

# PEDIATRICS

Policy Statement; Role of the Pediatrician in Youth Violence Committee on Injury, Violence, and Poison Prevention Key Words: violence, victimization, adolescent, interpersonal relations, child advocacy Abbreviation: AAP; American Academy of

Embargo Release Date: Monday, June 29, 2009 - 12:01am (ET)



## Embargo Policy:

Information in this article is embargoed for release until the date indicated above. Interviews may be conducted prior to the embargo release date, but nothing may be aired or published.

If you are a media representative and have questions about the embargo, upcoming press events, or other matters, please contact AAP Communications staff at 847-434-7877, or via e-mail at [commun@aap.org](mailto:commun@aap.org)



# Policy Statement—Role of the Pediatrician in Youth Violence Prevention

## CONTRIBUTORS:

### COMMITTEE ON INJURY, VIOLENCE, AND POISON PREVENTION

#### KEY WORDS

violence, victimization, adolescent, interpersonal relations, child advocacy

#### ABBREVIATION

AAP—American Academy of Pediatrics

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict-of-interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

[www.pediatrics.org/cgi/doi/10.1542/peds.2009-0943](http://www.pediatrics.org/cgi/doi/10.1542/peds.2009-0943)

doi:10.1542/peds.2009-0943

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2009 by the American Academy of Pediatrics

## abstract

Youth violence continues to be a serious threat to the health of children and adolescents in the United States. It is crucial that pediatricians clearly define their role and develop the appropriate skills to address this threat effectively. From a clinical perspective, pediatricians should become familiar with *Connected Kids: Safe, Strong, Secure*, the American Academy of Pediatrics' primary care violence prevention protocol. Using this material, practices can incorporate preventive education, screening for risk, and linkages to community-based counseling and treatment resources. As advocates, pediatricians may bring newly developed information regarding key risk factors such as exposure to firearms, teen dating violence, and bullying to the attention of local and national policy makers. This policy statement refines the developing role of pediatricians in youth violence prevention and emphasizes the importance of this issue in the strategic agenda of the American Academy of Pediatrics. *Pediatrics* 2009;124:393–402

## INTRODUCTION

A periodic survey of 1632 American Academy of Pediatrics (AAP) members administered by the AAP Task Force on Violence in the late 1990s indicated that injury as a result of violence is a substantial problem being confronted by pediatricians in practices across the country.<sup>1</sup> More than half of the respondents reported having recently seen a child who had sustained an intentional injury as a result of child maltreatment, and more than one third reported having recently treated a child with an injury resulting from domestic or community violence. Most pediatricians feel that they have an important role to play in the prevention of such injuries, and there is evidence to suggest that parents and community leaders also perceive a central role for pediatricians in the prevention of youth violence.<sup>2–4</sup> However, many pediatricians feel ill prepared to screen for and manage forms of violence other than child maltreatment.

In 1999, the AAP published a comprehensive policy statement outlining and defining the emerging role of pediatricians in the prevention of youth violence.<sup>5</sup> This statement represented the culmination of 3 years of focused, strategic thinking and outlined possible interventions that could be woven into routine health maintenance and preventive care practice. The 1999 statement also identified opportunities for pediatricians to assume leadership roles in violence prevention education and advocacy in community-based and out-of-office settings.

Although awareness of youth violence as a key issue in pediatrics has increased since publication of the 1999 statement, AAP periodic survey results have demonstrated a continued need for training and support for pediatricians.<sup>6,7</sup> In response, violent-injury prevention has assumed a higher priority within the AAP,<sup>8</sup> and several ongoing efforts have been initiated, such as the AAP Violence Prevention Symposium (2003); National Chapter Injury Prevention Conference (2005); appointment of a violence prevention subcommittee to the national Committee on Injury, Violence, and Poison Prevention (2005); and the publication of *Connected Kids: Safe, Strong, Secure* (2006).<sup>8</sup> At both the organizational policy and clinical practice levels, the AAP is striving to prepare and engage pediatricians in specific activities aimed at reducing the burden of intentional injuries borne by children in the United States.

This revised policy statement updates the evolving epidemiology of intentional injury, identifies important emerging issues related to violence prevention in children, and reaffirms the basic tenets that support the recommendations made in the original statement 10 years ago. Key new areas highlighted in this revised policy statement incorporate new information and resources concerning bullying and dating violence, and provide further specific counseling guidance for pediatricians

## BACKGROUND

Over the last 2 decades of the 20th century, violence emerged as a major public health problem that disproportionately affects children, adolescents, and young adults. Despite recent declines in rates of violent deaths, non-fatal firearm injuries, and violence-related behaviors, such as fighting and weapon carrying,<sup>9–15</sup> homicide remains the second leading cause of

death for all children 1 to 19 years of age.<sup>16,17</sup> Significant ethnic disparities in youth violence exposure persist. For example, homicide is the second leading cause of death in the United States for ages 15 to 19, but it is the leading cause of death among black 15- to 24-year-olds.<sup>18</sup>

Cross-national analyses have demonstrated similar rates of violence-related behaviors among adolescents in this country compared with international peers, yet the United States continues to lead the industrialized world in rates of youth homicide and suicide.<sup>19–21</sup> Approximately 3% of direct medical expenses in this country are related to interpersonal assault injuries, and the total cost to society of gun violence is approximately \$100 billion, of which \$15 billion is attributable to firearm injuries to children.<sup>22–24</sup>

The potential risks and behavioral consequences associated with early childhood exposure to violence in the home and/or witnessing violence in the community are profound. Over the past decade, there has been a great deal of scholarly attention devoted to elucidating those factors that confer risk or promote resilience.<sup>25–28</sup> It is recognized that there is a great deal of overlap among contextual factors, including family dynamics, community norms, and cultural beliefs and practices, that all play critically important roles in determining individual outcomes.<sup>29</sup> Primary care pediatricians routinely have access to young people involved in violence-related behaviors and are particularly well positioned to advise parents and caregivers.<sup>30</sup> Pediatricians are also likely to be aware of community-based resources such as prenatal and early intervention home visitation programs that have demonstrated promise in reducing the subsequent burden of intentional injury borne by young children.<sup>31,32</sup>

Myriad promising primary care inter-

ventions have been developed, but few have been evaluated in a scientifically controlled fashion.<sup>33–35</sup> To that end, several governmental health and organized medicine entities, including the Centers for Disease Control and Prevention, the Office of the Surgeon General, the American Medical Association, and the Agency for Healthcare Research and Quality, have sought to synthesize the burgeoning research literature in this area to help identify effective approaches.<sup>36–39</sup> The AAP has also developed and published a number of policy statements and other reports specifically related to addressing youth violence from an evidence-based, best-practices perspective.<sup>40–43</sup> However, the most comprehensive effort to date undertaken by the AAP is the primary care violence prevention protocol titled *Connected Kids: Safe, Strong, Secure*. Developed as a multi-year project supported in part by the Office of Juvenile Justice and Delinquency Prevention of the Department of Justice, *Connected Kids* is a carefully constructed resource aimed specifically at facilitating the primary health care professional's ability to incorporate intentional injury prevention tools and messages into everyday practice.

Another important recent development in the field of violence prevention has been the recognition of the primary importance of resilience factors that enable children and young adults to adapt successfully to stress, including exposures to violence. Scientific support for the crucial role of resilience stems from a number of sources, including analysis of data stemming from the National Longitudinal Study of Adolescent Health.<sup>26,28</sup> This statement discusses *Connected Kids*, bullying prevention, and dating violence. The related key issues of firearms and media violence<sup>42,43</sup> are included in other AAP policy statements.

**CONNECTED KIDS: SAFE, STRONG, SECURE**

*Connected Kids: Safe, Strong, Secure* is a program launched by the AAP in 2005 that addresses violence prevention in the context of routine child health care. The development of *Connected Kids* involved the input of more than 100 experts as well as extensive input from parents and adolescents during a 3-year process.<sup>8,44,45</sup> The final AAP product consists of a clinical guide, 21 parent/patient information brochures, and supporting training materials (see Tables 1–3).

Because of the recent recognition of the primary importance of individual and family resilience discussed above, the *Connected Kids* program implements a strength-based approach to anticipatory guidance, helping parents and families raise resilient children. This approach results in a much broader approach to anticipatory

guidance than previous, risk-based approaches. In addition, each topic area specifically addresses the social ecology of childhood by including information about the child’s development, the parent’s feelings and reactions in response to the child’s development and behavior, and specific practical suggestions to help families connect to existing community resources.<sup>46</sup> Feasibility and qualitative field tests conducted in early 2005 yielded enthusiastic results, and rigorous program evaluation using existing practice-based networks is planned. The first randomized, controlled trial published to date of a primary care intervention designed to affect youth involvement in violent behavior demonstrated efficacy in the reduction of both fighting and fighting-related injuries.<sup>47</sup> The availability of an AAP tool like *Connected Kids* has great promise and potential to similarly affect children

across the country as pediatricians become comfortable integrating its use into their practices. *Connected Kids* is coordinated with the third edition of *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*<sup>48</sup> and provides assistance in implementation of the *Bright Futures* psychosocial and safety themes. More detailed information is available from the AAP Web site ([www.aap.org](http://www.aap.org)).

**BULLYING**

Bullying is a form of aggression in which 1 or more children repeatedly and intentionally intimidate, harass, or physically harm a victim who is perceived as unable to defend herself or himself.<sup>49,50</sup> An issue of emerging concern has been the association of bullying behavior, particularly among young school-aged children, with the subsequent development of serious

**TABLE 1** Training Resource From AAP *Connected Kids: Safe, Strong, Secure: Infancy and Early Childhood*

INFANCY AND EARLY CHILDHOOD: PRENATAL TO 4-YEAR-OLD VISITS			
VISIT	INTRODUCE	REINFORCE	BROCHURES
<b>2 Days to 4 Weeks</b>	<ul style="list-style-type: none"> <li>● What Babies Do</li> <li>● Coping with parental Frustration</li> <li>● Parent Mental Health</li> <li>● Parent Support<sup>79</sup></li> </ul>		1. Welcome to the World of Parenting!
<b>2 and 4 Months</b>	<ul style="list-style-type: none"> <li>● Child Care<sup>80</sup></li> <li>● Family<sup>79</sup></li> <li>● Safe Environment<sup>81</sup></li> <li>● Parenting Style<sup>82</sup></li> <li>● Bonding and Attachment</li> </ul>	<ul style="list-style-type: none"> <li>● Parent Mental Health</li> <li>● Parent Support</li> </ul>	2. Parenting Your Infant
<b>6 and 9 Months</b>	<ul style="list-style-type: none"> <li>● Establishing Routines</li> <li>● Discipline = Teaching<sup>82</sup></li> </ul>	<ul style="list-style-type: none"> <li>● Parent Support</li> <li>● Child Care</li> </ul>	3. How Do Infants Learn? 4. Your Child Is On the Move: Reduce the Risk of Gun Injury
<b>12 and 15 Months</b>	<ul style="list-style-type: none"> <li>● Reducing child access to firearms<sup>42</sup></li> <li>● Modeling Behavior</li> <li>● Child Development and Behavior<sup>92</sup></li> </ul>	<ul style="list-style-type: none"> <li>● Safe Environment</li> <li>● Bonding and Attachment</li> </ul>	5. Teaching Good Behavior: Tips on How to Discipline
<b>18 Months and 2 Years</b>	<ul style="list-style-type: none"> <li>● Child’s Assets</li> <li>● Guided Participation</li> </ul>	<ul style="list-style-type: none"> <li>● Parenting Style</li> <li>● Reducing child access to firearms Modeling Behavior</li> <li>● Safe Environment</li> <li>● Parent Support</li> <li>● Reducing child access to firearms Child Development and Behavior</li> </ul>	6. Playing Is How Toddlers Learn 7. Pulling the Plug on TV Violence
<b>3 and 4 Years</b>	<ul style="list-style-type: none"> <li>● Media<sup>43,83</sup></li> <li>● Peer Playing</li> <li>● Safety in Others’ Homes<sup>42</sup></li> <li>● Talking About Emotions</li> <li>● Promoting Independence</li> </ul>	<ul style="list-style-type: none"> <li>● Establishing Routines</li> <li>● Modeling Behavior</li> <li>● Guided Participation</li> </ul>	8. Young Children Learn a Lot When They Play

**TABLE 2** Training Resource From AAP *Connected Kids: Safe, Strong, Secure: Middle Childhood*

MIDDLE CHILDHOOD: 5- TO 10-YEAR-OLD VISITS			
VISIT	INTRODUCE	REINFORCE	BROCHURES
<b>5 Years</b>	<ul style="list-style-type: none"> <li>● Establishing Routines and Setting Limits<sup>82</sup></li> </ul>	<ul style="list-style-type: none"> <li>● Child Development and Behavior</li> <li>● Child's Assets</li> <li>● Safety in Others' Homes</li> <li>● Promoting Independence</li> <li>● Modeling Behavior</li> <li>● Establishing Routines and Setting Limits</li> </ul>	9. Growing Independence: Tips for Parents of Young Children
<b>6 Years</b>	<ul style="list-style-type: none"> <li>● Teaching Behavior</li> <li>● Bullying Prevention</li> <li>● Out-of-School Time</li> </ul>	<ul style="list-style-type: none"> <li>● Reducing child access to firearms</li> <li>● Promoting Independence</li> <li>● Establishing Routines and Setting Limits</li> <li>● Bullying</li> <li>● Media</li> <li>● Out-of-School Time</li> </ul>	10. Bullying: It's Not OK
<b>8 Years</b>	<ul style="list-style-type: none"> <li>● School Connections</li> <li>● Alcohol and Drug abuse prevention<sup>84</sup></li> <li>● Interpersonal Skills</li> </ul>	<ul style="list-style-type: none"> <li>● Reducing child access to firearms</li> <li>● Promoting Independence</li> <li>● Establishing Routines and Setting Limits</li> <li>● Bullying</li> <li>● Media</li> <li>● Out-of-School Time</li> </ul>	11. Drug Abuse Prevention Starts With Parents 12. Friends Are Important: Tips for Parents
<b>10 Years</b>	<ul style="list-style-type: none"> <li>● Child Mental Health</li> <li>● School Performance</li> </ul>	<ul style="list-style-type: none"> <li>● Reducing child access to firearms</li> <li>● Promoting Independence</li> <li>● Establishing Routines and Setting Limits</li> <li>● Bullying</li> <li>● Media</li> <li>● Out-of-School Time</li> </ul>	13. Everybody Gets Mad: Helping Your Child Cope with Conflict

**TABLE 3** Training Resource From AAP *Connected Kids: Safe, Strong, Secure: Adolescence*

ADOLESCENCE			
VISIT	INTRODUCE	REINFORCE	BROCHURES
<i>Early:</i>	<ul style="list-style-type: none"> <li>● Family Time Together</li> </ul>	<ul style="list-style-type: none"> <li>● Reducing youth access to firearms</li> <li>● Establishing Routines and Setting Limits</li> </ul>	14. Talking With Your Teen: Tips for Parents
<b>11 to 14 Years</b>	<ul style="list-style-type: none"> <li>● Peer Relationships</li> <li>● Support System</li> <li>● Staying Safe</li> <li>● Teen Mental Health</li> <li>● Conflict Resolution Skills</li> <li>● Healthy Dating</li> <li>● Gaining Independence</li> <li>● Plans for the Future</li> </ul>	<ul style="list-style-type: none"> <li>● Alcohol and Drug abuse prevention</li> <li>● School Performance</li> </ul>	15. Staying Cool When Things Heat Up 16. Expect Respect: Healthy Relationships 17. Teen Dating Violence: Tips for Parents
<i>Middle:</i>	<ul style="list-style-type: none"> <li>● Firearm and Suicide Prevention, including reducing child access to firearms<sup>42,85</sup></li> <li>● Depression prevention<sup>85</sup></li> <li>● Resiliency</li> <li>● Transition to Independence</li> </ul>	<ul style="list-style-type: none"> <li>● Alcohol and Drug abuse prevention</li> <li>● Peer Relationships</li> <li>● Healthy Dating</li> <li>● Gaining Independence</li> <li>● Peer Relationships</li> <li>● Plans for the Future</li> </ul>	18. Teen Suicide and Guns 19. Next Stop—Adulthood: Tips for Parents
<i>Late:</i>	<ul style="list-style-type: none"> <li>● Negotiating a New Environment (Post-High School)</li> </ul>	<ul style="list-style-type: none"> <li>● Depression prevention</li> </ul>	20. Help Stop Teenage Suicide 21. Connecting With Your Community

assault behaviors. A comprehensive analysis stimulated by the rare but high-profile, multiple-casualty, school-based events in Pearl, Mississippi; West Paducah, Kentucky; Jonesboro, Arkansas; Springfield, Oregon; and Littleton, Colorado in the late 1990s brought into acute focus just how serious a precursor bullying may be.<sup>51</sup> Several professional medical organizations, including the American Medical Association and the Society for Adolescent Medicine, have directed specific attention by way of formal policy or resolution to the issue of youth bullying, often within the context of the

broader problem of youth violence.<sup>52,53</sup> Also, the Health Resources and Services Administration of the US Department of Health and Human Services recently launched phase II of a major multiyear awareness campaign thematically titled "Take a Stand, Lend a Hand: Stop Bullying Now."<sup>54</sup>

Although bullying among school-aged children has been well described in other parts of the world, until recently, epidemiologic characterization of the depth and extent of the problem in the United States has been lacking. Nansel et al<sup>55</sup> at the Eunice Kennedy Shriver

National Institute of Child Health and Human Development of the National Institutes of Health have created a bullying epidemiology working group and are comparatively analyzing both domestic and international data sets. They have established a prevalence baseline of 30% for children either bullying and/or being bullied on the basis of a large sample of 6th- to 10th-graders.<sup>56</sup> They have also begun to critically analyze the true associations of bullying with some of the traditional violence-related behavioral markers, including weapon carrying and frequent fighting. Bullying and being bul-

lied are both associated with higher rates of weapon carriage and fighting serious enough to result in injury.<sup>57,58</sup> These associations seem to be stronger for bullies than for targets. Also of great concern are the more subtle psychosocial consequences that can be associated with bullying behavior, including the subsequent development of depression and suicidal ideation.<sup>59,60</sup> These problems are more likely to result from the indirect, relational bullying behaviors that are more typically engaged in by young girls and that can be notoriously elusive to identify.<sup>61</sup>

A growing literature has also begun to explore bullying's relationship with somatic conditions, disease morbidity, and the development of long-term behavioral exposures and outcomes manifesting in adulthood.<sup>62–65</sup> The emergence of portable technologies, such as cellular telephones, digital cameras, and personal digital assistants and ready accessibility to social networking Internet sites has led to the advent of technology-assisted bullying behavior—a phenomenon known as “cyberbullying.”<sup>66,67</sup>

European researchers have been active for more than 30 years in developing interventions around bullying prevention. The most successful programs have been implemented in Scandinavia on the basis of the model developed by Norwegian investigator Dan Olweus.<sup>68</sup> The Olweus Bullying Prevention Program is a school-based model that has been replicated, refined, and evaluated many times internationally. Olweus proposes specific programmatic interventions at the school-wide, classroom, and individual levels on the basis of the insight that each bullying episode involves 3 groups of children: bullies and their acolytes, victims, and bystanders. However, there is a paucity of published reports in the peer-reviewed literature describing imple-

mentation and controlled evaluation of the Olweus Bullying Prevention Program in the United States.<sup>69</sup> It is clear that in this country, it must first be accepted that bullying behaviors cannot be considered a normative rite of passage and that they can be precursors for more serious downstream consequences. In terms of primary prevention, early parenting behaviors such as cognitive stimulation and emotional support have been shown to confer resilience against the future development of bullying behaviors in elementary-aged schoolchildren.<sup>70</sup> Promotion and reinforcement of such parenting skills plus recognition, screening, and appropriate referral as secondary prevention strategies are essential ways that pediatricians can collectively contribute to this aspect of youth violence prevention.

### **DATING VIOLENCE**

The past decade has also seen more attention focused on relationship violence in adolescence, specifically teen dating violence. Depending on case definition and reporting methodology, estimates of the prevalence of teen dating violence have been reported to range from 9% to 46%.<sup>71–73</sup> With most US teenagers dating by middle adolescence,<sup>74,75</sup> it is important that pediatricians be aware of the precursors, symptoms, and behaviors associated with teen dating violence. Appropriate from a developmental standpoint, nascent prevention efforts in this area have focused primarily on peer-group-targeted interventions. One such school-based program that used a randomized, controlled methodology demonstrated efficacy for reducing self-reported teen dating violence victimization and perpetration rates at intervals up to 4 years after intervention.<sup>76–78</sup>

Because routine care-oriented intervention opportunities are more limited

in adolescence and preadolescence, it is important that pediatricians avail and extend themselves as community resources to those entities that most influence the development of teen behavior. These would almost certainly include middle and high schools and, depending on the specific constitution of a given community, might also include faith-based organizations, local Boys and Girls Clubs, and/or other prosocial organizations. Most critical, however, is the role of the pediatrician as an information repository for parents and families. Early anticipatory guidance about adolescent cognitive and social development, relationship dynamics, and the risks of teen dating violence is paramount as part of a primary prevention strategy. The *Connected Kids: Safe, Strong, Secure* set of resource materials for early adolescence includes a “tips for parents” brochure on teen dating violence (see Tables 1–3). These materials and associated prompts are available in structured electronic formats to facilitate incorporation in electronic health records and associated decision-support tools.

### **THE ROLE OF THE PEDIATRICIAN: RECOMMENDATIONS**

There are 4 domains in which pediatricians should be expected to employ their skills and influence in the implementation of youth violence prevention strategies: clinical practice, advocacy, education, and research.

#### **Clinical Practice**

Clinical practice for intervention, management, and prevention of youth violence should include:

- a working familiarity with the *Connected Kids: Safe, Strong, Secure* primary care violence prevention protocol;
- use of a comprehensive approach, exemplified by the *Connected Kids*

protocol for anticipatory guidance, screening, and counseling of children and families during the course of routine health maintenance (key elements of the protocol should be built into the practice flow sheets or electronic health record age-based prompts; parent and youth education materials should be readily accessible, either as printed material or printed at the time of visit);

- appropriate and timely treatment and/or referral for violence-related problems identified; and
- maintenance of an accurate database of community-based counseling and treatment resources. Whenever applicable, this database should be available through the practice's electronic health record system or linked to the practice's internal and external Web sites.

### Advocacy

Pediatricians should advocate for:

- adequate publicly supported community-based behavioral health services;
- protection of children from exposure to firearms;
- bullying awareness by teachers, educational administrators, parents, and children coupled with adop-

tion of evidence-based prevention programs;

- responsible programming on television, video, cable, the Internet, and video game formats that minimizes youth exposure to violent images, messages, and themes;
- the role of health professionals as appropriate public health messengers through print, electronic, or online media; and
- incorporation of content related to youth violence prevention in electronic health records, including screening prompts and links to parent education materials.

### Education

Pediatricians should exercise every available opportunity to learn more about violence prevention through:

- formal continuing medical education or professional development programs;
- learning about community resources for children and adolescents; and
- elective course or rotation work in either medical school or postgraduate training.

### Research

Pediatricians can contribute to needed research by:

- participating in practice-based research in the area of youth violence prevention;
- contributing data to existing intentional injury surveillance systems; and
- advocating for municipally supported, legislatively mandated active local injury surveillance systems.

### COMMITTEE ON INJURY, VIOLENCE, AND POISON PREVENTION, 2006–2007

Gary A. Smith, MD, DrPH, Chairperson  
 Carl R. Baum, MD  
 M. Denise Dowd, MD, MPH  
 Dennis R. Durbin, MD, MSCE  
 Kyran P. Quinlan, MD, MPH  
 \*Robert D. Sege, MD, PhD  
 Michael S. Turner, MD  
 Jeffrey C. Weiss, MD  
 \*Joseph L. Wright, MD, MPH

### LIAISONS

Julie Gilchrist, MD – *Centers for Disease Control and Prevention*  
 Lynne Haverkos, MD, MPH – *Eunice Kennedy Shriver National Institute of Child Health and Human Development*  
 Jonathan Midgett, PhD – *US Consumer Product Safety Commission*  
 Lori Roche – *Health Resources and Services Administration/Maternal and Child Health Bureau*  
 Alexander Sinclair – *National Highway Traffic Safety Administration*  
 Lynne J. Warda, MD – *Canadian Paediatric Society*

### STAFF

Bonnie Kozial  
 \*Lead authors

### REFERENCES

1. American Academy of Pediatrics. Periodic Survey of Fellows #38 executive summary: pediatrician's views on the treatment and prevention of violent injuries to children. Available at: [www.aap.org/research/periodicsurvey/ps38exs2.htm](http://www.aap.org/research/periodicsurvey/ps38exs2.htm). Accessed January 23, 2008
2. American Academy of Pediatrics. New AAP tools to focus on violence prevention, management. *AAP News*. 2002;20(2):66
3. Barkin S, Ryan G, Gelberg L. What pediatricians can do to further youth violence prevention: a qualitative study. *Inj Prev*. 1999;5(1):53–58
4. Wright JL. Training healthcare professionals in youth violence prevention: closing the gap. *Am J Prev Med*. 2005;29(5 suppl 2):296–298
5. American Academy of Pediatrics, Task Force on Violence. The role of the pediatrician in youth violence prevention in clinical practice and at the community level. *Pediatrics*. 1999;103(1):173–181
6. Trowbridge MJ, Sege RD, Olson L, O'Connor K, Flaherty E, Spivak H. Intentional injury management and prevention in pediatric practice: results from 1998 and 2003 American Academy of Pediatrics Periodic Surveys. *Pediatrics*. 2005;116(4):996–1000

7. American Academy of Pediatrics. Academy heeds call to work for child injury prevention. *AAP News*. 2005;26(7):19
8. Sege RD, Flanigan E, Levin-Goodman R, Licenziato VG, De Vos E, Spivak H; American Academy of Pediatrics. American Academy of Pediatrics' Connected Kids program: case study. *Am J Prev Med*. 2005;29(5 suppl 2):215–219
9. Cheng TL, Wright JL, Fields GB, et al. Violent injuries among adolescents: declining morbidity and mortality in an urban population. *Ann Emerg Med*. 2001;37(3):292–300
10. Fingerhut LA, Ingram DD, Feldman JJ. Homicide rates among US teenagers and young adults: differences by mechanism, level of urbanization, race, and sex, 1987 through 1995. *JAMA*. 1998;280(5):423–427
11. Brener ND, Simon TR, Krug EG, Lowry R. Recent trends in violence-related behaviors among high school students in the United States. *JAMA*. 1999;282(5):440–446
12. Cherry D, Annett JL, Mercy JA, Kresnow M, Pollock DA. Trends in nonfatal and fatal firearm-related injury rates in the United States, 1985–1995. *Ann Emerg Med*. 1998;32(1):51–59
13. Sege RD, Kharasch S, Perron C, et al. Pediatric violence-related injuries in Boston: results of a city-wide emergency department surveillance program. *Arch Pediatr Adolesc Med*. 2002;156(1):73–76
14. Centers for Disease Control and Prevention. Violence-related behaviors among high school students: United States, 1991–2003. *MMWR Morb Mortal Wkly Rep*. 2004;53(29):651–655
15. Eaton DK, Kann L, Kinchen S, et al. Youth risk behavior surveillance: United States, 2005. *MMWR Surveill Summ*. 2006;55(SS-05):1–108
16. National Center for Injury Prevention and Control. Youth violence: facts at a glance. Available at: [www.cdc.gov/ViolencePrevention/pdf/YV-DataSheet-a.pdf](http://www.cdc.gov/ViolencePrevention/pdf/YV-DataSheet-a.pdf). Accessed May 15, 2009
17. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-Based Injury Statistics Query and Reporting System (WISQARS) [database online]. Available at: [www.cdc.gov/injury/wisqars](http://www.cdc.gov/injury/wisqars). Accessed January 23, 2008
18. Cheng TL, Haynie D, Brenner R, Wright JL, Chung SE, Simons-Morton B. Effectiveness of a mentor-implemented, violence prevention intervention for assault-injured youths presenting to the emergency department: results of a randomized trial. *Pediatrics*. 2008;122(5):938–946
19. US Department of Health and Human Services, Health Resources and Services Administration. *U.S. Teens in Our World*. Rockville, MD: US Department of Health and Human Services; 2003. Available at: [www.mchb.hrsa.gov/mchirc/\\_pubs/us.teens/index.htm](http://www.mchb.hrsa.gov/mchirc/_pubs/us.teens/index.htm). Accessed January 23, 2008
20. Smith-Khuri E, Iachan R, Scheidt PC, et al. A cross-national study of violence-related behaviors in adolescents. *Arch Pediatr Adolesc Med*. 2004;158(6):539–544
21. Centers for Disease Control and Prevention. Rates of homicide, suicide, and firearm-related death among children: 26 industrialized countries. *MMWR Morb Mortal Wkly Rep*. 1997;46(5):101–105
22. Snyder H, Sickmund M. *Juvenile Offenders and Victims: 1999 National Report*. Washington, DC: US Department of Justice, National Center for Juvenile Justice; 1999
23. Rice DP, Max W. The high cost of injuries in the United States. *Am J Public Health*. 1996;86(1):14–15
24. Cook PJ, Ludwig J. The costs of gun violence against children. *Future Child*. 2002;12(2):86–99
25. Borowsky IW, Ireland M, Resnick MD. Violence risk and protective factors among youth held back in school. *Ambul Pediatr*. 2002;2(6):475–484
26. Resnick MD, Ireland M, Borowsky I. Youth violence perpetration: what protects? What predicts? Findings from the National Longitudinal Study of Adolescent Health. *J Adolesc Health*. 2004;35(5):424.e1–424.e10
27. Sege R, Stringham P, Short S, Griffith J. Ten years after: examination of adolescent screening questions that predict future violence-related injury. *J Adolesc Health*. 1999;24(6):395–402
28. Borowsky IW, Ireland M. Predictors of future fight-related injury among adolescents. *Pediatrics*. 2004;113(3 pt 1):530–536
29. Rivara FP, Shepherd JP, Farrington DP, Richmond PW, Cannon P. Victim as offender in youth violence. *Ann Emerg Med*. 1995;26(5):609–614
30. Cheng TL, Schwarz D, Brenner RA, et al. Adolescent assault injury: risk and protective factors and locations of contact for intervention. *Pediatrics*. 2003;112(4):931–938
31. Kitzman H, Olds DL, Henderson CR, et al. Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing: a randomized controlled trial. *JAMA*. 1997;278(8):644–652
32. Olds DL, Kitzman H, Hanks C, et al. Effects of nurse home visiting on maternal and child functioning: age-9 follow-up of a randomized trial. *Pediatrics*. 2007;120(4). Available at: [www.pediatrics.org/cgi/content/full/120/4/e832](http://www.pediatrics.org/cgi/content/full/120/4/e832)
33. Johnston BD, Rivara FP, Droesc RM, Dunn C, Copass MK. Behavioral change counseling in the

- emergency department to reduce injury risk: a randomized, controlled trial. *Pediatrics*. 2002;110(2 pt 1):267–274
34. Zun LS, Downey L, Rosen J. The effectiveness of an emergency department-based violence prevention program. *Am J Emerg Med*. 2006;24(1):8–13
  35. Cheng TL, Wright JL, Diane M, Copeland-Linder N, Menvielle E. Randomized trial of a case management program for assault-injured youth: impact on service utilization and risk for re-injury. *Pediatr Emerg Care*. 2008;24(3):130–136
  36. Thornton TN, Craft CA, Dahlberg LL, Lynch BS, Baer K, eds. *Best Practices of Youth Violence Prevention: A Sourcebook for Community Action*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2000
  37. US Department of Health and Human Services. *Youth Violence: A Report of the Surgeon General*. Rockville, MD: US Department of Health and Human Services; 2001
  38. American Medical Association, Commission for the Prevention of Youth Violence. *Youth and Violence: Medicine, Nursing and Public Health—Connecting the Dots to Prevent Violence*. Chicago, IL: American Medical Association; 2000
  39. Chan LS, Kipke MD, Schneir A, et al. *Preventing Violence and Related Health-Risking Social Behaviors in Adolescents*. Rockville, MD: Agency for Healthcare Research and Quality; 2004. AHRQ publication No. 04-E032-1
  40. American Academy of Pediatrics, Task Force on Adolescent Assault Victim Needs. Adolescent assault victim needs: a review of issues and a model protocol. *Pediatrics*. 1996;98(5):991–1001
  41. American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. The new morbidity revisited: a renewed commitment to the psychosocial aspects of pediatric care. *Pediatrics*. 2001;108(5):1227–1230
  42. American Academy of Pediatrics, Committee on Injury and Poison Prevention. Firearm-related injuries affecting the pediatric population. *Pediatrics*. 2000;105(4 pt 1):888–895
  43. American Academy of Pediatrics, Committee on Public Education. Media violence. *Pediatrics*. 2001;108(5):1222–1226
  44. De Vos E, Spivak H, Hatmaker-Flanigan E, Sege RD. A Delphi approach to reach consensus on primary care guidelines regarding youth violence prevention. *Pediatrics*. 2006;118(4). Available at: [www.pediatrics.org/cgi/content/full/118/4/e1109](http://www.pediatrics.org/cgi/content/full/118/4/e1109)
  45. Sege R, Hatmaker-Flanigan E, De Vos E, Levin-Goodman R, Spivak H. Anticipatory guidance and violence prevention: results from family and pediatrician focus groups. *Pediatrics*. 2006;117(2):455–463
  46. Bronfenbrenner U, Moen P, Garbarino J. Child, family, and community. In: Parke R, ed. *Review of Child Development Research*. Chicago, IL: University of Chicago Press; 1984:283–328
  47. Borowsky IW, Mozayeny S, Stuenkel K, Ireland M. Effects of a primary care-based intervention on violent behavior and injury in children. *Pediatrics*. 2004;114(4). Available at: [www.pediatrics.org/cgi/content/full/114/4/e392](http://www.pediatrics.org/cgi/content/full/114/4/e392)
  48. American Academy of Pediatrics, Bright Futures Steering Committee. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. Hagan JF, Shaw JS, Duncan PM, eds. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2007
  49. Glew G, Rivara F, Feudtner C. Bullying: children hurting children. *Pediatr Rev*. 2000;21(6):183–189
  50. Olweus D. *Bullying at School: What We Know and What We Can Do*. Cambridge, MA: Blackwell Publishers; 1993
  51. Vossekuil B, Fein RA, Reddy M, Borum R, Modzeleski W. *The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States*. Washington, DC: US Secret Service and US Department of Education; 2004. Available at: [www.ustras.gov/uss/ntac/ssi\\_final\\_report.pdf](http://www.ustras.gov/uss/ntac/ssi_final_report.pdf). Accessed January 23, 2008
  52. Wright J. Bullying among children and youth: a pediatrician's perspective. In: Fleming M, Towey KJ, Limber SP, et al, eds. *Educational Forum on Adolescent Health: Youth Bullying*. Chicago, IL: American Medical Association; 2002:22–25
  53. Eisenberg ME, Aalsma MC. Bullying and peer victimization: position paper of the Society for Adolescent Medicine. *J Adolesc Health*. 2005;36(1):88–91
  54. Health Resources and Services Administration. Stop Bullying Now. Available at: [www.stopbullyingnow.hrsa.gov](http://www.stopbullyingnow.hrsa.gov). Accessed January 23, 2008
  55. Nansel TR, Craig W, Overpeck MD, Saluja G, Ruan WJ; Health Behaviour in School-aged Children Bullying Analyses Working Group. Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. *Arch Pediatr Adolesc Med*. 2004;158(8):730–736
  56. Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton B, Scheidt P. Bullying behaviors among US youth: prevalence and association with psychosocial adjustment. *JAMA*. 2001;285(16):2094–2100

57. Nansel TR, Overpeck MD, Haynie DL, Ruan WJ, Scheidt PC. Relationships between bullying and violence among US youth. *Arch Pediatr Adolesc Med.* 2003;157(4):348–353
58. Glew GM, Ming-Yu F, Katon W, Rivara FP. Bullying and school safety. *J Pediatr.* 2008;152(1):123–128
59. van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics.* 2003;111(6 pt 1):1312–1317
60. Kim YS, Koh YJ, Leventhal B. School bullying and suicidal risk in Korean middle school students. *Pediatrics.* 2005;115(2):357–363
61. Mollen CJ, Fein JA, Localio AR, Durbin DR. Characterization of interpersonal violence events involving young adolescent girls vs events involving young adolescent boys. *Arch Pediatr Adolesc Med.* 2004;158(6):545–550
62. Srabstein J, McCarter RJ, Shao C, Huang ZJ. Morbidities associated with bullying behaviors in adolescents: school based study of American adolescents. *Int J Adolesc Med Health.* 2006;18(4):587–596
63. Spector ND, Kelly SF. Pediatrician's role in screening and treatment: bullying, prediabetes, oral health. *Curr Opin Pediatr.* 2006;18(6):661–670
64. Bauer NS, Herrenkohl TI, Lozano P, Rivara FP, Hill KG, Hawkins JD. Childhood bullying involvement and exposure to intimate partner violence. *Pediatrics.* 2006;118(2). Available at: [www.pediatrics.org/cgi/content/full/118/2/e235](http://www.pediatrics.org/cgi/content/full/118/2/e235)
65. Sourander A, Jensen P, Rönning JA, et al. What is the early adulthood outcome of boys who bully or are bullied in childhood? The Finnish "From a Boy to a Man" study. *Pediatrics.* 2007;120(2):397–404
66. Raskauskas J, Stoltz AD. Involvement in traditional and electronic bullying among adolescents. *Dev Psychol.* 2007;43(3):564–575
67. Kowalski RM, Limber SP. Electronic bullying among middle school students. *J Adolesc Health.* 2007;41(6 suppl 1):S22–S30
68. Olweus D, Limber S, Mihalic SF. *Blueprints for Violence Prevention, Book Nine: Bullying Prevention Program.* Boulder, CO: Center for the Study and Prevention of Violence; 2002
69. Bauer NS, Lozano P, Rivara FP. The effectiveness of the Olweus Bullying Prevention Program in public middle schools: a controlled trial. *J Adolesc Health.* 2007;40(5):266–274
70. Zimmerman FJ, Glew G, Christakis DA, Katon W. Early cognitive stimulation, emotional support, and television watching as predictors of subsequent bullying among grade-school children. *Arch Pediatr Adolesc Med.* 2005;159(4):384–388
71. Johnson SB, Frattaroli S, Campbell J, Wright J, Pearson-Fields AS, Cheng TL. Gender-based violence in the lives of urban adolescents. *J Womens Health (Larchmt).* 2005;14(2):172–179
72. Glass N, Fredland N, Campbell J, Yonas M, Sharps P, Kub J. Adolescent dating violence: prevalence, risk factors, health outcomes, and implications for clinical practice. *J Obstet Gynecol Neonatal Nurs.* 2003;32(2):227–238
73. Marcus RF. Youth violence in everyday life. *J Interpers Violence.* 2005;20(4):442–447
74. Wingood GM, DiClemente RJ, McCree DH, Harrington K, Davies SL. Dating violence and the sexual health of black adolescent females. *Pediatrics.* 2001;107(5). Available at: [www.pediatrics.org/cgi/content/full/107/5/e72](http://www.pediatrics.org/cgi/content/full/107/5/e72)
75. Malik S, Sorenson SB, Aneshensel CS. Community and dating violence among adolescents: perpetration and victimization. *J Adolesc Health.* 1997;21(5):291–302
76. Foshee VA, Linder GF, Bauman KE, et al. The Safe Dates Project: theoretical basis, evaluation design, and selected baseline findings. *Am J Prev Med.* 1996;12(5 suppl):39–47
77. Foshee VA, Bauman KE, Greene WF, Koch GG, Linder GF, MacDougall JE. The Safe Dates program: 1-year follow-up results. *Am J Public Health.* 2000;90(10):1619–1622
78. Foshee VA, Bauman KE, Ennett ST, Linder GF, Benefield T, Suchindran C. Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *Am J Public Health.* 2004;94(4):619–624
79. American Academy of Pediatrics, Committee on Early Childhood, Adoption, and Dependent Care. The pediatrician's role in family support programs. *Pediatrics.* 2001;107(1):195–197
80. American Academy of Pediatrics, Committee on Early Childhood, Adoption, and Dependent Care. Quality early education and child care from birth to kindergarten. *Pediatrics.* 2005;115(1):187–191
81. American Academy of Pediatrics, Committee on Child Abuse and Neglect. The role of the pediatrician in recognizing and intervening on behalf of abused women. *Pediatrics.* 1998;101(6):1091–1092
82. American Academy of Pediatrics, Committee on Psychosocial Aspects of Child and Family Health. Guidance for effective discipline [published correction appears in *Pediatrics.* 1998;102(2 pt 1):433]. *Pediatrics.* 1998;101(4 pt 1):723–728

83. American Academy of Pediatrics, Committee on Public Education. Children, adolescents, and television. *Pediatrics*. 2001;107(2):423–426
84. Kulig JW; American Academy of Pediatrics, Committee on Substance Abuse. Tobacco, alcohol and other drugs: the role of the pediatrician in prevention, identification, and management of substance abuse. *Pediatrics*. 2005;115(3):816–821
85. Shain BN; American Academy of Pediatrics, Committee on Adolescence. Suicide and suicide attempts in adolescents. *Pediatrics*. 2007;120(3):669–676

