

## CAEP Position Statement on Gun Control

Carolyn E. Snider, MD, MPH;\* Howard Ovens, MD;† Alan Drummond, MDCM;‡  
Atul K. Kapur, MD, MSc§

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### EXECUTIVE SUMMARY

Firearm-related injury and death continue to be a significant problem in Canada. Since the 1990s Canadian emergency physicians (EPs) have played an active role in advocating for gun control. This paper updates the Canadian Association of Emergency Physicians' (CAEP's) position on gun control. Despite a media focus on homicide, the majority of firearm-related deaths are a result of suicide. Less than 40% of firearm-related injuries are intentionally inflicted by another person. Since the implementation of Canada's gun registry in 1995, there has been a significant reduction in firearm-related suicides and intimate partner homicides. Proposed weakening of gun laws in Canada will have a significant impact on firearm-related mortality and injury. There must be instead an expansion of programs focused on prevention of suicide, intimate partner violence and gang-related violence.

The majority of intentional or unintentional firearm-related injuries involve a violation of safe storage or handling practice. The potential for future harm because of unsafe storage or handling or through gang conflict retribution supports our position that health care facilities report gunshot wounds (GSWs). Moreover, a nationwide surveillance system is necessary to support research and to guide future public policy development and legislation.

As EPs we must advocate for injury control. All firearm injuries and deaths are preventable, and we must advocate for a multifaceted approach in order to minimize this risk to our patients.

### CAEP POSITION

The Canadian Association of Emergency Physicians recommends the following measures:

1. Continued support for the original provisions of Bill C-68 and the gun control law, and active opposition to any attempt at repealing the national firearms registry (including the long gun registry).
2. Advocacy for the implementation by the government of a nationwide surveillance system for firearm-related injury and mortality.
3. Expansion of programs focused on the prevention of suicide, intimate partner violence and gang-related violence.
4. Support for legislation mandating that health care facilities report GSWs, but not knife injuries or other violent injuries.
5. Continued support for research into firearm-related injury and death in order to guide further public policy development and future legislation.

Passed by the CAEP Board of Directors, October 2008

From the \*Department of Emergency Medicine, St. Michael's Hospital, Toronto, Ont., Lecturer, Department of Medicine, University of Toronto, Toronto, Ont.; †Director, Schwartz/Reisman Emergency Centre, Mount Sinai Hospital, Toronto Ont., Associate Professor, Department of Family and Community Medicine, University of Toronto, Toronto, Ont.; ‡Clinical Assistant Professor, Department of Family Medicine and Emergency Medicine, University of Ottawa; Ottawa Ont., Clinical Assistant Professor, Department of Family Medicine, Queen's University, Toronto, Ont.; §Assistant Professor, Department of Emergency Medicine, University of Ottawa, Ottawa, Ont., President, Physicians for a Smoke-Free Canada, Ottawa, Ont., Director (District 8), Ontario Medical Association, Toronto, Ont., Emergency Physician, Ottawa Hospital Clinical Investigator, Ottawa Health Research Institute, Ottawa, Ont., Investigator, Ontario Tobacco Research Unit, Toronto, Ont.

Submitted Nov. 8, 2008; Accepted Nov. 8, 2008

CJEM 2009;11(1):64-72

## Background

Firearms are an important cause of injury and death. In 2004, 743 Canadians were killed by the use of firearms (2.4 per 100 000 people)<sup>1</sup> and, despite general media focus on urban crime, 76% of these firearm-related deaths were caused by suicide. Firearm-related injury significantly impacts our health care system. In the 2001/02 fiscal year, 606 hospital admissions were a result of gunshot wounds (GSWs).<sup>2</sup> Of these, firearm-related wounds that were intentionally inflicted by another person accounted for 37% (224); unintentional wounds, 34% (205); and suicide attempts, 20% (121). Many more victims of firearm-related wounds are discharged directly from emergency departments (EDs). Although national data for ED visits is unavailable, in 2004/05, 624 Ontario ED visits resulted from firearm-related injuries versus 199 hospital admissions.<sup>3</sup> In addition to morbidity and mortality, the total medical cost (including direct care costs and lost productivity) associated with firearm-related injuries in Canada in 1991 was estimated at \$6.6 billion.<sup>4</sup>

In Canada, emergency physicians (EPs) have been active in efforts to reduce firearm morbidity and mortality through gun control advocacy and intentional injury research. The role of Canadian EPs was last reviewed in the late 1990s.<sup>5</sup> Recent controversies over the long gun registry and mandatory reporting of GSWs made it timely to update the Canadian Association of Emergency Physicians' (CAEP's) position on these and related issues. The authors reviewed the relevant literature, and studied international and Canadian gun control efforts as well as historical and current EP initiatives. The CAEP Board of Directors reviewed the proposed position statement and approved the final statement in October 2008.

## Gun ownership in Canada

Almost 7 million firearms are registered in Canada. As of March 2007, more than 1.9 million Canadians held firearm licences and 1.6 million owned at least 1 registered firearm.<sup>6</sup> Of firearm owners, 76% own a rifle, 67% own a shotgun and 12% own a handgun.<sup>7</sup> Nonrestricted firearms refer to ordinary long guns (rifles and shotguns). Restricted firearms refer to nonprohibited handguns, semiautomatic long guns and other firearms restricted by the Criminal Code. Some handguns, sawed-off long guns, fully automatic guns and other firearms are prohibited by the Criminal Code.

Rural areas have higher rates of gun ownership. In Canada, legal ownership rates are the highest in the Yukon

and the Northwest Territories (32% of adults own 1 or more firearms) and lowest in Ontario (9%).<sup>7</sup> The majority of owners (74%) use their firearms for hunting, target or sport shooting (30%) and collecting (17%). Only 4% own firearms for property or personal protection.

The 2 primary sources of firearm-related deaths are: 1) legal firearms (i.e., those that are registered by and in possession of a licensed individual) that are misused, most commonly during intimate partner homicides, suicides and unintentional firearm deaths; and 2) illegal firearms that have been stolen from or sold by the legal owners of the registered firearms.<sup>8</sup> Of guns associated with crime in Toronto, 30% are estimated to be deferred from lawful use. Most of the remaining illegal guns are smuggled from the United States.<sup>9</sup>

## Firearm injuries and deaths

### Suicides

Suicide is the second most common cause of death in Canada for those aged 10–34 years and the ninth leading cause of death overall.<sup>10</sup> In 1998, firearm deaths accounted for 22.1% of suicides (26.2% men, 6.6% women).<sup>11</sup> The majority of suicides are not premeditated, but are impulsive in nature. Suicide attempts using a firearm are particularly lethal (96% completion), compared with overdose attempts, in which only 6.5% are lethal.<sup>12</sup>

Kellermann and colleagues<sup>13</sup> showed that keeping a gun in the home increases the risk of suicide by firearm, with an odds ratio of 4.8 (95% confidence interval [CI] 2.7–8.5). More recently, Miller and coworkers<sup>14</sup> compared changes in suicide rates with firearm ownership over a 22-year period and revealed that for every 10% decline in gun ownership, firearm suicide rates dropped by 4.2% (95% CI 2.3%–6.1%) and overall suicide rates decreased by 2.5% (95% CI 1.4%–3.6%). This effect increased for children (aged 0–19 yr), with a reduction in the rate of firearm-related suicide of 8.3% (95% CI 6.1%–10.5%) and an overall suicide rate reduction of 4.1% (95% CI 2.3%–5.9%). In a study of self-inflicted firearm-related injuries or deaths among children (aged < 19 yr), 65% were caused by use of a firearm owned by a household member.<sup>15</sup> Suicide rates are higher in Aboriginal rural communities, where the use of firearms is overrepresented.<sup>16</sup>

Firearm-related suicides by males in Canada decreased between 1979 and 1998 from 41% to 29% of all suicides by males.<sup>11</sup> Overall, firearm-related suicides have decreased by 43% since the introduction of stricter gun laws in 1991 and by 23% since the introduction of the Firearms Act<sup>17</sup> in 1995 (Fig. 1<sup>18</sup>). This decline was confirmed in a 4-study review that examined changes in Canadian suicide

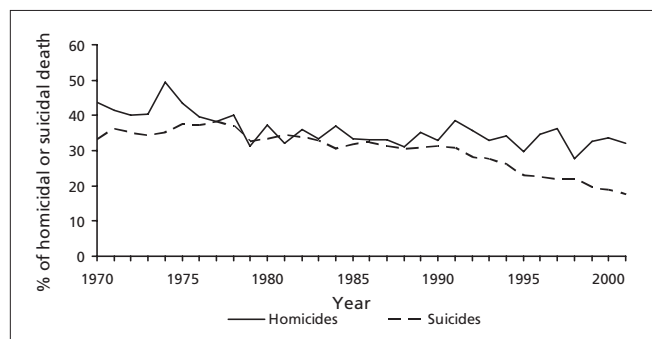
rates following the introduction of stronger gun laws in 1991.<sup>19</sup>

## Homicides

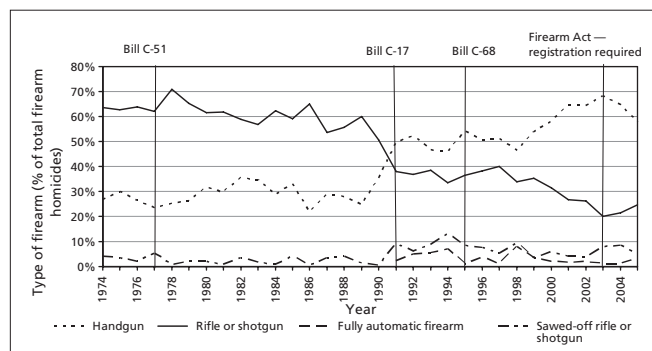
### Overall

Homicide is among the top 10 causes of death in Canada for those aged 1–34 years.<sup>10</sup> Despite increases in gang violence and homicide as a result of illegal guns, firearm homicides have decreased significantly since the 1991 introduction of stricter gun control: from 271 (a rate of 0.99 per 100 000 people) in 1991 to 190 (0.58 per 100 000) in 2006.<sup>20</sup>

Those opposed to long gun registration claim that there is a lack of criminal activity involving long guns.<sup>21</sup> This is not true (Fig. 2). Of firearm-related homicides in 2005 in Canada, 25% were by rifles or shotguns, 58% by handguns and 18% by prohibited firearms.<sup>22</sup> Long guns were used in 72% of firearm-related spousal homicides.<sup>23</sup> Additionally, 10 of the 13 police officers killed on the job in the last decade were murdered by long guns (77%).<sup>24</sup> Since the implementation of the gun registry in 1995, a 30% reduction in homicides by long guns has occurred.<sup>22</sup>



**Fig. 1. Percentage of all homicidal deaths and suicides involving firearms, 1970–2001.** Adapted from: Statistics Canada. Causes of death.<sup>18</sup>



**Fig. 2. Firearm homicides by type of firearm in Canada, 1974–2005.** Adapted from: Canadian Centre for Justice Statistics. Homicide survey, homicides involving firearms, by type of firearm, Canada. Table 253-0005.<sup>22</sup>

Some urban–rural differences may also exist. A national study of illicit firearms demonstrated that long guns were more commonly used in rural crimes, and handguns were used in most urban crimes involving firearms.<sup>8</sup> Between 1998 and 2003 in Toronto, 93% of firearm homicides involved a handgun.<sup>25</sup>

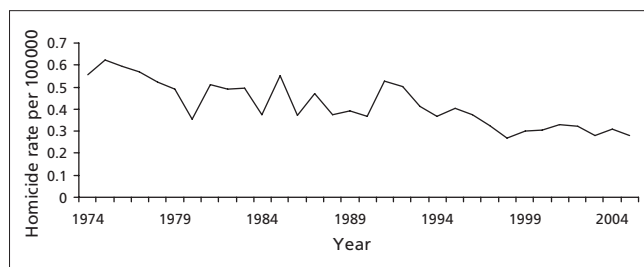
In 2006, police recovered 61 (36%) firearms that had been used in homicides.<sup>26</sup> Of these, 18 (30%) were registered (i.e., 12 rifles or shotguns, 4 handguns and 2 sawed-off rifles or shotguns). Police were able to determine ownership in 45 (74%) cases: 26 were owned by the accused, 2 by the victim and 17 by another person (10 of these were reported as stolen).

### Intimate partner homicides

Significant variations exist between intimate partner firearm homicides and other firearm homicides, both in the types of firearms used and the risk factors. In 2006, 21% of homicides were intimate partner homicides (0.28 per 100 000)<sup>27</sup> (Fig. 3). Firearm use in spousal homicide has decreased by 36% since the 1995 implementation of stricter gun control laws.<sup>23</sup>

The spousal homicide rate against women is 5 times higher than that against men.<sup>28</sup> Between 1995 and 2004, spouses using firearms were responsible for 31% of intimate partner homicides against women.<sup>23</sup> Rifles and shotguns were used in 62%, handguns in 28% and sawed-off rifles or shotguns in 10% of these spousal homicides.

Keeping a gun in the home is a risk factor for spousal homicide.<sup>29</sup> Firearms are not only used for homicide in intimate partner violence. Gun owners enrolled in a Massachusetts batterers’ intervention program described intimidating their partners by threatening to shoot them, a pet or someone they loved; cleaning, holding or loading the gun during an argument; or firing the gun during an argument.<sup>30</sup> US laws prohibiting gun ownership for those placed under a domestic violence restraining order were accompanied by a 7% reduction in intimate partner homicide.<sup>31</sup>



**Fig. 3. Intimate partner homicide rates per 100 000 in Canada, 1974–2005.** Adapted from: Canadian Centre for Justice Statistics. Homicide survey, number of solved homicides, by type of accused–victim relationship, Canada. Table 253-0006.<sup>27</sup>

In Canada, gun licence applications require mandatory notification of current and former spouses. Additionally, spouses can call a 24-hour hotline if they have safety concerns. Over 26 000 calls have been made to the firearms hotline since its introduction in 1998.<sup>32</sup> When responding to a domestic violence call, law enforcement officers are required to remove known firearms and inquire about unregistered firearms.<sup>33</sup> Before responding to a call, officers can query the firearm registry to determine if firearms are on the premises. On average, officers query the registry 5800 times per day.<sup>6</sup>

### ***Gang homicides***

The topics of gangs and youth violence overlap greatly with the issue of firearm-related injury and death. Youths belonging to gangs often remain in gangs into their adulthood.

Although overall homicide rates have decreased substantially since the early 1990s, the rate of youths accused of homicide in Canada reached a level in 2006 that has not been seen since 1961.<sup>34</sup> In that year, 104 gang-related homicides (including both youths and adults) took place (17% of all homicides). Approximately 50% of these homicides occurred in Montréal, Toronto, Edmonton and Vancouver and 75% were committed with firearms, mostly handguns.<sup>26</sup> Although a multifactorial approach is necessary to reduce gang homicides, preventing access to firearms will clearly have a positive effect.

### **Unintentional injuries and deaths related to firearms**

Unintentional death related to firearms forms a small but important percentage of all firearm-related deaths: 3% in 2004.<sup>1</sup> Many of these victims were children; others included hunters and sport shooters. Nonfatal injury resulting from use of a firearm is most commonly unintentional. In Ontario, 63% of all 2004/05 ED visits because of firearm-related injury were classified as unintentional; overall, 395 ED visits and 78 hospital admissions were a result of unintentional firearm injury.<sup>3</sup>

In a study of child and adolescent unintentional firearm-related injuries and deaths, the firearm used was owned by the victim's household member, relative, friend or friend's parent in 72% of cases.<sup>15</sup>

Several interventions have been proposed to reduce unintentional firearm-related injuries and deaths. Compliance with safe storage regulations has been shown to protect children and adolescents from unintentional injury and suicides.<sup>35</sup> The Firearms Act requires these measures.<sup>36</sup> Safe storage laws enacted in some US states have reduced child

mortality caused by the use of firearms.<sup>37</sup> Education and distribution of gun safes and locks have successfully promoted safe storage.<sup>38</sup>

Many firearm groups, including Canada's National Firearms Association, suggest the strategy of "gun-proofing" children.<sup>39</sup> Age-appropriate training programs have been studied extensively in the United States. A recent pretest-posttest randomized trial demonstrated that school-aged children retained the information they were taught,<sup>40</sup> but the trial did not examine whether this impacted real-life scenarios. Another study examined the behaviour of 8- to 12-year-old boys in a realistic scenario: participants were placed in a room with a friend, sibling or both. A handgun and 2 water pistols were present. Of those who discovered the handgun (72%), 76% handled it, 48% pulled the trigger with enough force to discharge it and approximately 50% were unsure if it was a real gun or a toy. Of those who handled the gun or pulled the trigger, 90% had received gun safety education.<sup>41</sup> Gun safety education is clearly inadequate by itself and cannot be the only measure employed to keep our children safe. Ensuring children do not have access to guns is imperative.

Hunters and sport shooters are also at risk of unintentional injury. A review of hunting-related fatalities in North Carolina between 1983 and 1992 revealed that the victim was mistaken for game in 22% of cases. The 1988 Hunter Orange Law required hunters to wear bright orange clothing and resulted in a statistically significant reduction in hunting-related fatalities.<sup>42</sup> Gun owners are also at risk of injury while cleaning and carrying guns. Firearm safety courses have been a prerequisite to acquisition of gun licences in Canada since 1991.<sup>43</sup>

Vernick and colleagues<sup>44</sup> have suggested that product modifications such as personalized guns (i.e., guns that can only be operated by the authorized user through personal identification numbers or fingerprinting), loaded chamber indicators and magazine disconnect devices (also known as magazine safeties) could be associated with a large decrease in unintentional firearm-related deaths and could also reduce the dangers related to stolen guns.

### **Illegal firearms**

Most firearms used in gang-related and youth homicides are illicit and have been smuggled from the United States or stolen from a legal Canadian owner. Firearms smuggled from the United States come from 5 primary sources: 1) licensed US dealers; 2) straw purchasers (who legally acquire a gun for someone unable to legally purchase guns); 3) false identification used by someone unable to legally



purchase guns; 4) secondary US markets such as gun shows, flea markets and private sales; and 5) theft.<sup>8</sup> When the Toronto Police Service examined crime-related guns from 2003, 24% of traceable guns were traced to the United States.<sup>25</sup>

Domestic firearms used in gang crimes are most commonly stolen from legal owners. Since 1974, more than 85 000 firearms have been stolen, of which more than 50% are restricted (e.g., handguns).<sup>8</sup> Between 1998 and 2002, only 34% of missing or stolen firearms were recovered.<sup>45</sup> Therefore, many stolen firearms remain in the hands of criminals and are used in gang homicides. Secure storage coupled with registration to keep track of stolen guns is paramount.

## History of gun control in Canada

Canada has maintained strong gun control for over a century.<sup>43</sup> The first Criminal Code, enacted in 1892, required citizens to have a permit to carry a pistol. In the mid-1930s, gun laws were strengthened to require handgun registration. Over the next 40 years, the laws expanded to restrict ownership of automatic weapons.

A major change in gun control occurred in 1977 when Bill C-51 was passed, which required a Firearms Acquisition Certificate (FAC) to be obtained for all guns. This involved screening all applicants. Bill C-51 also introduced mandatory minimum sentences for indictable offences committed with a firearm, prohibited all fully automatic weapons and forbade individuals from carrying a restricted weapon to protect property.

In 1991, Bill C-17 further toughened FAC requirements. Stricter background information, mandatory safety training and a 28-day waiting period were required.

In 1995, Bill C-68 established the Firearms Act, which shifted firearm administration and regulation out of the Criminal Code. Major components included longer sentences for those convicted of using firearms in serious crimes (e.g., murder), mandatory registration of all firearms, controls on ammunition sales, tighter provisions on storage, mandatory spousal notification of an application for new or renewed licences or registration of firearms, and a ban on semiautomatic military weapons and short-barreled handguns. Bill C-68 was challenged tenaciously by anti-gun control advocates (including the Province of Alberta) as being unconstitutional; however, the Supreme Court of Canada upheld it in 1999. All firearms in Canada were to be registered as of Jan. 1, 2003. The gun registry implementation was hindered by active noncompliance by those opposing the law, but the Royal

Canadian Mounted Police have estimated that as of March 2007, 90% of the approximately 2 million Canadian gun owners have registered their guns.<sup>6</sup>

In February 2006, the Conservative Party of Canada won a minority government after running on a platform that included repealing the gun registry for long guns and investing the money saved in better crime enforcement. Soon after being sworn in, the Conservatives introduced Bill C-21, which would repeal the requirement to register unrestricted long guns, such as hunting rifles and shotguns. The other House of Commons parties, all of which support the registry, opposed this; however, the government found another way to immobilize it. In May 2006, the government introduced a 1-year “amnesty” for long gun owners who failed to renew licences or register long guns, and extended it twice; the amnesty lasts until May 2009.<sup>46,47</sup> Bill C-24, which was introduced in October 2007, would amend the Criminal Code and the Firearms Act to repeal the requirement to obtain a registration certificate for nonrestricted firearms.<sup>48</sup>

## International gun control

Worldwide, approximately 200 000 people die annually from firearms used in suicides, homicides and unintentional injuries in nonconflict settings. In 1997, the Center for Disease Control reported that US children under the age of 15 were 9 times more likely to die from unintentional firearm-related injury, 11 times more likely to die in a firearm-related suicide and 16 times more likely to die in a firearm-related homicide than children in 26 other industrialized nations.<sup>49</sup> In the 2004 US National Firearms Survey, 38% of households and 26% of individuals reported owning at least 1 firearm.<sup>50</sup> Almost 22% of Canadian households own a gun.<sup>51</sup> The most recent statistics from Canada and the United States (2004) show that the US firearm-related homicide rate is 7.2 times higher than Canada's, and the US rate of robberies involving firearms is 4.7 times higher than Canada's.<sup>52</sup> US gun regulation is exceptionally controversial. Most gun regulation occurs at the state level, resulting in great variability across states and difficulty in enforcing regulations. Numerous gun groups (including the National Rifle Association) lobby the US government persistently and tirelessly, arguing that gun ownership is a constitutional right and therefore no restrictions should be in place.<sup>53</sup> Pro-gun control groups such as the Brady Campaign lobby the government for greater gun control. Another US initiative to reduce firearm death is from the Mayors Against Illegal Guns coalition, which is a coalition of over 270 city mayors sharing the common goal of removing illegal guns from the streets.<sup>54</sup>

Gun control regulations have been demonstratively effective in numerous countries. Australia banned semiautomatic and pump-action shotguns in 1996, following a gun-related massacre in Tasmania. The result has been a decade without a mass shooting and accelerated decline in firearm-related homicides and suicides.<sup>55</sup> In 1989, England and Wales passed national legislation on firearm ownership, registration and storage. A significant reduction in firearm-related suicides was observed after this legislation was passed.<sup>56</sup>

## History of emergency medicine initiatives in Canada

### *Involvement in the 1990s gun control debate*

The Canadian Association of Emergency Physicians has been involved in the gun control debate since the early 1990s. The Canadian Association of Emergency Physicians joined the Coalition for Gun Control in 1992, and between 1994 and 1995 developed its first position on gun control. This included 1) support for a national firearms registry; 2) unequivocal support for Bill C-68; 3) consideration given to the development of a medical reporting system for individuals at risk of firearm-related injury (i.e., untreated depression, psychosis, drug and alcohol abuse and disorders with poor impulse control) and those involved in domestic violence; and 4) a call for a concerted effort to develop and institute educational programs on violence and conflict resolution.<sup>5</sup>

This position was presented to the House of Commons Standing Committee on Justice and Legal Affairs in May 1995 and the Senate Committee on Legal and Constitutional Affairs in September 1995.

At the 2006 annual meeting, members challenged the CAEP Board to update the gun control statement given the current government's campaign promise to abandon the gun registry for long guns. This position paper is the result of that challenge.

### *Mandatory gunshot wound reporting in Canada*

Mandatory GSW reporting by health care providers and institutions has been very controversial in Canada. In 2005, Ontario passed Bill 110, the first Canadian law that required health care facilities to report to legal authorities the name of anyone presenting with a GSW.<sup>57</sup> In March 2007, Saskatchewan passed Bill 20: The Gunshot and Stab Wounds Mandatory Reporting Act.<sup>58</sup> Nova Scotia introduced similar legislation, Bill 10: Gunshot and Stab Wounds Mandatory Reporting Act, in November 2007, but after public debate, deleted all references to stabbings

before passing the bill in December 2007.<sup>59</sup> Manitoba passed Bill 20: The Gunshot and Stab Wounds Mandatory Reporting Act in June 2008.<sup>60</sup>

## Ontario's experience

In 2003, the Ontario Medical Association (OMA) Section on Emergency Medicine published a position statement proposing a mandatory GSW reporting law.<sup>61</sup> They argued that whenever a patient is intentionally or unintentionally injured by a firearm, a violation of safe storage or handling practice has occurred. The potential for future harm, whether to victims or others in their home or vicinity, because of unsafe storage or handling or through gang conflict retribution, supports the concept that this is a public health issue. They proposed that the public health implications of those injured by guns were equivalent to suspected child abuse, patients who appear unfit to drive and a long list of communicable diseases: all circumstances that EPs were already obligated to report. The section also clarified that they did not support mandatory stab wound reporting. Gun injuries are inherently different from other violent injuries (including stabbings) owing to their unique lethality, including lethality at a distance. This makes them a public health risk to people in the vicinity when the trigger is pulled.<sup>62</sup> The huge burden that knife wound reporting would place on health care workers and police is extremely disproportionate to the minimal potential health benefit.

The OMA Section on Emergency Medicine also proposed mandatory reporting as a way to avoid conflict occurring between EPs and police when patients with GSWs presented to EDs. The section conducted a survey, which determined that huge variability existed in practice among Ontario EPs.<sup>63</sup> Additionally, many EPs and police mistakenly believed that mandatory reporting was already in place.

The statement was controversial; some expressed strong dissension. Those opposed were concerned about the potential for patients to avoid or delay seeking care. Many were concerned about the ethics of disclosure to legal authorities.<sup>64</sup> All other forms of mandatory disclosure were to non-law enforcement agencies (e.g., Children's Aid Society, Ministry of Transportation or Department of Public Health).<sup>65</sup> Opponents also argued that EPs already had a "duty to warn" in cases where they felt the public was at risk.<sup>65</sup> Additionally, they noted that no existing research demonstrated that a reduction in firearm-related injury or death would result because of mandatory reporting. Despite this, Bill 110 was passed without opposition in spring 2005.

In 2007, a survey was conducted to examine the effec-

tiveness of and issues surrounding mandatory GSW reporting laws in Ontario.<sup>66</sup> Respondents from members of the OMA Section on Emergency Medicine, representatives of the police and random members of the public generally expressed broad acceptance and support for the bill with high rates of compliance by health care workers. Eight of 47 police officers reported personal involvement in an investigation that was initiated by a report under the law, leading to between 6 and 14 incidents of charges laid or guns confiscated. Six incidents of patients delaying care were reported by EPs.<sup>66</sup> Lack of a report database limits the ability to judge effectiveness, but anecdotal evidence supports both potential benefit (investigations leading to the confiscation of guns, charges laid or both) and potential harm (shooting victims delaying care to avoid police questioning). No evidence has been published in either Canada or the United States on the benefits of mandatory reporting laws. Further research will better evaluate this initiative and help guide legislation across Canada. However, experience thus far provides little support for expansion of the scope of reporting laws to include stabings or other forms of criminal activity.

(Given the discussion above, the authors of this paper disagreed about whether to recommend a statement on mandatory GSW reporting. Ultimately the authors presented both sides of the argument to the CAEP Board; the board decided to support mandatory GSW reporting.)

### The need for continued research and advocacy

In October 2007, the current Canadian government introduced Bill C-24, which would repeal the requirement of registering long guns. However, since the implementation of the registry there has been a significant reduction in firearm-related deaths.

Increased funding is essential to support Canadian research into 1) the root causes of violence at all levels (societal, community and individual); 2) mental health; and 3) interventions to decrease unintentional firearm-related injury. A national firearm-related injury and mortality surveillance system is clearly necessary. The resulting databases would be invaluable for health and policy research in Canada.

As physicians we must advocate for injury control. We have the opportunity to make a substantial difference in the health of Canadians and must oppose the weakening of current gun control measures in Canada. As EPs, we have seen too many patients injured or killed by firearms. All firearm-related injuries and deaths are preventable. Thus we must support a multifaceted approach in order to reduce

this health burden on our patients. We believe the measures called for in the 2008 CAEP Position Statement will help achieve these goals.

**Competing interests:** None declared.

### References

1. Mortality, summary list of causes — 2004. Ottawa (ON): Statistics Canada; 2007. Cat no 84F0209XIE. Available: [www.statcan.ca/english/freepub/84F0209XIE/84F0209XIE2004000.htm](http://www.statcan.ca/english/freepub/84F0209XIE/84F0209XIE2004000.htm). (accessed 2008 Nov 27).
2. Canadian Institute for Health Information. National Trauma Registry Report: injury hospitalizations (includes 2001–2002 data). 2004. Ottawa (ON): The Registry; 2007. Available: [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=AR\\_8\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_8_E) (accessed 2008 Nov 27).
3. Smartrisk. Firearm injuries. Toronto (ON): Compass. 2006;3. Available: [www.oninjuryresources.ca/downloads/Compass/2006/2006-11-OICompass-firearm.pdf](http://www.oninjuryresources.ca/downloads/Compass/2006/2006-11-OICompass-firearm.pdf) (accessed 2008 Nov 27).
4. Miller TR. Costs associated with gunshot wounds in Canada in 1991. *CMAJ* 1995;153:1261-8.
5. Fisher H, Drummond A. A call to arms: the emergency physician, international perspectives on firearm injury prevention and the Canadian gun control debate. *J Emerg Med* 1999;17:529-37.
6. Quick facts about the Canadian Firearms Program as of March 2007. Ottawa (ON): Royal Canadian Mounted Police; 2007. Available: [www.cfc-cafc.gc.ca/media/program\\_statistics/default\\_e.asp](http://www.cfc-cafc.gc.ca/media/program_statistics/default_e.asp) (accessed 2008 Nov 27).
7. Focus on firearms. Ottawa (ON): Canadian Firearms Centre; 1998. Available: [www.cfc-cafc.gc.ca/pol-leg/res-eval/pamphlets/pdfs/focus-en.pdf](http://www.cfc-cafc.gc.ca/pol-leg/res-eval/pamphlets/pdfs/focus-en.pdf) (accessed 2008 Nov 27).
8. Canada. Feature Focus: The illegal firearms market in Canada 2007. Ottawa (ON): Criminal Intelligence Service Canada; 2008. Available: [www.cisc.gc.ca/annual\\_reports/annual\\_report\\_2007/feature\\_focus\\_2007\\_e.html](http://www.cisc.gc.ca/annual_reports/annual_report_2007/feature_focus_2007_e.html) (accessed 2008 Nov 27).
9. Ontario. Background: McGuinty government's four-point plan to protect Ontario communities from gun violence. Toronto (ON): Ministry of the Attorney General; 2008. Available: [www.attorneygeneral.jus.gov.on.ca/english/news/2008/20080527-gun-bg-en.pdf](http://www.attorneygeneral.jus.gov.on.ca/english/news/2008/20080527-gun-bg-en.pdf) (accessed 2008 Nov 27).
10. Canada. Leading causes of death and hospitalization in Canada. Ottawa (ON): Public Health Agency; 2004. Available: [www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php](http://www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php) (accessed 2008 Nov 27).
11. Langlois S, Morrison P. Suicide death and attempts. *Health Rep* 2002;13:9-23.
12. Shenassa ED, Catlin SN, Buka SL. Lethality of firearms relative to other suicide methods: a population based study. *J Epidemiol Community Health* 2003;57:120-4.

13. Kellermann AL, Rivara FP, Somes G, et al. Suicide in the home in relation to gun ownership. *N Engl J Med* 1992;327:467-72.
14. Miller M, Azrael D, Hepburn L, et al. The association between changes in household firearm ownership and rates of suicide in the United States, 1981–2002. *Inj Prev* 2006;12:178-82.
15. Grossman DC, Reay DT, Baker SA. Self-inflicted and unintentional firearm injuries among children and adolescents: the source of the firearm. *Arch Pediatr Adolesc Med* 1999;153:875-8.
16. Canada. Trends in First Nations mortality. Ottawa (ON): Health Canada; 1996.
17. Firearms Act. 1995, c. 39. F-11.6. Available: <http://laws.justice.gc.ca/en/ShowFullDoc/cs/F-11.6///en> (accessed 2008 Nov 28).
18. Causes of death. Ottawa (ON): Statistics Canada. Cat no 84-208.
19. Leenaars AA, Moksony F, Lester D, et al. The impact of gun control (Bill C-51) on suicide in Canada. *Death Stud* 2003;27:103-24.
20. Canadian Centre for Justice Statistics. Homicide survey, primary method used to commit homicide Canada. Table 253-0002. Ottawa (ON): Statistics Canada; 2008. Cat no 85F0033MWE.
21. Law-abiding Unregistered Firearms Association. Random firearms registry quick facts. Edmonton (AB): The Association; 2008. Available: [www.lufa.ca/quickfacts.asp](http://www.lufa.ca/quickfacts.asp) (accessed 2008 Nov 27).
22. Canadian Centre for Justice Statistics. Homicide survey, homicides involving firearms, by type of firearm, Canada. Table 253-0005. Ottawa (ON): Statistics Canada; 2008.
23. Canadian Centre for Justice Statistics. Family violence in Canada: a statistical profile 2006. Ottawa (ON): Statistics Canada; 2006. Cat no 85-224-XIE. Available: [www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/pdfs/fv-85-224-XIE2006000\\_e.pdf](http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/pdfs/fv-85-224-XIE2006000_e.pdf) (accessed 2008 Nov 27).
24. Canadian Association of Chiefs of Polices. Canadian police and peace officer's memorial. Ottawa (ON): The Association; 2007. Available: [www.cacp.ca/english/memorial/english/default.htm](http://www.cacp.ca/english/memorial/english/default.htm) (accessed 2008 Nov 27).
25. Minutes of the Toronto Police Services Board Meeting. Toronto (ON): The Board. 2007 Jan 22.
26. Homicides 2006. Ottawa (ON): The Daily. Statistics Canada; October 17, 2007. Available: [www.statscan.ca/Daily/English/071017/d071017b.htm](http://www.statscan.ca/Daily/English/071017/d071017b.htm) (accessed 2008 Nov 27).
27. Canadian Centre for Justice Statistics. Homicide survey, number of solved homicides, by type of accused-victim relationship, Canada. Table 253-0006. Ottawa (ON): Statistics Canada; 2008.
28. Homicides 2005. Ottawa (ON): The Daily. Statistics Canada; Nov. 8, 2006. Available: [www.statcan.ca/Daily/English/061108/d061108b.htm](http://www.statcan.ca/Daily/English/061108/d061108b.htm) (accessed 2008 Nov 27).
29. Campbell JC, Webster D, Koziol-McLain J, et al. Risk factors for femicide in abusive relationships: results from a multisite case control study. *Am J Public Health* 2003;93:1089-97.
30. Rothman EF, Hemenway D, Miller M, et al. Batterers' use of guns to threaten intimate partners. *J Am Med Womens Assoc* 2005;60:62-8.
31. Vigdor ER, Mercy JA. Do laws restricting access to firearms by domestic violence offenders prevent intimate partner homicide? *Eval Rev* 2006;30:313-46.
32. Canada's gun control program: keeping firearms out of the wrong hands. Ottawa (ON): Department of Justice; 2003. Available: [http://canada.justice.gc.ca/en/news/nr/2003/doc\\_30840.html](http://canada.justice.gc.ca/en/news/nr/2003/doc_30840.html) (accessed 2008 Nov 27).
33. Criminal Code R.S.C. 1985, c. C-46, s. 117.04.
34. Crime Statistics in Canada. Ottawa (ON): Statistics Canada; 2006. cat. no. 85-002-XIE. Available: [www.statcan.ca/english/freepub/85-002-XIE/85-002-XIE2007005.pdf](http://www.statcan.ca/english/freepub/85-002-XIE/85-002-XIE2007005.pdf) (accessed 2008 Nov 27).
35. Grossman DC, Mueller BA, Riedy C, et al. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA* 2005;293:707-14.
36. *Firearms Act*. Storage, Display, Transportation and Handling of Firearms by Individuals Regulations. (SOR/98-210). Available: <http://laws.justice.gc.ca/en/F-11.6/SOR-98-210/index.html> (accessed 2008 Nov 27).
37. Hepburn L, Azrael D, Miller M, et al. The effect of child access prevention laws on unintentional child firearm fatalities, 1979-2000. *J Trauma* 2006;61:423-8.
38. Carbone PS, Clemens CJ, Ball TM. Effectiveness of gun-safety counseling and a gun lock giveaway in a Hispanic community. *Arch Pediatr Adolesc Med* 2005;159:1049-54.
39. National Firearm Association. Gunproofing your child. Edmonton (AB): The Association; 2007. Available: [www.nfa.ca/publications/gunproof.pdf](http://www.nfa.ca/publications/gunproof.pdf) (accessed 2008 Nov 27).
40. Howard PK. Evaluation of age-appropriate firearm safety interventions. *Pediatr Emerg Care* 2005;21:473-9.
41. Jackman GA, Farah MM, Kellermann AL, et al. Seeing is believing: what do boys do when they find a real gun? *Pediatrics* 2001;107:1247-50.
42. Cina SJ, Lariscy CD, McGown ST, et al. Firearm-related hunting fatalities in North Carolina: impact of the 'Hunter Orange' Law. *South Med J* 1996;89:395-6.
43. History of firearms control in Canada: up to and including the Firearms Act. 2004. Ottawa (ON): Royal Canadian Mounted Police; 2007. Available: [www.cfc-cafc.gc.ca/pol-leg/hist/firearms\\_control\\_e.asp](http://www.cfc-cafc.gc.ca/pol-leg/hist/firearms_control_e.asp) (accessed 2008 Nov 27).
44. Vernick JS, O'Brien M, Hepburn LM, et al. Unintentional and undetermined firearm related deaths: a preventable death analysis for three safety devices. *Inj Prev* 2003;9:307-11.
45. The Registrar of Firearm's Report to the Solicitor General of Canada on the Administration of the Firearms Act. Ottawa (ON): Royal Canadian Mounted Police; 2002. Cat no JS99-1/2002.
46. Canada. Order Amending the Order Declaring an Amnesty Pe-



- riod (2006). Ottawa (ON): Canada Gazette; 2007. Available: <http://canadagazette.gc.ca/partI/2007/20070407/html/regle3-e.html> (accessed 2008 Nov 27).
47. Canada. Order Amending the Order Declaring an Amnesty Period (2006). Ottawa (ON): Canada Gazette; 2008. Available: <http://gazetteducanada.gc.ca/partII/2008/20080528/html/sor147-e.html> (accessed 2008 Nov 27).
  48. Bill C-21, An Act to amend the Criminal Code and the Firearms Act (non-registration of firearms that are neither prohibited nor restricted), 2nd Sess., 39th Leg., Canada, 2007.
  49. Centre for Disease Control. Rates of homicide, suicide, and firearm-related death among children — 26 industrialized countries. Atlanta (GA): The Centre; 1997. Available: [www.cdc.gov/mmwr/preview/mmwrhtml/00046149.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/00046149.htm) (accessed 2008 Nov 27).
  50. Hepburn L, Miller M, Azrael D, et al. The US gun stock: results from the 2004 national firearms survey. *Inj Prev* 2007;13:15-9.
  51. Block R. Firearms in Canada and eight other western countries: selected findings of the 1996 international crime (victim) survey 1997. Ottawa (ON): Department of Justice; 1997. Available: [www.cfc-cafc.gc.ca/pol-leg/res-eval/publications/1997/pdfs/crime\\_en.pdf](http://www.cfc-cafc.gc.ca/pol-leg/res-eval/publications/1997/pdfs/crime_en.pdf) (accessed 2008 Nov 27).
  52. Hung K. Firearm statistics. Ottawa (ON): Department of Justice; 2006. Available: [www.justice.gc.ca/en/ps/rs/rep/2006/rr06-2/table.html](http://www.justice.gc.ca/en/ps/rs/rep/2006/rr06-2/table.html) (accessed 2008 Nov 27).
  53. National Rifle Association. Available: [www.nra.org/about/](http://www.nra.org/about/)
  54. Mayors Against Illegal Guns Coalition. Available at: <http://mayorsagainstillegalguns.org/html/about/about.shtml>
  55. Chapman S, Alpers P, Agho K, et al. Australia's 1996 gun law reforms: faster falls in firearm deaths, firearm suicides, and a decade without mass shootings. *Inj Prev* 2006;12:365-72.
  56. Hawton K, Fagg J, Simkin S, et al. Methods used for suicide by farmers in England and Wales. The contribution of availability and its relevance to prevention. *Br J Psychiatry* 1998;173:320-4.
  57. Bill 110, Mandatory gun-shot wounds reporting act, 1st Sess., 38th Leg., Ontario, 2005. Available: [//www.ontla.on.ca/bills/bills-files/38\\_Parliament/Session1/b110ra.pdf](http://www.ontla.on.ca/bills/bills-files/38_Parliament/Session1/b110ra.pdf) (accessed 2008 Nov 27).
  58. Saskatchewan. Progress of Bills 2006/07. Regina (SK): Legislative Assembly of Saskatchewan; 2007. Available: [www.legassembly.sk.ca/bills/ProgressOfBills/Progress\\_of\\_Bills\\_2006-2007.pdf](http://www.legassembly.sk.ca/bills/ProgressOfBills/Progress_of_Bills_2006-2007.pdf) (accessed 2008 Nov 27).
  59. Bill 10, Gunshot and Stab Wounds Mandatory Reporting Act, 2nd Sess., 60th Leg., Nova Scotia, 2007. Available: [www.gov.ns.ca/legislature/legc/bills/60th\\_2nd/1st\\_read/b010.htm](http://www.gov.ns.ca/legislature/legc/bills/60th_2nd/1st_read/b010.htm) (accessed 2008 Nov 27).
  60. Bill 20, The Gunshot and Stab Wounds Mandatory Reporting Act. 2008, 2nd Sess., 39th Leg., Manitoba, 2008. Available: <http://web2.gov.mb.ca/laws/statutes/2008/c02108e.php> (accessed 2008 Nov 27).
  61. Ontario Medical Association. The case for mandatory reporting of gunshot wounds in the emergency department. Toronto (ON): The Association; 2003. Available: [www.oma.org/pcomm/OMR/nov/03gunshot.htm](http://www.oma.org/pcomm/OMR/nov/03gunshot.htm) (accessed 2008 Nov 27).
  62. Ovens H, LeBlanc B. OMA submission to the Standing Committee on Justice Policy on Bill 110: an act to require the disclosure of information to police respecting persons being treated for gunshot wounds. Toronto (ON): The Association; 2005. Available: [www.oma.org/pcomm/OMR/apr/05bill110.htm](http://www.oma.org/pcomm/OMR/apr/05bill110.htm) (accessed 2008 Nov 27).
  63. Ovens H, Morrison H, Drummond A, et al. The case for mandatory reporting of gunshot wounds in the emergency department. Toronto (ON): The Ontario Medical Association; 2003. Available: [www.oma.org/pcomm/OMR/nov/03gunshot.htm](http://www.oma.org/pcomm/OMR/nov/03gunshot.htm) (accessed 2008 Nov 27).
  64. Pauls MA, Downie J. Shooting ourselves in the foot: why mandatory reporting of gunshot wounds is a bad idea. *CMAJ* 2004;170:1255-6.
  65. The Standing Committee on Justice Policy. Deliberations of Bill 110 - Mandatory Gun-shot Wounds Reporting Act. 2005. Toronto (ON): Legislative Assembly of Ontario; 2005. Available: [www.ontla.on.ca/committee-proceedings/transcripts/files\\_html/2005-03-02\\_JP022.htm](http://www.ontla.on.ca/committee-proceedings/transcripts/files_html/2005-03-02_JP022.htm) (accessed 2008 Nov 27).
  66. Ovens H, Borgundvaag B, Park H. Reaction in Ontario to Bill 110: Canada's first mandatory gunshot wound reporting law. *CJEM* 2009;11:3-13.

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**Correspondence to:** Dr. Carolyn Snider, Emergency Department, St. Michael's Hospital, 30 Bond St., Toronto ON M5B 1W8; [sniderc@smh.toronto.on.ca](mailto:sniderc@smh.toronto.on.ca)