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Chair

Mr. Garry Breitkreuz

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• (1530)

[English]

The Chair (Mr. Garry Breitkreuz (Yorkton—Melville, CPC)): I would like to bring this meeting to order. This is meeting number 13 of the Standing Committee on Public Safety and National Security. According to Standing Order 108(2), today we are going to be discussing tasers.

We would like to welcome to our committee two witnesses: from the Canadian Police Research Centre, Mr. Steve Palmer, executive director; and from Taser International Inc., Mr. Tom Smith, chairman.

Before we begin, I'd like to ask the media to please excuse themselves from the room.

I would also like to welcome everybody back to the committee. I hope you all had a good break and have come back rested, relaxed, and ready to do lots of work. I think we will have a very interesting study here before us today. So I look forward to this time together.

Just as a word to our witnesses, the usual practice at this committee is to allow you each an opening statement of approximately ten minutes, and then we will move to questions and/or comments, beginning with the official opposition and moving to the other opposition parties and then coming over to the government. Then we'll continue to rotate with our questioning. Questions and answers are usually about seven minutes in the first round for each one, and then we move to five-minute questioning rounds later on.

If you are ready, who would like to go first? I have Mr. Palmer listed first on my program.

Is it okay if you go first, sir? Okay, any time you are ready, you may begin.

Mr. Steve Palmer (Executive Director, Canadian Police Research Centre): Thank you, Mr. Chairman.

My name is Steve Palmer. I've been with the Canadian Police Research Centre for 10 years. I started as director in 1998 and took over the position of executive director in 2004.

For 29 years now, CPRC has been providing leadership in the search for real-life solutions to a wide range of threats to the safety and security of communities and of the first responders who serve them. CPRC works through a collaborative model that brings together diverse groups from law enforcement, responder, and science and technology communities from across Canada and around the world.

We call this a network of technology partner associates, and the success of CPRC depends on these partnerships, which enable us to draw upon the knowledge and expertise of experts from local, provincial, national, and international law enforcement and other government agencies. We also work with a broad spectrum of industry partners, professional associations, universities, research groups, and more.

Through these partnerships CPRC contributes to the development, refinement, and testing of new products, tools, and technologies in real operational settings. The knowledge and results generated from CPRC studies provide the foundation for further advances in policy, procedures, and technology.

It is important to note that CPRC itself does not develop policies and procedures. The work it does is intended to provide tools, information, and recommendations to be taken into consideration by the Canadian police community in the review or development of training programs, policies, and procedures. It strives to provide a central and objective source of knowledge on issues of interest to the police community and other first responders, including but not limited to conducted energy devices, better known as tasers.

Today I would like to take a few minutes to give you an overview of a study that was published in August 2005. I will also provide you with a brief outline of the study we are currently undertaking on behalf of the Canadian Association of Chiefs of Police.

In August 2004 the Canadian Association of Chiefs of Police, or CACP, requested that we conduct a thorough review of the existing research and data available on tasers and provide a national perspective on the safety and use of these devices. We worked closely with representatives from the Victoria Police Department who at the same time were also studying tasers on behalf of the British Columbia Office of the Police Complaint Commissioner. We also consulted with our U.S. and U.K. counterparts, who were in the process of studying the use of tasers at the same time.

For the purpose of the 2005 study we reviewed research and data associated with the use of the taser M-26 and X-26, focusing on three areas: first, medical safety; second, policy considerations surrounding police conducted energy devices operation; and finally, excited delirium syndrome.

A steering committee was appointed to guide our activities and ensure appropriate representation from the community. Membership included medical professionals, police officers, police trainers, policy analysts, and other stakeholder representatives. Close to 100 sources were reviewed, providing a thorough analysis of the existing data on tasers and excited delirium syndrome in Canada. It was concluded that conducted energy devices are effective law enforcement tools with a low risk of harm to the subject when used appropriately.

Available research at the time also indicated that there existed no definitive research or evidence linking the use of tasers to death, but that excited delirium was gaining credibility as a main contributor to deaths proximal to taser use.

Based on the material reviewed, CPRC formulated the following recommendations for the police community to take into consideration.

It became apparent that there are no scientifically tested, independently verified, and globally accepted safety parameters for the use of tasers, meaning that police services are completely reliant on manufacturer claims regarding the safety of the product. CPRC recommended that further work is needed for the national coordination of tasers and other less lethal technologies' issues and testing.

Our review also indicated that more research is needed on the existence and nature of excited delirium and how people suffering from this condition can be best subdued by police to expedite medical treatment.

● (1535)

We also concluded there is a lack of scientific information on death proximal to restraint and recommended that a national epidemiological study of individuals resisting arrest be conducted to gather data on all aspects of these subjects and those dying in police custody. This recommendation is what led to the CACP requesting the restraint study, which was announced in November 2007.

Restraint is one of the three components of our most recent study of tasers. The other two components are to conduct an update of the 2005 report and to look at ways of creating a more centralized approach to evaluating evolving taser technology and encouraging information sharing on tasers.

As part of the restraint study, we are reviewing a variety of documents, such as police reports, ambulance route sheets, and coroners' reports, to identify and evaluate the situational and individual characteristics of persons who resist police interaction and undergo police restraint, as well as to look at the incidence of subject death and the relationship between varying methods of restraint and the risk of death in the restrained subject.

As part of the update of the 2005 report, CPRC is reviewing the expanded body of research that has become available since 2005. Project methodology and structure is similar to that used to produce the 2005 report. The CPRC is working in collaboration with the research community, end users, and other stakeholders, and a working group has been established. Experts from the scientific,

medical, and operational communities will again be consulted for their objective analysis.

A steering committee will be established to guide activities and assure appropriate representation from the community. Membership will include medical professionals, as well as representatives from non-governmental organizations, emergency responder organizations, police oversight bodies, and relevant international organizations. CPRC is also collaborating with experts who have participated in other studies and reviews of tasers nationally and internationally.

CPRC is involved in a number of other taser-related initiatives. We are currently waiting for final approval of a joint research project with the United Kingdom Home Office Scientific Development Branch and the United States National Institute of Justice. The aim of the project is to study and evaluate the new extended range wireless projectile being developed by Taser International to ensure it meets or exceeds the necessary safety standards for use in law enforcement.

CPRC is keeping an eye on the taser cam issue and is considering conducting an independent study into the use of these devices in Canada. A taser cam is a weapons-mounted audio and video recording device that is designed to capture video footage of use of force incidents when taser is deployed.

We are also collaborating with federal, provincial, and municipal agencies to determine the level of interest for a research project that would review the different use of force frameworks being used by the police services across Canada to move towards one consolidated, nationally accepted use of force framework.

Finally, CPRC is currently establishing test-based lines for tasers, and we will begin testing weapons for police services this spring.

The work we do in collaboration with our network of technology partner associates generates important data that can assist decision-makers in developing relevant policy, procedures, or training programs. Building on 29 years of experience, CPRC will continue to build partnerships and draw upon the rich knowledge and expertise found here and abroad to support the law enforcement and responder community in Canada.

Thank you.

● (1540)

The Chair: Thank you very much.

We'll now go to our next witness.

Mr. Smith, please, go ahead.

Mr. Tom Smith (Chairman, Taser International Inc.): Mr. Chairman, members of the committee, I thank you for the invitation to be with you today. My name is Tom Smith, and I'm the founder and chairman of the board of Taser International.

One of my chief duties is to travel to meetings such as this one, where we offer information of a scientific and technical nature to stakeholders, the law enforcement community, and legislators. I take these duties very seriously. Every session I attend is an opportunity not only to share information but for me and my company to learn. Sadly, sometimes these meetings are called due to tragic circumstances.

I intend to give you a brief overview of our company's history, but more importantly, I want to help you understand the scientific and technical research and the operation of our device.

Let me start with the taser electronic control device. What is it? It is a hand-held device that emits an electrical charge, through conducted wires, a distance of up to 35 feet to temporarily incapacitate a subject who poses a threat so that he or she can be taken into custody safely.

My brother and I started our company with the mission of protecting life. That remains our mission today. We have produced two products that are used extensively in law enforcement: the Taser M26 and the Taser X26.

Let me give you a brief history of taser technology. It's been around since the 1970s. It was introduced to the law enforcement market in 1974. However, the technology at the time didn't truly incapacitate; it was more based on pain compliance. Through the 1980s and 1990s it had some use here and there, but it had very limited application.

The reason my brother and I started our company was that we had two friends who were shot and killed in a crazy road rage incident. We looked at that and wondered why there wasn't a better way to stop somebody without having to resort to lethal force. We grew up watching *Star Wars* and *Star Trek* and asked why we couldn't make a non-lethal phaser. That's what led us to start the company. At the same time, our mom was looking for a way to protect herself. She didn't like the options and wasn't comfortable with a firearm.

So we decided to start Taser International and expand upon the history that had been out there for, at that time, 20 years. We introduced the first products in 1994 in the commercial market in the United States. We really got into the law enforcement market in 1999 with the introduction of the M26. After that product was introduced and had seen success and we had started some initial studies, we introduced the X26 in 2003, because it was 60% smaller and 60% lighter and it met the demands of the law enforcement community.

One of the things we also wanted to do was contribute to accountability for the command staff with respect to how use of force is applied. Every taser that has been produced for the law enforcement community has an on-board clock and a computer system that records every time the trigger is pulled. So if there are any accusations or allegations concerning the use of the device, you can actually take the device from the officer and download the date, time, duration, battery temperature, and other information about how, when, and where it was used.

We then went to the cartridge and serialized every single cartridge. In a case where you issue it to a particular officer, you can validate not only where it was used, because it leaves little ID tags all over the scene, but whether it was assigned to an appropriate officer, if it

was his cartridge that was used. Again, it was another step in accountability.

Then several years ago we introduced the taser cam. Now, whatever you are pointing the taser at, when it is activated it records audio and video of the event. That again contributes to accountability so the command staff can make sure there's appropriate, responsible use within the training and policies that have been established. There's no other device today that gives that kind of use accountability when it's used in a use of force situation.

Let's talk a little bit about the electrical system of the taser. When I sit here and pump my fist open and closed, there's an electrical signal that's being transmitted from my brain to my muscle to make that occur. In its most basic form, that's what the taser has copied. We plug it into you remotely with two wires and send that same signal that caused the muscles to contract and release. That is where the success was. When we do that 19 times per second, we can actually make those muscles contract and release to the point where you cannot override it. And that's where we get the true incapacitation.

Now, a lot has been made of the 50,000 volts number, and while that sounds very, very scary in relation to 110 volts coming out of a wall outlet, you can actually get a static shock on a doorknob that's as high as 35,000 or 40,000 volts. So that just tells us the distance the energy will jump through an air gap.

The actual application into the body is at a very, very low power. It's actually less than four milliamps. On the X26 it's about 2.1 milliamps. I think some people are surprised to learn that the energy source for the taser, the batteries that power it, are the same batteries as are in most digital cameras. So we are able to take only that fixed energy supply and make it go high voltage to arc through clothing, but it's at a very, very low amperage. In fact, in terms of joules, which is another measurement of energy, 0.07 joules per pulse come out of the X26. To give you a context, a defibrillator that's used to stimulate the heart usually outputs between 150 and 400 joules per pulse, again compared to 0.07 joules coming out of the X26.

● (1545)

Now let me reference the medical studies. I have these binders before me today. They represent over 1,300 pages and over 120 scientific and medical studies that have been done surrounding the use of the device. The majority of them have been peer-reviewed, meaning they've been looked at by other scientists. I also have studies that have been done in the United Kingdom and by the Canadian Police Research Centre, the Alfred Hospital in Australia, and the United States Air Force, among a few.

We've also gathered together some incredibly scientific and medically minded individuals to create our medical advisory board, like Dr. Hugh Calkins, the director of electrocardiophysiology at one of the leading heart institutes in the United States. We have world-class experts helping us conduct the studies and research so we can answer those questions and know and take corporate responsibility for knowing what we're going to introduce before it hits the marketplace.

We've done the theoretical research surrounding the electricity of the device and the medical research surrounding it, and it continues to go on. We've done animal testing, which was a good base beginning. Over the last several years there have been over 15 published peer-reviewed human studies looking at the analysis of how a taser actually works on a human subject.

While all of that needs to be done and is appropriately being done, we've also had over one million people exposed to the taser—over 600,000 law enforcement officers, and nearly 500,000 field uses in the world. So we've had over one million people exposed to the energy, which again is an incredible number in terms of the use of force and how this device can work.

We have over 12,000 agencies deploying taser technology, and 300,000 officers in the world are carrying tasers on their hips today in 45 countries. The biggest reason this has had a tremendous impact on law enforcement is the ability to reduce injuries, not only to officers but to suspects. That is documented in nearly every agency that has used it. We've seen injuries go down in Winnipeg, Toronto, Calgary, Vancouver, Montreal, and Quebec. Everywhere they have implemented the taser, we've seen injury rates to officers and suspects decrease with overall use of force.

Again, I appreciate the opportunity to be here today. We would welcome the opportunity, should it be needed, to come back at any time to help the committee.

Thank you.

The Chair: Thank you very much.

We'll begin with the official opposition and Mr. Dosanjh for seven minutes.

Hon. Ujjal Dosanjh (Vancouver South, Lib.): Thank you, Mr. Palmer and Mr. Smith.

This is not an easy issue. One of the things I've noticed, with all of the coverage Mr. Smith has received over the last number of years, is the claim—and correct me if I am wrong—that tasers don't kill. We are told—and I have believed it to date but I'm questioning my own belief—that tasers are non-lethal alternatives to guns in the hands of police.

Are you suggesting to us—and if you are, I want you to admit it—that while 300 people have died in North America, 17 of them in Canada, subsequent to being tasered, tasers have not played any part whatsoever in their deaths?

• (1550)

Mr. Tom Smith: Again, I would suggest that you have to look at the scientific research that has been done today. I've been tasered myself. We rely on the scientific experts to look at the data, and in

the studies that have been done, we have not seen anything conclusive come back scientifically to say that a taser has killed.

In fact, in the vast majority of the cases you just referenced, when certain emotions have been removed—certainly these are tragic scenarios, and our hearts go out to the family any time that occurs—and you have been able to look at the science, the taser has been removed in almost all the cases. There are less than 30 cases where the taser has been listed as a contributing factor, meaning it's listed along with other devices. But that is completely different from saying the taser caused a certain outcome.

Hon. Ujjal Dosanjh: Are you then suggesting to me that the 270 who have died—other than the 30 deaths you say may have been contributed to by tasers—would have died regardless of whether or not a taser was used?

Mr. Tom Smith: I'm responding to the medical community—

Hon. Ujjal Dosanjh: No, I'm asking you a question. Give me an answer in layperson's language. Are you suggesting that those 270 would have simply vanished, even if a taser had not been used?

Mr. Tom Smith: I'm telling you that the research that was done on those particular cases has shown that the taser did not cause, or contribute, in those 270 cases.

Hon. Ujjal Dosanjh: And they would have died regardless?

Mr. Tom Smith: I'm not going to make that statement. But I am going to tell you the research that has been done claims the taser had nothing to do with the outcome of those tragic incidents.

Hon. Ujjal Dosanjh: Look, you say the taser is not risk free. Obviously you admit there are risks. And so does the U.S. Department of Defense, which actually concluded in 2004 that it didn't want its military personnel to be tasered during training because, they said, there are risks. So they know what you know, but you are not prepared to actually admit, in simple layperson's language, that those 270 persons might have been alive today if they had not been tasered.

Mr. Tom Smith: Well, sir, with all due respect, there is no perfect solution out there. I have to rely on the scientific community, which said that in those 270 cases, when they examined the science, the taser did not have to do with the outcome of those incidents.

In regard to the U.S. military, there are certain risks. We do cause incapacitation where you can fall to the ground, and that can certainly result in an injury, but it's going to be much more similar to an athletic type of injury. I would also point to the United States Department of Justice study that recently looked at 1,000 incidents and showed there were roughly two or three that resulted in that exact type of an injury. Out of 1,000 incidents, it's a very, very low injury rate.

Hon. Ujjal Dosanjh: Let me preface my next question by simply saying that I still believe the police ought to have this non-lethal alternative, if it is non-lethal—and there are increasing questions with respect to that in my own mind, although I haven't come to a conclusion.

I was the attorney general in British Columbia when, for the first time in Canada, the device was introduced by the Victoria police subsequent to a pilot project. I was assured that it was absolutely non-lethal and that it would be used sparingly by the police. I have now come to believe that it's riskier than I was led to believe, and in fact it is not being used as sparingly as it ought to have been used.

The question I have is the same question that someone asked you in Toronto, I believe. This is not to cast aspersions on police officers, but this is a real question that I think the public needs to know. The fact is you admit that you pay police officers every now and then for certain things. I would like to know, how much have you paid in terms of actual money to police officers in Canada, and for what purposes do you pay them? That's a huge issue of conflict. It's the same police officers who then come to us and say they would like to be able to use this device.

• (1555)

Mr. Tom Smith: I was asked that question in Toronto and, at the time, I did not have an answer. I can give you the answer today: it's two. One is Officer Darren Lauer, who was paid for the design of a holster he created in the year 2000. We paid him for the design of the holster that we used and then reproduced to sell. We have paid one other officer who did some training for us on his own time in Europe.

Hon. Ujjal Dosanjh: I understand you also said that you pay for training.

Mr. Tom Smith: We pay officers when they take their own time for training in the United States. That is correct.

Hon. Ujjal Dosanjh: But not in Canada, not for Canadians?

Mr. Tom Smith: The two incidents I just gave you are the only two in which my company has paid officers in Canada.

Hon. Ujjal Dosanjh: All right.

Let me ask you another question. Most of the studies you have, you say have been done on humans. Initially you started out with the studies on pigs, then you obtained authorization to use this device with respect to humans—and then, obviously, subsequently you had this data with respect to humans.

I've looked at those studies. Most of the studies exclusively focus on the age group between 19 and 43. Those are people who are aware they are going to be tasered. They are healthy people. When you take those two or three factors out, when the police go onto the street and taser an individual they know nothing about, who could be older, younger, or unhealthy, do you think your research takes all of that into account?

Mr. Tom Smith: I believe the research we're doing today is the best available. We are following the ethics standards set by our leading institutions worldwide, not just in the United States.

I can tell you that in the classes where law enforcement officers do get trained, we don't de-select anyone. In fact, we looked at recent studies where the members in the class had a previous heart attack or a previous heart condition, or had been exposed to that. We've also now been subjecting them to alcohol, or that type of application—which is also going to be seen on the street—and we are also exercising them to the point of their becoming acidotic, literally exhausting them, before hitting them with the taser, and then

scientifically measuring their blood, breathing, and pulse rates. We're using an ultrasonic waveform so that we can see how they're reacting. That's being done independently of our company. It's being funded by the National Institute of Justice, the University of California at San Diego, Dr. Ted Chan.

So I do believe the research is out there today. While you'll never be able to look at every possible scenario that exists, the research certainly covers the vast majority of cases that exist within the human body.

The Chair: We will now go to Monsieur Ménard, please.

[*Translation*]

Mr. Serge Ménard (Marc-Aurèle-Fortin, BQ): One of my colleague's first comments makes me realize that you have before you on this committee two former ministers of justice, a former minister of public safety (myself), and two former chiefs of police. This is not because you are appearing, it is probably because of the very fact that we are concerned with public safety. So our views come from our experience and we would like to benefit from yours.

My first question is for Mr. Palmer. Who finances the Canadian Police Research Centre that you represent?

[*English*]

Mr. Steve Palmer: The Canadian Police Research Centre is a federal government organization. We receive all of our funding from the federal government.

[*Translation*]

Mr. Serge Ménard: Fine. Do the members of your organization, or do you, on occasion receive benefits such as travel to conferences or even items of equipment from the companies that make this kind of device?

• (1600)

[*English*]

Mr. Steve Palmer: We do not. We pay our own travel; we are very careful not to accept funding from companies for things such as travel. Normally we will buy the equipment we are evaluating and testing. Sometimes it is customer or industry supplied. We have not received any equipment from Taser International or any funding from Taser International.

[*Translation*]

Mr. Serge Ménard: When you buy these items, you use the money that the government gives you.

[*English*]

Mr. Steve Palmer: That is correct.

[*Translation*]

Mr. Serge Ménard: Have you noticed a significant increase in taser use by police forces in recent years?

[*English*]

Mr. Steve Palmer: We as an organization do not track the quantity of use of force, so I can't give you an accurate response.

[Translation]

Mr. Serge Ménard: In the police forces with which I am familiar and for which I was responsible, taser use is constantly documented. A report must be filed each time it is used.

Are you in a position to keep records of taser use for all of Canada?

[English]

Mr. Steve Palmer: If we were requested to do that, certainly we could take the information from the police services, tabulate it, and provide such a report.

[Translation]

Mr. Serge Ménard: From what I have read, there is one situation in which it is believed that a taser can contribute to death, and it is often when the person is said to be suffering from excited delirium. What are the symptoms of excited delirium?

[English]

Mr. Steve Palmer: Excited delirium is a set of symptoms that can be severe agitation, sweating, violent behaviour, and the inability to process signals and respond to commands and questions from a police officer or anyone else. We consider it a medical emergency, and I think one of the greatest successes since our last report was the police community and the emergency medical services community starting to work together and treating this as an emergency, and we're starting to see lives saved.

[Translation]

Mr. Serge Ménard: Do you think that it should be made clear that tasers must not be used in cases of excited delirium?

[English]

Mr. Steve Palmer: In our report, when we looked at it, we didn't make any stipulation based on the peer review one way or the other on excited delirium. It is seen as an effective tool in rapidly subduing somebody in that state. So we didn't comment against it.

[Translation]

Mr. Serge Ménard: Mr. Smith, does your company sell tasers to civilians?

[English]

Mr. Tom Smith: Yes. We sell to civilians in the United States and have since 1994.

[Translation]

Mr. Serge Ménard: Do you not think that tasers should be used only by people who are fully trained, not only to recognize the circumstances in which they should not be used, but also those in which they should be used as a last resort, just before a firearm is used?

[English]

Mr. Tom Smith: You have to remember that in the United States our citizens are allowed to buy firearms. The taser is completely illegal to be sold in Canada. So in the United States we felt that for somebody like my wife or my mother to be able to access the technology like this to protect herself when she didn't want to have a firearm, we made appropriate accountability of the technology so that we could make sure it was used properly.

Again, on where the product is used in terms of use of force by law enforcement, that is set by the experts, the law enforcement community, relative to the other tools. This is one tool in the tool box. There is no perfect solution, and they will establish when and where it is used. And as far as training is concerned, we provide a DVD and manuals and material to train.

• (1605)

[Translation]

Mr. Serge Ménard: So you do agree that they should be used only by people who have been trained.

[English]

The Chair: That will have to be your final question.

Go ahead. You may answer.

Mr. Tom Smith: Again, you can in the United States obtain a firearm and not have any training. So in our context, we do provide visual material through a DVD and written material through a manual that comes with it for training, and we do make the effort to try to train them, but like with other available devices, there's nothing mandatory or required.

The Chair: Thank you very much.

Ms. Priddy, would you like to go next?

Ms. Penny Priddy (Surrey North, NDP): Thank you, Mr. Chair.

Thank you, Mr. Smith and Mr. Palmer, for being here today.

I think this session and this review was brought about by the tragic death of Mr. Dziekanski at Vancouver International Airport, although many other factors were attached to that as well. But I think it has galvanized people's concern about tasers across the country, which was already beginning to grow. I often refer to it as "taser creep", because I am seeing more and more use of it in situations that, at least as they're described, do not seem to me to be the next step below using a gun.

Mr. Smith, when you're selling the taser, I don't believe you make a recommendation on where it should go in the continuum of force. Is that correct?

Mr. Tom Smith: Yes, that is correct.

Ms. Penny Priddy: Where would you place it?

Mr. Tom Smith: Again, I would tell you that 86% of the agencies that use our technology place it at the point of active resistance, when the physical threat of violence or somebody getting injured is going to occur. That is where it is typically used.

Ms. Penny Priddy: Mr. Palmer, can you answer the same question, please?

Mr. Steve Palmer: We agreed that it was an intermediate weapon and therefore it could fit where the police services saw was appropriate. We don't set policy ourselves; we allow the police services to do that.

Ms. Penny Priddy: But you do make recommendations.

I was in the room with Mr. Dosanjh at the time the tasers were approved in British Columbia. I think most people understood tasers to be a last resort before an officer would use a gun. You tell me it might be an intermediate weapon. Other police forces might tell me it's somewhere else on a continuum of force. I think citizens are concerned that they don't know whether the level of force is consistent across the country.

Mr. Kennedy reported in December and made 10 recommendations about taser use. Could you please tell me how many of those recommendations have been acted on?

Mr. Palmer.

Mr. Steve Palmer: Again, I haven't been tracking the outcomes of Mr. Kennedy's report; we're busily working on our own report.

Ms. Penny Priddy: Okay. I must admit that answer causes me some concern—that Mr. Kennedy has done this review, and while you may not have to follow all the steps in it, there's not some coordination going on between looking at the work that has already been done and the work you're currently doing. So when you say it doesn't have an impact, that concerns me as well.

You may be confronted by police officers and police chiefs or attorneys general at the table, but you also have a health minister and a former nurse at the table. My concern is whether either Mr. Smith or Mr. Palmer, or both, recommend positioning after the taser has been used. I think we know that about 10% of people walk around with cardiac arrhythmia, which may never cause them any problem, but it could under these circumstances. When people are in a prone position you have a buildup of acidosis, so people should be repositioned very quickly.

What kind of medical support—because it seems fairly inconsistent to me—does Taser and the research centre recommend?

Mr. Smith, first, please.

•(1610)

Mr. Tom Smith: Again, we don't have a recommendation. That comes back to the department and how they are going to dictate policy in terms of post-taser application. Other than getting them into custody, if it's medical—medical personnel and so on—their policy is going to determine what they do.

In terms of acidosis, this peer-reviewed study looked at the fact that the taser does not make somebody more acidic during the application of the taser. In fact, the early use of that can end that confrontation where they are exerting and maybe becoming more acidic.

Ms. Penny Priddy: The research I've read says it also depends on the position they're in. We have seen people in prone positions with additional pressure placed on their back, which I think is not any medical personnel's recommendation about the position someone should be placed in.

Mr. Palmer, would you like to comment on whether you make recommendations to police forces about what to do after tasing, or before tasing, in terms of notifying paramedics or EMS?

Mr. Steve Palmer: The evolving best practices are to get the subject away from the prone position as quickly as practical and also

to get EMS on the scene in areas where they are in the excited delirium syndrome situation. Other than that, it's monitoring.

I want to come back to your other question on Mr. Kennedy's report. As you are aware, there were a couple of recommendations in that report relating to the Canadian Police Research Centre, and we're certainly actively involved in pursuing those.

Ms. Penny Priddy: My city probably has the largest police force in the country. There are almost 400,000 in the city of Surrey, which is policed by the RCMP. But many are obviously policed by their own police force.

Do you think you would find any consistent gathering of data about when tasers are used and the result on the person? Would you be confident that we would be able to tell the kind of use they are seeing? I have heard that the information gathering is inconsistent and that there is no guarantee that there will be documentation afterward.

So even if we were to ask you, as Mr. Dosanjh or Mr. Ménard said, if you could gather that information, do you have any confidence that information is even out there?

Mr. Steve Palmer: Use of force reporting is a provincial responsibility.

Ms. Penny Priddy: It's somebody else's.

Mr. Steve Palmer: My understanding is that most provinces now are requiring that police services provide reports when forces use them.

Ms. Penny Priddy: But you have no idea whether it's in a consistent manner or not.

Mr. Steve Palmer: No, I do not.

Ms. Penny Priddy: Mr. Smith, do you get reports back about taser use and impacts?

Mr. Tom Smith: The data that we try to collect in Canada, for example, is what we have been able to get out of the publicly available media. Most departments, as Mr. Palmer represented, keep that data, and they're reluctant to provide it, especially to a manufacturer.

So most of the data we receive is obtained publicly in Canada. In the United States, a lot of departments do submit that information, but again, it's certainly not a standard practice.

Ms. Penny Priddy: I'll just close by saying that it concerns me that a company that would make a weapon that, if not causation lethally, could be a predisposing cause would not be able to receive back information about the impact of that weapon, because how would you know how to change its use?

Thank you.

The Chair: We'll now go over to the government side. Mr. Norlock and Mr. MacKenzie, I think you've agreed to share your time.

Mr. Norlock, you may start.

Mr. Rick Norlock (Northumberland—Quinte West, CPC): Thank you.

I have just a couple of follow-up questions as a result of some of the questions that were given and some of the answers also.

This question is for Mr. Smith. There was some question with regard to the money you've spent on police officers lobbying on your behalf versus.... My question is this: how would you compare the amount of money that you may have spent on police officers—either directly employed for product purchased or developed by them, or designed and sold to you—versus the amount of money that your company has spent on lawyers?

• (1615)

Mr. Tom Smith: First, let me be clear that we have not paid any law enforcement officers to lobby or to sell the product. They were paid for their time to train other officers in the use of force, similar to the standard that's set for all other uses of force.

I would tell that you we've spent a great deal more on legal fees in the last several years than we have on training fees.

Mr. Rick Norlock: Yes, give us an idea of how much you spend on legal fees.

Mr. Tom Smith: We spend right now between \$1 million U.S. and \$1.5 million U.S. per quarter on legal, so between \$4 million U.S. and \$6 million U.S. per year.

Mr. Rick Norlock: Thank you.

I think you've answered this, but I'm going to ask you directly: do you pay police officers to lobby their civilian decision-makers in order to purchase your product?

Mr. Tom Smith: No, we do not.

Mr. Rick Norlock: Thank you.

I have some questions for you, Mr. Palmer. You mentioned Mr. Kennedy and some of his findings. Are you connected in any way with the RCMP?

Mr. Steve Palmer: We have RCMP representation on projects, but we are not part of the RCMP, no.

Mr. Rick Norlock: Thank you.

In some of your answers, excited delirium syndrome came up. I've been doing some reading, both in my previous occupation and currently, with regard to excited delirium syndrome. The question was asked of, I believe, the psychiatric community, and they say it's not a recognized psychiatric condition. However, they do say there have been some studies into this so-called syndrome. Are you aware of that?

Mr. Steve Palmer: Yes, very much so. I guess the National Association of Medical Examiners recognizes excited delirium syndrome as a cause of death, whereas medical practitioners, psychiatrists, and others have yet to recognize it—and they may not, because when they do a physical examination of somebody in a hospital, they have a whole range of other diagnoses they can use.

Mr. Rick Norlock: In the absence of the use of the taser—let's say it was recommended that the taser not be used when a police officer believed they were dealing with a person who had excited delirium syndrome—what other method of constraint do you think would be

appropriate to use to protect any innocent civilians or the police officers themselves?

Mr. Steve Palmer: There's a variety of things, everything from conversation on. When that fails, when the individual is non-responsive or continues to be violent and is a hazard to himself or to others, then you have the option of pepper spray, which is a pain compliance device. If the individual does not react to pain, then you go to others. You can try to break an arm or a leg with a baton—a very violent, damaging weapon. Another technique is called the “polyester pileup”, where you'll have five or six police officers jumping on an individual and bringing that individual to the ground. This often ends in injuries to all concerned, the police officers and the subject.

There's no easy solution to that question on what are the response techniques. It varies, depending on what's available and on hand.

Mr. Rick Norlock: And these are assessments that a police officer or law enforcement agent would have to make within seconds of arriving, or at least within a very short period of time. It would also depend on whether or not the person exhibiting excited delirium actually had a weapon or the potential of acquiring a weapon, in regard to all the circumstances.

I would like to go back to a couple of alternate methods of restraint, the last of course being the one we haven't talked about or that you didn't mention, the use of the metal baton or ASP, which most police officers are equipped with. To your knowledge, have there been any studies that reveal, when it is used, the numbers of injuries that would be sustained in its use? What would those injuries be, from the least to the greatest?

Mr. Steve Palmer: I have seen some studies looking at that. It is very rare that an ASP or a metal baton is used without the incidence of injury, whereas with a taser it's not as common to have an injury when it's used.

• (1620)

Mr. Rick Norlock: We haven't discussed the use of capsaicin, or pepper spray. Are you aware of any circumstances where pepper spray would be used by police officers to little or no effect on the non-compliant person?

Mr. Steve Palmer: I don't have any study to that effect. I have anecdotal information from discussions with police officers of cases in which it has been ineffective.

Mr. Rick Norlock: Would you also say that the use of pepper spray can be a negative to the police when it is used outdoors? In those very few milliseconds or seconds they have to determine their use of force methodology, they also have to determine which way the wind is blowing.

Mr. Steve Palmer: Yes. There are situations where the victim of the pepper spray can be either the police officer or a fellow police officer.

Mr. Rick Norlock: I guess I should say that would apply even indoors, where there is an air conditioner, a fan, or anything else.

Mr. Steve Palmer: Yes.

Mr. Rick Norlock: So the police officer, in a very few seconds, must determine whether to use the ultimate—their sidearm, the lethal weapon—or whether some alternate means of compliance can be used, everything from the ASP to capicum.

Would you not agree with me that if you are going to use the ASP properly you have to be very close to the subject?

Mr. Steve Palmer: Yes, you have to be within physical striking distance of the individual.

Mr. Rick Norlock: Thank you.

The Chair: Your time is up.

I will have to end the first round of questioning. We will now go to five-minute rounds of questioning, beginning with Mr. Cullen, please.

Hon. Roy Cullen (Etobicoke North, Lib.): Thank you, Mr. Chair.

Thank you, Mr. Palmer and Mr. Smith.

Many Canadians, this Canadian included, would have been working on the assumption that a taser would be used as a weapon of last resort before lethal force. But when I saw those video clips of what happened with Mr. Dziekanski at the Vancouver airport, I began to question that. I know there are a number of investigations going on, so you may not want to comment on that specific incident, but I found it quite shocking that four trained RCMP officers were not able to restrain this gentleman without using a taser.

What I am also hearing from Mr. Palmer and law enforcement generally and from Mr. Smith is that it is really meant to be an intermediate response, which I think puts a very different perspective on it.

I would like to come back to that, because I am a little confused about excited delirium syndrome. Mr. Smith, on your website—Taser's website—you refer to a term called “sudden in-custody death syndrome awareness”. Is that the same thing as excited delirium syndrome?

Mr. Tom Smith: I think they are different. Excited delirium syndrome is the symptoms of the individual; the sudden in-custody death scenario is an instance where.... Unfortunately, it has been around for years. It is the very tragic side of law enforcement. About 4,000 to 5,000 in-custody deaths occur in law enforcement annually in the United States and Canada. I think that is a different scenario. Not every one of those instances is excited delirium.

Hon. Roy Cullen: On your website, if I have it correct, you say:

“Signs of Sudden In-Custody Death Syndrome include: extreme agitation, bizarre behavior, inappropriate nudity, imperviousness to pain, paranoia, exhaustive exertion, “superhuman” strength, hallucinations, sweating profusely, etc.”

To me that sounds a lot like excited delirium syndrome.

I'd like to pursue this a bit, because that is quite a different thing from someone using a taser as a last resort before lethal force. I'm wondering whether you could get to a point, if someone is in this excited state.... It seems to me there could be many circumstances when a law enforcement officer presented themselves in front of a person who's about to be arrested who could exhibit these signs. It seems to me that could be quite common. Then the taser might put

them over the top. In other words, they're in this agitated state, they suddenly get tasered, and that causes other physiological responses that might cause a heart attack or something else.

I wonder whether either or both of you could comment on what I just said.

• (1625)

Mr. Steve Palmer: One of the things we looked at in our 2005 study was the effects of acidosis, or the buildup of acids in the blood through exertion. That led to our recommendation of no more than three five-second cycles on an individual, so that you did not have that extensive buildup of acids in the blood during the restraint process.

Hon. Roy Cullen: Mr. Smith.

Mr. Tom Smith: Again, we would take the perspective of nearly half a million people having been exposed in those same real-world situations by the law enforcement community. It's going to be used at a similar level to the OC spray or to the baton. Where there's going to be a physical confrontation between people, always there's inherent risk. That's typically where the taser—again it's one tool in the tool box—is being used in over 86% of the agencies that use our technology.

Hon. Roy Cullen: But it seems to me that if a confrontation is going to result, that leads you to the thinking that it's a weapon of last resort. Yet what I'm hearing from Taser and from law enforcement is that if someone is in this agitated state of excited delirium, it's almost better to taser them, because they could be heading towards a heart attack on their own. It's better to taser them, get them calmed down, and get them to a hospital.

Is it used in circumstances like that?

Mr. Tom Smith: It has been used in circumstances like that, and some of the medical research is actually suggesting using the taser or any device to end that confrontation as quickly as you can, rather than allowing the person to continue down the path of physically exerting themselves literally to death. We have seen medical researchers recommend that the taser can stop that action and get that person into custody, and then, as Mr. Palmer recommended, get them to a medical facility or to medical personnel to assist them.

Hon. Roy Cullen: Whether you agree with that or not, it seems to me that it opens up this huge grey area of how you interpret whether a person is exhibiting all this behaviour. If you look at sweating, bizarre behaviour, and exhaustive exertion, it's a pretty broad range. I'm just worried about law enforcement officers—not with any devious intent—applying that so broadly that it loses its meaning.

Mr. Tom Smith: I agree. One of the things that I think are key for our tool or any tool is a good comprehensive policy on how any use of force, taser included, is going to be employed by the officers, and then good training, so that they understand the policy and understand what the different tools can do, because they do have to make split-second decisions on how they are going to deal with this subject.

Typically it's in a very small minority of cases that they have to use force in dealing with the everyday public, if a good policy and good training regimen is set up to establish how the force is going to be used.

Hon. Roy Cullen: I think that's it for me.

The Chair: That's right. It's only a five-minute round.

Madame Thi Lac.

[*Translation*]

Mrs. Ève-Mary Thaï Thi Lac (Saint-Hyacinthe—Bagot, BQ): I am going to share my time with Mr. Ménard.

We have talked about use in the context of the training received by the users. Is that training sufficient? We are familiar with your research studies. Some people are at risk, such as pregnant women and smaller elderly people. Is this weapon not equally harmful when it is used on people who are intoxicated or on drugs? We have talked about the state of excited delirium a lot today.

[*English*]

Mr. Tom Smith: Again, we go back to the medical research. One of the leading studies that have been completed was done by the Cleveland Clinic, which is the number one heart institute in the United States, where we were provided funds to ask that very question. They put animals on cocaine and exposed them to the taser to evaluate whether there was a higher degree of risk when those subjects were on a drug and exposed to the taser. The conclusion of that, which was a peer-reviewed study, showed that in fact being on cocaine did not increase the risk following the use of a taser. In fact, it made it much harder to stimulate them with electricity. Therefore, it was determined to be safer by the Cleveland Clinic.

[*Translation*]

Mrs. Ève-Mary Thaï Thi Lac: You have only done the tests on animals? Have you done the same kind of test on humans?

• (1630)

[*English*]

Mr. Tom Smith: The only test we've been able to do on humans is with alcohol. We cannot get the ethical review board to take an illegal drug and apply it to human subjects for the testing. We're bound by the ethics of the medical community as to what they can do in terms of studies.

[*Translation*]

Mrs. Ève-Mary Thaï Thi Lac: Do deaths related to taser use involve any one model in particular?

[*English*]

Mr. Tom Smith: No. We've had in-custody deaths occur following the use of both devices.

[*Translation*]

Mrs. Ève-Mary Thaï Thi Lac: I see. Thank you.

Mr. Serge Ménard: Do I have a few minutes?

[*English*]

The Chair: Are you done? Okay.

[*Translation*]

Mr. Serge Ménard: Can I use them?

[*English*]

The Chair: Oh, you're sharing your time.

Go ahead.

[*Translation*]

Mr. Serge Ménard: I see that you have brought a lot of studies with you. What percentage of those studies have you contributed to?

[*English*]

Mr. Tom Smith: In the studies, when you look at our research, we actually highlight that this was a study that was funded by Taser International. I would estimate today that it's about 20% of the research. The 80%, for example, the Canadian research, the United Kingdom research, the Australian research, the U.S. Air Force research, was all done independently of our organization.

[*Translation*]

Mr. Serge Ménard: I would like to know if you agree with the principle that a taser should be used only when a firearm could be used, and that it should be used in place of a firearm.

I will put the question to Mr. Smith first.

[*English*]

Mr. Tom Smith: Again, I'm going to rely on the use of force experts who tell us that you do not take a taser to a gun fight. And that's where 86% of the agencies using our technology have it, at the level of active resistance or physical confrontation between people.

[*Translation*]

Mr. Serge Ménard: That is not quite the question I asked. Should it not be used only when deadly force could be used?

[*English*]

Mr. Tom Smith: Again, I would say that the research we've seen from the use of force experts shows that it is not the only circumstance in which it should be used. It's going to be used at the same levels as pepper spray or a baton, which is before there's a lethal situation with a firearm.

[*Translation*]

Mr. Serge Ménard: Mr. Palmer, what do you think? Can you give us some insight?

[*English*]

Mr. Steve Palmer: I've seen research that shows that someone who has been exposed to a taser has still been able to fire a firearm. So it would put the public and the police officer at risk.

[*Translation*]

Mr. Serge Ménard: Mr. Chair, I wonder if my question could have been translated incorrectly.

I have often heard police officers say that a taser should only be used when they would use their firearm if they did not have a taser. Do you agree? If not, where do you disagree?

[*English*]

The Chair: That's going to be your last question.

Does anybody want to give a brief response?

Mr. Steve Palmer: It would be dangerous because an individual would still be able to fire his or her weapon with a taser. As a full use-of-force option other than a firearm, this could be dangerous.

The Chair: Mr. MacKenzie.

Mr. Serge Ménard: [*Inaudible—Editor*]...with the principle that it should be used only instead of a firearm, and only in circumstances where a firearm should be used.

The Chair: Monsieur Ménard, you'll have another turn.

Mr. Steve Palmer: Sir, we don't write policy. We said that you have lethal weapons and you have less lethal weapons. When we did our evaluation, we said this was a less lethal technology and therefore it fit into the spectrum of intermediate weapon, not lethal force weapon.

The Chair: I think that's clear enough.

Mr. MacKenzie.

• (1635)

Mr. Dave MacKenzie (Oxford, CPC): Thank you, Chair, and thank you to our witnesses.

Actually, I would suggest that the question is backwards. If the officers don't have a taser, it may result in their using a firearm. So it gives them one more tool, and that simply makes sense to me.

We talked a lot about excited delirium deaths. The whole issue of excited delirium deaths came up before the taser was used. My recollection is that back in the early 1990s when we were using oleoresin capsicum spray, or pepper spray as it's commonly known, we had excited delirium deaths then. Am I correct in that?

Mr. Steve Palmer: Yes, you are. The first terminology came up, I believe, in 1988, and the research literature goes back to the 1800s of identifying deaths of a similar cause.

Mr. Dave MacKenzie: And that's not something where a police officer who is in the middle of a scuffle or a struggle, or whatever situation, is going to be able to say that the individual is suffering from excited delirium.

Mr. Steve Palmer: As you probably all know, police officers generally have basic first aid training. They're not trained medical professionals. So a detailed medical diagnostic is not something they'd be able to perform.

Mr. Dave MacKenzie: I think one of the areas we've sort of gone off to is the excited delirium. To me, it's a little bit of a red herring in this issue. I think we need to hear from you folks about the research and what it is.

But if we look at the issues that seem to have developed here today, would I be correct in saying that most of those deal with training and discipline with respect to the use, the discipline that follows the training? When we talk about what we're going to do and how we're going to do it, and all those things, those deal with training.

There's just one little thing I'd like to say. When you were talking about the use of force, Mr. Palmer, I think you talked about four or five officers piling on. There are a lot of police officers in this country who would be happy to have three or four officers with them, so that option is not necessarily viable in a lot of cases.

Tasers in Canada are primarily handled by officers who are specifically trained in their use and in the use of force, ordinarily parts of containment teams, tactical teams, or supervisors as opposed

to everybody on the street. Would you have that knowledge, or could you comment on it?

Mr. Steve Palmer: Again, sir, it varies from province to province. In most provinces, it is at the supervisor or special team level.

To add to your question, if I may, when the police community asks us to look at something, they say, what we want from you is to understand what the medical issues are, how does this work, and are there areas where it doesn't work? They take that information and then they build their policies. From their policies they build their training. The next step is the reporting and the feedback to ensure the quality of service for their communities.

Mr. Dave MacKenzie: Perhaps I'll just go back to the excited delirium. My recollection, going way back, is that we had incidents of people handcuffed and dying in police cars. At the time, we weren't sure why, but I think, after the fact, medical people started to talk about this phenomenon called "excited delirium". They weren't necessarily people who'd had any particular force used on them.

I wonder if either of you could comment, if you're aware or if you could confirm that in fact that has been the case in the past.

Mr. Steve Palmer: It's difficult to comment on anecdotal information that isn't well documented. I will say I have received phone calls from police officers who said, "Steve, I read your report. Thank you, because I had an incident last night. We got the individual to the hospital and they're alive."

As you also know, there were two fewer victims: one is the subject and the other is the police officer with an in-custody death investigation hanging over his head.

• (1640)

Mr. Tom Smith: I can tell you, again anecdotally, that police and the law enforcement community have been dealing with the subject of in-custody death since the 1800s, since policing started. I think the new thing now is trying to understand, medically, how we can minimize the occurrence of those incidents. I think that's where a lot of the research is going today.

How do we recognize that? How do we train a law enforcement officer, who's not a doctor, to recognize in a scenario that's going on that they need to get some medical attention? I think that's where a lot of the research is going today. Whether a taser is there or not, that incident has been around for many, many years. Unfortunately, it's not going to go away.

We also have law enforcement officers who have to implement our laws, have to take people into custody who may choose to fight with them. I've said this before. The way not to get tasered or subjected to any use of force is to not fight with police. I think if you start to look at the body of medical research that's being done today and a lot of the policies, the feedback loop in place to implement better procedures and training so we can get these people help, I think we're going to see a decrease. Unfortunately, I think that's the side of policing you just aren't going to be able to eliminate.

The Chair: Briefly, very briefly.

Mr. Dave MacKenzie: I know it's impossible to prove the negative, but one of the advantages of a taser—and it's kind of the opposite of Mr. Ménard's statement—is that we would have no way of knowing, I suppose, how many people may not have had the use of lethal force because the officer had the option of using a taser, and that would be the intent of the taser.

Mr. Tom Smith: Absolutely. In the United States, with the National Institute of Justice, they're struggling with that question. How do you confirm that this avoided that particular outcome? It ends the confrontation so that the officer isn't getting hurt, the suspect isn't getting hurt.

As Mr. Palmer mentioned, I have travelled the world and heard from law enforcement officers, "Thank you for this technology, because I didn't have to get hurt and I was able to take this person into custody without incident." Again, that's why this tool is available.

It's not perfect; none of them are. It's a very difficult situation. It's giving them another tool in the tool box.

The Chair: Mr. Palmer, you had a comment.

Mr. Steve Palmer: Yes, I would just like to say that it's one of the intents of our restraint study. We're doing a prospective study, which means we're going to be looking at different cities over the course of a year and looking at all cases where there is assaultive behaviour on an individual...*[Inaudible—Editor]*...or greater, with a police officer. We'll look at the medical records, we'll look at the outcomes. In a year we'll be able to answer that question factually.

The Chair: We'll begin the next round now.

Ms. Barnes, please.

Hon. Sue Barnes (London West, Lib.): Thank you very much, sir.

Thank you for coming today.

What is the weight of a person who could be safely tasered? We come in all shapes and sizes. What do you consider a safe weight for your taser to work without harming?

Mr. Tom Smith: Again, in the medical research we've done, the smallest I've seen so far has been in the 60-pound range to upwards of 300 pounds. One of the advantages to this technology is that it's not like a drug where it's dose-dependent based on the size or weight of the individual. Again, the signal that exists within the body exists whether you're small or large. We're just causing a stimulation to occur. In the research we've seen, it's between the 60-pound range and several hundred or 300-pound range.

Hon. Sue Barnes: Sixty pounds would be children's weights. You're not suggesting this should be used on a child.

Mr. Tom Smith: Again, we're relying on the scientific evidence of what we've looked at per se. Obviously there are certain scenarios in the policy and training where you don't want to have to use force, but what are the options available? So we have to rely on the research.

Hon. Sue Barnes: Mr. Palmer, are there any concerns about the different weight issues? Are there any directions about whom a taser can be used on or any restrictions in this country right now?

Mr. Steve Palmer: Again, we didn't set any real policy restrictions; those are provincial jurisdictions.

Hon. Sue Barnes: In the material, you say that the taser is being used in correctional facilities. That's not in Canada, to my knowledge. Do you concur with that?

The Chair: Are you asking Mr. Palmer or Mr. Smith?

Hon. Sue Barnes: Mr. Smith. It's in his material.

Mr. Tom Smith: I believe it's being used in correctional facilities in Canada—some, not all.

• (1645)

Hon. Sue Barnes: Thank you.

This is a very cold country in some parts right now, negative 40. Has any medical work been done about the effects of tasers in a very cold setting? Would there be differences?

Mr. Tom Smith: We've done studies of the functioning of the weapon itself, and that's one of the reasons we use compressed nitrogen, so we can have them function in the cold. The batteries are really going to be the limitation, to manufacture the power supplies.

In terms of the medical studies, our direction was more on the concern that a taser application—and Ms. Priddy mentioned the acidosis—was more related to increasing body temperature, which we did not see in the research that was published. But in terms of the research that I'm aware of, we haven't tasered anybody who's been put into a cold environment.

Hon. Sue Barnes: A lot of Canada is cold in winter, and people are being tasered.

Mr. Palmer, have there been any studies done about the effects of various temperatures when this weapon is being used?

Mr. Steve Palmer: There may be some, but I'm not aware of any. Studies I've seen have looked at the mechanical electrical characteristics of the device in cold weather.

Hon. Sue Barnes: From my reading of the RCMP materials, I see that multiple taserings is permissible right now. Why is it necessary to have more than one taser incident?

Mr. Steve Palmer: Each individual use of force is something that needs to be considered by the police officer at the scene and evaluated as to what is required to obtain compliance of the individual. Each case would be unique, and certainly the officer would have to identify why.

Hon. Sue Barnes: Mr. Smith, you manufacture a product that can continue the taser force for significant lengths of time. Why did you not produce a taser that automatically cuts off so there's no chance of an accidental continuous taser?

Mr. Tom Smith: There's a twofold answer to that.

Number one, when we've done the science.... In a lot of our human studies now we're doing as long as 45- and 60-second continuous exposures so that we make sure medically we can show there's no higher degree of risk in those cases. On the practical application side, in working with the law enforcement community we don't want to limit.... Again, it goes back to what Mr. Palmer said, that we don't limit a guy hitting somebody with the baton twice or spraying with the pepper spray once, or shooting a single bullet. So we're giving them a tool that they will again, through policy and training, have to know how to implement and apply. And until we see medical research that says there's that certain risk, we've made the device work for a five-second cycle. At that time the officer will evaluate if they are going to have to use another application of the taser.

Hon. Sue Barnes: Mr. Palmer, are there any studies being done in Canada that you're aware of about the differences in impact of a multiple taser use as opposed to a single taser use?

Mr. Steve Palmer: A variety of studies have looked at the impacts, the physiological characteristics, of multiple uses, yes.

Hon. Sue Barnes: Could you provide these to the clerk of the committee so we can have them distributed, please?

Mr. Steve Palmer: Yes, I can provide you with the references, anyway.

The Chair: I have a question on the technical aspects before we go over to the government side. It stems from this issue of when it's minus 40 outside.

Are there things that restrict your ability to use it, such as a lot of heavy clothing or this kind of thing? Is there something that people could do to protect themselves from being tasered?

Mr. Tom Smith: There are, and we cover that very extensively in training.

Again, it goes back to the 50,000 volts that I mentioned at the beginning. That allows the energy to arc through up to two inches of clothing. We fire out two darts. So if you think of it as jumper cables, it's a positive and a negative. If you have only one of those darts making contact or if one of them is further than two inches or five centimetres from the body, it's not going to be able to arc the distance and connect to send the signal into the body.

In fact, in the studies we're seeing today, the number one reason for the taser not working in the field is a missed shot, meaning that only one dart hit or they were wearing a very thick coat so that, for example, if it swung away more than that distance, it would not make the connection and send the energy into the body. Then the officer would have to resort to another tactic with the taser, or another tool.

The Chair: Mr. Mayes, you are next on the list.

Mr. Colin Mayes (Okanagan—Shuswap, CPC): Thank you, Mr. Chair.

I'd like to ask Mr. Smith, why do your designers feel it is necessary to have the X26 waveform repeat at 19 cycles per second, given that a waveform is more than perfectly capable of locking up the victim with each cycle? Why not repeat the shock perhaps two or three times per second? What is the reason for that?

● (1650)

Mr. Tom Smith: That's a great question. Actually, that was one of the reasons the original technology did not work that well. When we actually went into the lab to determine the level we needed for incapacitation.... The discharge of our pulse is really in the range of microseconds. The actual pulse lasts for about a microsecond. When you look at that, again, that release causes a single muscle contraction.

What we learned in the lab and what we actually even learned in our human testing early on is that if we used anything less than about 12 to 14 pulses per second, the individual was able to have enough recovery time of their muscle to be able to function, while being jerked around, but once we crossed that threshold we got the true incapacitation, in which the muscle would lock up to the point where they were not able to continue to incapacitate.

We came up with the 19 pulses per second because that was what was required in order to get incapacitation. If we went much beyond that, we didn't see any further lock-up. That was the optimal point where we got the lock-up of the individual. They couldn't fight through it. But going beyond that, there was no further benefit.

Mr. Colin Mayes: So you're saying that's the minimum?

Mr. Tom Smith: The minimum is 12 to 14, and that's kind of on the edge. So 19, on a bell curve, is where we saw the maximum incapacitating effect of locking up the muscle response, where it would not be able to recover to the point of the individual being able to fight through the effect.

Mr. Colin Mayes: Thank you.

The Chair: Now we come over to Ms. Brown for the final round of questioning.

Ms. Bonnie Brown (Oakville, Lib.): Thank you very much, Mr. Chair.

Mr. Palmer, was the study your centre did restricted to a review of the literature, or did you actually have human subjects and test them with taser application?

Mr. Steve Palmer: In the 2005 study, we did not do any human or animal testing ourselves. We reviewed literature.

Ms. Bonnie Brown: Thank you very much.

Mr. Smith, you list 12 studies in your presentation, one of which is this one. How many of those 12 studies involved testing on humans?

Mr. Tom Smith: There are over 15 studies.

Ms. Bonnie Brown: No, I'm talking about your presentation. There's a list of 12, so I have to assume you think those are the best 12 or the most convincing 12.

Mr. Tom Smith: Actually, they're more just a representative sample of some of the international flavour, but I would tell you that the Wake Forest University study at the bottom was a human study on 1,000 taser applications in the real world use. Dr. William Bozeman presented that.

The study above that is by Dr. Ted Chan at the University of California, San Diego. He's performed three or four different studies. They looked at breathing. They looked at the acidosis question.

Ms. Bonnie Brown: I just really want the number. Of the 12, how many had human participants?

Mr. Tom Smith: At least four of them did.

Ms. Bonnie Brown: Mr. Palmer, you said your centre, which is the research centre for Canada, does not track the use of force in Canada. Is that correct?

Mr. Steve Palmer: That's correct.

Ms. Bonnie Brown: Thank you.

Supposing we asked you to do that, do you think the police forces across the country would share that information with you? For example, supposing we asked you to compare the number of times a firearm was discharged by a policeman as compared to the number of times a taser was used, supposing we challenged you with that and gave you the money to do it, do you think the police forces would disclose to you those kinds of statistics?

Mr. Steve Palmer: They're certainly tracking those statistics.

Ms. Bonnie Brown: They are, but I'm asking if they would they share them so we could get a national picture.

Mr. Steve Palmer: Quite honestly, I believe they would.

Ms. Bonnie Brown: Okay. Thank you.

For example, Mr. Smith says in his presentation that he is aware of—that Winnipeg shared with him—the fact that their municipal police force tasered 160 times in 2006. Did they also share with you how many times a gun was discharged by the Winnipeg police?

Mr. Tom Smith: We collected that data from the newspaper. So the only thing it referenced in the newspaper was that particular citing.

Ms. Bonnie Brown: Do we have any figures for 2007 comparing those two things?

Mr. Tom Smith: I have not seen anything. Our source, as I referenced before, was from what has been published in the media, and I think most of this was published at the end of last year and was still referencing 2006.

•(1655)

Ms. Bonnie Brown: Thank you.

It seems to me the research is showing some places on the chest seem to absorb the more damaging effects compared to, say, being tasered on the thigh or the shoulder or something. I'm wondering if you would be willing, in your future training exhibits and public demonstrations, to include the barbs on the chest in the exact locations determined by scientists to be the least safe.

Mr. Tom Smith: In the human studies we've done, we've tried to replicate the animal models where those concerns were raised and we have not been able to do that. In fact, just last week, Dr. Mark Kröll, who is on our board of directors and holds 200 patents in pacemaker technology, was shot with the probe in the centre of the sternum in a demonstration. What we try to simulate in the training is really what they're going to see in the real world and to reach those more susceptible locations is going to be very challenging, but we have seen that duplicated in the human studies that have been published without being able to achieve the same result.

Ms. Bonnie Brown: You suggested to us that you have been tasered and that your mother and your wife have purchased tasers, or you have given them to them.

Mr. Tom Smith: Yes.

Ms. Bonnie Brown: Would you be willing to subject yourself to taser testing on those very sensitive parts of the chest?

Mr. Tom Smith: Yes, I would.

Ms. Bonnie Brown: How about your wife and your mother?

Mr. Tom Smith: I can't speak for them, but I can tell you we have a lot of people who would subject themselves to that testing.

Ms. Bonnie Brown: I didn't mention your mother-in-law, you will notice.

Mr. Tom Smith: Thank you.

Ms. Bonnie Brown: You have in your literature that a 60-pound person could absorb a taser shock and still be safe. How do you know that for sure? Did you expose that to children?

Mr. Tom Smith: No, when the original study was published and peer-reviewed in *Pace*, the journal of electrophysiology—I can't remember the exact title, but its acronym is PACE—they did an initial test when they looked at 60 pounds through 240 pounds and established a baseline safety margin, and that's what we're referencing in our material. That is the 60-pound animal that was done in that test.

Ms. Bonnie Brown: This was an animal, not a person.

Mr. Tom Smith: Correct, because we have not been able to get the ethics committee's—

Ms. Bonnie Brown: I understand. I don't want you to either.

I am wondering why in your promotional literature you would talk about 60 pounds. Does that not encourage people to think it might be applicable to children? Why ever would you put that in, even though it's a scientific fact? Why wouldn't you have thought this could be misinterpreted?

Mr. Tom Smith: Again, the policy and procedure is going to dictate the training. What we had to represent was the science that was done, and that just happened to be the weight of the smallest animal that was used in that particular study, so again it showed a minimum 15:1 safety margin.

Ms. Bonnie Brown: Are you clear that a 60-pound animal could absorb such a shock?

Mr. Tom Smith: That was in that particular test, correct.

Ms. Bonnie Brown: Is that in your promotional material that it's a 60-pound animal, or is the implication that it's a 60-pound human?

Mr. Tom Smith: The implication is that it was a test done by PACE on the animals and that the smallest subject... Again, that's the base model they use when they're doing cardiac study for pacemakers, defibrillators, and even the tasers. That was the baseline model that was used. It was that size, 60 pounds.

The Chair: We'll go over to Mr. Brown now for the next round.

Mr. Gord Brown (Leeds—Grenville, CPC): Thank you very much, Mr. Chairman.

I want to thank our witnesses for coming today.

I know that in light of these high-profile deaths in Canada over the last while there is a great deal of public interest, and Canadians are keen to see the outcome of our study as well as the other studies in Canada. We're just getting into this now, and I haven't had a chance to review some of the outcomes. Obviously you've had studies in the United States.

Mr. Smith, maybe you could give us a general idea of what we will find in those studies when we do a little bit more research.

Mr. Tom Smith: Over 120 studies have been done to date. What we are seeing at this point is that they are generally safe, very effective tools. We haven't seen a scenario where they can repeatedly say that if you have scenario A, B, and C occur you're going to have a certain outcome.

I can tell you that here in Canada, in 16 of those incidents where it did go to six jurors and was peer-reviewed through the process of an inquest, the taser was not even mentioned as having contributed to or been a cause in any of those cases. There are still some new ones pending with the more recent incidents, and we have to rely on the medical researchers to be able to document that. It is certainly an emotional event that we are sympathetic to, but we have to rely on the science, and that's what this information here is providing.

● (1700)

Mr. Gord Brown: What I'm trying to get at is this. In studies similar to this, about the use and the policies and procedures in some of those other studies, what kinds of recommendations will we find?

Mr. Tom Smith: We haven't seen any recommendations in the medical studies other than—

Mr. Gord Brown: No, I'm not talking about the medical studies. I'm talking about studies similar to what we're doing. There must have been some other ones done in the United States when, obviously, there have been some deaths.

Mr. Tom Smith: Like, for example, the International Association of Chiefs of Police. Thought leaders from all over the world came out with this. If you're going to put a taser program in place, here are the steps you should take in developing a policy, in developing good training. Mr. Palmer mentioned something that is a new subject now, recognizing some medical aspects. Instead of just a law enforcement call, it's also a medical call. So those things are evolving in recommendations that you will see. Make sure there's a policy, and make sure there's training and at least some beginning recognition now of some basic medical conditions that may require medical attention.

Mr. Gord Brown: Thank you.

I'll ask Mr. Palmer this question. In terms of studies that may have been done, have we seen any decrease in injuries to law enforcement when they do have those? I don't know how you would measure it, but you may have some studies or some information on how it may make it safer for our law enforcement officers.

Mr. Steve Palmer: That's one area we're going to be looking at in our study as well. Again, there are a few older studies out there and a couple of newer ones that do address this, not necessarily broadly but by individual police services.

Mr. Gord Brown: Okay. I'll go back to Mr. Smith here for a second.

I noticed you're developing another taser. It's launched from a standard 12-gauge shotgun and will have a range of 20 metres, and you're expecting to have that this year. What sort of use do you see for that that would be different from the hand-held unit?

Mr. Tom Smith: One of the limitations today in the use of our device is the length of the wires. We're just physically limited by that distance. I mentioned earlier the *Star Trek* phaser, a longer-range application. In law enforcement use today, one of the things they have is a beanbag round or rubber bullet that can be deployed from a launcher such as a shotgun. So one of the requests we had from the law enforcement, the military in particular, was they would like to be able to reach, let's say, a person in a barricade situation or a person further than a confrontation with you and me. The taser has obviously proven effective in stopping and incapacitating compared to a beanbag, where you're literally just trying to hit somebody with a fast ball and inflict pain, which sometimes they may be able to fight through if they aren't feeling that. This device will be able to take that type of application—it's a higher level of force—hit that individual, and now apply a taser wave to incapacitate them, rather than just hitting them with beanbag rounds.

Mr. Gord Brown: Thank you very much.

The Chair: We will now go back to the government side.

Mr. Cullen, please.

Hon. Roy Cullen: Thank you, Mr. Chairman.

I'd like to come back, if I could, to this sudden in-custody death syndrome awareness.

On your website, Mr. Smith, it says that if a subject is exhibiting signs of behaviours associated with sudden in-custody death syndrome—and you then list that these signs are extreme agitation, bizarre behaviour, inappropriate nudity, imperviousness to pain, paranoia, exhaustive exertion, superhuman strength, hallucinations, etc.—consider combining the use of a taser device with immediate physical restraint techniques and medical assistance.

When I saw the videotape of the Mr. Dziekanski experience, it comes back to this issue of using the taser once or twice or three times or four times. I don't recall how many times they used it, but it seems to me it was certainly more than once and maybe more like three or four times. In the way you look at it, if someone is exhibiting these symptoms, could you use one shot of the taser and then, if you have four RCMP officers especially, could you not then rush in and subdue this person? Do you have to actually taser them multiple times? I don't understand how that works.

Mr. Tom Smith: In the Vancouver case there are nine minimum investigations going on that I'm aware of, so I don't want to speculate on that particular instance. What I can tell you is, in the research that we're seeing today, sometimes more than one application is required to give the officers the ability to take that individual into custody.

I think people need to understand one of the fallacies about the taser device. It does not knock you out, it does not make you go unconscious; it only incapacitates during the stimulation. As soon as that stimulation ends, there's nothing keeping that individual from getting up, from re-engaging in the fight, from getting their full faculties back. If they weren't able to restrain them or get them into custody and they chose to continue to fight, there have been times when the second, third, or fourth application is needed in order to get that person restrained.

• (1705)

Hon. Roy Cullen: But wouldn't you then say, as you're recommending on your website, that if they're exhibiting these behaviours—which seems to have been the case with Mr. Dziekanski, which I know you don't want to comment on specifically, though it's the state he seemed to have been in, to me any way—you'd use a taser and then try to use physical force, rather than using the taser repeatedly?

I suppose you have the dilemma that one of the police officers will get in between the taser and the person you're trying to subdue. But what you're recommending on your website is not that you absolutely multiple-taser the person to the point where they're totally incapacitated, and then apply physical force or constraint, but that you do those simultaneously. Is that right?

Mr. Tom Smith: That's the standard trend out there for any use of force. You don't want to have somebody just sit there and hit him with a baton over and over again either. The idea of using force by law enforcement is to take that person into custody with the least amount of force possible in order to reduce the injury. Certainly we cover pretty extensively in our training the point that we don't want somebody to just sit there and keep pulling the trigger over and over. This is not a spectator sport, so you need to get them in and get them restrained and get them into custody, so you can minimize the amount of force. But again, with policy and training, that's where they're going to determine how that's done at the particular agency.

Hon. Roy Cullen: There was a piece on some television program about a woman who was quite drunk, and the police officers tasered her mercilessly; she was lying on the ground, and they even tasered her when she was in the police car. To me that's an abuse of the taser, and probably 1%, or half of 1%, of law enforcement officers would use that force. And I think the person concerned was disciplined.

But how do you then ensure that if you're tasering someone and you try to apply physical force at the same time, the police officers don't get in the middle of it and get tasered themselves?

Mr. Tom Smith: That's part of the reason we recommend that the officers get tasered in the training, so that while that officer is getting tasered, the other officers are hands-on and touching that officer so they can realize the electricity is very lazy; it's trying only to go between those two points. As long as they're touching the extremities or are away from that area, it's not going to go to them. But if they do touch that point of contact and become part of, let's say, the circuit here, they will get that stimulation.

So we really emphasize in the training that you can go hands-on with the taser. Unless you touch the probe or get in between the probes, it's not going to come to you. That's really part of the purpose of the training, so they can experience what the taser feels like and

know the amount of force they're applying and know that when they're holding the subject up, it's not going to come to them just because they're touching the individual.

Hon. Roy Cullen: I have one final question if I may. It's a very short one.

Mr. Smith, do you know the temperature of the electric arc of a taser?

Mr. Tom Smith: I do not know the temperature, off the top of my head.

Hon. Roy Cullen: Could you let us know through the chair?

Mr. Tom Smith: Certainly.

The Chair: Monsieur Ménard, do you have any further questions, or does the Bloc?

Mr. Serge Ménard: Yes, just a few.

[*Translation*]

Mr. Smith said earlier that since tasers have been in use in major cities—he mentioned some large Canadian cities—the number of deaths has decreased.

Mr. Palmer, I assume that you are particularly interested in statistics on the use of force by police forces in Canada. Can you confirm Mr. Smith's impression on this?

[*English*]

Mr. Steve Palmer: We do not have those statistics identifying what the injury rate was prior to the use of tasers and what it currently is. It is one of the areas we are seeking information on to see whether we can capture that information in time for our report in August.

[*Translation*]

Mr. Serge Ménard: Mr. Smith, you have often mentioned cases that have occurred. I do not know if you are providing statistics, but you are certainly giving the impression that you are seeing a reduction or an increase in something.

What is your basis for saying, for example, that only 30 cases involved taser use? Where did those figures come from and who compiled them?

• (1710)

[*English*]

Mr. Tom Smith: In a lot of the instances the departments, at the department level, did track injury rates before versus when a taser came in. Obviously they've had injuries in the past. For example, in the United Kingdom, they were documenting injury rates to officers. When a taser was being deployed, there were no injury rates on those particular instances where a taser had been deployed to an officer. However, if an officer had used a baton or gotten into a fist fight, there'd been an injury and the officer had to go to the hospital.

A lot of that data is in worker compensation claims made by the officer and it's held by the cities. But a lot of that data really comes out of the agencies reporting back to us. Unfortunately, anywhere in the world, there's no central reporting of injury rates to officers or suspects, so a lot of that data is used by the local municipalities.

I included a PowerPoint presentation that gets some of that data for your reference. That is taken from public records at the cities and the departments that report those statistics. And it's, by far, not comprehensive for every agency.

[Translation]

Mr. Serge Ménard: Mr. Palmer, in Canada we have the Uniform Crime Reporting Survey. As a result, we have very precise statistics on crimes that are reported to police officers.

So I do not think that it would be too much to ask our system to have a box on a form to be checked whenever a taser is used, because it always leads to an arrest and therefore to a report.

[English]

Mr. Steve Palmer: That's the information that is probably already captured by police services. Again, I'm not sure whose jurisdiction it falls into, whether it's federal or provincial, in tracking statistics. But it's certainly not the Police Research Centre's position or responsibility to demand that information from police services.

[Translation]

Mr. Serge Ménard: I also think that the statistics are compiled by Statistics Canada. You are familiar with the Uniform Crime Reporting Survey, correct? That could be one of our recommendations.

There are rare cases where police offices have to use two tasers in particular circumstances.

Mr. Smith, is there documentation describing when two tasers have been used and both have hit their target? After all, two tasers could be used when there is a chance that one will not hit its target. Does the fact that someone has two tasers increase the risk a lot?

[English]

Mr. Tom Smith: We have not seen an increase in the risk factor with multiple exposures to the taser. The way it was relayed to me is that if I have two cups that each have 100 degrees of water and I pour them together, I don't have 200 degrees of water. I have more of 100 degrees of water. And electricity, again, follows very similar principles to water. It's not a cumulative effect that each time you add it, you're going to be accumulating it in the body.

The Chair: We'll actually have to wrap it up.

Ms. Priddy, did you have any more questions? You did. Okay, go ahead, please.

Ms. Penny Priddy: Yes, please. Thank you.

They're training questions, if I might.

If a city in Canada of a couple of hundred thousand people decides to buy tasers from you—and maybe they're going to buy 50, I don't know—who provides the training?

• (1715)

Mr. Tom Smith: Typically it's law enforcement officers who will provide the training. We do what we call a “train the trainer” program where they will attend a taser training. It's a two-day course to become an instructor, where they will learn how the taser works and then they will take that material to go back and develop a use of force policy and a procedure. Our two days really focuses on the taser itself.

Ms. Penny Priddy: In many “train the trainer” programs—and I'm not suggesting around tasers but in other “train the trainer” programs—there is follow-up to document or evaluate how well the training has worked, have people been able to work with it, have there been any problems with it, etc. Do you do that?

Mr. Tom Smith: We absolutely do. In fact, we just released version 14 of our own trainings over the last several years. And Mr. Palmer mentioned earlier that the feedback loop is a key factor for any training, so we take that very seriously also. We'll continually update to provide the latest material to send out. We've done 14 different versions.

Ms. Penny Priddy: The reason I'm worried about that is that there's at least one case I'm aware of in which I think it was actually a police officer who brought a lawsuit—I believe, but I am not certain—because of a taser. The comment was made that when he was being voluntarily tasered and injured his back the officers who were tasering him had not been holding him correctly. Therefore, I do worry about how training can get diluted, if you will, if there is not extremely consistent follow-up with it. So in that circumstance, I wanted to know about training the trainer.

The other part I'm interested in, and it just seems an irony, is whether the tasers bought by individuals in the United States are the same.

Mr. Tom Smith: The electrical pulse they deliver is the same. We limit the distance to 15 feet, where for law enforcement it's 35 feet.

Ms. Penny Priddy: And they get a DVD.

I just think of the irony. If I buy a new bread maker or lawnmower, I get a booklet and a DVD. If I buy a taser I get a booklet and a DVD for how to use it. There just seems to be some inconsistency in training. However, we're not talking about selling them here.

Mr. Palmer, do you think the training that is going on across the country is consistent? Canadians have a right to know that they are safe and that equipment is being used safely, no matter where they live in this country. Do you think the training is consistent?

I'm concerned that you can only make recommendations; you can't collect data from people in Canada primarily. We're told that only provinces can make recommendations. Is that also the case with the RCMP, that you could only make recommendations to the RCMP?

Mr. Steve Palmer: As an organization, we have no legislative authority, no.

Ms. Penny Priddy: We have three or four organizations all involved in something that citizens are very concerned about, yet both the responsibility and the coordination seem to be spread amongst a number of organizations—provincially, federally, municipally, the manufacturer, the training, etc. It doesn't seem to me there's much coordination so you have somebody who insists that, across the country, this is the training, this is the protocol; you call an ambulance, a paramedic, before you use it. These are the things we guarantee citizens when tasers are used.

I must admit that's of real concern to me.

Thank you.

The Chair: Do you have a comment, Mr. Smith?

Mr. Tom Smith: Yes, I do. You bring that up in the context of just a taser. I would say we are following the industry standard—what is being done for pepper spray, for the baton, for physical restraint, for firearms. The standard that's out there, that we're following in training the trainer and the way the officers are being trained, is consistent with the way they're trained in use of force in general.

I would just say you're probably going to want to look at all of that, because this is, again, just one piece of the puzzle in the whole training application for law enforcement.

Ms. Penny Priddy: Of course, one can always be better and therefore set a higher standard for other implements that other people are training with.

Mr. Tom Smith: We think we have the best training out there today.

The Chair: We'll now really go over to the government side.

Mr. MacKenzie.

Mr. Dave MacKenzie: Thank you, Mr. Chair.

Actually, Mr. Smith, I appreciate what you just said. I thought we'd gotten way off base. All we're talking about is the taser. We don't check off boxes when our police officers use an ASP. We don't check off boxes when they use Monadnock sticks. We don't check off boxes when they use a number of other use of force options.

With all due respect to what Ms. Priddy said, the provinces are responsible for the administration of justice. Not only are the RCMP in provinces across the country, they are also municipal forces in those provinces. The provinces, as I think Mr. Dosanjh said, set their rules across the country. The Province of Quebec, the Province of Ontario, the Province of British Columbia all may have different reporting documents, if you will, for the use of force.

Mr. Palmer, I would just ask you if it would not be virtually impossible to try to gather the information that the committee's asking, because there may very well be different interpretations across the country by the provincial authorities on what's required to report the use of force, and tasers are only one small part.

• (1720)

Mr. Steve Palmer: Yes, you're right. It would take a consistent agreement negotiated at the Solicitor General level, I suspect, among all provinces, to get the information and establish the reporting systems, etc., to bring it all in on a consistent basis. They are used, but it's not the principal tool of police. It's used in a very small percentage of the time.

Mr. Dave MacKenzie: That's good enough. Thank you.

The Chair: Okay. We will now go over to the official opposition.

Ms. Barnes.

Hon. Sue Barnes: Thank you, Mr. Chair.

“Research” is a word that has different meanings to different people. When I think of peer review research, I'm thinking of people with doctorates doing some studies and having it verified by other people of that level. You mentioned the Canadian Police Research Centre. Has there been peer-reviewed research done in the Canadian Police Research Centre, say, within the last five years?

Mr. Steve Palmer: Yes, I would say the work that we did on the taser last time...because we used a committee that came up and did peer review research that included scientists, medical practitioners, and others. In that case, it wasn't published in an established journal. We had our own peer review committee look at the work. We've also had some of our people publish in peer review journals.

Hon. Sue Barnes: Okay. My understanding, from your answer to Ms. Brown earlier, was that it was a literature review.

Mr. Steve Palmer: Yes.

Hon. Sue Barnes: That's not peer-reviewed research.

Mr. Steve Palmer: The review, the comments, and the recommendations that we made in the report went through a review committee of scientists and researchers, so they did have that independent oversight, a peer review, if you wish to call it that.

Hon. Sue Barnes: Okay. Peer review has a specific meaning in research communities.

Mr. Steve Palmer: Yes.

Hon. Sue Barnes: I think we're not talking about the same thing.

I'm going to ask Mr. Smith this. I notice you have different countries here, often in the Commonwealth—the Australia, the U.K. home branch. Did any of these countries, before using your product, do their own physical research on people? Canada has not done that, but did any of these countries do it?

Mr. Tom Smith: Yes, they did.

The Home Office actually spent two years and £3 million. They did the same type of protocols, and they are now collecting the field data as well. When they went out to the initial use in 2003, I believe it was, they only limited it to five agencies. It was very controlled, and I believe it was over 18 months where they were very controlled in the use.

In France, where this unit is used by the police in the gendarmerie, they did do human testing prior to allowing the law enforcement... following the protocols that had actually been done in both Canada and the United Kingdom. There is a lot of sharing of knowledge among the countries and institutes of justice between Europe and North America, and in Australia the Alfred hospital had done the same type of research. So it's not just research that's been done in the U.S.; there has been human research done outside the U.S. as well.

Hon. Sue Barnes: And that has not been contributed to in any way, shape, or form by your company?

Mr. Tom Smith: Absolutely not.

Hon. Sue Barnes: Thank you so much on that.

This is a public safety committee, and I can think of other ways our federal government is involved in the health of Canadians. For example, with drug research, if a new product comes in the market, we don't take the U.S. studies; we do our own studies.

I would be very interested to go through this process, because I don't think most of us are experts in tasers, and there is a real concern in this country over their use. I see this even from clippings earlier today. We see in some of the studies on pigs, for instance, in the U.S. that there is a problem. Do you want to address that study? It certainly brought up some problems.

• (1725)

Mr. Tom Smith: It did, and that's why, when that study raised those concerns, the human studies went to find out if we had the same effect as they saw in those particular studies that were done several years ago, because obviously the human study is the model where we're using it. We did not reproduce it, and the studies that were done independently of us by the University of California at San Diego were unable to reproduce the results.

The committee needs to understand that the reason you start with the swine model in the animal studies is they are much more susceptible to electrical stimulus than the human being is. If you're proving it at a certain level there, it's certainly applicable to a human, but if you find something there, we then go to the human model, and we've not been able to reproduce the effect.

Hon. Sue Barnes: You're talking about an animal that has a limited brain capacity. But you're talking to, say, a 100-pound

person. Are there any studies done on the psychological effects of having been tasered?

Mr. Tom Smith: I'm not aware of any psychological studies that have been done. I know we have worked with the mental illness associations both in Canada and the United States. In fact, we were endorsed by the national schizophrenic group within British Columbia several years ago as being a good tool to have available to police, again, as another tool in the tool box. But there are no peer-reviewed published studies that I'm aware of on psychological effects.

Hon. Sue Barnes: Mr. Palmer?

Mr. Steve Palmer: No.

Hon. Sue Barnes: Thank you.

The Chair: Are there any further questions?

Seeing there are none, I would like to thank our witnesses very much for their attendance at the committee today. I appreciate all the information you have given to us. We will find it very helpful as we go forward.

The meeting is adjourned.

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