



House of Commons
CANADA

Standing Committee on Public Safety and National Security

SECU • NUMBER 022 • 2nd SESSION • 39th PARLIAMENT

EVIDENCE

Wednesday, March 12, 2008

—
Chair

Mr. Garry Breitkreuz

Also available on the Parliament of Canada Web Site at the following address:

<http://www.parl.gc.ca>

Standing Committee on Public Safety and National Security

Wednesday, March 12, 2008

• (1530)

[English]

The Chair (Mr. Garry Breitkreuz (Yorkton—Melville, CPC)): I'd like to bring this meeting to order.

This is meeting 22 of the Standing Committee on Public Safety and National Security. We are continuing our study of tasers.

I would like to welcome to the committee the four witnesses before us: Mr. John Butt, consultant with Pathfinder Forum; Ms. Christine Hall, emergency department physician; Monsieur Pierre Savard, professor at the University of Montreal; and Mr. Bernard Lapierre, ethicist and philosopher, also from the University of Montreal.

Welcome. We very much look forward to your testimony. I hope we can go the full two hours. Unfortunately, however, votes are scheduled in the House.

The Clerk of the Committee (Mr. Roger Préfontaine): The bells should start at 5:15.

The Chair: Okay.

So we'll try to get in as much of your testimony as we can. The usual practice is to allow you an opening statement of approximately 10 minutes. There's a little leeway there if you need it. Then we will go to questions and comments from the different political parties.

Without any further ado, we will begin with Mr. Butt.

You can introduce yourself, Mr. Butt, and maybe give us a little bit of your background before you begin your statement.

Dr. John C. Butt (Consultant, Pathfinder Forum, As an Individual): Good afternoon, Chairman and members. First, may I say I'm pleased to be here.

I only represent myself in these matters. My present status as an independent consultant has taken me to the issue of reviewing deaths, sudden deaths in particular, both in the criminal and civil areas of court, and in some circumstances the taser has been involved in these reviews.

My background has been as a pathologist for 37 or 38 years. I've been a medical doctor from the beginning and have held the position of senior death investigation authority and chief medical examiner of the Province of Alberta, and the Province of Nova Scotia latterly. I have done independent consulting for about 20 years, and I have done it pretty well exclusively since 2000. My practice includes cases both in Canada and the United States, and I have had referrals from the United States in the general area of discussion involving, in

the greater context, persons who have been "taken down" by the police. That's a broad statement, but I hope to bring it to a somewhat narrower focus—and I'm sure my colleague, Dr. Hall, will be doing that as well.

So I'm only going to review the features that, on reflection in my mind, may be questions that you have in the first place or that may be somewhat contentious.

First of all, what is the role of the coroner or the medical examiner as an official? I say this in regard to them as an official, not necessarily in regard to another professional individual, for there are coroners in Canada, for example, who have no special qualifications, meaning they are not medically qualified and do not do autopsies. That's a separate office, as you may be aware, and there are statutory obligations for them to answer certain questions.

The two questions that are relevant to your own examinations are, first, what is the medical cause of death? It is a specific issue whether or not this exists; it's not always determinable. But of course in certain cases, it's very obvious. For example, in serious trauma it's very obvious. But as we'll see, there is no specific pathology associated with any of these take-down procedures. Very uncommonly is there specific pathology, including with the taser.

The other question that is asked of the coroner or medical examiner is, what is the manner of death? The manner of death is whether the death is natural, or, if it's unnatural, whether it is an accident, a suicide, or a homicide, or if those entities don't lead to a conclusion, if the manner of death is indeterminable.

In some situations, as I'm sure most are aware, there is a process called the inquest or, in some provinces, notably in Nova Scotia, Manitoba, and Alberta, a public inquiry. There, the questions that I mentioned formerly—the cause of death and the manner of death—are determined in an open public forum, sometimes by a jury.

The pathologist's role is different, and it is essentially to conduct an autopsy. In some provinces there are specialists in sudden death autopsies. You're all aware that there has been a substantial discussion about forensic pathology recently in the press, and many of you will be familiar with the types of issues in which pathologists are involved. The commonest one, of course, that reaches the press is murder. Without in any way belittling the issue of taser deaths, or making an issue of taser deaths, when they occur in public, they attract almost as much attention as a homicide does—in fact, in current memory, perhaps even more so.

● (1535)

The pathological features associated with these conditions I'm sure you're perhaps curious to know. There are no specific or unique features. Very seldom in taser deaths is there any form of injury. The dispersement of the two barbed probes or the use of the push stun method with a taser may cause isolated small areas of burning of the flesh, and I mean isolated. If you have seen the probes, you will know that they are very, very small, so the area of coagulation of the tissue is basically no bigger than the head of a pin.

As far as the mechanism of death is concerned, which I haven't discussed, the question becomes whether it is related to potentially one or two systems: the respiratory system or the cardiovascular system. I'm going to keep this brief by saying that the determination at autopsy of the effects of a cardiac arrhythmia is impossible. Under no circumstances where there has been a cardiac arrhythmia—under any circumstances—whether that relates to a recent heart attack or deployment of the taser...it is not possible at post-mortem to determine this, nor is it possible at post-mortem to determine under any circumstances, unless there's a bitten tongue, whether the person might have had a seizure.

There are very few changes that are even slightly related to the taser. One of them may be changes in the microscopic appearance of striated or voluntary muscle. I'm not going to go into the details of it, but it's more a feature of a high temperature than anything else. That's called hyperthermia. There may be small features associated with falling or with other minor blunt trauma when the person collapses as the result of the electrical shock.

Without question, I'm sure you have heard of the issue of excited delirium. I feature that, as I feel certain Dr. Hall will, because in the realm of medical practice and particularly that of the forensic pathologist or the death investigating officer, on the issue of excited delirium or syndrome, a group of symptoms is common, and one cannot ignore that.

I would comment on it further to say that it's regrettable that it has been said in the media that excited delirium is not in the parlance of psychiatry. Delirium is common in the parlance of psychiatry, and excited delirium I'm sure is well known to every doctor in the hospital who has to deal with patients who come in in an excited state. That's Dr. Hall's area.

Excited delirium is seen in other forms of takedown. It has been seen in the capicum spray. It has been seen in the issue of neck holds and of physical restraints on the ground such as hog-tying, piling on top of the victim, and a number of other restraint techniques. Excited delirium has received more prominence, I believe, since cocaine has become a common drug in the community, and certain forms of cocaine, it is said, are more likely to cause excited delirium than others.

Excited delirium is also common in certain psychotic states, pure and simple. That means bipolar disorder in the acute phases of mania and the acute manic phase in schizophrenic disorders, both of these where the subject may have decided to withdraw his or her medication.

There are many arguments in favour of excited delirium. I'm not going to go over them. It has a strong historic context.

● (1540)

Witnesses relate these symptoms frequently as simply as in a call to the police—running around, knocking on doors, shouting, etc. In the clinical context, meaning symptoms and signs, there are plenty of things to allow this to be called a syndrome.

There are many important unanswered questions. I've tried to focus on those that I think are the most common in the relevance of the work I have done and in reviewing cases of sudden death associated with all forms of takedown in the excited state that most of these people are in.

The question is, what is the mechanism of fatal collapse in excited delirium? That is a very, very important question. In fact, I would opine that this is the most important question. It begs the question, well, are they going to die anyway? But it also gives note to the point that these deaths occurred long before the taser ever came along. Are excited delirium fatalities in the taser different from the sudden-death fatalities that are seen in the other modalities I've mentioned?

I don't have an answer to any of these things, and I don't know that anybody does. The next question brings up perhaps the reason why. Most such studies would be deemed unethical. You can't be tasing people for the purposes of a medical experiment.

My final question to the committee is, why would one curtail the use of a taser if it is an option to the use of lethal force?

Thank you very much for this opportunity.

● (1545)

The Chair: Thank you very much.

Ms. Hall, perhaps you'd like to go ahead, please.

Dr. Christine Hall (Emergency Department Physician, As an Individual): Thank you.

I'll just introduce myself briefly.

I'm going to read my notes, because I take a lot of artistic licence when I speak freely.

I'm Christine Hall. I'm a full-time emergency medicine specialist in Victoria, in the Vancouver Island Health Authority. That means I work shift, and lots of it, in an active, busy, tertiary care emergency room. I am a trauma team leader there as well as an educator.

Previously, I was program director for emergency medicine at the University of Calgary. I also hold a master's degree in epidemiology from the University of Calgary and am cross-appointed in the department of community health sciences through the faculty of medicine at the University of Calgary and also the faculty of medicine's department of surgery at UBC.

I work full-time; I'll just underline that. I do a lot of academic inquiry and research in this area on top of my full-time employment, which is why many questions remain unanswered and I don't get a lot of sleep.

Sudden death in custody is not new, and I think Dr. Butt has illustrated that quite well. Sudden death in custody is not restricted to the use of a conducted energy weapon, or taser, as we commonly refer to that device. Sudden deaths in custody still occur now without the use of conducted energy weapons. Sudden and unexpected death in agitated persons has been published for over a century in medical literature. The examination of sudden deaths in custody in a pre-hospital environment—in other words, on the street and before admission to hospital—has appeared formally in the medical literature in North America since the 1970s, and thus over three decades of research.

The problem of sudden death in custody is multi-faceted and it's complex. It's not as simple as evaluating the last thing that happened in a complicated series of events. We need to know scientifically which specific clinical or situational features predict the death of a restrained person. In the unpredictable deaths of these individuals—and these people are usually marginalized society members—drug intoxicated, alcohol intoxicated, and psychiatric issues prevail. The unpredictable deaths of these people are compelling and worthy of intense scientific scrutiny and not sensationalized conjecture.

I have no interest whatsoever in the forwarding of any specific restraint methodology or technology. My interest lies in evaluating the clinical problem that is sudden in-custody death. I have no shares in, no funding from, and I'm not getting any funding from Taser International. I never have had; I never will have.

Publication bias is rampant in Canada right now, and it's problematic for us in the scientific community. In the lay press, there are publications of details of every case of death proximal to the use of a conducted energy weapon in society, and that happens long before cases have been analyzed or causal relationships investigated. While the Canadian public certainly has the right to hear what's going on, I think the Canadian public is deserving of having that information in a context-specific manner. In other words, currently all negative outcomes are widely publicized and presented, with no discussion whatsoever on the non-lethal outcomes.

Scientific opinion subsequently presented with the data appropriately contextualized is commonly viewed as a cover-up. It is very difficult to scientifically refute theories that are generated with no responsibility to fact. It is almost impossible. Thus, there is a public notion that deaths proximal to police restraint with conducted energy weapons are on the rise or happen very frequently in Canada. That is not a scientifically based opinion. Scientifically, evaluation of all factors continues, and no causal relationship can clearly be drawn. Yet there is public demand for moratoriums and much public speculation about the specific danger of conducted energy weapons.

In Canada, since 2003, the deaths of people associated in any way with the use of a conducted energy weapon include 20 cases. In 2003, there were three cases; in 2004, there were six; in 2005, there were five; there was a single case in 2006; and there were five cases in 2007.

• (1550)

During that same interval, the population of Canada increased from 31.5 million to 32.8 million. Conducted energy weapons were possible in an expanding number of police agencies, and the

incidence of methamphetamine and cocaine abuse did not remain the same.

These simple data are certainly not eloquently evaluated, and certainly that data has not been evaluated formally as yet, but this seems to belie the notion that sudden deaths following conducted energy weapon use is spiralling out of control or expanding in a disproportionate manner.

Each death is clearly important, but the intense interest in deaths following conducted energy weapons alone overrepresents these deaths in context. Other equally important persons have died in the same interval, following restraint that did not include conducted energy weapon use. The distraction of interest solely to the conducted energy weapon will necessarily direct us to an erroneous conclusion.

There is no sufficiently detailed national database in Canada that can be searched to determine what proportion of deaths related to conducted energy weapons is represented according to the denominator of all. Currently I am working on a protocol that's being imminently submitted, as we speak, to look at the last 15 years of coroners' records to evaluate the frequency and kind of sudden custody death in Canada.

In the U.S., in 2000, a law mandated the mandatory reporting of in-custody death, and very early evaluations of that data have begun.

I will have a snapshot of that data, if you like, later.

There is no such system in Canada, and my study will require the evaluation of coroners' records from basement boxes, from filing cabinets, and hopefully from some electronic databases. The protocol is being submitted even as we speak; funding has yet to be secured, as with all research venues.

The comprehensive review of all medical research to date is certainly outside the scope of my presentation, but I'd like to highlight a few things for you. It must be stressed that in order to appropriately evaluate medical research, there must be meticulous study of the methodology, results, findings, and limitations of every study. An appropriate review is not confined to scanning titles and conclusions. This commonly happens in popular discussion and very commonly occurs in legal proceedings.

I'm involved in the comprehensive review of the body of research to date by an international and multidisciplinary group to update the 2005 report generated by the Canadian Police Research Centre. The same agency is coordinating the effort. We anticipate release of that comprehensive report in the fall of this year. It is a daunting task. I've taken two months of clinical leave to get part of it done—at my own expense.

Animal studies are the cornerstone of much medical research, and the swine or pig model is a valid and credible model for the physiological study of some of the aspects of conducted energy weapon technology. My colleague is going to talk to you about the limitations of such things, I'm sure. However, animal models are not human models, and that limitation is cited by every author who publishes an animal study.

There were several studies investigating the relationship between conducted energy weapons and the capability to generate dysrhythmia, which were carried out as a necessary part of the device's development. Those data demonstrated a wide margin of anticipated safety in the application of the technology to humans. While all study with industry sponsorship deserves particular scrutiny, it is important to note that not all such data represents such a conflict of interest to nullify the findings.

Current animal studies have suggested that conducted energy weapons can generate potentially lethal dysrhythmia in the swine model. If someone will remind me, I'll explain to you the difference between dysrhythmia and a heart attack later—it's important.

There are many issues that have arisen in the translation of those animal studies to the human experience. For example, the generation of ventricular fibrillation, which is when the heart does not make an effective heartbeat—it fibrillates—has never been documented in an animal model without perfect chest application of conducted energy weapon probes in exact locations bracketing the heart.

● (1555)

Perfect dart placement is likely very difficult to achieve in a police interaction. However, police dart placement data have never been recorded or evaluated.

No ventricular fibrillation has been documented with limb or abdominal probe locations in any model, including models where only one probe was in the chest and the other was in a limb or in the abdomen. No ventricular fibrillation has been documented in any model with application of a device in the push or drive stun mode. Yet individuals have died in custody with non-chest probe placement and with the device used in push or drive stun mode. This to me suggests that other factors are at play.

In multiple studies of normal, healthy volunteers, including some with police members undergoing training, published by multiple authors, there has never been a demonstrated arrhythmia or cardiac event. These studies have included strenuous exercise—to physical exhaustion—in order to simulate the rigours of a pre-hospital struggle. However, authors are obviously unable to subject human volunteers to the metabolic difficulties of an acute psychiatric emergency or a drug intoxication.

Some field study does exist. Bozeman et al. evaluated 962 field applications of conducted energy weapons in all corners in true police situations. Those data were made public in October of 2007.

They found no or minimal injury in 99.7% of subjects who were subjected to a field application of a taser in a true police environment, with moderate or severe injury found in 0.3% of their cohort. The precision of those estimates is extremely high because of the large sample size.

While every death is certainly significant and devastating, few would argue that a 0.3% risk of moderate or severe injury is as high as we thought it could be. However, more research is obviously needed and is under way.

My research group and I have been collecting data in the city of Calgary for the past 18 months, and we will soon begin to collect the same data in Victoria and in two American centres. This restraint

study investigates all features of the police interaction, including subject presentation and all methodologies of restraint, including taser, in a prospective manner.

I use the term “taser” because it's the only commercially available device at the moment; I mean “conducted energy weapon”.

On my return to Victoria next week, we'll begin to analyze the Calgary data, which include zero fatalities in 18 months of prospective study. In Calgary, conducted energy weapons are used by general duty officers.

Lack of funding prevents current expansion of this study to all urban Canadian centres, despite interest, or to the RCMP, because it's a massive organization with 40,000 members.

What's the current field experience with conducted energy weapons? In very short summary, to date there have been approximately 325 cases of death following the application of conducted energy weapons at any point during police interactions in North America. This is not to be confused with a proven causal relationship.

These cases must be interpreted with a number of questions. One, what is the denominator of field applications of conducted energy weapons on which that 325-case cohort falls? It is likely in the hundreds of thousands of applications, but there is no organized database to tabulate those applications.

Within the 325 cases, twenty are Canadian. Those data have the same problem with denominator: there is no organized method to record the number of CEW applications in the field.

All of these cases are counted or itemized as taser-related regardless of other features of the cases. The concept of confounding of the data by another factor—or that CEW is in itself a confounder—must be examined thoroughly to determine which features are consistent among in-custody deaths. For example, as Dr. Butt mentioned, the features of excited delirium are overwhelming in their presence, including delirium from psychiatric illness, drug or alcohol intoxication, or all of the above.

● (1600)

The second or third question is, what about the fatalities, in the same timeframe, in which conducted energy weapons were not used? As an example, in British Columbia, a review of coroners' records shows that there were 267 deaths in which police were involved in any way in the interval from 1992 to 2007; and eight of those involved a conducted energy weapon. Those data need to be explicitly examined, and the same should be done in each province. Thorough evaluation is pivotal.

What does the future hold? Future work will be undertaken on the physiological effects. However, it is unlikely that further work on animals or healthy volunteers will answer the question in the population of interest. The exposed population has situational features that cannot be duplicated in an experiment in a lab. Calls for moratoria on the use of conducted energy weapons “Until such time as independent and unbiased study...has been properly completed”—to quote from an article—effectively terminate the ability to conduct such research in the population of interest. A moratorium would in fact generate a catch-22 relationship in carrying out the very research the statement requests.

It's irresponsible to police agencies, to officers, and to subjects to discard a safe and effective restraint methodology based on conjecture. It is irresponsible to other persons who have died suddenly in custody, without the application of a conducted energy weapon, to focus solely on that method of restraint.

Thank you.

The Chair: Thank you very much.

We'll go over to Monsieur Savard now, please.

Go ahead, sir.

[*Translation*]

Prof. Pierre Savard (Professor, École Polytechnique, University of Montreal, As an Individual): Mr. Chair, members, I thank you for your invitation.

I am a biomedical engineer. A biomedical engineer develops new tools to diagnose and treat illnesses. I have developed computer models that calculate how the current passes through the human torso, in order to improve electrocardiogram diagnoses. I have also developed systems for cardiac activation mapping to guide arrhythmia surgery.

[*Editor's note: audiovisual presentation*]

On the screen, you can see the surgeon applying a net with hundreds of electrodes to the surface of the heart. The signals from the net are analyzed by the computer, which gives an image of the electrical activation sequence of the heart during an arrhythmia, in order to identify the origin of the abnormal arrhythmia. So we could say that my expertise is in the fields of bioelectricity and cardiac arrhythmias.

Let us try to understand what happens when an electrical current is applied with a taser. First, a hundred 50,000-volt impulses are released. This current, which circulates through the body regardless of where the dart lands, is enough to stimulate the muscles and nerve endings. A warning signal is immediately sent to the autonomic nervous system. In turn, the autonomic nervous system mobilizes different organs. It sends signals to the heart telling it to beat more quickly. The heart rate will accelerate. It will go from 72 beats per minute at rest to between 137 and 140 beats per minute. This happens in every case.

When the electrodes get close to the heart, part of the current can stimulate one section of the heart. The stimulation in this section can spread to the rest of the heart, and the impulse current will cause an accelerated heartbeat. This is referred to as capture. This phenom-

enon has been well-documented in experiments on pigs and on humans wearing implantable pacemakers. Later on I will speak more about capture, that is, the way a taser impulse can cause the heart to contract.

There is a third possibility, which Dr. Hall mentioned earlier. If the electrodes are even closer to the heart and there is a sufficient current density, the current can stimulate several sections of the heart. These different sections of the heart will desynchronize and each contract based on their own rhythms. Instead of an organized, rapid contraction, it becomes anarchy, an electrical storm in the heart. This is referred to as ventricular fibrillation. Since the heart stops pumping blood efficiently, it leads to death.

However, everyone agrees that this phenomenon is very unlikely, because the current required to cause fibrillation is around 50 milliamps, but the current released by the taser is around two milliamps. But scientific literature shows that a group of researchers in Toronto reported a case in which, by using a taser to apply a current, fibrillation was directly induced in a pig.

That is a summary of the immediate effects of the taser. We are concerned with the deaths caused by taser shocks. A study by Dr. Strote and Dr. Range Hutson from the University of Washington provides more information about the nature of these deaths. The study covered the period from 2001 to 2004, during which it found that in the United States, there were 75 deaths that occurred less than 24 hours after the individual was shocked by a taser. The study did not include the other deaths for which an immediate cause of death could be determined.

•(1605)

Working with these cases, they spoke with the pathologists and were able to obtain 37 autopsy reports. The reports revealed that 54% of the deceased suffered from illnesses affecting the coronary arteries, which irrigate the heart, or from cardiomyopathy, which is a deterioration of the heart muscle. So, more than half of these people were suffering from heart diseases. In 78% of the cases, the individuals had consumed illegal substances, stimulants; in 76% of the cases, there was a diagnosis of excited delirium; in 27% of the cases, the doctors determined that the taser was a potential cause of death or a contributory cause of death.

However, that last point is debatable. I will focus on the presence of heart diseases in more than half of the cases. Why? Because it is possible to determine heart disease in an autopsy. It is possible to see a deterioration of the muscle. It is important to contrast the 54% with the prevalence of heart disease. In this case, we are talking about heart disease in the United States, where the prevalence is 8% of the general population. In men under the age of 45, the prevalence is much lower, between 2% and 4%.

In examining these figures, a statistician would note that if the taser did not in any way cause death, meaning that there was no association between the taser and death, the study sample should have the same proportion of heart diseases as the general population, which is 4% to 8%. But this is not the case. So a statistical association is being made, which is not enough to establish a cause-and-effect relationship.

To go further, we must examine the mechanisms involved. We can make an analogy between the taser and the programmed stimulation protocol that cardiologists use in diagnoses. If a patient presents with palpitation or syncope symptoms, the cardiologist will insert a catheter into the heart, through which a series of electrical impulses are emitted. Each impulse will cause the ventricles to contract. In the electrocardiogram, the left side indicates the normal rhythm. The red arrows represent the electrical impulses emitted by the catheter. We can also see the heart's response. The doctor follows about ten of these impulses with one or several premature impulses. Then the stimulation is stopped.

There are two possible outcomes. In the first case, the heart rate returns to normal—and that is what happens with normal subjects—and the cardiologist can reassure the patient. In the second case, one of the possibilities is that there could be ventricular tachycardia. The heart rate accelerates, reaches more than 100 beats per minute and continues. It is important to note that ventricular tachycardia happens only in cases where there is an arrhythmia substrate, for example, in the presence of an old myocardial infarction. In this case, part of the heart muscle has been replaced by a layer of scar tissue. The ventricular tachycardia may continue for a few seconds or even a few minutes. After a few minutes, the heartbeat may return to normal, or ventricular fibrillation may occur.

•(1610)

During a cardiological exam, the cardiologist has access to a defibrillator and can shock the patient to bring the heart rate back to normal. I think we can make an analogy between the series of impulses used by cardiologists to provoke arrhythmias and the series of impulses an individual receives from a taser.

In conclusion, I think that there is a clear statistical association between death after taser shock and heart diseases, and that there is a plausible explanation for how this device can lead to death. There could be a ventricular tachycardia which deteriorates into fibrillation after a few seconds or minutes. That could explain the cases when an individual dies a few minutes after a taser shock. There are other possible explanations. In some cases, there could be a ruptured aneurysm caused by increased blood pressure because of an increased heart rate, as we discussed earlier; there could be an electrolyte imbalance, and thus an imbalance in the concentration of ions, caused by the stimulation of the nervous system. So there are many avenues of investigation for research.

Heart diseases increase the probability of death after taser shocks, and the studies on healthy subjects are really insufficient to conclude that the taser is completely safe. We can study hundreds or thousands of volunteer 25-year-old police officers, who are athletic and in good health, but it does not mean a thing because in the general population there are people with all kinds of medical problems.

I was surprised to see in the warnings issued by TASER International to its clients—to the people purchasing tasers—a rather long paragraph which states:

•(1615)

[English]

...it is important to remember that the very nature of use of force and physical incapacitation involves a degree of risk that someone will get hurt or may even be

killed due to physical exertion, unforeseen circumstances and individual susceptibilities.

[Translation]

Thus, there could be deaths in cases of predisposition to cardiac arrhythmia. This contradicts the statements made by the president of the company, who publicly said that this device did not pose any risks. The company's lawyers acknowledge that there is a risk.

I am not sure if it is my place to make recommendations, but I think that because of the real risk of death, if we use the taser, we must take precautions and limit its use to aggressive and dangerous subjects. Or, it should be used as a last resort. Police training should focus on the possibility of death. We must stop saying that this device does not pose a risk. I do not believe that is true. We must publish detailed incident reports to facilitate research. I agree on this with my colleague, Dr. Hall, who is trying to develop databases. It is very difficult to obtain information.

I think that the taser should be defined as an electrical weapon. We must stop calling it an impulse device, which means nothing. A television remote control is an impulse device. I think that term trivializes this object. It is a weapon.

Thank you.

[English]

The Chair: Thank you very much.

Last of all, Monsieur Lapierre.

[Translation]

Mr. Bernard Lapierre (Ethicist, philosopher and lecturer, École Polytechnique, University of Montreal, As an Individual): Mr. Chair, I would like to thank the committee for inviting me to participate in this debate on the use of non-lethal weapons by Canadian enforcement agencies. I also appreciate the fact that the committee is allowing me to speak in my first language, which I hope will make my remarks easier to understand.

I am an ethicist and philosopher, which means I work in applied philosophy, and, since 2000, applied philosophy of science and technoscience. I am the coordinator of applied engineering ethics courses at the École Polytechnique de Montréal. I am also the current president of the ethics committee for research on human subjects at the École Polytechnique de Montréal. Previously, I had the opportunity to teach public safety ethics for the Sûreté du Québec, the Service de police de la Ville de Montréal and the Laval police. Furthermore, I was a researcher for the Sûreté du Québec on ethics issues. In addition to teaching, I also have experience as a consultant. I provide ethical advice on any kind of problem in many different fields.

The first point I would like to make is that I believe ethics is not a prescriptive system, as many people believe. And it is even less a system of duty and obligation. I think that ethics is about using critical thinking when the norms are not enough. Given the doubt in the decision-making process and the inherent imperfection of the laws, codes and standards that can influence our thinking, I think we are talking about ethical reflection.

I was very pleased to accept your invitation. It is a monumental challenge for me, and I am very humbled to close the period of presentations. At my age, to perform a feat like this in 10 minutes is truly something.

Three main points came to mind rather quickly. First, I would like to talk about the weapon itself. Second, I will speak about its use by police officers. Third, I will also discuss the objectives of police officers in using the taser or a non-lethal weapon. Then, if you would like, you may question me to go into more detail on any issues I bring up. I will bring up a lot of issues, which is not easy to do in 10 minutes.

First, let us talk about the non-lethal weapon itself. The first thing that struck me is that there are a number of definitions for this weapon. As my colleague mentioned, we can talk about an electrical impulse weapon, an electromagnetic weapon, or a handgun. We can also talk about a less-lethal weapon or a less-than-lethal weapon. These terms can be found in articles and in the literature. The term itself is ambiguous. I think it is not just a question of semantics or vocabulary. Do we know exactly what a non-lethal weapon means? Today, we are talking about the taser, which is one commercial example of non-lethal weapons, but they existed before.

I believe the paradox for the average person is whether the weapon is lethal or maybe lethal. Do we know the predictable consequences of its use? For the archetypal “good father” who is trying to determine what the current Civil Code would call “acting as prudent and diligent persons would have”, there is some confusion. What exactly does that mean? During a recent Radio-Canada interview, Quebec’s justice minister started out by calling it a weapon, and finished by saying that it was an instrument. What is it, exactly? A weapon, by definition, is not harmless. A weapon and an instrument are not the same thing.

In the United States, police officers who currently use this weapon refuse to call it “non-lethal”, and understandably so. They prefer the term “less lethal” or “less than lethal” because they know that otherwise, if anything happened—an accident or a death—they would be sued.

● (1620)

Police officers are more likely to be protected legally if they use a term that actually represents the object. So, in refusing to use “non-lethal” when referring to the taser, perhaps American police officers know something we do not?

The weapon originated with the military. We must understand that we started using so-called non-lethal weapons because of media coverage of war. People were shocked to see the horrific scenes. We could perhaps go back as far as the Vietnam war. The Canadian people were shocked to see such horrific scenes. I do not think it is over-represented; these are shocking images of war. The armed

forces decided that, since they had to deal with media coverage, they would develop non-lethal weapons, which was a good idea in and of itself.

The armed forces found that the intentions of the manufacturer and the user were enough to legitimize the use of this weapon. NATO and the U.S. Department of Defense officially stated in documents that their primary objective was not to kill, and that is why they were going to use a non-lethal weapon.

Whether we like it or not, the expression “non-lethal” seems to mean only one thing to the general population, which is that the weapon is clearly non-lethal, and that it does not kill. The definition of the weapon is a problem, which will have consequences for the public.

The simple fact of justifying a responsibility is not enough when it comes to ethics. In ethics, it is no defence to simply claim there is an intent to make a decision. There must also be the ability to make decisions. Do we have the abilities required to use these tools? Lastly, we must think about responsibility: when I use this object, are the consequences predictable?

If there are unforeseen consequences in a given case, and if that truly is an accident, it is appropriate to use the weapon, provided the individual has the required knowledge and has good intentions. However, if the consequences could be death—there are not enough studies to answer this question—we open the door to irresponsibility. I think it would be ethically indefensible. The intentions of the designer and user—the armed forces, originally—are good, but they are not enough to say that this use is ethically defensible.

My colleagues have provided more information than I can about the research, which is limited and generates a lot of controversy. The inadequacy of scientific studies and independent studies on this subject; the number of trials of the weapon on animals or the scientific validity of the results; and the practically non-existent research concerning the potential effects and consequences on the entire body, including psychological consequences, are questions that remain unanswered, as my colleagues mentioned.

The use of the weapon also raises some fundamental questions. Was the weapon proven to be safe before it was used? Considering Canada’s research and ethical certification, it should be necessary to prove that a weapon is safe before putting it on the market. Is it necessary to prove it is safe? Yes. Is it necessary to prove that using the weapon poses no risks? No, because there is no such thing as zero risk.

So, we must think about it, do research and take responsibility for the predictable consequences of our actions. But therein lies the problem. People with different interests will show that death is not a predictable consequence of using a taser.

● (1625)

We hear that this person or that person died three minutes later, 24 hours later, and so on. It is not possible to take responsibility for something that one denies. In searching for a formal, scientific, causal link, we are denying.

I looked at some protocols, for example, the one concerning excited delirium. What should be done when the weapon is used in a case of excited delirium? How should it be used around women and children. At one point, I wondered something rather simple: how can one determine whether a woman is pregnant if she is a prostitute and drug addict and is confused? How will the police determine that?

The concept behind the term “excited delirium” is not very clear. We must not forget that, as my colleagues mentioned, there are several causes for the delirium, such as intoxication, of course, and mental illness. This raises some fundamental questions. Is this the answer when it comes to the least fortunate in our society? There is also talk of those who did not deserve to be tasered. There have been several cases. Twenty cases have been directly associated, but in Montreal, there was one group of cases where the use of this weapon was not necessary. Individuals were passively resisting or were handcuffed, and the use of the weapon was not necessary.

When dealing with individuals with mental illness and multiple substance abuse problems, will our society say that because these people are confused and causing a lot of problems in the street, the taser should be used against them? Is that the kind of society we want? There are less serious cases, but when there is a death during an arrest, a serious investigation is conducted. We want to know the cause of death. If the methods need to be changed, they are. In the case of the taser, this seems rather vague.

The Canadian Charter of Rights and Freedoms also seems to pose a problem. I spoke about objectives. We can also talk about abuse, loss of control and training problems with police officers, but at the end of the day, what kind of police officers do we want?

In conclusion, I will say that I believe it is important to enhance the role of police officers. It is a very difficult and corrosive line of work. I have seen takedowns related to criminal activities—I have been around police officers—and I can tell you that it is a very difficult environment. We expect a lot from our police officers. Their public image is often criticized. That is one of the major problems with the taser.

A fundamental tool for police officers is the quality of the public's trust in them. If that trust is lost, the number of problems associated with the taser will increase.

• (1630)

[English]

The Chair: Thank you. We'll immediately go to our rounds of questions and comments.

Mr. Dosanjh, please.

Hon. Ujjal Dosanjh (Vancouver South, Lib.): Thank you very much for your very thoughtful presentations. This has, in fact, been one of the most interesting sessions so far, because these are the kinds of questions that haven't been raised so far.

It appears to me, having come from four and a half years of law enforcement as an AG, that over the last number of years since the taser was first started as a pilot project in Victoria, the law enforcement community has essentially fallen in love with it and has done so somewhat blindly. In fact, there has been significant usage creep.

I was interested in Dr. Butt's remark that we shouldn't ask for moratoriums if this is an alternative to lethal force. From all of the reports, the most recent one coming out of Nova Scotia, I believe, it is indicated that the usage of tasers has gone up phenomenally. Deaths with the use of force using guns at the hands of the police in Calgary, Montreal, and Vancouver have remained stable. The usage of tasers has gone up phenomenally, and there have been 20 deaths in the last several years, as you mentioned.

Then it appears to me that perhaps one can arrive at a conclusion, in a very simple kind of way and without going into too much complex detail, that the taser is being used somewhat mindlessly and somewhat unnecessarily, because if you previously needed only so much usage of guns and you only killed a few people and that number has remained stable, has our society become suddenly so violent that you need tasers with every third police officer?

All of the ethical questions you've raised bring to mind, in fact, the very question I raised with the complaints commissioner the other day: the fact that the RCMP have not implemented his top two recommendations to classify this as an impact weapon, which some of you, I believe, would agree it should be.

The question I have for you is this. You say, Professor Savard, that there is no evidence that this is a safe weapon, that there hasn't been enough research that it is a safe weapon. If that is the case, what is your prescription? How do we change the use of this to take into account all of the hesitations and questions that you've expressed?

All of you can answer that question.

Prof. Pierre Savard: To start, I can make a parallel with cigarettes and lung cancer. In the 1960s, people started to think that cigarettes might lead to lung cancer. It's very difficult to prove that one particular individual who died because of lung cancer did so because he smoked cigarettes. But on the other hand, it's possible to prove with an epidemiological approach that smoking cigarettes increases the risk of developing cancer.

That's what I tried to show: that there's an increased risk of dying after being tasered when you have heart disease. For this vulnerable population with heart disease, with other medical conditions, I think there's an increased risk of dying.

I think we should try to minimize the use of tasers. It's so easy. It's like a mute command on your remote control for your TV; if you're tired of listening to a guy, you push a button and that's it.

That's not what we want to do. We want to use the taser when somebody is going to hurt somebody else or is going to hurt himself and really needs the restraint. I understand that in some circumstances you need to restrain some people, and my colleague here who has worked in hospitals can tell us more about other types of restraints that are used for people who are agitated.

As a first line, I think we should try to reduce as much as possible the use of the taser. That's my point.

• (1635)

The Chair: Thank you. Who would like to go next?

Ms. Hall?

Dr. Christine Hall: Sure. I think it's a simple question with a complicated answer. Your question raises more questions in my mind, and the first thing is that safety and scope of practice are two different questions. I think most of us on this side of the table are poorly placed to answer the questions surrounding use of force paradigms and where things fit.

That said, I think one of the issues is who defines an acceptable level of safety and how. I think one of the great misconceptions, and the thing I had to learn when I started doing this research, is this: was this weapon designed to be an alternative specifically to deadly force? In other words, do you bring a taser to a gunfight? The answer to that, from police circles, is that if you are staring down the barrel of someone else's gun, it shouldn't occur to you to draw a taser.

So I think that concept, although it's a bit crude, is very important in all of this. And one of the great responsibilities of your committee is to decide where that all fits.

When you consider the weapon specifically in the light of an alternative to deadly force, that's clearly a whole different question from what's going on in Canada and North America today. What we're seeing when we look at evaluations of data from police agencies is that police officers are using tasers. There's no question everyone in this room could come up with an anecdote of an inappropriate use. That's the same with every weapon system or restraint modality there is. But when the police are going to the taser is when they're involved in close-proximity, hand-to-hand confrontation. That usually happens, in my experience, in reading the literature and in reading case reports and in testifying at inquests. That's not an all or nothing statement.

There is no "always" and no "never" in medicine. So the discussion about whether this is lethal, whether it is non-lethal, whether it is less lethal—no methodology, no matter what you call it, will always be one or the other, and that's important. So use of force is one thing.

Safety and who determines the adequacy of studies is extremely important to me and everyone in this room. To use the pharmaceutical development model, data are evaluated in animal models for drugs, then they're taken to normal, healthy volunteers to determine dosing profiles, side-effect profiles, and the like. And eventually all drug models are tested in the clinical venue for which they are intended. That's what's happening with taser technology right now.

None of us who know about restraint believes that any single method of restraint will never cause harm and will never cause a death. The question becomes, at what frequency level, in what situation, does that situation become untenable? The answer to that question depends largely on who you are. If you are the police officer who has a fractured scaphoid who doesn't work for 12 weeks and has a chronically arthritic wrist from a hand-to-hand struggle, then the level of safety required of a weapon system is quite different than if you're the mother of a 23-year-old methamphetamine addict who died in her bathroom.

So the question of safety is a big one.

Medical safety is quite different from the level of safety that's expected in the community policing world. Physicians are held to

about a 70% standard. In other words, when you go to have your gall bladder out, the anesthetist gives you a list of risks, the nurses give you a list of risks, the hospital gives you a list of risks, and the surgeon gives you a list of risks. We all take risk into account and weigh it against the severity of the situation.

I think one of the pivotal things that's been said across this side of the table is that deciding when enough data is enough data is a tall order. We do need to know what we're doing. We do need to keep better track of what we're doing and to evaluate it fairly.

• (1640)

The Chair: Thank you.

Does anybody else want to respond?

Mr. Butt.

Dr. John C. Butt: Well, if I may, I would add to Dr. Hall's remarks, with which I agree.

On the issue with the exponential use of tasers, the significant increase in taser use has followed the sale of the device. There's no question about that. It's axiomatic: if you have more cars in the community, you're going to have more car accidents. This emphasizes Dr. Hall's point that the research is very difficult to conduct.

That having been said, I thought that when Professor Lapierre was looking at the people who deliver this—that is, those who fire the taser—he said two important things. One was on the issue of training and one was on the issue of loss of control over the parameters, even though the training has been carried out.

To give you an example, the death of Mr. Dziekanski occurred in Vancouver in mid-October last year. I was in Savannah, Georgia, and it became an issue for me. One evening I was going to a television studio to respond to a Canadian broadcast about it. The people in the television studio asked me what this was about, since I was a talking head. They said that was interesting, because it had come up there as well, in terms of people using it in the schools.

This is inappropriate in our society. At the same time, many of you will have visited the Taser website and seen that the device is marketed in colours that are attractive to women and in a size that is useful in the handbag or other concealed place.

The Chair: We're going to have to keep moving a little more quickly here.

Go ahead, Monsieur Ménard.

[*Translation*]

Mr. Serge Ménard (Marc-Aurèle-Fortin, BQ): Thank you.

You are no doubt the group of witnesses that will be most helpful. Honestly, I would like to spend several hours with you to have a more in-depth discussion. I truly believe you are the people mostly likely to help us make the decisions we need to make, in spite of all the imperfections of politicians, who specialize in everything and nothing all at the same time.

Nevertheless, we have some diverse backgrounds here. I was Quebec's public safety minister for quite a while; our colleague was health minister; that gentleman was an attorney general and a premier, even if he is too humble to say so. On the other side, we have former chiefs of police. But despite all of that, we are still undecided when it comes to the use of tasers.

At the start of the 2000s, when the time came to decide whether or not they would be purchased, tasers were presented as a tool that would save lives, because they would be used in instances when the alternative would be to use a firearm. Clearly, a taser is less dangerous than a firearm. That goes without saying. I thought that tasers would only be used when the use of a firearm would be justified. But I have learned here that this is no longer the case. On the contrary, chiefs of police and the RCMP commissioner told us that the taser was classified in a lower category than firearms—I no longer remember the classifications we were given—but in the category where other instruments were found. I do not remember, but perhaps this could be found in the testimonies. I hate to say it, but it is in the same category as the baton. According to your testimony, you would not put it in that category.

I was aware of one of the things Ms. Hall explained, which I am sure police officers would have brought up. In principle, the firearm is really a last resort. It is also a weapon used as a deterrent. I completely understand that if a police officer is faced with someone who is about to use a weapon, and does not have a taser handy, he cannot—Well, there seems to be a period where there is a bit of a grey area where it would be difficult to justify using the taser.

Did I understand correctly? Right at the beginning, Mr. Butt asked the fundamental question: why have a moratorium on the use of tasers if they are an alternative to the use of lethal force? Personally, I will say with absolutely no hesitation that, if tasers are used only as an alternative to lethal force, there should not be a moratorium.

However, I see that, in practice, a taser is used when the situation could deteriorate into a confrontation. If there are weapons present it is easier, but not in situations that could deteriorate into more dangerous confrontations. That is when we start to worry. The situation at the Vancouver airport is a good example, although we would like to see the full video of what happened. And we will see it. That said, we are worried.

Another possibility is the use in cells. In the past, individuals have been killed at the time of arrest through the use of other immobilization methods. In Quebec, one person died while being arrested by Montreal police. It has also happened in Quebec City. A hockey player was killed, a really big guy, who appeared to be under the influence of drugs. It took almost 10 Quebec City police officers to try to subdue him. I remember that at the time, I was given examples. I was told that Mr. Kordic would still be alive.

Would you agree that we have a good idea of the circumstances in which a taser can be used? It is obvious that if the person is armed and could injure other people around him, the taser is preferable to a firearm.

• (1645)

However—and I would like to hear what you think about this—I think the problem arises in situations that could deteriorate into

confrontations and where one of the individuals could be seriously injured or killed.

[*English*]

The Chair: Mr. Lapierre.

[*Translation*]

Mr. Bernard Lapierre: I would like to go back to the question of when police officers use tasers. I think it is clear that they should be used just before the lethal weapon. Several studies have been conducted on this in Europe, particularly in Switzerland. These are the circumstances in which this weapon was preferred.

Mr. Serge Ménard: So it was not to replace the baton?

Mr. Bernard Lapierre: Not at all.

There is another problem. As a philosopher examining this issue, I have a hard time, as do you, understanding the purpose of this weapon. I do not know if we are saying the same thing; it is probably just a matter of language. Why was this tool created? What is the purpose of the taser? What does it replace? What is it for?

• (1650)

Mr. Serge Ménard: Mr. Lapierre, since we do not have much time, I think I can answer that question as all of my colleagues might. The point is to subdue someone who could become dangerous—when there is a serious risk he could become dangerous—and to subdue him without causing serious injuries.

Mr. Bernard Lapierre: I agree, and that is what I assumed. But let us look at the appropriate purposes. We see that there are far fewer injuries to police officers, and far fewer injuries to individuals being arrested. It is very important to see that the tool drastically reduces the number of injuries to police officers. Is the purpose to reduce the number of injuries? I do not know and I cannot answer that question. I do not feel comfortable determining the explicit purpose of this weapon. Furthermore, what the media have shown or what we can see—even Amnesty International is now revealing cases of torture with this weapon—is that it is being used in cases where the average person does not understand why it was used.

In conclusion, I would like to say that in the case of excited delirium or multiple drug use, I think the first intervention should be medical. I understand that the person can move around and be threatening, but what was done before the taser existed? What do they do in hospitals or psychiatric facilities? What do they do in detention centres or prisons to subdue unruly individuals? Do they use a taser?

[*English*]

The Chair: Thank you.

Ms. Priddy, please.

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

I have about three or four questions. My first two questions are to either Dr. Butt or Dr. Hall.

Do you know the percentage of people who at any one time would be likely to be suffering from cardiac arrhythmia, just in their walking around time, that hasn't been diagnosed, hasn't been serious enough to be diagnosed?

Second, while I understand that a post-mortem would not show whether somebody had suffered from cardiac arrhythmia, if there were medical backup and somebody could get a monitor on as soon as the person was subdued, would we be better able to then tell whether there was a causal relationship between cardiac arrhythmia and death?

Dr. Savard, perhaps the same question can go to you and Dr. Lapierre. I rather laughingly said one day that I supported entrepreneurship for women, that I thought it was wonderful, but I had never envisioned it to be “Taserware” parties. In point of fact, that's exactly what we're seeing in the state of Arizona: “Taserware” parties, just as we saw Tupperware parties.

I asked, “What if somebody uses it on children?”, and people said that could never happen. Well, there are now stories coming out—either it's being used in a school, or a parent has bought it and it's being used against a child. That is absolutely terrifying to me. It's a question I'd be interested in having Dr. Lapierre respond to.

Dr. John C. Butt: I could probably start this by talking a little bit about the issue of heart disease in the population.

Dr. Hall has had a lot more responsibility and experience in terms of the emergency ward. In my practice I haven't had a patient with a pulse since 1967, so I have to be careful what I say here.

There is a significant amount of coronary artery disease in the community. Professor Lapierre indicated what the statistics were of coronary artery disease. I'm going to make a parenthetical comment here, which Dr. Hall actually prompted me on. It is that in Professor Lapierre's statistics, there is no correlation between the coronary artery disease that was found in a very few people in the population and the fact that they might have been taking a drug. The drug is cocaine, and cocaine is very provocative in the background of coronary artery disease. It is a specifically provocative drug in terms of developing cardiac arrhythmias.

This is one of the big conundrums in this work. Dr. Hall, I think, has illuminated that and is certainly capable of developing the point better than I am.

There is not a lot of cardiac disease around that is identifiable at autopsy in the younger age group. Generally speaking, in terms of arrhythmias, there is a pathological or demonstrably anatomical background to the disease. That's because the largest cause of cardiac arrhythmias is the type of disease that Professor Lapierre spoke of, notably occlusive coronary artery disease, which, as I say, is aggravated by the use of cocaine.

• (1655)

Ms. Penny Priddy: Would you comment, Dr. Hall?

Dr. Christine Hall: I think that's a really important point.

I understand what Dr. Savard's point was in illustrating that the predominance of coronary disease was extremely high in that population. Stats, damn lies—we've all heard it about statistics, but when you evaluate a statistic like that, you must control for the presence of illicit substance use.

Cocaine and methamphetamine are associated. There are no old methamphetamine addicts. It's a very devastating drug. People don't have years and years of meth use. There are old cocaine addicts.

Cocaine plus alcohol makes cocaethylene, which is many times more productive of coronary atherosclerosis than even cocaine alone, which is enormously associated with cardiac disease. That's the confounding that I'm talking about in data.

Ms. Penny Priddy: If we could get a monitor on somebody immediately, would we have a better sense of that?

Dr. Christine Hall: That's exactly the question we're trying to address. There are a couple of important points about that.

In the ideal world, that's what would happen. People have experienced sudden in-custody death following restraint on a cardiac monitor with an advanced cardiac life support crew in attendance. Their rhythm was not ventricular fibrillation in the very few cases that have happened while on a monitor.

Why can't you get them on a monitor? It's because you can't get near them.

One of the great misconceptions that's been mentioned in this committee is that these people need medical care, and that could not be more true. The problem is how to get a 280-pound methamphetamine-intoxicated, violent, destructive, combative person into the back of an ambulance and into an emergency room, or, as happened in Black Diamond hospital just last week, what do you do when that person is throwing your oxygen cylinders through your glass, attacking your physician, and you have unarmed security?

Ms. Penny Priddy: I realize it would be post-taser that you could do that.

Dr. Christine Hall: It's an excellent point that you raise. The problem is that when these people die in sudden in-custody death, regardless of taser application, what happens is the person very suddenly becomes quiescent, and at that point there is no pulse. By the time you get the monitor on, if the paramedics are present, the horse has left the barn.

Ms. Penny Priddy: On the expanded use to children, Professor Lapierre, do you have any comment? It really scares me.

[*Translation*]

Mr. Bernard Lapierre: I go back to the question of the weapon's purpose. We need to ask ourselves if the taser, this non-lethal weapon, truly corresponds to our values, to the kind of society and police officers we want to have in Canada. If the answer is yes, we need not think any further.

We are talking about violent people, but there is a difference between violent, aggressive people—cocaine addicts or not—and the people we were just talking about. It seems as though we are becoming desensitized to this weapon. Could this go so far as to having the weapon used on children? I think we are slipping, as little as possible, when it comes to integrity and human dignity. The use of such a tool on children is barbaric. One need not be a philosopher to see that.

It is barbaric. Even when it comes to using this weapon on passive or ill individuals, I really have to wonder. It would put a lot of responsibility on our police officers to give so much leeway. They would have to have medical knowledge, and so on. That does not make any sense. I am not a doctor, but based on the statements made by the doctors here, it is clear that these situations are medical emergencies.

• (1700)

[English]

The Chair: Okay. We'll have to move on.

[Translation]

Mr. Bernard Lapierre: A medical emergency can require the use of force, but I do not know if the taser is the appropriate tool.

[English]

The Chair: Thank you.

We're going to move over now to the government side.

Mr. MacKenzie.

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

Actually, the last question was a little bit nonsensical, because taser use is not allowed in Canada to civilians; it's only used by police officers. So children here will not get it, and if you wanted to have that debate, you'd have to take it to the U.S.

I really appreciate the vast differences here. One is from a practical side and the other is a little bit from theory. I can tell you what used to happen before we had pepper spray and before we had tasers, and how we used to subdue people. I don't think the vast majority of Canadians would object to the difference in the new tools the police officers have in their toolboxes. In the past, it used to be simply force.

Dr. Hall, you've probably seen in emergency wards in the last 10 years, when we talk about the change.... Could you tell us whether, in the last 10 years, you have seen a change in emergency medicine, with patients coming in who have either been attacked more violently or who are more violent? Is that, in fact, the case?

Dr. Christine Hall: There are a couple of answers—and I'll be brief, I promise.

The Drug Abuse Warning Network in the U.S., whose data you can pull, revealed that six years ago, I think it was, 50% of the American population had experimented with an illicit substance, a psychoactive drug such as cocaine. People over the age of 65 we now routinely screen for street drug use, such as cocaine, because it's common. If you don't ask, you don't know, especially when they're in having a heart attack.

My emergency medicine experience medically is restricted to my residency, which was five years long, and to my clinical practice, and I'm entering my seventh year, so I have 12 years of medicine, but I was also a nurse before, for 15 years. Little did I know, when I moved to sleepy little Victoria, how much methamphetamine I would encounter. I can tell you that in my daily practice in Victoria I encounter over-stimulated, hypertensive, tachycardic, agitated, psychotic individuals probably every other day.

My first day in Victoria, my patient stood up with a stretcher on his back and crashed into the glass door in the trauma room—stood up, with a stretcher on his back, in four-point restraint.

That kind of agitation, most members of the general population have never experienced. People who talk about psychological interactions and therapeutic talk with these people have never seen

an agitated psychotic person. Whether they're psychotic because they have organic schizophrenia—which is a terrible, debilitating disease, and you can have psychotic breaks if you're perfectly compliant with your medications.... If you have schizophrenia and you use cocaine, which is startlingly common, then you are even more likely to have a psychotic break.

For these people, delirium is defined by an altered level of consciousness with two things: impaired thinking and impaired input from the senses. These people perceive things differently and they cannot think their way out of it.

If I told you right now that a little unicorn pranced through the middle of this room, you'd all look at me and say, "No, it didn't", and I would say, "You're right; I'm sorry." But if you cannot realistically think your way past that and are fighting for your life in your mind.... It's amazing the strength these people exhibit. Anyone who has ever tried to take blood out of a two-year-old knows what I'm talking about: the strength of millions.

But in specific answer to your question, there is no doubt that methamphetamine and cocaine use in this country is on the rise, and it's on a logarithmic rise.

The City of Calgary collected data, I think two years ago, on the incidence of cocaine-related interactions with police, and it was up 300% in one calendar year. In the same calendar year, injuries to police officers were up by 300%. So we are seeing a different person on our streets and in our hospitals and in our psychiatric units than we saw 10 or 15 years ago.

It's not progressing across the country in a very straightforward pattern. It is west to east, and you haven't seen anything yet in Ontario.

• (1705)

Mr. Dave MacKenzie: Thank you.

Dr. Butt, if I recall, you said we saw a rise in the numbers of deaths starting in about the 1970s. I appreciate many of your comments and your background, but as a pathologist, in most of the cases of deaths that you would have seen in that time and up to and including today, I'm sure you would do toxicology.

Dr. John C. Butt: Invariably.

Mr. Dave MacKenzie: Would those tests have risen, from the perspective...? We used to see a lot of what we call speed freaks. It began in the 1970s, and it's rising, I think, as Dr. Hall has indicated. Is the number of both of those—not as a scientific datum but as an observation—increasing as these deaths are also increasing?

Dr. John C. Butt: I have to qualify that. I rarely do autopsy work, and that includes the last eight years. It's plain from what Dr. Hall said that with the increase in the use of drugs there's an increase in the amount of sudden death. This means that those cases are referred to the system, where autopsies are mandatory. It's prudent and I think most common, as you imply, to do the tests you're thinking about. Dr. Hall has said this in terms of the emergency people and the patients who go there, where they're tested as well.

The answer is yes. The toxicology tests are done. As to the frequency with which they come back positive, I don't know the statistic.

Thank you.

Mr. Dave MacKenzie: You indicated, I think, Dr. Butt, that there was no correlation that you could determine from medical exams between the use of the taser and the deaths of individuals, or any knowledge of it. But there is lots of evidence, I believe, of correlation between death and people who have experienced excited delirium. That hasn't only occurred within the police community or with people who have been tasered.

I suspect you could tell us about those cases in which people have been in, perhaps, institutions or hospitals and where there's been no use of force.

Dr. John C. Butt: It's a very good point.

Here's a scenario and a question that came out of it. Some of you would be aware that on South Granville Street, which is quite a nice street in Vancouver, in about the middle of November a gentleman had a substantial chain and struck out at the police and was shot dead. This man had serious bipolar disorder and had of his own accord withdrawn his medication and become uncontrollable.

The questions that arise out of that are many, obviously, but one of them is, what happens under those circumstances in a psychiatric ward in a hospital? The answer is, in part, that these things are controlled by medication, which also leads, as a parenthetical comment, I would say, to the issue of paramedics responding to the scene when these people have this condition. But also, it leads into the issue of whether these deaths occur in hospital.

I think of one death.... One swallow clearly doesn't represent a summer, but let me assure you that these deaths do occur in the emergency wards, in the portal to the emergency ward, and I have actually investigated a death that occurred in the hospital after several days of a person who had a serious bipolar disorder and was confronted during a manic episode and died. We don't know exactly what the details were, but one suspects there was some form of restraint offered.

So these deaths occur in a wide spectrum, not only of cause but under a variety of circumstances.

I can't do any better than that, but I probably have said more than I needed to.

• (1710)

The Chair: Mr. Cullen, please.

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

Thank you to the panel. This has been a very interesting panel.

I have a number of questions and five minutes, so I'm going to head right into them.

Mr. Savard, in your presentation there's reference to a University of Washington study in which they looked at people who had died as a result of these interventions. If I read it right, 76% of those people had been in a state of excited delirium.

Prof. Pierre Savard: Yes, that's what they report.

Hon. Roy Cullen: That's what they're reporting. Doesn't that, then, kill the theory that the taser should be used—and we've had

witnesses suggest this—on individuals who are in this state, so that they can quickly be calmed down and restrained and given the proper attention? That statistic would seem to fly in the face of that.

Prof. Pierre Savard: The main point of my presentation was about cardiovascular disease. On the use of drugs or the presence of this type of disorder, I'm not an expert.

Hon. Roy Cullen: Okay. But just going from those stats, it seems to me that these people all died as a result of the use of this conducted energy device, and 76% of them prior to that had been in a state of excited delirium. I'm not sure it argues well that the taser should be used on people in a state of excited delirium.

Anyway, I'll come back.

In your presentation, you also talked about the heartbeats per minute, when the taser is applied, being...I think the top range was 137 or thereabout. Now, when I go on my elliptical machine in the morning and I look at the range, 137 is pretty normal, if you're exercising. So 137 beats per minute is not way off the chart, is it?

Prof. Pierre Savard: No, you can go higher, to 180 beats; there's no problem with that. When you have a normal heart, there's no problem with increasing the heart rate when it is an organized electrical activation. That's what we call sinus rhythm.

The problem comes when you have the other type of arrhythmia, ventricular tachycardia. You don't have that in people who have a normal heart, who don't have any myocardial infarction, who don't have any Wolff-Parkinson-White syndrome, or other type of heart disease.

Hon. Roy Cullen: In your presentation as well, Mr. Savard, you said there's insufficient data to conclude that the taser is completely safe. What I thought I heard Ms. Hall say is that there's insufficient data to conclude that the taser is more dangerous than other interventions—the pepper spray or physical constraints. In other words, I think that in coming at it differently, you're saying similar things: that more data is needed, more study. This would lead one to conclude, it seems to me, that it would not be unreasonable for this committee or the government to say that while there is this uncertainty, the way the taser is applied and the way it's used, in terms of the rules of engagement, should be very carefully constructed.

Would that be a fair comment?

Prof. Pierre Savard: My point of view is that police officers already have firearms, which are much more dangerous, but they have learned how to use them. They have a strict protocol of usage of those arms, and I think that's what should happen: we should have a strict protocol for using a taser, such that when you use a taser, you should have to file a report, and it should have to be investigated, just as when you use a firearm—maybe not as much, but there should be this type of association with the use of the taser and a report afterwards.

Hon. Roy Cullen: Ms. Hall?

Dr. Christine Hall: I have no problem with that line of reasoning, with a couple of caveats. Those would be that recommendations are easy to make and hard to make sensible.

Take, specifically, the issue of not tasing a pregnant female. How does a police officer know if a 300-pound methamphetamine addict is pregnant or not when she's in a drug-intoxicated state? Not every pregnant female is a 27-year-old soccer mom. Not to be disrespectful, but it's very easy to make recommendations and hard to make them sensible.

It's a similar case with respect to children and to children and tasers; the notion of that terrifies me. But have you seen a 14-year-old boy lately? It's difficult to assess a 14-year-old who's high on cocaine, who weighs 195 pounds, and who's not telling you his age.

So I agree with the principle.

• (1715)

Hon. Roy Cullen: Your point is a valid one, I think, in the sense that it's a catch-22 with respect to a moratorium, where you wouldn't have the ability to collect the data.

I have just one more quick question, if I may, to Ms. Hall. I think this is some of the work you'd like to do more study on, and I hope the federal government will fund some of your research, because I think it's very useful. We'll talk to the parliamentary secretary afterwards.

It's the idea of whether there is a profile—in other words, this business of cause and effect—of what the police or law enforcement call a “client” that would lead law enforcement more easily to use a device like the taser. I think we've touched on some of it: that people in very drug-induced states or people in this state of delirium would necessarily be of the profile that would lead to the use of the taser, which would actually be the kind of profile that would be the problematic one.

Is that the kind of work you're going to do, or do you know the answer to that?

Dr. Christine Hall: Yes, exactly, and that's exactly the point.

Sudden in-custody death from 1979 until now has identified a very similar profile of the person who experiences sudden death in custody, regardless of the restraint methodology used. It is nearly universally the violent, incoherent, agitated, semi-clothed, rampantly destructive individual who undergoes struggle in futile resistance.

There's no always, no never, but that is the individual who suddenly and without warning dies in custody.

That is not to say that the individual is at a higher risk from taser application, and that's an important point. In 1980, that same type of individual was experiencing sudden in-custody death, and there was no taser to be had.

The Chair: We really need a lot more time, and we'll have to have the committee decide where we're going to go with this.

I want to thank the witnesses very much for their testimony. I appreciate it.

Hon. Sue Barnes (London West, Lib.): I had my name on the list for some questions.

The Chair: There are a whole bunch of people on the list. I'm sorry; we ran out of time.

I want to remind the committee that the whips have to approve the trip we have on the day we come back, March 31. That's not yet happened, so please talk to your whips.

A voice: Is it RCMP headquarters?

The Chair: It's to go to RCMP headquarters. That has not been approved by the whips.

The other thing is that on April 2 we are departing for Vancouver to continue our study on tasers there. That is just to give you a heads-up.

Is there anything else?

Mr. Dave MacKenzie: I'd definitely like to try to see if we can get the two Vancouver witnesses in when we're there. It is crazy to get so many witnesses here and not....

The Chair: Okay.

Mr. Dave MacKenzie: If we're going to be there, and if we have any time, even if it's an evening....

The Clerk: Do you want to add the two doctors to Vancouver?

The Chair: Yes. They are Dr. Butt and Dr. Hall.

This meeting stands adjourned.

Published under the authority of the Speaker of the House of Commons

Publié en conformité de l'autorité du Président de la Chambre des communes

**Also available on the Parliament of Canada Web Site at the following address:
Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante :
<http://www.parl.gc.ca>**

The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the express prior written authorization of the Speaker of the House of Commons.

Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.