

Canadian Medical Association  
Submission on Bill S-209, An Act to  
Amend the Criminal Code (prize fights)

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Submitted to the House of Commons Standing Committee on  
Justice and Human Rights

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A healthy population and a vibrant medical profession  
Une population en santé et une profession médicale  
dynamique

The Canadian Medical Association (CMA) is the national voice of Canadian physicians. Founded in 1867, CMA's mission is to serve and unite the physicians of Canada and be the national advocate, in partnership with the people of Canada, for the highest standards of health and health care.

On behalf of its more than 78,000 members and the Canadian public, CMA performs a wide variety of functions. Key functions include advocating for health promotion and disease/injury prevention policies and strategies, advocating for access to quality health care, facilitating change within the medical profession, and providing leadership and guidance to physicians to help them influence, manage and adapt to changes in health care delivery.

The CMA is a voluntary professional organization representing the majority of Canada's physicians and comprising 12 provincial and territorial divisions and 51 national medical organizations.



## Introduction

In 2010, physician delegates to the CMA's annual General Council voted in favour of a ban on mixed martial arts prize fighting matches in Canada. The CMA's complete policy on head injury and sport, the central concern of physicians with respect to mixed martial arts, is attached as an appendix to this brief. A key recommendation in this policy is that physicians discourage participation in sports in which intentional trauma to the head and body is the objective of the sport, as is the case with mixed martial arts (MMA).

## Background

MMA prize fighting, like commercial boxing, is distinct from healthy sport because the basic tenet is to win by deliberately incapacitating one's opponent through violent bodily assault. Professional fighters train in different martial arts disciplines in order to develop the widest possible set of fighting techniques. Blows delivered by hands, feet, elbows and knees are entirely permissible.<sup>1</sup> "Bouts" are won in a number of ways that include deliberate head injury such as knockout (KO) and technical knockout (TKO). Physician and referee stoppage are recognized as a necessary option for the declaration of a winner in order to prevent continued violence.<sup>4; 5</sup>

Despite the introduction of rules and regulations meant to ensure fighter safety, MMA is a violent sport with a high risk of injury. Publications seem to indicate that the overall injury rate in professional MMA competitions ranges approximately from 23 to 28 injuries per 100 fight participations, which is similar to that found in other combat sports involving striking, including boxing.<sup>1; 5; 7</sup> Organizers support the rules because they realize that prize fighting can't be sustained as a business if the fighters are unable to return to the ring.

The injuries vary in severity but include many types of head injury: ocular injuries, such as rupture of the bony orbit or of the eye itself; facial injuries including fractures; spine injuries; concussion; and tympanic membrane ruptures.<sup>2, 6, 7</sup>

Most sanctioned matches end in a submission, judge's decision or referee/physician stoppage, as opposed to KO or TKO. It is important to note that the overall risk of critical injury, defined as a persistent acquired brain injury, permanent blindness, permanent functional loss of limb or paralysis, appears to be low. The ability of referees to intercede and for fighters to voluntarily concede victory to their opponents, as well as the presence of physicians at the ringside, are all thought to play a role in minimizing the risk of critical injury.<sup>7</sup>

The risk of traumatic brain injury and concussion nevertheless remains one of the chief concerns with respect to MMA. KO rates are thought to be lower in professional MMA events than in similar boxing competitions, but it is not clear why. It is well known that knockouts are the result of brain injury<sup>4</sup> and at least one study reported that blunt trauma to the head was a common reason for match stoppage. One study reported a severe concussion rate of 16.5 per 100 fighter participations (3.3% of all matches).<sup>6</sup> Regrettably, as in other combat sports, long-term follow-up of players is insufficient to measure how often head injury leads to permanent brain damage.<sup>1,3</sup>

## **Issues**

### **Insufficient research**

Whether you defend or condemn MMA, the true nature and rate of severe brain injuries is speculative.<sup>6</sup> Similarly, the absence of longitudinal studies means that the true long-term health implications of MMA fighting can only be surmised.

### **Risk factors for injury**

Unsurprisingly, losing fighters are at a considerably greater risk for sustaining injury. It is notable that fighters losing by KO or TKO appear to have a higher overall incidence of injury.<sup>4</sup> An increased duration of fighting is associated with an increased incidence of injury.<sup>3</sup> <sup>5</sup> However, it remains unclear how age and fight experience contribute to the risk for sustaining injury.<sup>2,3,4</sup> It appears that fighters with head injury continue to fight and sustain further injury, head injury being more clearly associated with injury than are either inexperience or age.

### **Current situation**

Despite the sport's growing popularity, professional MMA competitions are currently illegal in Canada. Indeed, section 83(2) of the Criminal Code of Canada states that only boxing matches, where only fists are used, are legal. However, the governments of Nova Scotia, Quebec, Ontario, Manitoba and Northwest Territories have regulated/licensed MMA through athletic governing commissions, effectively circumventing the Criminal Code. The legality of the sport in New Brunswick, Alberta and British Columbia currently varies by municipality.

### **CMA Recommendations**

The CMA recommends that Section 83(2) of the Criminal Code, the ban on mixed martial arts, be maintained in its current form.

The CMA recommends that the federal government undertake further research on head injuries and concussion in Canada, including expanding current surveillance tools for the incidence of these injuries.

## References

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