll release that to you, but I'll try." His second response was, "I was right the first time; they won't release it to you." We're in the dark until such time as they make something known to the general public.

**Mr. Robert Kitchen:** You bring up an interesting point. One thing we've heard throughout the study is a question of data: collecting that data, how accurate it is and how easy it is to obtain, with issues of privacy, etc. There are a number of apps out there that do that sort of thing, which allow for the trainers, the doctors, etc. to share that information.

I'll put this out to all of the panel. Are you aware of any data or programs that you think are of value? We've heard of a number of different ones out there. Obviously, everyone has an idea, and their idea is the best. How do we, as a committee, take in all that so we can formulate a way, without picking somebody specifically? The moment we put a label on one particular organization, now that group starts to champion who they are.

● (1740)

Dr. Patrick Bishop: That's also a good question.

Mr. Robert Kitchen: I learned from the best.

Dr. Patrick Bishop: You've had a couple of good ones in the past.

The issue of surveillance is really a critical thing in Canada because it's not ongoing. There is a surveillance system run by the major Toronto hospitals in the country. I think it's called CHIRPP. However, they only see a fraction of the trauma that is seen in sport because most of the time the injured party doesn't have to go to that trauma unit.

Keeping track of this kind of data is kind of a hit-and-miss affair, and it only takes shape when somebody decides they should collect injuries for three years. They do that. They do a nice job of it and make a report, but the report is issued two years after the last injury, so you're two years behind already. You can see trends, though. Then the surveillance stops, and we don't see it again for another 15 or 20 years, or until somebody is doing a Ph.D. or a master's degree and is interested in concussions in water polo or something.

It's an issue, really. I know that Hockey Canada, through their insurance program, tries to collect data, but again, it has to be an injury that requires insurance intervention. If it doesn't require insurance intervention, it doesn't necessarily get reported.

The CSA has an audit program where, if there is a faulty helmet and an individual is injured because the helmet's cracked or something, that gets reported to CSA and then down to the manufacturer, but that doesn't happen very often.

The Chair: Thank you.

We're going to be moving now to the NDP and Ms. Hardcastle.

Ms. Cheryl Hardcastle (Windsor—Tecumseh, NDP): Thank you everyone for your intriguing contribution to this subject. You know that we're exploring what an effective means would be for the government to look at the emerging issues, with diagnosis, treatment and prevention. You can go off on all these different paths for each of those intriguing things. I appreciate the spirit of collaboration, and you understand how important that is in how we get what we know to trickle down.

My first question will be for the CSA. Maybe everyone would like to weigh in on this.

We know that our protective equipment, as we have it today, even as up to date as it is, doesn't reduce all the risks. As a matter of fact, this committee has heard that sometimes it makes athletes more vulnerable to serious injury—this gladiator effect, or this idea that you're invincible or that someone has this equipment on and can take a certain kind of hit.

We can get into whole social theories of sport and all that stuff, but how do you think we proceed and balance that? What possibly could the context be? How could we measure and get a handle on both of those phenomenons? What do you suggest or see from your past experiences as a way that we should be moving forward?

**Dr. Patrick Bishop:** I think you're absolutely correct that sometimes when you develop protective equipment it gives a false sense of security to the wearer.

In fact, I think this has happened in ice hockey, where the increase in concussion, in my history of it, has been related to making better helmets. The idea isn't to take the helmets off or to make helmets that aren't as good; it's to educate the players, the coaches, the parents, the administrators and the whole community that this is to protect against certain types of injuries and is not intended to give licence for a free-for-all.

That educational aspect is critical. At the CSA, of course, our job is to write the standard, and then another group certifies it, but we do ask the governing bodies to take care of the education and administration part.

• (1745)

Ms. Cheryl Hardcastle: Does anybody else want to weigh in on hat?

Mr. Jocelyn East: What you are talking about is this cultural shift that we've been hearing about since the beginning of the work of this committee. This cultural shift obviously needs education. People need to understand that protective gear is there to protect, not to become a weapon. That's very important. We also know there are several myths regarding concussions that need to be destroyed. People need to understand that these are myths.

As part of the cultural shift, you have all the gear, the behaviour, the rules of the game and the training method as well. People need to understand that within sport that's what sports hold; I mean, they own the rules of the game, the rule book, the training methods and the behaviour. Sport can look at this. It's part of the prevention aspect that we want to push moving forward. This will help in the training and also in the education of people.

In my given sport, that gear is great and you need to have it, but you have to behave in a certain way as well, to ensure that you protect yourself and are protecting others.

I don't know if you want to comment, Greg.

**Mr. Greg Guenther:** I was just going to make one other comment that I found very interesting yesterday.

I received a social media message about a new tool that athletes could wear to prevent concussions. I think we're going to see a lot more of that.

An organization like the CSA can help us in the messaging to moms, dads, athletes and coaches as to the validity of some of these tools, because they're arguably bogus science. That's a concern: that there will be a lot of people trying to take advantage of the business side of concussions.

The Chair: Thank you.

We'll move over to the Liberals, with Madam Fortier.

[Translation]

Mrs. Mona Fortier (Ottawa—Vanier, Lib.): Thank you very much.

My first question is for Mr. East.

Regarding the whole issue of harmonization, what do you think are the challenges we should focus on with the provinces, territories and the federal government? How should we operate, or what aspects should we focus our energy on to address harmonization?

Mr. Jocelyn East: Thank you for the question.

There are two main vectors in harmonization: the sport community, and provincial and territorial governments. That is why national sport organizations have told us they needed support in the process from provincial and territorial governments. They were not really talking about financial resources. That is not what they meant. They were really talking about tools, by which we mean education tools, return-to-play protocols, key messages and prevention, as well as awareness messages on what should be done when a concussion occurs.

So harmonization lies in those practices. That is where the issue was when the working group began operating. The issue is on a downward trend, but it still exists. There are always new tools, and it is clear that people want to do the right thing. They want to develop tools that will benefit the community the most. However, our fundamental principle has always been that the development of those tools depends on scientific research, which is evolving considerably and at lightning speed. So it is a matter of ensuring that research bears fruit, influences the health field, which, in turn, influences the sport sector. We can then disseminate those tools through different networks. So it is truly our anchor.

• (1750)

**Mrs. Mona Fortier:** Have you looked into any existing legislative frameworks or laws? For example, Mr. Stringer, Rowan's father, did a good job of presenting to the subcommittee the piece of legislation enforced in Ontario. If this is something you have looked into, do you think it could be harmonized across the country?

Mr. Jocelyn East: The position the working group has always adopted on laws, which the members have of course discussed, is that they are part of the toolbox. A piece of legislation is part of the toolbox. If a group is not doing what it should be doing, using the legislation can become an option. However, as we represent six provinces and one territory, each with its cultural distinctions, we are focused on the principled approach. Each administration has the power to decide what is best in relation to its culture and its context. That is why the framework we have developed is based on fundamental principles. Be it a piece of legislation, a framework for action or a provincial strategy, we want to ensure that those fundamental principles are reproduced.

**Mrs. Mona Fortier:** We know that you have 16 recommendations. Do you have any for us? Can you guide us toward specific potential solutions on which we should focus in our study? In your opinion, what should we prioritize in our work right now?

Mr. Jocelyn East: Thank you for the question, which is excellent.

Our main recommendation to the subcommittee is really to ensure that your report will build upon what has been done. You heard from various witnesses throughout the winter.

It is really essential to recognize all the work that has been done, with its strengths and its weaknesses, as we know that it is not complete. It must provide value added and take into account these recommendations, for example. That may be the so-called "umbrella" recommendation, if I may call it that. It is certain that, for the five components of the harmonized approach, there is still work to be done. It's a matter of supporting sport organizations and ensuring that harmonization takes place. So message dissemination remains a major challenge to be addressed. Mr. Guenther mentioned it a few times. In fact, nationally, things are being done, but they must continue to be extended to the entire system. In terms of sport, those key messages must be disseminated.

Another recommendation is to stimulate the partnership in each province and territory between sport, education and health. We saw this in Manitoba and in New Brunswick; provinces are starting to have those working groups. That is fundamental, as each has its own reality, but each has its responsibility in terms of concussions.

There will be more recommendations in our document. [English]

**Mrs. Mona Fortier:** I just want to make sure, Chair, that we have those 16 recommendations in our tool box.

The Chair: The analyst is saying no.

[Translation]

Mrs. Mona Fortier: Could we ask you to submit them to us?

Mr. Jocelyn East: Yes, they are in the document we will submit to you.

Mrs. Mona Fortier: That's great.

Thank you very much, Mr. East.

[English]

The Chair: We'll move over to the Conservatives for about three minutes or so and then we're going to suspend and go up for votes and then we'll be right back.

Dr. Kitchen.

Mr. Robert Kitchen: I'm appealing to the researching minds amongst you. I haven't kept up with the research on the issues of mouthguards and prevention. I'd be interested to hear about any update as to where we might sit with that or any new research or research that's saying no to the value of that.

**Dr. Patrick Bishop:** Mouthguards are good for protecting the teeth. Other than that they don't do much.

**Mr. Robert Kitchen:** What you're saying is there isn't anything new along those lines.

Dr. Patrick Bishop: Nothing.

**Mr. Robert Kitchen:** One of the things we've seen throughout the study is the issue of the SCAT5 and the value of the Child SCAT5 and the on-site issues.

I'm going to bring this to the public health aspect of it. Are you stepping up to educate on that in the school systems with school sports?

**Mr. Greg Guenther:** On SCAT5, we are not doing any education. For any kind of SCAT5 training or education for us we have the Sport Medicine and Science Council of Manitoba, which is made up of medical practitioner membership. Within that group, they oversee the delivery of SCAT5 training. Most of the SCAT5 training is taking place with athletic therapists, medical therapists, nurse practitioners, etc. It's more on the medical practitioner side.

**•** (1755)

**Mr. Robert Kitchen:** Minor hockey put trainers on all minor hockey teams. When I took that course many years ago, compared to my background, I saw a very limited value from my point of view. But education, as we heard from Mr. Stringer too, is an important thing. Do we need to expand that with the training programs that are provided, recognizing that it could inhibit people volunteering?

**Mr. Greg Guenther:** I had an athlete at a tournament who had a suspected concussion. We were fortunate that there was an athletic therapist on site, which in not normal for your typical high school volleyball tournament. That athlete went to the athletic therapist, who conducted SCAT5 and suggested she go to emergency.

We were very lucky that we had an athletic therapist there.

The Chair: Thank you.

We want to thank our first panel for the information. For anything that you would like to submit to the committee, like recommendations or any other information that you feel would be vital and useful for our report, we'd ask that you do so.

We're going to suspend now.

• (1755) (Pause) \_\_\_\_\_

● (1840)

**The Chair:** Welcome, everybody. Thank you to our witnesses for your patience as we got through a number of votes. We're going to be starting with our second panel.

With us today we have, from the Department of Canadian Heritage, major events and commemorations, Assistant Deputy Minister Andrew Campbell. As well, from the Public Health Agency of Canada, we have Gerry Gallagher and Andrew MacKenzie.

We look forward to hearing your statements or testimonies and then the members will have an opportunity to ask you all their questions. It's a full government panel here.

We'll start with Andrew Campbell.

[Translation]

Mr. Andrew Campbell (Assistant Deputy Minister, Canada 150, Sport, Major Events and Commemorations, Department of Canadian Heritage): Thank you, Mr. Chair.

Ladies and gentlemen members of the committee, good evening.

My name is Andrew Campbell, and I am the senior assistant deputy minister at Canadian Heritage for the sport sector. Sport Canada falls under my responsibility and continues to be a key component of Canadian Heritage where our mission is to ensure Canadians participate and excel in sports. Within this mission, the health and safety of all participants in sport, not only high-performance athletes, is a key priority for us.

Over the years, I have been seized by the issue of concussions and impressed by the strong engagement not only of Sport Canada, but of the sport sector as a whole, along with the health and education sectors, and the provinces and territories, which are indispensable, as it has been said.

Indeed, five years ago, concussions were not a priority. However, let me be clear in saying that, while we have made many strides in addressing this public health issue, there is still work to be done. But today, I would like to highlight some of the accomplishments made by Sport Canada in order to help you identify remaining gaps and recommendations for moving forward.

[English]

First, I'm pleased to report that Sport Canada has been monitoring this issue since 2009, and we're seeing increased consciousness throughout the country around the scope of the concussion issue. In 2009 it seemed to be just within the professional sport sector. Shortly thereafter, in 2011, during the sport leadership conference in Toronto, Sport Canada was involved in the organization of a workshop with Dr. Charles Tator and another one around our 2010 Vancouver games Olympic medallists. This represented our first initiative to sensitize the sport community as a whole to the issue of concussions and to highlight the need for action.

At this point, Sport Canada embarked on a robust collaborative work with provinces and territories. The federal-provincial-territorial sport committee and the sport, physical activity and recreation, SPAR, committee allow us to work closely with all provincial and

territorial governments and experts in addressing issues in the sport sector, as you saw earlier today.

Sport Canada is the co-chair of the federal-provincial-territorial sport committee and the sport, physical activity and recreation committee, and through this mechanism, in addition to managing Canada Games, we also address matters that emerge regarding our sport governance, including harassment, abuse, and in this case, concussions. We're very proud of the solid, multi-sector partnership that we've developed in managing concussions, and it is within these fora that the vital decisions on nationwide policies and their relevant implementation are made.

To support the work of this federal-provincial-territorial coordination, Sport Canada hosted the first multi-sector consultation in January of 2015. 2015 also marked the issuance of respective mandate letters for the Minister of Sport and the Minister of Health, who respectively indicated the importance of directing efforts towards the development of a pan-Canadian strategy on concussions.

I'd like to underline that our collaboration with the health sector, represented by the Public Health Agency of Canada, has been crucial in helping us to move this yardstick in both sport and society. My colleagues from PHAC will highlight the important work they have supported.

I also want to highlight that we are working with the education sector through the joint consortium for school health, and that we are building stronger collaboration to reach the school sport system to disseminate required information.

Further, during the 2017 conference of the Council of Ministers of Education, Sport Canada provided a presentation in which we showcased our work on concussion management in sport.

Another foundational event that represented outreach to the wider public was the 2016 Governor General's conference on concussions in sport hosted at Rideau Hall. This event represented a huge success in raising awareness and outreach to communities across the country to emphasize the importance of working together to harmonize our work in this area.

Sport Canada's work also includes a close relationship with 56 national sport organizations and several multi-service sport organizations, some of which have appeared in front of this committee.

**●** (1845)

Since 2016, Sport Canada has been working alongside Parachute Canada to facilitate their work with the national sport organizations in developing and refining their return-to-sport protocols and to ensure that they are aligned with the Canadian guidelines on concussion referenced in previous sessions.

To ensure dissemination of this extensive work, in 2017 we hosted another conference to highlight the work on management and detection of concussions. This work was done with the support of the Sport Information Resource Centre. During that event, we also launched with the SIRC the "We Are Headstrong" national campaign. That campaign, aligned with the Canadian guidelines from federal-provincial-territorial work, was designed in consultation with the sport sector ranging from those at the national level to those in smaller communities. These stakeholders underscored the desire to ensure that the communication on concussion management remains clear, simple and instructive on crucial steps to follow, from the moment an athlete or player receives a blow to the head to the return to sport activity. The "We Are Headstrong" campaign focused on four key general principles to apply to a suspected concussion: recognize, remove, refer and return.

I just presented a list of different activities that Sport Canada has taken on, which demonstrates the scope of Sport Canada's contribution to the wide-ranging management of concussion in sport, including the areas of awareness and detection. Resulting from discussions on pan-Canadian harmonized approaches, which you have heard about already at the committee and in the previous presentation, we have identified that we still have work to do in the areas of surveillance and prevention of concussions.

On the surveillance front, the sport community has indicated that it will be difficult for them to conduct thorough data collection since the type of personal data resides in the health domain. The sport sector has also identified to us a lack of capacity to sustain data collection due to the limited capacity of those who undertake the work. I think, as highlighted earlier, the sector is primarily voluntary.

This is not to suggest that the sport sector should have no involvement in the surveillance component, but at this point the federal-provincial-territorial SPAR ministers have indicated that Sport Canada should discuss with the Public Health Agency of Canada how to enhance the existing systems that my colleagues from the Public Health Agency will describe to you shortly.

We will also explore with the sport community how they can contribute to enhance the surveillance within their reality, given the constraints of the sport system. This will be part of the work that Sport Canada does moving forward.

At the federal-provincial tables, and with Sport Canada, consensus around the next focus for the sport sector has emerged, and this focus is that of prevention of concussions. We have come to a point that the next big logical step is one that the sport sector does own, and that is prevention. It's also an area in which the sport community can show a huge amount of leadership throughout society.

#### **(1850)**

# [Translation]

As you heard from my colleagues from the Federal-Provincial-Territorial Working Group on Concussions, we must turn our focus to prevention and consider this through the vectors of rules of the game, training methods and behaviours.

As part of our next steps, all federally funded sport organizations will be required to incorporate a concussion policy in their operations, covering all components of the harmonized approach.

This policy will include the return-to-sport protocols developed with Parachute Canada.

# [English]

As you can see, collectively and with a significant amount of coordination at the federal-provincial-territorial level and across government organizations, we have done a lot to address concussions, but we still have work to do. This work is mainly in the area of prevention and in ensuring the sharing of knowledge from the national level down to the club level.

Let me thank you again for inviting us here today. It's a privilege to share with you these facts and to answer your questions.

#### The Chair: Thank you.

Now we're going to move to the Public Health Agency of Canada with Ms. Gallagher and Mr. MacKenzie.

Ms. Gerry Gallagher (Executive Director, Centre for Chronic Disease Prevention and Health Equity, Health Promotion and Chronic Disease Prevention Branch, Public Health Agency of Canada): Mr. Chair and honourable members, thank you for the opportunity to address this committee regarding the role of the Public Health Agency of Canada on sport-related concussions. As mentioned, I'm pleased to be joined by my colleague, Andrew MacKenzie, who is the Director of the Behaviours, Environments and Lifespan Division team with the Centre for Surveillance and Applied Research in the Public Health Agency of Canada.

As we've heard, playing sports is part of a healthy and active lifestyle. Regular activity in childhood develops physical and mental health and reduces the risk of chronic diseases later in life. Those include type 2 diabetes, cardiovascular disease, as well as some forms of cancer. However, there are risks.

Concussion in sport is a recognized public health issue because of the frequency of occurrence, as well as the potential short- and longterm consequences, including sometimes tragic outcomes.

# [Translation]

Our role is to: support Canadians to be more physically active in safe and responsible environments; conduct surveillance of chronic diseases and injuries, including traumatic brain injury and concussion; invest in the development of guidance, protocols and tools; and, increase concussion awareness among Canadians.

# [English]

In 2015, the Minister of Health and the Minister of Sport and Persons with Disabilities were mandated to support a national strategy to raise awareness for parents, coaches and athletes in concussion treatment. Budget 2016 allocated \$1.4 million to the Public Health Agency of Canada to harmonize concussion guidelines in collaboration with provinces and territories, focusing on helping students and athletes return to school as well as to sport.

#### [Translation]

In June 2016, the federal, provincial and territorial ministers responsible for sport, physical activity and recreation acknowledged concussions as an important public health issue that requires collaboration between sport, health and education sectors.

#### [English]

Ministers asked officials to develop a plan to harmonize the efforts of governments and stakeholders, leading to the creation of the federal-provincial-territorial concussion working group that you heard from earlier. The Public Health Agency of Canada has been a member of that group.

In July 2017, ministers endorsed the framework for action in five key areas: awareness, prevention, detection, management and surveillance.

Here is a bit more about what PHAC's role is in this. From a surveillance perspective, to help us understand the scale and scope of the problem, the Public Health Agency of Canada collects data on traumatic brain injuries—including concussions—and monitors changes over time. This includes data from an emergency department surveillance system from 11 pediatric and eight general hospitals across Canada. We know that children and youth suffer a disproportionate number of these injuries, particularly while participating in sports and recreational activities.

Our recent surveillance data indicates that there are 46,000 children and youth between the ages of five and 19 diagnosed in emergency departments with concussions in 2016-17. Boys typically have higher rates of concussion for most sports in an age group as compared to girls. Among them, ice hockey, rugby and ringette are the sports with the highest proportion of traumatic brain injuries, including concussion.

Now I'll speak a bit about tools for Canadians.

In 2016, we recognized the need for better and consistent information, tools and resources for athletes, their parents, their coaches and teachers, as well as the health professionals who care for them.

To help address this gap, the Public Health Agency of Canada funded Parachute to convene experts to develop guidance and tools to prevent, identify and manage concussions. These include the "Canadian Guideline on Concussion in Sport", published in July 2017. It outlines parameters for prevention, identification and management, as well as return to activity.

#### • (1855)

#### [Translation]

Return-to-school and return-to-sport protocols were released in spring 2018 to support the safe return of students and athletes to their learning and sport environments.

### [English]

It also includes online training for health professionals, which aims to increase their knowledge of the awareness, recognition and management of concussions. Links to these materials are available on our website, as well on Parachute's website.

The guideline and related protocols form the foundation for subsequent awareness tools and resources. After that guideline was developed, the Public Health Agency of Canada also conducted public opinion research to better understand what Canadians know about sport-related concussions. We learned that there were significant knowledge and awareness gaps about concussion among parents, coaches and teachers, as well as health care professionals.

For example, half of respondents indicated they had little or no knowledge about concussion. One quarter of respondents did not know how concussion was treated. Only 15% could correctly identify the best treatment.

#### [Translation]

Only four in 10 respondents were aware of available concussion resources such as the Canadian guideline on concussion in sport, and the return-to-school and return-to-sport protocols.

# [English]

Budget 2016 also provided funding to support the development of additional practical tools and resources for parents, coaches, athletes, teachers and health professionals.

A few more examples include the "SCHOOLFirst" handbook, which is a concussion tool for teachers and school administrators on how to support students and athletes in their return to school, and the Progressive Activation and Concussion Education app, which is available for use on Apple or android phones. It outlines step-by-step instructions for children and youth, parents and coaches on how to identify and manage a suspected concussion, as well as how to manage the safe return to school and to sport.

#### [Translation]

The Public Health Agency of Canada has worked closely with Sport Canada to create a website on concussions on canada.ca. It includes easy to read information, an infographic, basic information on concussion and links to other online tools, like the ones I mentioned earlier, all in one online location.

[English]

In terms of results to date and looking ahead, I'm pleased to say that over the last few years our partnerships with the sport, health and education sectors across Canada have led us to create a suite of harmonized concussion tools for parents, coaches, athletes, teachers and health professionals. Building on our ongoing surveillance work, we will continue to work with these sectors to increase awareness of these tools and monitor their use.

In the coming months, the Public Health Agency of Canada looks forward to working with Sport Canada, as well as other partners, to share results from a second round of public opinion research that included a focus on understanding what youths' views were in terms of awareness, knowledge and access to resources; enhanced concussion prevention and management in primary and secondary schools; strengthened concussion prevention, identification and management in sports by working with Sport Canada and others; and further increasing the uptake of those resources and tools for parents, coaches, athletes, teachers and health professionals in communities across the country.

[Translation]

I believe that, through collaboration and harmonized concussion approaches, we will be in a position to provide better support to children and youth where they live, learn and play.

[English]

I'd be pleased to answer your questions.

[Translation]

Thank you very much.

[English]

The Chair: Thank you.

We're going to move over to question and answer time, starting with Mr. Fisher from the Liberals.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thanks, folks. I appreciate your being here. I appreciate your expertise in this subject as we are starting to wind down our report.

I'll start with Mr. Campbell for Sport Canada.

Sport Canada funds national sport organizations. Is there a plan or has there been a discussion to tie funding to performance outcomes or participation outcomes in concussion programs, as you do with harassment? I think it was Dr. Frémont who had suggested that would be something we should look at.

Is that something you would recommend this committee consider?  $\bullet$  (1900)

**Mr. Andrew Campbell:** Within the sport funding framework, we have a number of different things that we tie back. The sport funding framework provides the core funding for all the national sport organizations, multi-sport organizations and the Canadian sport centre.

One of the things we are continuing to do and look at is how we update our scorecarding on that. We scorecard organizations on many different elements. Obviously the harassment, abuse and

discrimination pieces that the minister announced in June are an important part of that. We have begun that work on concussions, and we will continue on in that work on concussions.

**Mr. Darren Fisher:** When you say you're continuing with that work, are you continuing to consider holding those groups—those national organizations—to account, that they must participate in programs and then respond and report back with outcomes?

**Mr. Andrew Campbell:** That's exactly what we would be looking at, ves.

Mr. Darren Fisher: Okay, good.

Do you have a time frame on when that might happen?

**Mr. Andrew Campbell:** There are plans afoot. In short order we'll be looking at that.

**Mr. Darren Fisher:** But there were no plans of tying it in with the harassment announcement in June.

**Mr. Andrew Campbell:** In the general area of safe sport, it is one of the areas we had looked at in the previous funding framework, but specifically on concussions, we are looking at it and moving that forward.

Mr. Darren Fisher: Good. That is good news.

The subcommittee has heard about the need or the desire for a concussion awareness week. I'm interested in your thoughts.

I'm also interested in the Public Health Agency's thoughts on something like that, concerning bringing it to the forefront for public awareness, but also what type of role both of your groups may have in a week like that, a national concussion awareness week.

We could start with Mr. Campbell.

**Mr. Andrew Campbell:** As you probably saw, the other part of my portfolio deals with national celebrations and that type of work. We see how those types of weeks and months do work in bringing attention to other types of activities that we have, whether it's promoting something on the Canadian heritage side or whether it is in doing things around sport. I think those are definitely good pieces to look at.

As you see, this issue is so complex because of how many players are involved, and it may in fact give a focus to those players on how to all come together. You could get everybody—from professional sports down to communities to health care professionals to schools—all being able to do something in a very coordinated fashion. Certainly we see the effects when efforts like that are made.

Mr. Darren Fisher: Gerry or Andrew?

**Ms. Gerry Gallagher:** Similar to my colleague at Sport Canada, we do see the value of awareness-types of events like this as a way to galvanize people and bring attention to the new tools and the suite of resources available, both for the parents of the children and youth, but also for what we call the "circle of care" folks around these students and athletes, their coaches and their education settings as well. It's an opportunity to put those pieces together.

We also see that in different parts of the country it can play out quite differently because the contexts are different. It's an opportunity to adapt some of the messaging—as appropriate—to what those contexts might look like and to the use of those tools.

**Mr. Darren Fisher:** For Sport Canada, I'm interested in how you're going to reach out towards or integrate with school sport. I don't know exactly how that works, and we probably don't have time at the moment to get into it, but I'm interested in how a national or federal agency can impact school sport, which tends to be totally provincial or territorial.

**Mr. Andrew Campbell:** In fact, very quickly, it's through making presentations to ministers of education and when they get together at

Mr. Darren Fisher: It's about collaboration and partnering with them.

Mr. Andrew Campbell: Yes, absolutely.

The Chair: Thank you.

Now we'll go over to the Conservatives and Dr. Kitchen.

**●** (1905)

Mr. Robert Kitchen: Thanks to all of you for being here.

I'm going to stay a little bit on Darren's line here, because you gave me questions that I wanted to ask.

On that aspect of taking it to the provincial areas and the school bodies besides the national sport organizations, you've talked about education. That's what we heard a lot of from Mr. Stringer. We heard "education, education and education" and how it's important.

The mandate letter talked about a strategy to "raise awareness for parents, coaches, and athletes" on concussions. The trouble is that I don't see education for parents and coaches.

We hear a lot about it. In my professional career, I went to a lot of meetings. I sat through great meetings and learned an awful lot, but when I walked out of them, I always asked myself what I could take back to my office. In this case, what can we take back to the parents and to the kids who need to learn this at a young age?

I'm not hearing it, so I'm wondering if you can give us some examples of what you're doing. What I'm hearing is that you're talking to the administrators. You're not talking to the coaches and the parents.

Mr. Andrew Campbell: I'm sorry if I didn't bring that out to a bigger piece. Certainly, Gerry and our friends over at the Public Health Agency of Canada also have pieces, but one of the big groups that we've been working through in order to get that into the hands of both practitioners and athletes—and then from the practitioners getting it into a broader area—is to do that through the Sport Information Resource Centre and the Headstrong campaign.

Doing that is actually creating tools. I don't want to say that as the federal government we sort of jump that federal-provincial boundary, but if we're going to get people in and involved, we need to work through groups such as the federal-provincial-territorial committee that just spoke and have everybody using that same harmonized approach.

The key is that harmonized approach and being able to take that to organizations such as the sport information research groups and the national sport organizations. If you are Hockey Canada, Rugby Canada or a number of the people who have come before you, that harmonized approach has really helped, because they can push that out to players, coaches and parents. You start to see that more and more in those types of national sport organizations.

In fact, we're seeing more requests coming in for that information, which is great news, because it means that we're now seeing it go out. That's why, with the Public Health Agency of Canada, we've done the apps, the web products that people can take and then move into their particular sport organization.

Ms. Gerry Gallagher: Thanks for that, Andrew.

Just to add to that in regard to the notion of putting all the information in one place, that was not the case a number of years ago. This is information to go onto the concussion page on Canada. ca in terms of what is a concussion, understanding the new resources that are available, and having the surveillance data in one place, along with all of the resources that Parachute has developed, including return to sport and return to school protocols as well.

Second, we do know that intermediaries matter. Student athletes and parents will go to the school, to the coach and to their physician to get that advice, and the consistency of the advice and that information is really important. It's a problem that we were trying to solve. A lot of that has been improved with the new tools that are available. Again, working with those organizations that have the audience of the professionals in those different sectors is a really important piece.

Again, the last is practical tools based on where people live, work, learn and play. As an example, for the mobile app, you don't need to be sitting behind your computer. It's on the field if you're at a game, so you can be starting to look at some information, as well as monitoring the signs and symptoms.

Mr. Robert Kitchen: I appreciate your presentation here because you talk about online training for health professionals, which aims to increase awareness, recognition and management of concussions. In my previous life, I was a regulator for a profession. I can mandate people to sit in a chair to listen to things but I can't mandate them to learn from that. I can't mandate them to go online. What sort of tracking system do you have to say that people are doing this? If so, can we find out a way such that we have everybody doing it? If they are not interested in it, they aren't going to do it. When we deal with rural parts of the country where we don't have an overabundance of doctors, how do we ensure that it's also in those parts of the country?

**Ms. Gerry Gallagher:** First, I will say that the training is now accredited by the College of Physicians and Surgeons of Canada. Other accreditation is in progress with other professional organizations, so it's good for CME credits.

Second, with respect to the tracking, that is something we're working on as far as being able to understand "pre- and post-" as well as the numbers taking the training.

• (1910)

**The Chair:** We're just going to move over to the NDP, and Ms. Hardcastle.

Ms. Cheryl Hardcastle: Thank you very much for your presentations.

I want to link this idea of funding and funding requirements to responsibilities. Maybe there is another opportunity as we create a requirement to adopt a concussion policy, which I'm really surprised hasn't been done yet. I'd like to come back to that. Could we also have reporting mechanisms so that we're making data collection a funding requirement? I guess I just want to better understand the status quo. If certain things are not being required now that I would have assumed were required, there are probably some other considerations that it would benefit our committee to know about, when we're doing recommendations.

I'm just going to get it out front and then we can use up the rest of my time, because I would imagine you have some strong opinions about concussion guidelines not being required yet for funding from the Public Health Agency. I almost feel like we're at—I don't want to say cross-purposes, but we don't have this momentum. We're not all rowing the same way right now. If there is something the government can be doing to facilitate that, and I mean the federal government specifically, even if it means using certain terminology or something specific when dollars are rolled out or requiring some kind of accountability or transparency. I would like to hear about that from you.

Mr. Andrew Campbell: I'll turn it over to Gerry in a second. I hate to sound like a broken record on some of this, but in the five years moving towards a harmonized approach, this has been very important. Now everybody can, as you had said, start rowing in the same direction. Before that point, there were different ideas at the provincial and territorial level, at the community sport level, among federal and national sport organizations and in provincial sport organizations. Through the community of health care professionals, there were many different approaches that people were taking. The harmonized approach has actually moved things forward fairly dramatically.

As you see in budget 2019, with the investments of \$30 million over five years towards making sport safer, there are opportunities within that to start to look at how we tie some of that funding. We always, at Sport Canada, say there are two sides to the ledger. There is one side of the ledger that is how sports are developing their sport: What are the coaching practices? What are the rules practices? We have measures and judging for that side of the ledger, but we also have the other side of the ledger, which is how people are doing as far as safe sport, governance, gender equity, the other sides that are about the governance of sport and the safety of sport and not necessarily the technical advances of that sport.

As we start to look at prevention, that's one of the areas where the two sides actually get together in being able to say what rules of the game we need to change, what behaviours of the game we need to change and what practices within those need to be changed to make safe sport just part of the culture of sport. We certainly are making headway in those areas.

I'll turn it over to Gerry for more on the health side.

**Ms. Gerry Gallagher:** My comment would relate to the harmonization of guidance and the products that we're referring to. Our role is not to fund national sporting organizations. That lever is with Sport Canada, so I will decline on that.

I will mention as well that the Canadian guidance was adapted from the international Consensus Statement on Concussion in Sport. Again, that harmonization between the international best views on this, informed by evidence, carries into the Canadian context, so that does address some of the concerns you have raised as far as ensuring consistency of not only how that plays out in the sporting arena, but also in recreational settings, on the playground, in the school or at home.

Maybe I will stop at that.

• (1915)

**Ms. Cheryl Hardcastle:** Do you think it has been too early up to this point to require a policy?

The Chair: A yes or no, please, because we're going to move over to the Liberals.

Mr. Andrew Campbell: It's a difficult yes or no—sorry.

I think up to this point we have been requiring it. Can we make it more stringent now? Yes.

The Chair: We go over to the Liberals and Dr. Eyolfson.

Mr. Doug Evolfson: Thank you all for your testimony.

We had a witness on the previous panel, Dr. Bishop. You were in the room. You heard this. He talked about how in sports and particularly in hockey there was a broad classification of how head injury would occur. I believe he used the terms "inadvertent" and "advertent": "inadvertent" being a fall; whereas something more "advertent" being a bodycheck, an elbow to the head or even fighting.

For the Public Health Agency, is there data as to the incidence of concussion due to one or the other, whether it's due to simply an accidental fall, or whether there's some actual action, or some part of the play or a deliberate act that's doing this?

Ms. Gerry Gallagher: I will turn to my colleague Andrew to answer that.

Mr. Andrew MacKenzie (Director, Behaviours, Environments and Lifespan Division, Centre for Surveillance and Applied Research, Health Promotion and Chronic Disease Prevention Branch, Public Health Agency of Canada): We have information coming out of the emergency departments that provides a narrative explanation of what happened, and what caused the accident. You would have to go back and manually review to do such a detailed search. It's not automatically structured that way, but that information does come into the Public Health Agency. Analysis is possible, but it's not analyzed in that way at this time.

#### Mr. Doug Evolfson: Thank you.

Mr. Campbell, this goes to the point I want to get to on this. Of course, being from Canadian Heritage...hockey is considered part of the Canadian identity.

We've heard from some witnesses that there is some influence of what goes on in professional hockey to some of the behaviours in children's hockey, junior hockey. There are certain ages that they can do certain things—no bodychecking before a certain age. Again, in some of the testimony we've heard, as children get older, there's more influence of what they see in pro hockey.

One of the contentious issues, of course, is fighting in hockey, particularly in the NHL. It's technically against the rules, but it's tolerated. It's tolerated in a way that you don't see in other sports. In the NFL, if there's a fist fight on the field, that can be a career-ending incident because the sanctions are so severe.

Have there been any attempts to lobby the NHL to take more concrete steps and actually get the fighting out of hockey?

**Mr. Andrew Campbell:** From the Sport Canada perspective, we don't lobby professional sport organizations. I think what we would say on those, and where we look at the prevention piece coming forward with national sport organizations, of which Hockey Canada would be one, is that they are actually looking very closely at the rules. What are the rules within minor hockey and within hockey that the government, in fact, is funding that could actually change and allow for prevention?

You have seen things in minor hockey, and Hockey Canada has brought forward a longer sanctioning of players who do get into these types of—whether it's a fight, or whether it's some sort of illegal, concussive type of behaviour. There are longer suspensions, and they are looking at how that plays against the rules.

We have that in lots of sports, and I think some of the witnesses perhaps talked about that and how they are looking to change the rule of the game to have it safer from a concussion perspective.

**Mr. Doug Eyolfson:** I've talked to some other witnesses, and there seems to be a common theme where no organization says that they do any lobbying of professional sports. Who would lobby an organization like the NHL to say that what they are doing could have an impact on what younger people are doing and that perhaps they should look at taking concrete steps to get this out of their sport?

• (1920

Mr. Andrew Campbell: I think what we've seen in professional sport is that lawsuits and public opinion are the two elements that have driven some professional sports to change the behaviour within their leagues. I think you continue to see that. As well, there are workmen's compensation claims that go against sport organizations and certainly some professional ones where the players are paid, as opposed to leagues where they're not. You do have workmen's compensation claims, and workmen's comp will come out and talk to people about the assessment they've done around that. You have to look at it as a professional environment. It's a work environment, so those same people who would come out in any work environment would come out in that case.

Mr. Doug Eyolfson: Thank you.

**The Chair:** Now each party is going to have an opportunity to have one last question. We're going to start with the Conservatives with Dr. Kitchen.

**Mr. Robert Kitchen:** The paper that was just published this year in the BMJ on the American Medical Society for Sports Medicine's position statement on concussion in sport estimates that over 50% of concussions in high-school-aged youth are not related to organized sports. Only 20% are related to organized school team sports and anywhere between 2% to 15% of participants might experience a concussion. How can we take this information and extrapolate it to our school system and our public health programs?

**Ms. Gerry Gallagher:** I'll first turn to Andrew to talk about what we do know about the Canadian context for that, and then perhaps I can add comments.

**Mr. Andrew MacKenzie:** One of the data systems that we have available would let us replicate analysis like that. It wouldn't be quite the same as the Americans. We're already working with Statistics Canada to develop a special survey on concussions. That survey will be collecting data next year. It will let us do a very similar analysis to what the Americans have done to get a clearer picture of exactly what's happening.

The Chair: Thank you.

Now we're going to move over to the Liberals with Madame Fortier.

Mrs. Mona Fortier: That was my question, too, although not related to the article.

[Translation]

Here is one of the main questions.

In terms of elite, school or even community sports, and diversity across the country, be it when it comes to rural areas or indigenous groups, there is one particularity. In other words, how do we address the challenge of bringing together various communities?

Can you tell us what the challenges are, if there are any?

Could you also tell us what to do to truly become engaged on the ground?

**Mrs. Gerry Gallagher:** That is the advantage of doing research based on public opinion.

As I said, we carried out a study a year and a half ago. It focused on the general public, parents, coaches, educators, as well as health professionals. It was a matter of measuring knowledge, generally speaking, on concussions in order to take action when a situation arises and provide access to tools. That was an initial survey.

We carried out another study last winter. We are currently analyzing it, so we don't have the final results. This time, we also questioned young people. We asked them the same questions to see what they think. We had three sets of questions to establish a comparison. I feel that this helps us understand the issue.

It is true that, in every context, there are very different situations, but there is incipient openness. In other words, it is not just a matter of telling people to use the tools they have. We are really also trying to understand the attitudes on this issue. That was brought up earlier. It is one thing to have information, but it is another to apply it, be it in the health sector, in a school or at home.

There is another aspect we have not yet discussed. When a situation occurs in a school or in the sport community, there is a team spirit aspect involved. Research has taught us how certain players may react.

[English]

They don't want to let their team members down, so they may not let on that they're not feeling quite on.

[Translation]

We are talking about elements of this kind, but that is truly an overview. We are not there yet, but this helps open the door a crack.

Thank you.

**●** (1925)

[English]

The Chair: Thank you.

To conclude, our last question is from the NDP and Ms. Hardcastle.

**Ms. Cheryl Hardcastle:** We mentioned this at the end of our last meeting when we talked about the role of officiating. There is a role for officiating in the culture shift that needs to happen, but also when we're introducing new information.

And even in education now, I'm thinking in our school system, for your games to be sanctioned the same pool of officials are qualified, whether they're doing the school hockey league or the minor hockey association. I feel that's untapped potential.

I'd like to hear your ideas on that, or where you've identified some of the opportunities.

**Mr. Andrew Campbell:** I think one of the unfortunate parts within the sport system in Canada is that there isn't an equivalent for officials of the Coaching Association of Canada.

We are looking within every national sport organization, trying to get into the officiating side, and that is one of the big pieces on prevention: rule changes and officials. Officials can often see when a player is no longer reacting in a way that would be considered the regular way that the individual would be playing. At those times, our precautionary principle with concussions has to be removed.

Certainly you would have officials who could be in that position. How to crack that nut is one we've been looking at, and quite frankly, it's a difficult nut to crack because there isn't a single national certification. We've been using the same thing on the coaches' side. The Coaching Associating of Canada has been a major partner, and I was going to use that again with—

The Chair: Thank you.

On behalf of the committee members, I'd like to thank our witnesses for their statements and their answers.

If we have missed something that you feel is vital and would help inform our report, we ask that you submit that information to our analysts. We'd like to put it into our report.

That will conclude our meeting.

**Mr. Andrew Campbell:** Could we also thank the committee for the excellent work? We've been impressed with whom you've had.

The Chair: Thank you, Mr. Campbell.

The meeting is adjourned.

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