Why Worry about Bullying?
Debra J. Pepler, Jennifer German, Wendy Craig and Samantha Yamada

Abstract
In this article, the authors review research to identify bullying as a critical public health issue for Canada. Drawing from recent World Health Organization surveys, they examine the prevalence of Canadian children and youth involved in bullying others or being victimized. There is a strong association between involvement in bullying and health problems for children who bully, those who are victimized and those involved in both bullying and being victimized. Health problems can manifest as physical complaints (e.g., headaches), mental health concerns (e.g., depression, anxiety) and psychosocial problems (e.g., substance use, crime). In Canada, there has recently been a disturbing incidence of Canadian children who have committed suicide as a result of prolonged victimization by peers. Healthcare professionals play a major role in protecting and promoting the health and well-being of Canadian children and youth. Given the significant mental and physical health problems associated with involvement in bullying, it is important that clinicians, especially primary care healthcare professionals, be able to identify signs and symptoms of such involvement. Healthcare professionals can play an essential role supporting children and their parents and advocating for the safety and protection for those at risk. By understanding bullying as a destructive relationship problem that significantly impacts physical and mental health, healthcare professionals can play a major role in promoting healthy relationships and healthy development for all Canadian children and youth.

This review provides an overview of the nature of bullying and the physical and psychological health problems associated with involvement in bullying. The review is followed by a discussion of the implications for health professionals and a protocol for assessing the potential link between bullying and a child's physical and psychological symptoms.

What Is Bullying?
Bullying is a type of abuse that can take different forms at various ages. In this article, we limit our discussion to bullying among children and adolescents; however, bullying can occur within the family, workplace or any other setting at any age (Duncan 1999; Hirst 2011; Noble et al. 2011). Bullying is defined as the use of power and aggression to cause distress or control another (Juvonen and Graham 2001; Olweus 1991). Two elements of bullying are key to understanding its complexity. First, it is a form of aggressive behaviour imposed from a position of power: children who bully have more power than the children they victimize, and this power is often not evident to adults. (Note that we avoid labelling children as "bullies" or "victims" because these labels constrain thinking of the problem as solely a characteristic of the individual, rather than as problem that emerges from complex social dynamics.) Children can acquire power through a physical advantage such as size and strength but also through a social advantage such as a dominant social role, higher social status in a peer group or strength in numbers, or through systemic power within society that undermines the foundation of marginalized groups (e.g., racial or cultural groups, sexual minorities, economically disadvantaged or disabled persons). Power can also be achieved by knowing another's vulnerability and using that knowledge to cause distress. Children's vulnerabilities, about which health professionals may have awareness, include physical disability, obesity, learning problems, sexual orientation and family background. Recent research indicates that children with special healthcare needs are more likely to be bullied, whereas those with a chronic behavioural, emotional or developmental problem are more likely to be involved in bullying others or in both bullying and victimization (Van Cleave and Davis 2006). The second key element is that bullying is repeated over time. With each repeated bullying incident, the power dynamics become consolidated: the child who is bullying increases in power,
and the child who is being victimized loses power. Interventions are required to support children, neutralize the power dynamics and promote healthy relationships. Although formal definitions include repetition, children are of the opinion that even a single occurrence of the use of power and aggression should be identified as bullying (Smith and Levan 1995).

Through our research, we have come to understand bullying as a destructive relationship problem – children who bully are learning to use power and aggression to control and distress others; children who are victimized become increasingly powerless and unable to defend themselves from this form of abuse. The use of power and aggression may be carried out through many forms of bullying. Although bullying was traditionally thought of as physical aggression, this form is only one of many strategies that children use to control and distress others. Bullying can be broadly categorized into direct and indirect forms of aggression (Olweus 1991). Direct bullying is an overt expression of power between the individual who is bullying and the individual who is being victimized. This form can include physical aggression (e.g., hitting or kicking) and verbal aggression (e.g., insults, racial or sexual harassment or threats). Indirect bullying is the manipulation of social relationships (e.g., gossiping and spreading rumours) to hurt or exclude the individual being victimized; it is often referred to as social or relational aggression. In recent years, a new form of bullying has emerged with technology, referred to as cyber bullying. It involves the use of electronic devices such as the Internet and text messaging to humiliate, exclude, spread rumours and in other ways cause distress to one or more individuals.

Prevalence of Bullying
Over the past 20 years, various studies around the world have indicated prevalence rates for involvement in bullying ranging between 10 and 23% of school-aged children. Every four years, the World Health Organization (WHO) conducts a global Health Behaviour in School-Aged Children (HBSC) study, with 35 countries participating in the latest reported 2006 survey, including Canada. The survey assesses a wide range of behaviours, including bullying and victimization, among 11-, 13- and 15-year-old students. Canada's ranking on the world stage is disappointing at 21 and 26 out of 40 countries for boys' and girls' bullying, respectively (Craig et al. 2009). (The higher the ranking is, the higher the amount of bullying.) On the survey, 23.3% of boys and 17% of girls reported bullying others at least once in the previous two months. Similarly, 50.8% of boys and 47.8% of girls reported being victimized at least once in the previous two months (Molcho et al. 2009). Across all age and frequency categories of bullying and victimization, Canada consistently ranked at or worse than the middle of the international group. In Canada and around the world, bullying problems have been perpetuated by misconceptions. This hinders the recognition of bullying as a critical issue impacting children's health and development. These misconceptions include the ideas that bullying occurs only in schools, is a problem that children naturally grow out of and is harmless. Although these ideas are refuted by research (e.g., Pepler et al. 2008), their perpetuation contributes to the lack of recognition of bullying as a critical public health problem for a substantial proportion of Canadian children and youth.

Bullying Is a Health Problem
Research points to a strong association between involvement in bullying and significant health problems. Both children who bully and those who are victimized experience elevated levels of physical and psychosocial health problems; those who are involved in both bullying and victimization experience the highest rates of problems (Craig 1998). The potential connections between early indicators of health problems and involvement with bullying may not come to the attention of parents and healthcare professionals because of the covert nature of bullying and the shame and fear of reporting experiences of victimization. We have developed a research fact sheet on the health and academic indicators for bullying or victimization or both – the Promoting Relationships and Eliminating Violence Network (PREVNet)/Substance Abuse and Mental Health Services Administration (SAMHSA) fact sheet "Psychosocial Problems and Bullying" is available on the PREVNet website (www.prevnet.ca) in the Download section.
Physical health problems are prevalent among children who have been chronically victimized by their peers. These children are at an increased risk for physical symptoms compared with non-victimized children. For example, they are 1.3–3.4 times more likely to report headaches and 1.3–3.3 times more likely to report stomach aches than are non-victimized children (Due et al. 2005; Williams et al. 1996). Victimized children are also more likely to report psychosomatic symptoms: they are 1.3–5.2 times more likely to report difficulty sleeping and 1.2–2.4 times more likely to report bedwetting (Due et al. 2005; Williams et al. 1996).

Findings from research on the physical and psychosomatic symptoms in children who bully others and those who both bully and are victimized suggest that (1) children involved in both roles may be most at risk and (2) children who bully others are equally likely as victimized children to experience these symptoms (Kaltiala-Heino et al. 2000; Klomek et al. 2007). Aggressive behaviour in children and adolescents is also related to other antisocial behaviours such as substance abuse. Youths who bully others are almost five times more likely than their non-aggressive peers to report alcohol use (Pepler et al. 2001). Research has shown that alcohol serves as a gateway to the use of other illegal substances, such as marijuana and heroin (Loeber et al. 1998). Adolescents who bully others are approximately seven times more likely than their peers to report using drugs (Pepler et al. 2001). Therefore, involvement in bullying is associated with risk-taking behaviours in adolescence; bullying in childhood might be an early indicator of risk for these problems in adolescence.

Several studies have documented the links between involvement in bullying and mental health problems. Mental illness is associated with a heavy burden of suffering for those afflicted and is also a burden for the health system. Among 15- to 24-year-olds, more than 10% of all hospital admissions in 1999 were due to seven mental illnesses: anxiety disorders, bipolar disorders, schizophrenia, major depression, personality disorders, eating disorders and attempted suicide (Health Canada 2002). Although there are no long-term follow-up studies exploring the connection between previous involvement in bullying and the incidence of specific mental health diagnoses, research indicates that psychological symptoms are more strongly associated with bullying involvement than are physical symptoms (Due et al. 2005). There are numerous studies on the prevalence of anxiety and depressive symptoms in children involved in bullying. Victimized children are 1.6–6.8 times more likely to report depressive symptoms than are children uninvolved in bullying (Due et al. 2005; Kaltiala-Heino et al. 1999; Williams et al. 1996). Depression was found to be equally likely in children who are victimized and children who bully; at even higher risk for depression are those children who both bully others and are victimized (Klomek et al. 2007; Williams et al. 1996). Similar patterns emerge for anxiety problems among children who bully, are victimized or both (Williams et al. 1996). Recent longitudinal studies reveal that psychosocial symptoms emerge following involvement in bullying (Fekkes et al. 2006; Kim et al. 2006) and may also contribute to further victimization (Fekkes et al. 2006). There is some evidence that psychiatric problems associated with involvement in bullying may persist into later life (Kumpulainen and Rasanen 2000; Sourander et al. 2007).

Over the past years, several Canadian children have committed suicide as a result of prolonged and serious victimization by peers. Suicidal ideation, attempts and completion in relation to bullying present a serious health concern. Children involved in dual roles, bullying others and being victimized, are estimated to be 12 times more likely to show severe suicidal ideation than do children uninvolved in bullying; those children who either bully or are victimized are also at high risk for suicidal ideation (Kaltiala-Heino 1999; Klomek et al. 2007). Although it is not possible to estimate the number of suicide attempts and completions caused directly by bullying involvement, the increased risk of suicidal ideation suggests that bullying may be a predisposing factor.

### Bullying Is a Psychosocial Problem

Both victimized children and children who bully are at risk for poor functioning at school. School functioning has been measured by attitude toward school and grades and absenteeism (Nishina et al. 2005; Rigby 2003; Tremblay 1999). Victimized children are more likely to dislike and avoid
school: one fifth to one quarter of frequently victimized children report bullying as the reason for staying home (Rigby 2003). Children who bully are also at risk for school problems. Physically aggressive children are significantly more likely than their non-aggressive peers to drop out of school (Tremblay 1999). Although there is a clear relationship between bullying and poor functioning at school, it is unclear whether the effect is direct or indirect. Children who exhibit serious psychosocial problems may experience associated problems with attention, behaviour and emotional regulation, which interfere with their ability to learn at school (Nishina et al. 2005).

School functioning has long-term effects on health and well-being. Low scholastic achievement may result in school dropout, the inability to attain post-secondary education and the limitation of job opportunities, potentially leading to decreased socioeconomic status (SES). Low SES, in turn, is significantly related to an overall lower life expectancy and increased likelihood of disease, such as cancer and cardiovascular disease (Advisory Committee on Population Health 1999; Auger et al. 2004; Wilkinson and Marmot 2003).

**Roles of Healthcare Professionals**

Given the significant mental and physical health problems associated with involvement in bullying, it is important that healthcare professionals be able to identify the associated signs and symptoms. The critical issue is to ascertain whether bullying is playing a role in the etiology of children’s presenting concerns. Children involved in bullying or victimization may present to healthcare professionals with a range of problems, from seemingly minor complaints (e.g., headache or stomach ache) to more severe concerns in need of immediate attention (e.g., depression or suicide ideation). The psychosomatic symptoms, mental illness and suicidal behaviour seen in children who have been bullied by peers are also among the symptoms experienced by children who have been abused at the hands of their caregivers (Runyan et al. 2002). For every one child reporting a concern about being sexually abused by an adult, there are three children reporting concern about being beaten up by a peer (Finkelhor et al. 1995).

Healthcare professionals have a legal duty to report suspicions of child abuse. Although bullying and victimization may not be explicitly included in that duty to report, we contend that healthcare professionals have a moral and ethical duty to investigate suspicions of peer victimization as the consequences are just as serious from a health perspective.

Children involved in bullying may experience health problems and school difficulties (e.g., attention or behavioural problems). They may present to a healthcare professional with health problems, but through further questioning of children and parents, the professional may discover that there are school difficulties also. To screen for bullying involvement and to explore whether the presenting symptoms might be associated with bullying experiences, healthcare professionals should be straightforward and ask children and adolescents whether they are being bullied at school, in sports or recreational activities or in their neighbourhoods. It is equally important to ask whether they are bullying others. To assess the severity of the bullying, there are five additional questions that can be posed to children and their parents (Craig and Pepler 2003); these are listed in Table 1, and the reasoning behind these questions is presented here. The more frequently children are involved in bullying, either as the children who bully or those who are victimized, the higher their risk is for health and other problems. Children with prolonged involvement in bullying are more likely to have established behaviour patterns and reputations within their peer group that maintain their involvement. With prolonged involvement in bullying or victimization, the risk of associated problems increases.

<table>
<thead>
<tr>
<th>Table 1. Preliminary protocol for assessing risk of being bullied or bullying others</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to ask you a few questions about your friends. Do you have friends at school and out of school? How do you get along with them? Have you been bullied at school, in sports or in your...</td>
</tr>
</tbody>
</table>
neighbourhood?

**If yes, continue with the following questions:**

- How often are you bullied?
- How long have you been bullied?
- Are you bullied just at school or also in other places, such as at home, on a sports team or at a rec centre?
- How much does the bullying affect you? How do you feel when you are bullied?
- What do you do to try to stop the bullying? Does it work? If not, what else can you do to stop the bullying?

*The goal is to ensure that the child has a trusted adult to turn to if bullying occurs. If victimization is chronic, frequent, pervasive and severe, the child will need support in settings where bullying occurs and may need a referral for mental health services.*

Have you been involved in bullying others at school, in sports or in your neighbourhood?

**If yes, continue with the following questions:**

- How long have you been bullying?
- How often do you bully?
- Are you involved in bullying just at school or in other places, such as at home, on a sports team or at a community centre?
- Can you tell me about the types of bullying that you have used? How do the kids you bully feel?
- Have any adults talked with you to help you stop bullying?

*The goal is to ensure that the child has an appropriate level of support to stop using power aggressively to control or distress others. If bullying is chronic, frequent, pervasive and severe, the child will need support in settings where bullying occurs and may need a referral for mental health services.*

Although children most often report that bullying occurs at school, it can also occur at home, in community settings and via cell phones and the Internet (Pepler et al. 1993, Raskauskas and Stoltz 2007). When bullying occurs across different relationships, it is an indication that behaviour patterns related to bullying or victimization are becoming consolidated and that the child is experiencing significant relationship problems. Because relationships are a critical social determinant of health, children who experience problems across multiple relationships are at increased risk for health problems.

Regarding the effect of bullying, although it is difficult to directly compare the impact of different forms of aggression, such as physical versus cyber bullying, the seriousness of the behaviour can be measured by the level of distress it causes the victimized child. The more serious the bullying or the more significant the impact on the child being victimized, the more likely it is that both the child who is bullying and the child who is being victimized are at risk for the health problems
Physicians should refer children who have been involved in bullying or victimization to available resources, or for psychological or psychiatric support if they determine that further assessment is necessary.

### Table 2. Indicators of bullying and victimization for children and adolescents

<table>
<thead>
<tr>
<th>Bullying</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Depressive symptoms</td>
</tr>
<tr>
<td>• Anxiety symptoms</td>
</tr>
<tr>
<td>• Alcohol and other substance use</td>
</tr>
<tr>
<td>• Poor functioning in school</td>
</tr>
<tr>
<td>• In extreme cases for bully-victims, suicidal ideation or suicide attempt</td>
</tr>
</tbody>
</table>

*Parents may have observed other behavioural signs of bullying:*

- Little concern for others’ feelings
- Aggressive and manipulative behaviour with siblings, parents and others, or with animals
- Possession of unexplained things or extra money

<table>
<thead>
<tr>
<th>Victimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Headaches</td>
</tr>
<tr>
<td>• Stomach aches</td>
</tr>
<tr>
<td>• Difficulty sleeping</td>
</tr>
<tr>
<td>• Bedwetting</td>
</tr>
<tr>
<td>• Depressive symptoms</td>
</tr>
<tr>
<td>• Anxiety symptoms</td>
</tr>
<tr>
<td>• Absenteeism from school, refusal to attend school</td>
</tr>
<tr>
<td>• Reduction in motivation and performance at school</td>
</tr>
<tr>
<td>• In extreme cases, suicidal ideation or suicide attempt</td>
</tr>
</tbody>
</table>

*Parents may have observed other behavioural signs of victimization:*

- Loss of possessions, need for money, hunger after school
- Injuries, bruising, damaged clothing, broken possessions
- Expression of threats to hurt him- or herself or others

Although physicians often have limited time in which to deal directly with patients, initial queries that result in a suspicion of involvement with bullying can be followed up with other efforts to gather additional information through observations and interviews with children as well as with their parents, educators and other children who have frequent and regular opportunities to
observe the identified child in daily social interactions. The challenge for healthcare professionals is that their exposure to children is often limited to office visits. Consequently, it is necessary for them to collect collateral history from parents and, in severe cases, to be involved as part of a multidisciplinary team to support the healthy development of children involved in bullying or victimization.

Identification and assessment of the extent of involvement are the first steps to helping children and parents address problems associated with bullying and victimization. Because bullying is a relationship problem, the interventions to address it must be composed of relationship solutions. Children who bully require interventions to stop their aggressive behaviour, promote empathy and pro-social behaviour and reduce peer pressure to engage in these behaviours. Children who are victimized may need support in developing assertive strategies as well as friendship skills and opportunities. The healthcare professional's role in these interventions may involve helping other adults to recognize the physical and psychological symptoms associated with the experience of being bullied; supporting the child; directing parents toward resources; advocating on behalf of the child to school officials or other community agencies; providing referrals to treatment settings, as appropriate; and encouraging parents to take an active role in monitoring their children and engaging them in positive school and community activities. Healthcare professionals who identify children involved in bullying can play an important advocacy role by writing a letter to the school or perhaps even visiting a class to educate classmates about the special needs of children or youth who bully or are victimized (Cummings et al. 2006).

Canadian resources are available from PREVNet (www.prevnet.ca); the Canadian Red Cross (www.redcross.ca/article.asp?id=000294&tid=030); and the Canadian Public Health Association (http://www.cpha.ca/en/activities/safe-schools/bigdeal.aspx) among others. The US Department of Health and Human Services has a number of available resources on bullying (www.stopbullyingnow.hrsa.gov) as does Melissa Institute for Violence Prevention and Treatment (www.teachsafeschools.org/bully.pdf).

Conclusion
Healthcare professionals play a major role in promoting the health and well-being of Canadian children and youth. With an increased understanding of bullying as a risk to the health and development of young Canadians, healthcare professionals can expand their practice in ways that position them to be catalysts in promoting healthy relationships and social change. With the potential to help children, their parents, schools and communities, a small effort by healthcare professionals to help a child at risk because of bullying or victimization may have a profound systemic effect in promoting healthy relationships in all of the contexts in which children and youth live, work and play.

About the Author
Debra J. Pepler, MSc, PhD, is scientific co-director of PREVNet (Promoting Relationships and Eliminating Violence Network), Distinguished Research Professor of Psychology at York University and senior adjunct scientist at the Hospital for Sick Children, in Toronto, Ontario. You can contact her at 416-736-2100, ext. 66155, or by e-mail at pepler@yorku.ca

Jennifer German, BSc, MD, practices family medicine in Toronto.

Wendy Craig, MA, PhD, is scientific co-director of PREVNet (Promoting Relationships and Eliminating Violence Network) and Professor of Psychology at Queen's University, in Kingston, Ontario.

Samantha Yamada, Med, MA, PhD (candidate), is a member of the Department of Psychology, York University, in Toronto, Ontario.

Acknowledgment
We gratefully acknowledge the support of the National Crime Prevention Strategy, the Networks of Centres of Excellence and SAMHSA in the preparation of this review article.

References


