



TO: Chair and Members of the Board of Health

FROM: Graham L. Pollett, MD, FRCPC  
Medical Officer of Health

DATE: June 17, 2010

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## KEEP MIXED MARTIAL ARTS ILLEGAL IN ONTARIO

### ***Recommendations***

#### ***It is recommended:***

- 1. That the Board of Health petition Premier Dalton McGuinty to keep mixed martial arts events illegal in Ontario; and further***
- 2. That all Ontario Boards of Health be requested to support this position.***

On Tuesday, May 25, 2010, officials with the Ultimate Fighting Championship (UFC) announced the establishment of an Ontario office in Toronto. The UFC is a mixed martial arts (MMA) promotion company based in the United States that hosts numerous events world wide. UFC events involve 2 men fighting in an enclosed metal cage. Initially, advertised as a “no holds barred” competition, some rules have been implemented in response to criticism and in an effort to obtain sanctioning from US State Athletic Commissions. These events have been called “a half step better than barbarism”. Mr. Tom Wright, former Canadian Football League Commissioner has been hired as the Ontario UFC President. MMA events are illegal in Ontario. It is clear that the establishment of this office is related to the UFC working toward having its events legalized in this province.

The Board of Health has taken a stand against violence in hockey as part of an approach to utilize sports as a means of educating boys and men in how to address highly emotional, conflict situations without resorting to violence as part of achieving the overall objective of addressing violence in society, particularly violence against women and children. This action is in recognition that the vast majority of violence in society – violence against women, children and men – is inflicted by men. Boys and men must become involved if violence is to be prevented.

Events such as those held by the UFC, whether presented as live events or televised, have a negative impact on children and adolescents. The cumulative result of repeated exposure to violence through sports, video games, movies, etc. is to desensitize people to the negative and harmful effects of violence. For children this is exhibited in a number of ways including aggressive behavior.

Attached as Appendix A is the American Academy of Pediatrics Position Statement on Media Violence. Though written in 2001, the exposure to media violence has only increased since that time with the advancement of video game technology and the establishment of violent events such as the UFC. The American Academy of Pediatrics document states:

*“Interpersonal violence, as victim or as perpetrator, is now a more prevalent health risk than infectious disease, cancer or congenital disorders for children, adolescents and young adults”.*

Violence in society is occurring in epidemic proportions. It can only be meaningfully addressed if we as a society make violence prevention a priority. One small step in that regard is to keep mixed martial arts events illegal in Ontario.

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# AMERICAN ACADEMY OF PEDIATRICS

Committee on Public Education

## Media Violence

**ABSTRACT.** The American Academy of Pediatrics recognizes exposure to violence in media, including television, movies, music, and video games, as a significant risk to the health of children and adolescents. Extensive research evidence indicates that media violence can contribute to aggressive behavior, desensitization to violence, nightmares, and fear of being harmed. Pediatricians should assess their patients' level of media exposure and intervene on media-related health risks. Pediatricians and other child health care providers can advocate for a safer media environment for children by encouraging media literacy, more thoughtful and proactive use of media by children and their parents, more responsible portrayal of violence by media producers, and more useful and effective media ratings.

ABBREVIATIONS. AAP, American Academy of Pediatrics; MTV, Music Television; FTC, Federal Trade Commission.

### INTRODUCTION

At a Congressional Public Health Summit in July 2000, the American Academy of Pediatrics (AAP) was joined by the American Medical Association, the American Academy of Child and Adolescent Psychiatry, and the American Psychological Association in issuing an unprecedented "Joint Statement on the Impact of Entertainment Violence on Children" (<http://www.aap.org/advocacy/releases/jstmtvevc.htm>). Although recent school shootings have prompted politicians and the general public to focus their attention on the influence of media violence, the medical community has been concerned with this issue since the 1950s.<sup>1</sup> On the basis of a growing and nearly unanimous body of evidence associating media violence with increased aggression in young people, the US Surgeon General issued a special report on the public health effects of media violence in 1972.<sup>2</sup> Ten years later, the National Institute of Mental Health issued a comprehensive review of the research on media violence and its effects, outlining concerns for children's psychological health,<sup>3</sup> as did a report generated by the American Psychological Association in 1993.<sup>4</sup>

### EXPOSURE

American children between 2 and 18 years of age spend an average of 6 hours and 32 minutes each day using media (television, commercial or self-recorded video, movies, video games, print, radio, recorded

music, computer, and the Internet).<sup>5</sup> This is more time than they spend on any other activity, with the exception of sleeping. When simultaneous use of multiple media is accounted for, that exposure increases to 8 hours a day.<sup>6</sup> A large proportion of this media exposure includes acts of violence that are witnessed or "virtually perpetrated" (in the form of video games) by young people. It has been estimated that by age 18, the average young person will have viewed 200 000 acts of violence on television alone.<sup>7</sup>

The National Television Violence study evaluated almost 10 000 hours of broadcast programming from 1995 through 1997 and found that 61% of the programming portrayed interpersonal violence, much of it in an entertaining or glamorized manner.<sup>8-10</sup> The highest proportion of violence was found in children's shows. Of all animated feature films produced in the United States between 1937 and 1999, 100% portrayed violence, and the amount of violence with intent to injure has increased through the years.<sup>11</sup> More than 80% of the violence portrayed in contemporary music videos is perpetrated by attractive protagonists against a disproportionate number of women and blacks.<sup>12</sup> American media, in particular, tend to portray heroes using violence as a justified means of resolving conflict and prevailing over others.<sup>13</sup>

Prolonged exposure to such media portrayals results in increased acceptance of violence as an appropriate means of solving problems and achieving one's goals.<sup>14,15</sup> Television, movies, and music videos normalize carrying and using weapons and glamorize them as a source of personal power.<sup>16</sup> Children in grades 4 through 8 preferentially choose video games that award points for violence against others.<sup>17</sup> Of the 33 most popular games, 21% feature violence against women.<sup>18</sup> The popular music CD that led the sales charts and swept the Music Television (MTV) Video Music Awards in the year 2000 featured songs about rape and murder with graphic lyrics and sound effects.<sup>19</sup> Because children have high levels of exposure, media have greater access and time to shape young people's attitudes and actions than do parents or teachers, replacing them as educators, role models, and the primary sources of information about the world and how one behaves in it.<sup>20</sup>

After the tragic shootings at Columbine High School in 1999, President Clinton asked the Federal Trade Commission (FTC) to investigate whether the motion picture, music, and video game industries advertised and marketed violent material to children and adolescents. Working with industry-provided

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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documents, the FTC determined that, despite the fact that their own ratings systems found the material appropriate only for adults, these industries practiced “pervasive and aggressive marketing of violent movies, music, and electronic games to children.”<sup>21</sup>

Many parents find the entertainment industry’s media ratings systems difficult to use; 68% of the parents of 10- to 17-year-olds do not use the television rating system at all,<sup>22</sup> and only 10% check the ratings of computer or video games that their adolescents wish to rent or buy.<sup>23</sup> Many parents find the ratings unreliably low, with an objective parental evaluation finding as much as 50% of television shows rated TV-14 to be inappropriate for their teenagers.<sup>24</sup> The ratings are determined by industry-sponsored ratings boards or the artists and producers themselves. They are age based, which assumes that all parents agree with the raters about what is appropriate content for their children of specific ages. Furthermore, different ratings systems for each medium (television, movies, music, and video games) make the ratings confusing, because they have little similarity or relationship to one another. The AAP offers an informational brochure that pediatricians can offer to parents and children to help them use the various ratings systems to guide better media choices.<sup>25</sup>

### INFLUENCE

Research has associated exposure to media violence with a variety of physical and mental health problems for children and adolescents, including aggressive behavior, desensitization to violence, fear, depression, nightmares, and sleep disturbances. More than 3500 research studies have examined the association between media violence and violent behavior; all but 18 have shown a positive relationship.<sup>26</sup> Consistent and strong associations between media exposure and increases in aggression have been found in population-based epidemiologic investigations of violence in American society,<sup>27</sup> cross-cultural studies,<sup>28</sup> experimental<sup>29–31</sup> and “natural” laboratory research,<sup>32</sup> and longitudinal studies that show that aggressive behavior associated with media exposure persists for decades.<sup>33–35</sup> The strength of the correlation between media violence and aggressive behavior found on meta-analysis<sup>36</sup> is greater than that of calcium intake and bone mass, lead ingestion and lower IQ, condom nonuse and sexually acquired human immunodeficiency virus infection, or environmental tobacco smoke and lung cancer<sup>37</sup>—associations clinicians accept and on which preventive medicine is based without question.

Children are influenced by media—they learn by observing, imitating, and making behaviors their own. Aggressive attitudes and behaviors are learned by imitating observed models.<sup>38–41</sup> Research has shown that the strongest single correlate with violent behavior is previous exposure to violence.<sup>42–44</sup> Because children younger than 8 years cannot discriminate between fantasy and reality, they are uniquely vulnerable to learning and adopting as reality the circumstances, attitudes, and behaviors portrayed by entertainment media.<sup>45–49</sup>

It is not violence itself but the context in which it is portrayed that can make the difference between learning about violence and learning to be violent. Serious explorations of violence in plays like *Macbeth* and films like *Saving Private Ryan* treat violence as what it is—a human behavior that causes suffering, loss, and sadness to victims and perpetrators. In this context, viewers learn the danger and harm of violence by vicariously experiencing its outcomes. Unfortunately, most entertainment violence is used for immediate visceral thrills without portraying any human cost. Sophisticated special effects, with increasingly graphic depictions of mayhem, make virtual violence more believable and appealing. Studies show that the more realistically violence is portrayed, the greater the likelihood that it will be tolerated and learned.<sup>50,51</sup> Titillating violence in sexual contexts and comic violence are particularly dangerous, because they associate positive feelings with hurting others.<sup>52–54</sup>

In addition to modeling violent behavior, entertainment media inflate the prevalence of violence in the world, cultivating in viewers the “mean world” syndrome, a perception of the world as a dangerous place.<sup>55,56</sup> Fear of being the victim of violence is a strong motivation for some young people to carry a weapon, to be more aggressive, to “get them before they get me.”<sup>56</sup> For some children, exposure to media violence leads to anxiety, depression, and posttraumatic stress disorder<sup>57</sup> or to sleep disturbances and nightmares.<sup>58</sup> Some defend media violence as an outlet for vicariously releasing hostility in the safety of virtual reality. However, research testing this “catharsis hypothesis” found that after experiencing media violence, children displayed increased overt aggression because of lowered inhibitions.<sup>59</sup> Numerous studies have shown that the most insidious and potent effect of media violence is to desensitize all of us to real life violence.<sup>60–62</sup>

Interactive media, such as video games and the Internet, are so new that there has been little time to assess their influence on children’s physical and mental health. Early studies of these rapidly growing and ever more sophisticated types of media indicate that the effects of child-initiated virtual violence may be even more profound than those of passive media, such as television.<sup>63–65</sup> Experimental studies have shown that after playing video games, young people exhibit measurable decreases in prosocial and helping behaviors and increases in aggressive thoughts and violent retaliation to provocation.<sup>66</sup> Playing violent video games has been found to account for a 13% to 22% increase in adolescents’ violent behavior; by comparison, smoking tobacco accounts for 14% of the increase in lung cancer.<sup>66</sup>

Children learn by observing and trying out “behavioral scripts.” Repeated exposure to violent behavioral scripts can lead to increased feelings of hostility, expectations that others will behave aggressively, desensitization to the pain of others, and increased likelihood of interacting and responding to others with violence.<sup>66</sup> Active participation increases effective learning. Video games are an ideal environment in which to learn violence. They place the

player in the role of the aggressor and reward him or her for successful violent behavior. Rather than observing part of a violent interaction, video games allow the player to rehearse an entire behavioral script, from provocation, to choosing to respond violently, to resolution of the conflict. Moreover, video games have been found to be addictive<sup>67</sup>; children and adolescents want to play them for long periods of time to improve their scores and advance to higher levels. Repetition increases their effect.

Interpersonal violence, as victim or as perpetrator, is now a more prevalent health risk than infectious disease, cancer, or congenital disorders for children, adolescents, and young adults. Homicide, suicide, and trauma are leading causes of mortality in the pediatric population, resulting in cumulative death rates of 22.8 per 100 000 in those 5 to 14 years of age and 114.4 per 100 000 in those 15 to 21 years of age.<sup>68</sup> Among urban youth, interpersonal violence is the most prevalent cause of injury (33%), and the incidence of gunshot wounds has increased dramatically in the past decade.<sup>69</sup> Gun violence is now a leading killer of children and adolescents.<sup>70,71</sup> Each year, 3500 adolescents are murdered<sup>72</sup> and more than 150 000 adolescents are arrested for violent crimes.<sup>73</sup> Nonwhite children and adolescents, particularly black males, disproportionately suffer the effects of violence in their communities as aggressors and as victims. The number of murderers 15 to 17 years of age increased by 195% between 1984 and 1994, when 94% of juveniles arrested for murder were male and 59% were black.<sup>74</sup> The murder rate of young black males rose 300% during the 3 decades after television's introduction in the United States.<sup>75</sup> Although exposure to media violence is not the sole factor contributing to aggression, antisocial attitudes, and violence among children and adolescents, it is an important health risk factor on which we, as pediatricians and as members of a compassionate society, can intervene.

The AAP offers the following recommendations:

1. Pediatricians must remain aware of the pervasive influence that the wide and expanding variety of entertainment media have on the physical and mental health of children and adolescents. Pediatricians should incorporate a media history<sup>76</sup> into annual health maintenance examinations and, as with seat belts and bicycle helmets, suggest healthy alternatives, such as sports, creative pursuits, interactive play, and reading, for children at risk. When heavy media use by a child is identified, pediatricians should evaluate the child for aggressive behaviors, fears, or sleep disturbances and intervene appropriately.<sup>77</sup>
2. Pediatricians should encourage parents to adhere to the AAP Media Education recommendations,<sup>78</sup> including making thoughtful media choices and covieing with children, limiting screen time (including television, videos, computer and video games) to 1 to 2 hours per day, using the v-chip, avoiding violent video games in homes where they may be observed or played by young chil-

dren, and keeping children's bedrooms media free.

3. Pediatricians and other child health professionals should ensure that only nonviolent media choices be provided to patients in outpatient waiting rooms and inpatient settings. Specific content guidelines should be established for entertainment options at all child and adolescent health care settings. Movies, video games, and print media should be prescreened, and broadcast television should be filtered through a v-chip before being made available to young patients.
4. On a local level, pediatricians should encourage parents, schools, and communities to educate children to be media literate as a means of protecting them against deleterious health effects of media exposure.<sup>78-81</sup> Media education involves teaching how media work, how media can influence the ways that we perceive reality and develop attitudes, how to determine whether media messages are appropriate, and how to reject messages that are not healthy. Research has demonstrated that media education and thoughtful media use can reduce violent behavior in children.<sup>82</sup>
5. On state and national levels, pediatricians should collaborate with other health care organizations, educators, government, and research funding sources to keep media violence on the public health agenda. Because leading researchers now state that the link between media violence and aggressive behavior is undeniable,<sup>83</sup> public health, psychology, and communications investigators should focus future research efforts on effective social, artistic, and clinical interventions to mitigate the harmful effects of media exposure.
6. Pediatricians should advocate for more child-positive media, not censorship. Pediatricians should support and collaborate with media producers, applying our expertise in child health and development toward creating child-friendly and truthful media. The entertainment industry should be urged to extend personal concern for the well-being of children to their business of creating and selling movies, television, music, and video games. Pediatricians offer the following recommendations to the entertainment industry:
  - Avoid the glamorization of weapon carrying and the normalization of violence as an acceptable means of resolving conflict.
  - Eliminate the use of violence in a comic or sexual context or in any other situation in which the violence is amusing, titillating, or trivialized.
  - Eliminate gratuitous portrayals of interpersonal violence and hateful, racist, misogynistic, or homophobic language or situations unless explicitly portraying how destructive such words and actions can be.
  - If violence is used, it should be used thoughtfully as serious drama, always showing the hurt and loss suffered by victims and perpetrators.

- Music lyrics should be made easily available to parents so they can be read before deciding whether to purchase the recording.
  - Video games should not use human or other living targets or award points for killing, because this teaches children to associate pleasure and success with their ability to cause pain and suffering to others.
  - Play of violent video games should be restricted to age-limited areas of gaming arcades; the distribution of videos and video games and the exhibition of movies should be limited to appropriate age groups.
7. Pediatricians should advocate for simplified content-based media ratings to help parents guide their children to make healthy media choices. A new child- and family-friendly rating system that describes media content in several areas (violence, language, sex, nudity, etc) is needed so parents can align their children's media exposure to their personal values. Although remaining respectful of and responsive to inherent differences between media, simple content-descriptive ratings that are consistent across various entertainment media should be devised. Just as it is important that parents know the ingredients in food they may feed to their children, they should be fully informed about the content of the media their children may use.
  8. Pediatricians should remember, and remind their patients' families, that if we do not buy or use entertainment media that are harmful to children, these media will no longer be produced.

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