



# Health Policy Research

## Bulletin

### Child Maltreatment: A Public Health Issue

**H**ealthy child development is a key determinant of health. Yet each year, a disturbing number of Canadian children experience various forms of abuse and neglect. Research shows that the injuries and emotional harm sustained during maltreatment can lead to immediate and long-term health problems that place considerable pressure on the health care system.

The health sector plays an important role in reducing the burden of child maltreatment through preventive programs, identification and referral, and treatment. This issue of the *Health Policy Research Bulletin* explores how Health Canada's leadership and its coordination of Canada's national child maltreatment surveillance system serve as a foundation for this work. More specifically, this issue of the Bulletin:

- explains what constitutes child maltreatment and describes how our understanding of the problem has evolved over the years and has been shaped by the sectors involved in addressing it
- highlights the important information that the *Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS) and other data collection activities are providing about the scope of child maltreatment and emerging concerns
- examines the factors and conditions that contribute to child maltreatment and, as an illustration, reports on a recent investigation of the relationship between child maltreatment and caregiver substance abuse
- uses two national-level data sources to explore the physical, emotional and behavioural outcomes of child maltreatment

Although much remains to be done to develop better integrated and more comprehensive systems for data collection, analysis and reporting on child maltreatment, current surveillance and research activities are starting to influence policy and practice.

#### In this Issue

##### Child Maltreatment

Informing Policy: A Scientific Perspective	3
What is Child Maltreatment?	6
The Canadian Incidence Study	9
Scope and Risk Factors	12
Association with Substance Abuse	16
Maltreatment Outcomes	19
Linking Evidence to Action	24
Who's Doing What?	28
Fact or Fiction?	30
<b>Survey Data Files</b>	<b>32</b>
<b>New and Noteworthy</b>	<b>34</b>

## A Statistical Snapshot of Canada's Children

### Population of Children Aged 0–18 (2003)<sup>1</sup>

Males: 3,824,389

Females: 3,640,464

### Children Under 18 in Low-Income Families (2001)<sup>2</sup>

Number of children: 1,245,700

Proportion of children: 18%

### Family Structure for Children Under 18 Living at Home (1996)<sup>3</sup>

74.3% in families of currently married couples

8.4% in common-law couple families

2.7% in male lone-parent families

14.5% in female lone-parent families

### Infant Mortality Rate (2000)<sup>4</sup>

5.3 per 1000 live births

### Injury Mortality Rate for Children Aged 0–19 (2000)<sup>5</sup>

15.0 per 100,000

### Injury Morbidity Rate for Children Aged 0–19 (2000–2001)<sup>6</sup>

529.6 per 100,000

### Hospitalizations Due to Injury, by Cause and Gender, 2000–2001<sup>7</sup>

Males	All ages	Ages 1–19
Traffic injury	11.3%	11.5%
Falls	36.4%	33.1%
Other unintentional injuries	38.1%	45.1%
Intentional injuries	12.7%	9.3%
Unknown intent	1.4%	1.1%

Females	All ages	Ages 1–19
Traffic injury	8.1%	11.6%
Falls	56.0%	29.4%
Other unintentional injuries	19.8%	33.3%
Intentional injuries	14.4%	23.4%
Unknown intent	1.7%	2.3%

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

## About the Health Policy Research Bulletin

Health Canada's *Health Policy Research Bulletin* is published three times a year. The Bulletin is part of a larger policy research dissemination program designed to enhance Health Canada's policy-relevant evidence base.

A departmental steering committee guides the development of the Bulletin. The Research Management and Dissemination Division (RMDD) within the Applied Research and Analysis Directorate, Information, Analysis and Connectivity Branch coordinates the Bulletin's development and production. RMDD would like to thank the steering committee members for their contributions, as well as Nancy Hamilton, Managing Editor, Jaylyn Wong, Assistant Editor, Tiffany Thornton, Coordination, and Raymonde Sharpe, Proofreading and Quality Control. Special thanks go to Lil Tonmyr and the Guest Editor of this issue, Dr. Catherine McCourt, Director of the Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch.

We welcome your feedback, suggestions and requests to be added to our mailing list. Please forward your comments and any address changes to: <[bulletininfo@hc-sc.gc.ca](mailto:bulletininfo@hc-sc.gc.ca)>.

Electronic HTML and PDF versions of the Bulletin are available at: <<http://www.hc-sc.gc.ca/arad-draa>>.

## Health Policy Research Bulletin

The opinions expressed in these articles, including interpretation of the data, are those of the authors and are not to be taken as official statements of Health Canada.

This publication can be made available in alternative formats upon request.

Permission is granted for non-commercial reproduction provided there is a clear acknowledgment of the source.

Published under the authority of the Minister of Health.

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada, 2004

ISSN 1499-3503

Editing, design and layout by Allium Consulting Group Inc.

Publications Mail Agreement Number 4006 9608

Return if undeliverable to:

Health Canada  
IACB/DGIAC  
RMDD/DGDR  
P/L: 1904A  
Ottawa, Ontario  
K1A 0K9



# Evidence and Action:

## *A Necessary Partnership*

The following interview with **Dr. Catherine McCourt**, Director of the Division of Health Surveillance and Epidemiology, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada, was conducted by Nancy Hamilton, Managing Editor of the Health Policy Research Bulletin.

**Q** When we talk about “child maltreatment,” what are we referring to?

For our purposes, child maltreatment is defined as physical abuse, sexual abuse, neglect or emotional maltreatment of a child. A more in-depth explanation of these terms can be found in the article *What is Child Maltreatment?* (see page 6). This article also elaborates on the evolving concept of child maltreatment, and the fact that there are different perspectives through which people see this topic. As for the definition of a child, the *Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS) uses the age range of 0–15 years, inclusive.

**Q** Child maltreatment appears to be an issue of concern to policy makers in many sectors. How is it significant for the health sector?

Child maltreatment can result in adverse health outcomes, both immediately and over the longer term. Child abuse and neglect can result in physical and emotional harm. It can also increase a child’s risk of behavioural, social, emotional and cognitive development problems.

The health sector plays an essential role in reducing the impact of child maltreatment through preventive programs, identification and referral, and treatment. For example, health care providers deliver programs that educate parents about the dangers of shaking babies. Child protection teams in paediatric hospitals have a role in the assessment, referral and treatment of children suspected of having been maltreated. As well, children’s mental health services are an important component of services for those who have been abused or neglected.

**Q** Why is Health Canada involved in this area?

First, children are a priority for Health Canada as they are for the federal government in general. More specifically, the Department is involved in the area of child maltreatment because we have a unique public health contribution to make, ►



one that complements the mandates of other sectors and jurisdictions. From my perspective, which is that of someone working in science to support policy development, the starting point is Health Canada's leadership and coordination of Canada's national child maltreatment surveillance. As you know, health surveillance is an ongoing system of data collection, expert analysis and interpretation, and communication of information for public health action. The Department's role in child maltreatment surveillance is consistent with our expertise in, and contribution to, national surveillance in many other areas of public health, including infectious diseases, chronic diseases, perinatal health and unintentional injury.

Health Canada also contributes through its support for external research activities, such as the work carried out by the Centre of Excellence for Child Welfare, which is one of four Centres of Excellence for Children's Well-Being in the country. In the broader health portfolio, the research funding provided by the Canadian Institutes of Health Research (CIHR) is also helping us to move forward. A third contribution is provided by the National Clearinghouse on Family Violence in its role as an information clearinghouse for professionals and the public.

**Q** *How would you respond to people who might say we should use resources for front-line services, rather than for surveillance and research?*

I would say that we need both. The essential purpose of our surveillance and research activities is to develop and disseminate knowledge that helps people working on the front lines to provide effective services. For example, surveillance gives us information about the extent of child maltreatment, as well as trends and patterns of occurrence. This information is essential for making sound policy decisions and for determining how to best allocate program resources.

Surveillance results also help to raise awareness among governments and the public about child abuse and neglect. Research provides knowledge about the causes of child maltreatment, as well as the risk and protective factors, so that better prevention and response policies and programs can be developed. Research that designs and evaluates prevention and intervention programs is also necessary if we are to use human and financial resources in the most effective and efficient way possible.

**Q** *What type of data and research are needed and what role has Health Canada played in developing this evidence base?*

From the surveillance perspective, we first need to know the burden of child maltreatment, including rates and trends over time. We need to know the circumstances in which the maltreatment occurs, so we can properly analyze and interpret the rates. Health Canada leads the CIS, which collects data on the incidence of maltreatment reported to, and investigated by, child welfare agencies across the country (see the article on page 9). Now in its second cycle, this periodic survey also collects data on circumstances and contextual factors, such as family income, housing, caregiver functioning and family stressors. This reflects the determinants of health approach that was taken with the CIS.

The core CIS survey reports at the national level, but provincial- and territorial-level analyses are very important because these jurisdictions are responsible for child welfare and the delivery of child protection services. Some provinces and territories support oversampling in their jurisdiction to enable this level of analysis and reporting (see the article on page 24).

It is important to emphasize that Health Canada's work on the CIS is carried out collaboratively with the provincial and territorial Directors of Child Welfare, and the academic and child advocacy communities. This helps ensure that the surveillance is of high scientific quality and that it is relevant and responsive to those who plan and provide services to children.

**Q** *What does the evidence tell us about the factors that contribute to child maltreatment and the related health consequences?*

We know that the risk factors for maltreatment can reflect the situation of the child, the situation of the parents or broader social factors, and that these risk factors vary according to the type of maltreatment (see also *The Scope of Child Maltreatment in Canada*, page 12). The risk factors, which include low socio-economic status, parental illness, spousal violence, social isolation and many others, are associated with a greater likelihood of maltreatment, but they do not necessarily cause the maltreatment. With regard to health consequences, the article *Maltreatment Outcomes: Immediate and Long-Term* (on page 19) discusses some of the effects of child maltreatment.

**Q** *What policy levers are available to prevent or mitigate the effects of child maltreatment, and how are our research efforts guiding policy development in this area?*

Policy levers such as child welfare legislation and the planning, resourcing and delivery of child protection services exist at the provincial and territorial level, and below. The provinces and territories are involved in policy development in other areas as well, such as education (awareness and prevention programs), the administration of justice and health services, including the provision of children's mental health services.

At the federal level, the Department of Justice has an important role through the *Criminal Code* and various aspects of family law, while the Royal Canadian Mounted Police has a clear role in policing and law enforcement. Health Canada and other federal departments collaborate through the Family Violence Initiative, led by Health Canada, and share responsibility for policy development in support of international initiatives such as the *UN Convention on the Rights of the Child* and *A World Fit for Children* (see page 26). In response to the latter document, the federal government worked with partners from across various sectors to develop a national plan of action entitled *A Canada Fit for Children*.

Health Canada is also active through its work on the prevention of violence and injury and, more broadly, through its support for the *World report on violence and health*. Finally, economic and social policy development in various areas of the federal government is important in addressing the socio-economic circumstances that increase the risk of child maltreatment.

The CIS has already had an impact on policy development and I anticipate that the effects will increase as more cycles of the study are implemented and analyzed. For example, in the education sector, CIS results have been included in curricula at the

university and high school levels, and in continuing education for school administrators. At the federal level, the CIS results supported Canada's successful intervention to include the concept of child neglect in *A World Fit for Children*. Recent analysis has also contributed to policy discussions about investigation priorities and procedures for child maltreatment and the development of differential response systems to reflect differing degrees of urgency for intervention.<sup>1</sup>



**H** **Health Canada and other federal departments**

**collaborate through the Family**

**Violence Initiative, led by**

**Health Canada, and share**

**responsibility for policy**

**development in support of**

**international initiatives**

**such as the UN Convention on**

**the Rights of the Child and**

**A World Fit for Children.**

**Q** *Where should future research efforts be focused?*

The article *From Evidence to Action: An Ongoing Journey* (see page 24) outlines the challenges involved in strengthening the evidence required for preventing and responding to child maltreatment. I believe there are a number of key areas that merit further study. For example, more work is needed to help us understand the maltreatment of vulnerable or special needs children, such as those with disabilities and Aboriginal children. We also need to develop a better understanding of the influence of cultural and societal factors, as well as the economic and health consequences of maltreatment.

I strongly believe that Health Canada's continued and strengthened collaboration with provincial and territorial governments and the Canadian Institutes of Health Research is important in addressing these gaps. The establishment of the new Public Health Agency of Canada is an opportunity to reinforce these collaborations, and to build on our current surveillance of child maltreatment, and of injury and violence more broadly. Lastly, I think that opportunities for international

collaboration should be sought, because we have something to learn from other countries and to offer other countries in terms of child maltreatment surveillance and research. 🌐

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

# WHAT IS *Child* MALTREATMENT?

Carol MacLeod, Family Violence Prevention Unit, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada; Lil Tonmyr, Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada; and Tiffany Thornton, Research Management and Dissemination Division, Applied Research and Analysis Directorate, Information, Analysis and Connectivity Branch, Health Canada

**O**ur understanding of child maltreatment issues and concepts has evolved significantly over the years. This article provides the historical context for current definitions of and approaches to child maltreatment and describes how various perspectives have influenced this evolution.

## Looking Back

It is only relatively recently that children in Western society have been treated as distinct from their family. This shift began during the Industrial Revolution when children's living conditions became a concern and governments responded by limiting age and hours of work, and by mandating primary school attendance. At the same time, volunteer social reformers stepped forward to care for children who were neglected, or physically or sexually abused.

Here in Canada, child protection became primarily a provincial responsibility because provinces possess the power to regulate charities. Notably, Canada's first Children's Aid Society was established in Ontario in 1891.<sup>1</sup> For the first half of the 20th century, the provinces focused on addressing child poverty, neglect and abandonment. In the 1960s, research describing a "battered child syndrome" precipitated a rapid evolution in how child maltreatment issues were conceptualized. As a result, social services altered their focus from negligent parenting to physical and sexual abuse issues.

The 1984 Badgley Report supported a further shift from parental to child rights.<sup>2</sup> Provinces and territories reoriented their child protection legislation, defining the various forms of abuse, mandating that cases of abuse be reported to child protection authorities or police and requiring that suspected child abuse cases be investigated. At the same time, social services moved away from child apprehension and placement to a preventive approach focusing on the "least disruptive course" that included support for families at risk and treatment for children who have been maltreated.

## Our Current Understanding

As more is learned about the effects of child maltreatment and attitudes evolve, concepts and approaches also change. For example, as a result of underlying beliefs about children's rights, emotional maltreatment is now considered to warrant child protection. Today, child maltreatment typologies generally include three elements: the relationship between the adult or youth and the child; acts of commission or omission by an adult or youth; and the harm or risk of harm to the child. Typologies



## Types of Child Maltreatment<sup>3</sup>

**Physical abuse** (assault) involves deliberate application of unreasonable force by an adult or youth to any part of a child's body. Physical abuse includes shaking, pushing, grabbing, throwing, hitting with a hand, punching, kicking, biting, hitting with an object, choking, strangling, stabbing, burning, shooting, poisoning and the abusive use of restraints.

**Sexual abuse** is adult or youth behaviour that involves using a child for sexual gratification and involves exposure of a child to sexual contact, activity or behaviour. Sexual abuse includes penetration, attempted penetration, oral sex, fondling, sex talk, voyeurism, exhibitionism and exploitation.

**Neglect** occurs when a child's caregiver fails to provide the physical or psychological necessities of life to a child. Neglect includes failure to supervise leading to physical harm, failure to supervise leading to sexual harm, permitting criminal behaviour, physical neglect, medical neglect, failure to provide psychological treatment, abandonment and educational neglect.

**Emotional maltreatment** concerns behaviours that damage a child psychologically, emotionally or spiritually. Emotional maltreatment includes emotional abuse, emotional neglect and exposure to family violence.

commonly recognize four categories of child maltreatment — physical abuse, sexual abuse, neglect and emotional maltreatment (see box).

### Approaches

There are two major approaches to child maltreatment. A **behaviour-based approach** involves legally proscribed adult or youth misbehaviours that harm the child, while an **effect-based approach** or **rights-based approach** looks at human rights or children's rights to live free of harm as a societal issue. Current international and Canadian approaches blend the two perspectives. For example, the World Health Organization's (WHO) 2002 *World report on violence and health*<sup>4</sup> employs an effect-based approach that defines maltreatment in terms of adult behaviours that harm the child's health, survival, development or dignity. The WHO endorses the idea that violence can be prevented by modifying conditions that lead to inappropriate adult behaviour.

The United Nations (UN) proposed protecting the human rights of children in its *Convention on the Rights of the Child*,<sup>5</sup> which Canada ratified in 1991. Health Canada upholds the responsibilities of the Convention by ensuring a child's right to survival, healthy development, protection and participation.

At the UN General Assembly Special Session on Children in 2002, the world's governments committed themselves to officially adopting the document, *A World*

*Fit for Children*.<sup>6</sup> Acting on this commitment, Canada developed its own national action plan entitled *A Canada Fit for Children*,<sup>7</sup> which is a joint responsibility of the Ministers of Health and Social Development Canada. The plan identifies the prevention of child maltreatment as its first priority under the theme "Protecting from Harm."

### Working Together

Effect-based approaches and behaviour-based approaches translate into three levels of intervention: legislative-based interventions intended to protect victims and punish perpetrators; social service interventions designed to protect children; and health system interventions intended to prevent, detect and treat the effects of maltreatment. Preventing and protecting children from maltreatment requires cooperation among federal and provincial governments, and voluntary community organizations. Underpinning these efforts is a legislative foundation that crosses jurisdictional boundaries.

### Legislative Frameworks

Justice Canada is responsible for the *Criminal Code of Canada*, which addresses the severest forms of child abuse and sexual exploitation, as well as interprovincial or international issues such as sex tourism and Internet child pornography. Provincial and territorial laws focus

on protecting children from harm and/or strengthening families. Provinces and territories are responsible for implementing child protection legislation, administering civil law and prosecuting most *Criminal Code* offences.

### Social Services

Most provinces and territories address child protection services through departments responsible for health, social services, community services and/or family services. Regional agencies or boards deliver services in some provinces and territories; other provinces and territories fund non-governmental charitable organizations such as the Children's Aid Society to provide community-based services. The scope of services also varies among jurisdictions, but generally includes parenting and life skills training, counselling, respite, daycare and specialized treatment programs for children who have been maltreated and/or perpetrators of abuse.

Where provinces and territories have devolved the responsibility for delivering child protection services to First Nations communities, Indian and Northern Affairs Canada (INAC) provides funding for the communities to design and manage programs in accordance with provincial and territorial legislation. In other areas, INAC funds services that are provided by provincial/territorial organizations or departments.

### Health Services

The view that health and freedom from maltreatment are fundamental child rights brings maltreatment firmly into the realm of public health. Healthy child development is considered to be a key determinant of health. However, the injuries and emotional harm sustained during maltreatment can lead to lifelong physical, emotional and cognitive disabilities that place considerable pressures on the health care system. Research has established relationships among maltreatment and a variety of physical, emotional and mental health problems, including: delayed brain development; unhealthy attachment; the adoption of harmful coping strategies (e.g., drug, alcohol and tobacco use); early sexual experience and unprotected sex leading to sexually-transmitted infection, pregnancy and unhealthy birth outcomes; body control strategies including disordered eating, slashing and suicide; antisocial behaviour; and the use of abusive strategies in adult relationships.<sup>8</sup>

Not only does child maltreatment affect the child who has been maltreated, it also has an impact on

the family, the community, and those responsible for detecting, treating and caring for children who experience maltreatment. As a result, child maltreatment has long been recognized as an issue that implicates the legal, housing, education, social services and health sectors.

Historically, federal and provincial governments have addressed child abuse in multi-departmental strategies that involve health departments as key players. Special federal interdepartmental initiatives addressing child maltreatment include the *National Children's Agenda*, *Gathering Strength: Canada's Aboriginal Action Plan*, the *Aboriginal Justice Strategy*, the *National Strategy on Crime Prevention and Community Safety*, the Homelessness Initiative and the Family Violence Initiative.

The federal government collects data and conducts research on the nature and extent of child maltreatment, particularly in the health sectors. Studies of note include the *National Longitudinal Survey on Children and Youth*, which captures data on parenting and domestic violence, and the *Health Behaviours of School-Aged Children Survey*, which addresses bullying. Led by Health Canada and Social Development Canada, the *Early Childhood Development Agreement* between the federal and provincial governments contributes to parent and child well-being, as do programs such as Health Canada's Community Action Program for Children, Canada Prenatal Nutrition Program and Nobody's Perfect program.

### Health Sector Roles

Child maltreatment is associated with serious and long-term health problems. For this reason, the health sector has an important role to play in identifying and preventing maltreatment, protecting children and treating those who experience physical and emotional harm. Health sector policies and programs can encourage healthy child development and promote the conditions and factors that protect children from immediate and long-term harm. Underpinning and guiding health sector activity are Health Canada's surveillance and research initiatives which promote exploration of the influences of early childhood experiences on later development, health behaviours and health outcomes. 🌀

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.



# The Canadian Incidence Study: Establishing an Evidence Base

Valérie Gaston, *Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada*, and Nico Trocmé, Ph. D., *Director of the Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto*

**T**he Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) is a cornerstone of Canada's surveillance network on child maltreatment. Prior to this study, there were no national estimates of the incidence of maltreatment in Canada. As a result, policy makers had to rely on American data for "best estimates" of the Canadian situation. This article describes the key features of the CIS, which operates on a five-year periodic data collection and reporting cycle. The first cycle was conducted in 1998; the second cycle began in 2003 and data analysis activities for it are currently under way.

## About the CIS

Health Canada carries out the CIS in collaboration with provincial/territorial governments and a cross-disciplinary team of investigators from regional academic centres under the leadership of the University of Toronto. The study is guided by a multisectoral steering committee comprised of health and social service officials, youth representatives, Aboriginal representatives, university-based researchers and advocacy groups.

The CIS examines cases of child maltreatment (physical, sexual and emotional maltreatment and neglect) reported to and investigated by child welfare services across Canada. In particular, it:

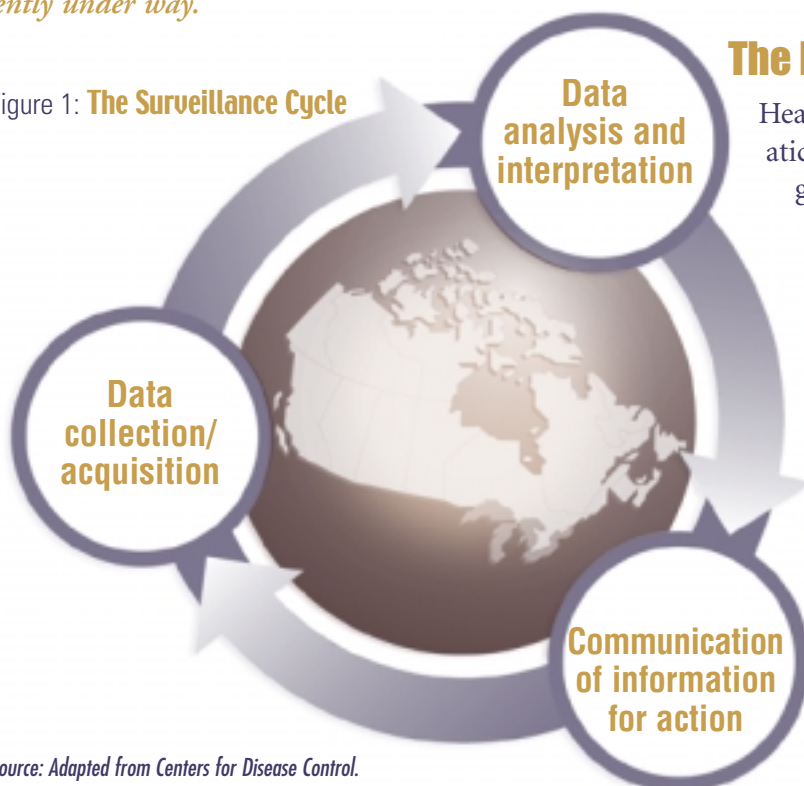
- examines the **rates of reported maltreatment** (e.g., type, duration, severity)
- explores key **characteristics of investigated children** (e.g., previous reports of maltreatment and child functioning issues such as developmental delay or depression) and their families (e.g., caregiver age, sex, education level, risk factors, primary income source and housing)
- tracks sources of referrals and **short-term case outcomes** (e.g., out-of-home placement and involvement of the child welfare court)

## The Important Role of Surveillance

Health surveillance is the continuous and systematic use of routinely collected health data to guide public health action. It provides data that allow researchers to identify trends, track information on the determinants of health (as well as various risk and protective factors), establish national research priorities, and guide the development and evaluation of policies and programs. It also highlights emerging issues and allows researchers and policy analysts to monitor progress in the prevention and treatment of disease and injury.

As the foundation of Canada's child maltreatment surveillance network, the CIS includes the three stages characteristic of the health surveillance cycle ▶

Figure 1: The Surveillance Cycle



Source: Adapted from Centers for Disease Control.

(see Figure 1). Data for the CIS are collected every five years; then the data are analyzed and the resulting information is disseminated and used to inform policy and practice. More detailed analysis of the data by researchers across the country is also encouraged (see the article on page 16).

A comprehensive child maltreatment surveillance network must collect and eventually link data from the professional milieus that interact with children who have experienced maltreatment, including child welfare, police, justice and paediatric hospitals. One information gap is data from coroners and medical examiners. However, these data will soon be available from the National Coroner/Medical Examiner Database, which will provide valuable information on the circumstances of deaths related to child abuse and neglect.

## The CIS: A Surveillance Cornerstone

Prior to the CIS, there were no comprehensive, national data on children and families who had been investigated because of suspected child abuse and neglect. This hampered efforts to develop and evaluate policies, programs and interventions. The main objectives of the CIS are to: provide reliable estimates of the frequency and characteristics of reported maltreatment among children 0–15 years of age; assist in targeting resources for children at risk of abuse and neglect; and guide the development of policies and programs.

## Methodological Highlights<sup>1</sup>

### What Gets Counted

The CIS collects information on cases of maltreatment that are reported to and investigated by child welfare services, including cases of **substantiated**, **suspected** and **unsubstantiated** maltreatment. Since the incidence rates of child maltreatment in Canada are based on maltreatment cases that have been substantiated, it is important to understand the difference between these terms (see box).

### The Issue of Under-Reporting

Because some cases are not included in the study, the rates of substantiated maltreatment reported by the CIS are generally considered to be underestimates of the true incidence of maltreatment in the child population.

## When is Maltreatment Substantiated?

**Substantiated maltreatment** refers to cases in which there is enough evidence for the social worker to conclude that abuse or neglect occurred. For example, emotional maltreatment would be substantiated if the police laid charges of domestic violence that took place while the children were present.

Maltreatment is **suspected** when there is insufficient evidence to conclude that maltreatment occurred, but it appears likely. Consider the situation where a school calls social services to refer a child who arrived crying with a mark on his face, saying that his father was angry and had yelled at him. Upon investigation, the parent's and child's account of what happened are plausible, although not entirely convincing.

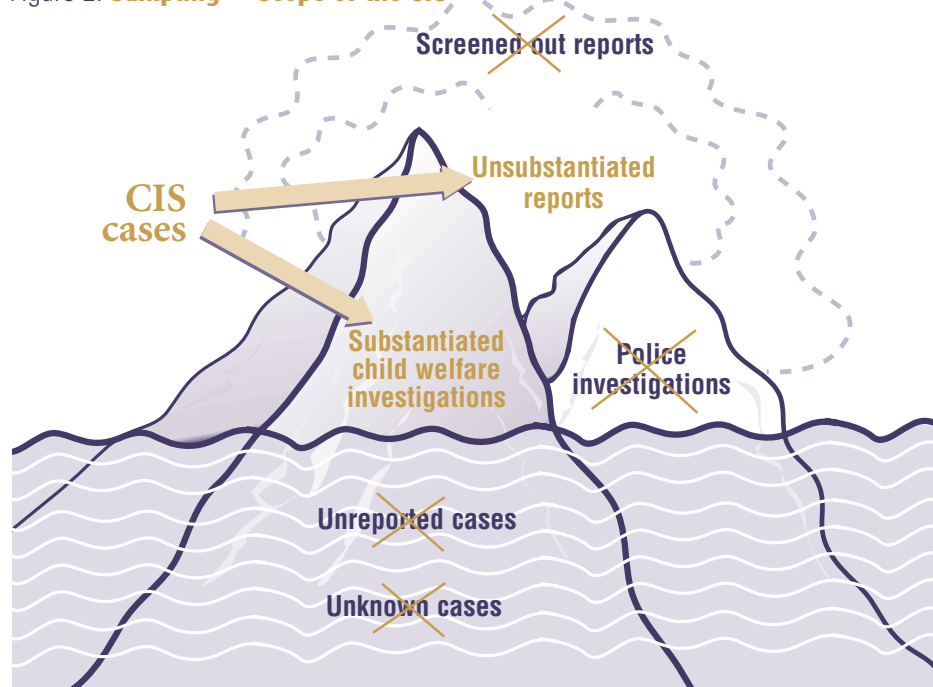
Where there is enough evidence to conclude that maltreatment did not occur, the case is **unsubstantiated**. For example, a neighbour calls to report that young children have been left unsupervised and are dirty, and that there is no food or heat in the house. Upon investigation, the worker discovers that the children are, in fact, supervised and well cared for.

For example, as illustrated in Figure 2, the CIS *does not* include:

- new reports on cases already opened by child welfare
- reports that have been “screened out” (i.e., referrals where there is not enough information to identify the family, such as an unidentified woman hitting her child in a grocery store parking lot)
- maltreatment investigations known only to the police (e.g., a case of domestic violence in a family with children where the police did not notify the child welfare agency)
- unknown and known cases of maltreatment that are unreported (e.g., a priest who knows that a child is being neglected but provides support for the family within the church instead of notifying child services)

### Sampling

The first cycle of CIS data collection conducted in 1998 (CIS-1998) summarized data from 51 sites across the country — including 3 Aboriginal sites — on 7,672 child maltreatment investigations. Data for the second cycle (CIS-2003) were collected at 68 sites across

Figure 2: **Sampling – Scope of the CIS**

Canada, including 10 Aboriginal sites. It is estimated that the CIS-2003 will include information on more than 10,000 child maltreatment investigations.

Sampling is carried out in several stages and involves both site and case selection. First, sites are randomly selected from a list of all child welfare agencies in Canada. The list is stratified by province or territory and Aboriginal status. These sites are recruited and those declining to participate are replaced by randomly selecting sites from the remaining pool.

Cases in participating sites are selected if they were opened within a three-month data collection period (between October 1 and December 31, 2003, for CIS-2003) and if they were investigated for child maltreatment. Notably, the CIS has developed operational definitions to overcome different administrative practices and child protection legislation. As a final step, the data are weighted in order to arrive at national annual incidence rates.

### Data Collection

At each site, child welfare workers conducting maltreatment investigations are trained to fill out a three-page data collection form. The questionnaire gathers information on

the source of the referral, the age and sex of all the children living in the home, the caregivers, the household, child functioning issues, and the type, duration and severity of maltreatment. The CIS data set contains no personal identifiers.

## Strengths and Limitations

One of the strengths of the CIS is that the data are collected directly from child welfare workers using a standard set of definitions. This avoids some of the problems of missing data and intra-jurisdictional differences that limit the utility of officially reported service statistics. However, the methodology does not provide long-term follow-up on study cases. Moreover, because CIS data are national in scope, they cannot be used to evaluate the effectiveness of specific regional programs or to make provincial or territorial comparisons. However, provinces and territories are given the option to oversample and those that do so can compare their results to the national estimates.

## The CIS in Practice

As a cyclical study, the CIS allows for estimation of trends over time and supports evidence-based approaches to prevention and intervention. The knowledge generated may be applied to practice, research, and program and policy development and evaluation. As the article on page 24 illustrates, findings from the study have played a key role in shaping a major change in the organization of child welfare services, as well as policy debates about child neglect and exposure to domestic violence. 🌐

**O**ne of the strengths of the CIS is that the data are collected directly from child welfare workers using a standard set of definitions. This avoids some of the problems of missing data and intra-jurisdictional differences that limit the utility of officially reported service statistics.

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/araad-draa>>.

# The Scope of Child Maltreatment in Canada

Lil Tonmyr, *Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada, and Lesley Doering, Division of Childhood and Adolescence, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada*

The factors that contribute to child maltreatment are complex. This article examines the scope of child maltreatment in Canada and explores the risk factors that increase the likelihood of a child being maltreated.

## Introduction

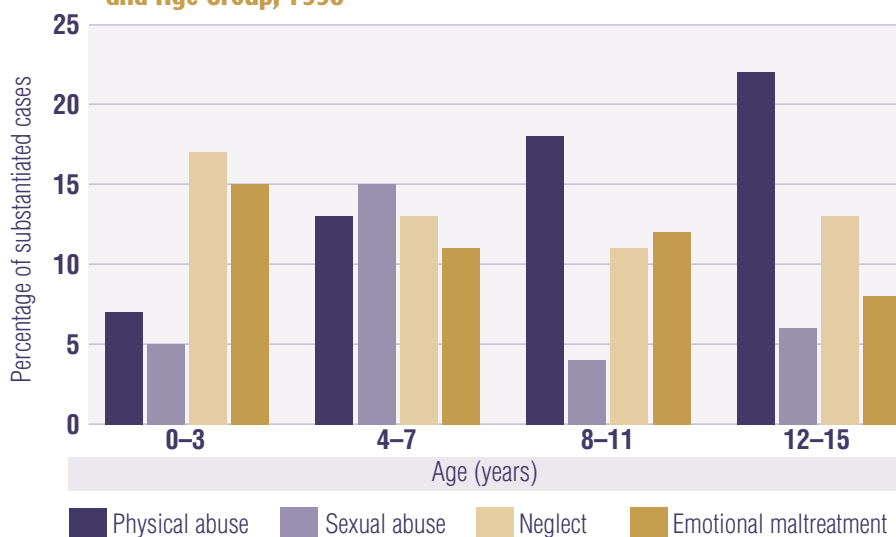
As discussed in previous articles, the *Canadian Incidence Study of Reported Child Abuse and Neglect (CIS)*<sup>1</sup> provides the first national-level estimates of child maltreatment in Canada. These estimates, together with data from other sources, are helping to define the scope of the problem and establish the broad range of contributing factors.

## Incidence

In child welfare terminology, **incidence** refers to the number of new cases of child maltreatment that are reported to child protection agencies in a single year. In 1998, an estimated 135,573 child maltreatment investigations were carried out across the country, representing 2.2 percent of Canadian children aged 0–15 years. Of these investigations, 45 percent were substantiated cases, distributed as follows into the four major maltreatment categories: neglect (40 percent); physical abuse (31 percent); emotional maltreatment (19 percent); and sexual abuse (10 percent).<sup>1</sup> While fifty-one percent of substantiated cases involved boys and 49 percent involved girls, Figures 1 and 2 show that the type of maltreatment varies by sex and age.

Because the incidence rates of child maltreatment are based on official reports

Figure 1: **Substantiated Maltreatment among Boys, by Type of Maltreatment and Age Group, 1998**



Source: Adapted from Trocmé et al., 2001.<sup>1</sup>

of maltreatment by child protection agencies, they tend to underestimate the actual occurrence of abuse. There are a number of reasons for this:<sup>2</sup>

- many children who experience abuse are not known to police or child welfare agencies
- children may be reluctant to come forward for fear they will not be believed or will be stigmatized
- children are dependent, which makes them vulnerable to intimidation
- children often blame themselves for the abuse and may link disclosure with negative consequences, such as family break-up or being put into care
- adolescents may not want their parents to know they are being abused for fear their activities will be restricted

- there is a prevailing view that family life is a private matter and the public is reluctant to interfere
- professionals may not recognize and/or report child maltreatment

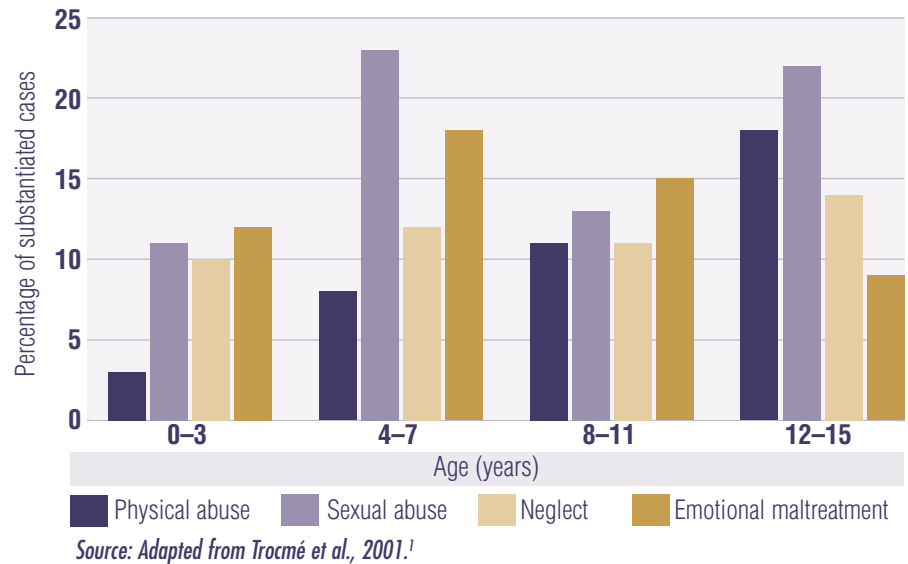
## Prevalence

Prevalence refers to the proportion of the population that were maltreated as children. While such data are not available at the national level, data from an Ontario community survey (n=9,953, 15–64 years old) suggest that a history of being physically and/or sexually abused while growing up is common. Child physical abuse was reported more often by males (31.2 percent) than females (21.1 percent), whereas child sexual abuse was more common among females (12.8 percent) than males (4.3 percent).<sup>3</sup> Respondents were also asked if they had been in contact with child welfare services as a child. Only a small proportion of respondents who were exposed to physical abuse (5.1 percent) or sexual abuse (8.7 percent) reported contact with a child welfare agency,<sup>4</sup> suggesting a high prevalence of unreported cases.

## Trends

Although national trend data are not yet available, two Ontario studies give an indication of changes in child maltreatment over time. The *Ontario Incidence Study of Reported Child Abuse and Neglect* was conducted in

Figure 2: **Substantiated Maltreatment among Girls, by Type of Maltreatment and Age Group, 1998**



1993 and 1998, when Ontario oversampled the CIS in order to obtain provincial estimates.<sup>5</sup> Over this five-year period, the total number of child maltreatment cases investigated rose from an estimated 44,900 to 64,888, an increase of 44 percent. The proportion of substantiated cases among all children aged 0–15 rose from 0.6 percent in 1993 to 1.0 percent in 1998, a statistically significant increase.

Figure 3, which compares the estimated number of substantiated maltreatment investigations in Ontario in 1993 and 1998 for the four maltreatment categories, shows a dramatic increase in the reporting of physical abuse over this period. Analysis suggests that the increase was largely driven by an increase in cases of

## A Focus on Aboriginal Children

Currently, there are no national data on the scope of child maltreatment among Aboriginal people in Canada. However, the first cycle of the CIS included three Aboriginal child welfare sites and an exploratory analysis of the data has been conducted by representatives of the First Nations Child & Family Caring Society of Canada (see *Who's Doing What?* on page 28). The results suggest that Aboriginal children are more likely than non-Aboriginal children to be reported to child welfare agencies and that neglect is the primary form of child maltreatment in this group.<sup>6</sup>



As mentioned in the previous article (page 9), the number of participating Aboriginal child welfare sites was increased for the second cycle of CIS and it is anticipated that more Aboriginal researchers will analyze these data. If the Aboriginal component of the CIS is to be enhanced, a number of conditions need to be met: strengthened support for Aboriginal-specific research using the CIS; further development of partnerships with Aboriginal child welfare agencies; and improved coordination of federal government efforts across departments serving Aboriginal communities.

inappropriate punishment. This may reflect a true increase in the occurrence of inappropriate physical punishment or, more likely, a change in society's tolerance of any type of physical punishment of children, leading to more reports to child welfare. Although estimates of sexual abuse decreased during this time, the data should be interpreted carefully. While similar trends have been reported in the United States, it is not known whether the decline is due to less willingness to disclose abuse or to more effective policies and programs that prevent sexual abuse.

A major concern is the rising incidence of emotional abuse and neglect. The increase in emotional abuse is largely driven by the recent inclusion of exposure to domestic violence as grounds for investigating emotional abuse. However, this highlights the importance of developing programs that deal with the consequences of family conflict for both children and caregivers. The increasing incidence of reported neglect may be driven by enhanced awareness of the detrimental effects of neglect.

## Why Are Some Children at Greater Risk than Others?

The factors that contribute to child maltreatment are complex and deeply rooted in the family, community, workplace and broader social systems. To understand child maltreatment, one must examine the influences of the broader physical, social and economic determinants of health and identify the factors that increase the likelihood or risk of maltreatment. In this context, the term “risk factor” may be applied to any variable — whether related to the child, parent or larger society — that is associated with the increased likelihood of a child being maltreated. Since the majority of the research to date has focused on women as the primary caregivers, maternal risk

**To understand child maltreatment, one must examine the influences of the broader physical, social and economic determinants of health and identify the factors that increase the likelihood or risk of maltreatment.**

factors such as maternal youth and low education levels have been more fully investigated than paternal risk factors, which require further attention. Previous experience of child maltreatment can also be a risk factor for further maltreatment. For instance, child sexual abuse typically does not occur in isolation; it is common for other problems to occur, including additional types of maltreatment.<sup>7</sup>

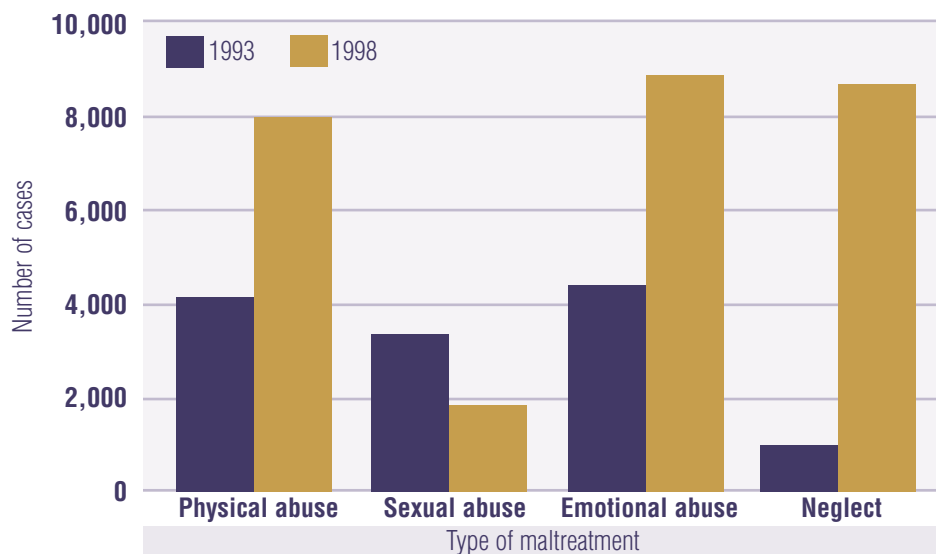
Research shows that risk factors may differ, depending on the particular form of child abuse. However, there are also variations in the availability of data linking specific forms of child maltreatment with specific risk factors.\*

### Physical Abuse

The evidence base on risk indicators associated with physical abuse is more extensive than for other forms of maltreatment. This may be because many of the risk factors for physical abuse are demographic variables and, therefore, are more easily identified than other types of variables. Risk factors for physical abuse include:<sup>7</sup>

*\*The information in this article about risk indicators for physical and sexual abuse is drawn from a cross-sectional community sample. Information for risk indicators for neglect is taken from a prospective longitudinal study of officially recorded and self-reported child maltreatment in the U.S. Information on risk factors for emotional abuse is drawn from reported cases to child welfare in Québec.*

Figure 3: **Incidence of Substantiated Maltreatment, by Type of Maltreatment, Ontario, 1993 and 1998**



**Child factors**

- male sex

**Parental factors**

- maternal youth, psychiatric impairment and low education
- lack of attendance at prenatal classes
- single-parent status
- childhood experience of physical abuse, substance abuse
- spousal violence
- unplanned pregnancy or negative parental attitude toward pregnancy
- social isolation or lack of social support
- low religious attendance

**Social factors**

- low socioeconomic status
- large family size
- recent life stressors

**Sexual Abuse**

Few indicators for sexual abuse have been identified and they are generally non-specific. For example, sex of the child is an identified risk factor for sexual abuse, with girls being at increased risk. Other risk factors for sexual abuse are:<sup>7</sup>

**Child factors**

- female sex

**Parental factors**

- living in a family without a biological parent
- poor relationships between parents, poor relationships between parents and children
- presence of a stepfather

**Emotional Abuse and Neglect**

Although there is limited information on the risk factors associated with **emotional abuse**, a number of parental and social factors have been identified, including:<sup>8</sup>

**Parental factors**

- history of childhood maltreatment
- spousal violence
- separation/divorce
- history of substance abuse
- blended family

**Social factors**

- low socioeconomic status

A greater number of risk factors have been identified for **neglect**:<sup>9</sup>

**Child factors**

- anxious/withdrawn early childhood
- low child verbal IQ

**Parental factors**

- parental sociopathy, psychopathology, conflict
- poor marital quality
- substance abuse
- low parental involvement and warmth
- early separation from mother
- maternal youth, alienation, anger, dissatisfaction, external locus of control, hostility, low self-esteem, serious illness
- single-parent status


**Social factors**

- low socioeconomic status
- large family size

**Evidence of Correlation not Causation**

Because most of the research on child maltreatment is based on retrospective accounts, the risk factors that have been identified should be regarded as correlates rather than the causes of maltreatment. As Kraemer and colleagues point out, understanding the causes of child maltreatment requires a focused search for causal risk factors (variable risk factors that can change the risk of outcome).<sup>10</sup> Consequently, it has been proposed that only longitudinal studies gathering information prospectively will determine which of the factors are indicators and, more importantly, causal risk factors (see *Using Canada's Health Data*, page 32). Although longitudinal data are preferable, cross-sectional data also provide useful information. For instance, the observed links between neglect, physical and emotional maltreatment, and poverty merit further attention in policies and programs.

**A Final Note**

Once the risk factors for child maltreatment have been identified, one must consider the question, “Why do some children exposed to one or more types of maltreatment experience long-term harm when others do not?” As the following articles suggest, understanding resilience to child maltreatment is critical for the development of appropriate intervention strategies.<sup>11</sup> 

 Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

# Substance Abuse

## and Child Maltreatment

Christine Wekerle, Ph.D., *University of Western Ontario*, Anne-Marie Wall, Ph.D., *York University*, Nico Trocmé, Ph.D., *University of Toronto*, and Eman Leung, M.A., *Centre for Addiction and Mental Health*. This article is based on research commissioned by the Healthy Environments and Consumer Safety Branch (HECSB) of Health Canada. The authors acknowledge the input and support of Stéphane Racine, M.Sc., *Drug Strategy and Controlled Substances Programme, HECSB*.

**W**hile parental substance abuse alone does not constitute child maltreatment, there are a number of situations in which maltreatment and substance abuse intersect. A secondary analysis of the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) recently examined the association between confirmed caregiver substance abuse and substantiated cases of child maltreatment. This article illustrates the complexity of the factors contributing to child maltreatment and shows how CIS research has contributed to a better understanding of these interactions.

### Introduction

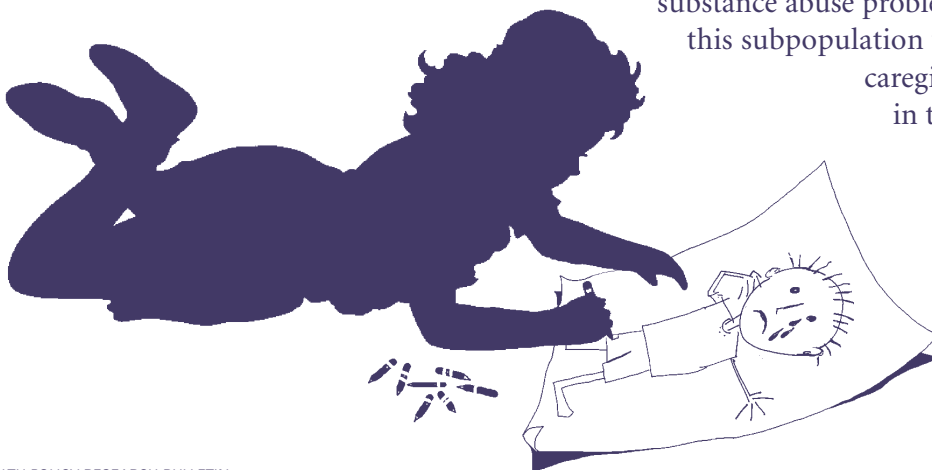
There are myriad situations where child maltreatment and parental substance abuse intersect. While caregiver substance abuse is not considered maltreatment, it can compromise parenting capacity and quality. In fact, there is growing evidence that children being raised in homes where adult substance abuse exists are at a higher risk of maltreatment.<sup>1</sup> Maltreatment may occur as a result of depleted household budgets, parental abandonment for hours or days, reduced emotional and physical availability and cognitive capacity on the part of the caregiver, and exposure to criminal activity, harmful substances or potentially dangerous adults.

### Data on Caregiver Substance Abuse

The CIS<sup>2</sup> provides an empirical starting point for studying the relationship between child maltreatment and parental substance abuse of alcohol and other drugs. Health Canada recently commissioned a secondary analysis of CIS data on caregiver substance abuse to identify the points of intersection between caregiver substance abuse, the nature of the maltreatment, family characteristics and case outcomes. Substance abuse was rated by caseworkers as “confirmed” if it had been diagnosed, observed by the worker or disclosed by the caregiver. Alcohol abuse was defined as “use of alcohol that poses a problem for the household,” and drug abuse was defined as “abuse of prescription drugs, illegal drugs, or other substances.”

The analysis found that a substantial subpopulation of adults involved in child welfare cases (15 percent) had confirmed substance abuse problems. More than half (59 percent) of this subpopulation were women. Both female and male caregivers were 1.5 times more likely to be in the 26 to 30 age group.

Compared to CIS cases involving caregivers who were not rated as abusing substances, cases involving caregivers with confirmed substance abuse were:





- one-and-a half times more likely for the report to be a repeated referral on that child, and nearly three times more likely for the family to have been reported before overall, including on other children
- more than three times more likely for the report to be considered by workers to be a longer term case, and over five times more likely for the case to move towards an application to child welfare court

These data suggest that families with substance abuse problems are more likely to be repeat users of child welfare services and that parenting concerns appear to be ongoing. This is not surprising given the context of substance abuse, where recovery from chronic use is challenging and relapse is not atypical.<sup>1</sup>

### About Caregivers with Substance Abuse

Based on the CIS data, caregivers with confirmed substance abuse experienced significantly more personal and socioeconomic disadvantages, and less residential stability and security than those who were not rated as confirmed substance abusers. For example, among substance abusing caregivers, there was a higher likelihood of maltreatment while growing up, more mental and physical health problems, lower household education and income levels, and a higher incidence of unsafe and temporary housing. To better isolate the

relationship between caregiver substance abuse and type of child maltreatment, these parental and demographic factors need to be controlled in statistical analyses, along with the age and sex of the child. Thus, while child abuse and neglect are associated with a variety of contextual and child-related factors, this article focuses on the substance abuse-maltreatment link.

### Neglect and Emotional Abuse

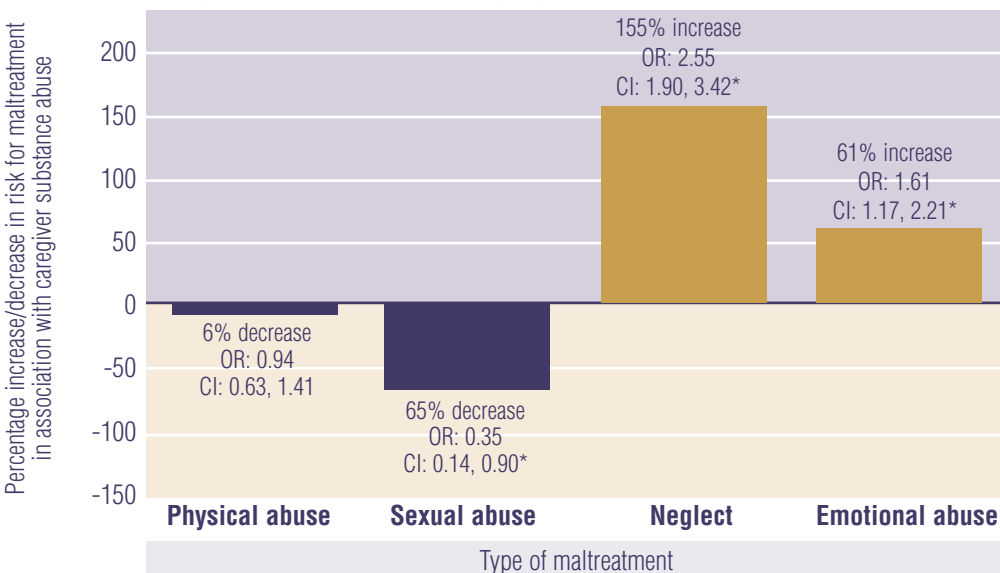
Adult substance abuse, whether by the caregiver or other adults with access to the child, may be related to all types of maltreatment — physical abuse, sexual abuse, emotional maltreatment and neglect. The data demonstrate that there is a significant relationship between caregiver substance abuse and specific types of child maltreatment, when the age and sex of the child and parental and demographic factors are statistically controlled.

As Figure 1 shows, significant relationships emerged between confirmed caregiver substance abuse and sexual and emotional abuse and neglect, but not with physical abuse. Most striking were the findings for emotional abuse and neglect as being elevated for caregivers with confirmed substance abuse. Also, caregiver substance abuse was linked to a lower likelihood of sexual abuse (65 percent decrease). However, it should be recognized that for many sexual abuse cases where child protection is not at issue, such

cases may be directed to the police rather than child welfare authorities. When comparing across different family structures, substantiated sexual abuse was more likely to occur in single male homes where substance abuse was confirmed.

Specifically, the risk of substantiated neglect was more than 1.5 times higher in families with substance abusing caregivers than in other families in the CIS. Across all cases, neglect was most likely to be committed by a couple with one biological parent and one step-parent. However, when substance abuse was a concern, neglect tended to be more

Figure 1: Increase/Decrease in Risk for Maltreatment Associated with Caregiver Substance Abuse, by Type of Maltreatment



Age and sex of the child plus the caregiver's characteristics were controlled in the statistical analysis. \*p<0.05. CI — confidence interval (95%). OR — odds ratio.

likely to occur in households with a lone female caregiver. This suggests that these latter families may require greater support in providing adequate care for their children when receiving treatment for parental substance abuse.

The risk of emotional abuse, including witnessing domestic violence, was 61 percent greater in families with substance abuse problems. This finding is consistent with research that points to a substantial overlap between adult substance abuse and domestic violence.<sup>1,3</sup> Emotional abuse was most likely to be committed by a biological parent and a step-parent together, a finding that held true in cases where substance abuse was a concern.

One pressing question that has yet to be answered concerns the delivery of services. Knowing the high risk of relapse, what is the best way to provide collaborative and coordinated services? There is a need to consider models where services across child welfare, battered women's shelters, police services, substance abuse treatment, community supports and parent training programs are synchronized to bolster long-term recovery from chemical dependency. The substance abuse treatment field has not reached a consensus on how to intervene effectively to achieve adult treatment gains for both substance abuse and violence.<sup>1</sup> However, earlier intervention is strongly indicated, given the adverse effects of accumulated and chronic trauma on developing brain structure and function.<sup>3,4</sup>

## What We Have Learned

Caregivers in the child welfare system with confirmed substance abuse problems seem more vulnerable to neglect and emotional maltreatment of their children. Effective treatment of adult substance abuse is an ongoing challenge and, once abusive behaviours have become part of the parenting repertoire, these parents may be at risk for continued problem parenting.<sup>1,5</sup> Although only a minority (15 percent) of reported maltreatment cases involve confirmed caregiver substance abuse, these parents are at higher risk for re-referral to child welfare.<sup>5</sup> Their teen children are more likely to have low educational attainment levels

and are at least four times more likely to have psychiatric problems, including depression, substance abuse and antisocial behaviour.<sup>6</sup>

Since parental substance abuse and domestic violence are predictors of re-referral to child welfare,<sup>7,8</sup> the results of the present analysis highlight the need for research on routine substance abuse screening of caregivers in child welfare investigations. Although not developed specifically for individuals involved in child welfare, a number of reliable and valid screening measures are available.<sup>9</sup> As is the case with most professional health groups, the child welfare field lacks substance abuse training. In addition to assessment and training directions, these analyses highlight the prevention of child maltreatment and substance abuse as critical strategies.

## The Way Forward

An integrated, national research agenda on child maltreatment that pairs scientific and community leadership is needed as a basis for establishing empirically-based, multi-targeted services. Ongoing monitoring and quality assurance of such services is an essential goal for child welfare research, as is a demonstration of their impact on healthy functioning and violence prevention. Important initiatives, such as a national database and the longitudinal follow-up of child welfare clients, are required to better assess the prevalence and trends over time of substance abuse problems among child welfare clients. A critical target as well are effective collaborative service delivery models that meet the needs of multiproblem families presenting to child welfare.

With a national network, there are increased opportunities to integrate research knowledge that was previously fragmented by discipline, type of abuse, sub-population, and service and policy activity. Moreover, it is likely that a coordinated, evidenced-based approach that responds to the needs of vulnerable families will maximize opportunities for all child welfare clients, including those who are substance abusing, and yield demonstrable individual, systemic, societal and socio-economic gains. 🌐

**C**aregivers in the  
child welfare  
system with confirmed  
substance abuse  
problems seem more  
vulnerable to neglect and  
emotional maltreatment  
of their children.

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

# Maltreatment Outcomes: Immediate and Long-Term

Richard De Marco, Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada, and Jennifer Phelan, Community Acquired Infections Division, Centre for Infectious Disease Prevention and Control, Population and Public Health Branch, Health Canada

**C**hild maltreatment can have serious consequences for the long-term health and well-being of individual children, families and the larger community. This article explores the immediate and long-term physical, emotional and behavioural outcomes of child maltreatment by presenting the results from two national level Health Canada data sources on children and youth.

## Two National Data Sources

A large body of international research shows that child maltreatment has both immediate and long-term detrimental effects on the health and well-being of those affected. These include psychological distress<sup>1,2</sup> and suicide<sup>3</sup> among sexually abused children, and physical injury, such as bruises and cuts, among physically abused children.<sup>4</sup> Risky behaviours, such as drug use and unprotected sexual activity, can also result from maltreatment.<sup>5</sup>

Two Health Canada data sources provide important information about the maltreatment of children and youth. The *Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS) collects incidence data on a sample of investigated maltreatment cases from all 13 provinces and territories, while the *Enhanced Surveillance of Canadian Street Youth* (ESCSY) is a national, multicentre, cross-sectional surveillance of Canadian street youth. While the primary purpose of the ESCSY is to provide information on sexually transmitted infections (STIs) and risk behaviours, it also gathers information on maltreatment experienced at home and on the street (e.g., sexual exploitation).

These sources present a unique opportunity for studying maltreatment in two different groups — the CIS focuses on children who have been officially investigated as a result of maltreatment, while the ESCSY follows youth whose marginal living conditions may prevent them from receiving support for past experiences of maltreatment. The former provides detailed information about child maltreatment when it occurs and indicates that different types of maltreatment have different health effects. The latter suggests that child maltreatment may have significant long-term effects on health behaviours, even when other major life stressors are present. ▶



## Methodology Highlights

Following is a brief description of the outcome measures of interest in the CIS. A more complete description of the CIS survey methods is presented on page 10.

- **Harm resulting from maltreatment** is measured as both physical harm (i.e., injury) and emotional harm. Both are assessed by social workers at the time of the investigation and are reported if they are suspected or known to be caused by maltreatment. Clinical corroboration of harm is not part of the study.
- **Physical injury** consists of the following: bruises/cuts/scrapes, burns and scalds, broken bones, head trauma and other injuries. The CIS also includes information about whether medical treatment was sought for the injury.
- **Emotional harm** is more difficult to assess. Case workers note any changes they observe in the child's development (e.g., regression or withdrawal), self-regulation (e.g., sleep patterns or elimination) or emotions (e.g., crying). Severity is determined by whether any of these changes required therapeutic intervention.

The ESCSY is based on a convenience sample of 1,733 youth aged 15 to 24 years who were recruited from drop-in centres in seven major cities across Canada.

There have been four cycles of the study — this analysis uses data from Cycle 2, which collected data from February to October of 1999. To obtain the data, public health nurses administered a 24-page questionnaire that includes items on sexual activity, STIs, substance use and living conditions, among others. For the purpose of this article, maltreated street youth are defined as those who cited emotional, physical or sexual abuse as a reason for leaving home. It is important to note that street youth face a number of unique challenges and that the findings cannot be extrapolated to all children in Canada.

More than three-fifths (62 percent) of the sample were male and the average age was approximately 19 years. With respect to ethnicity, more than a quarter (28 percent) of youth identified themselves as Aboriginal.

For clarity, a comparison of the two surveillance systems is presented in Table 1.

## Immediate Outcomes: The CIS

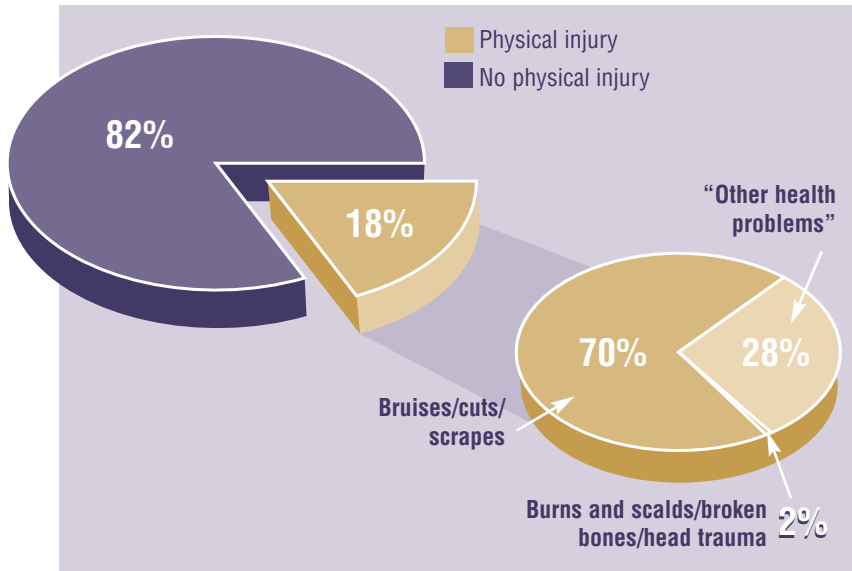
### Physical Injury

The CIS provides information on observed injuries and emotional distress in a sample of child maltreatment investigations. Some type of physical injury was evident to social workers in 18 percent of the substantiated cases. Injuries were noted in 44 percent of substantiated cases of physical abuse. In addition, injuries were noted in

Table 1: **CIS and ESCSY – A Comparison**

CIS, 1998 (n=7,672)	ESCSY, 1999 (n=1,733)
<ul style="list-style-type: none"> <li>• random sample of new child maltreatment investigations by child welfare authorities (not including investigations by other authorities, such as police and hospital reports)</li> <li>• children and youth aged 0 to 15 years</li> <li>• nationally representative sample (13 provinces/territories, stratified sampling)</li> <li>• includes measures for physical, sexual and emotional abuse, and neglect; also includes maltreatment correlates (child, family and perpetrator characteristics) and outcomes of child maltreatment (such as physical and emotional harm)</li> <li>• repeated at regular intervals (every five years)</li> </ul>	<ul style="list-style-type: none"> <li>• nurse-administered questionnaire on STIs, risk behaviours and past maltreatment; snowball sampling (recruiting peers) from street youth “drop-in” centres</li> <li>• youth aged 15 to 24 years</li> <li>• seven large urban centres (Vancouver, Edmonton, Saskatoon, Winnipeg, Toronto, Ottawa and Halifax)</li> <li>• includes measures for physical, sexual and emotional abuse, as well as sociodemographic information, and data on family characteristics and living situation, interactions with social support and legal systems, sexual history and practices, substance use and emotional well-being, among others</li> <li>• repeated at regular intervals (every two years)</li> </ul>

Figure 1: **Immediate Physical Injury among Substantiated Cases of Child Maltreatment, 1998**



Source: CIS, 1998.

other forms of abuse — specifically, neglect (10 percent), sexual abuse (8 percent) and emotional maltreatment (1 percent).<sup>6</sup> As shown in Figure 1, the two most common types of injury among substantiated cases of child maltreatment were bruises/cuts/scrapes (approximately 70 percent of all cases with a physical injury), followed by “other health problems”\* (about 28 percent of all physical injury cases). Medical treatment was required in approximately 24 percent of the substantiated cases of maltreatment in which an injury was noted.

**Emotional Harm**

Emotional harm is more common than physical injury among substantiated cases of maltreatment. Figure 2 shows the proportion of young people in each category of child maltreatment that experience emotional harm. Approximately 34 percent of substantiated cases suffered emotional harm. Emotional harm was most prevalent in cases of sexual abuse (47 percent); however, neglect, physical abuse and emotional maltreatment were also associated with emotional harm among both males and females. Treatment for emotional harm was required in 21 percent of substantiated cases.

\*For example, untreated asthma or non-organic failure to thrive.

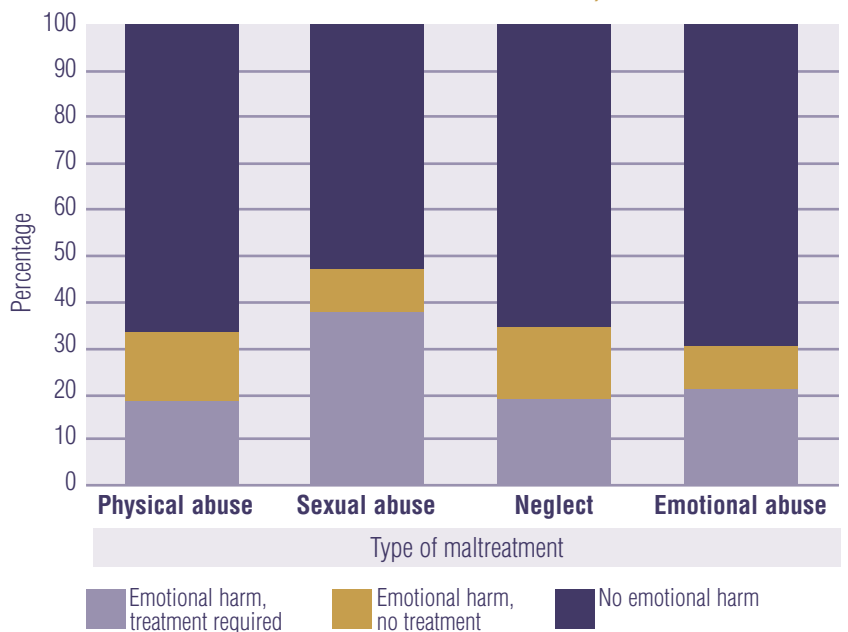
Overall, emotional harm appears to be a more common consequence of maltreatment than physical harm. However, it is important to note that these two types of harm are not mutually exclusive. In fact, approximately 8 percent of substantiated cases reported both physical and emotional harm.

**Differences by Sex**

Boys and girls tend to have different experiences of maltreatment. Although overall rates of child maltreatment are fairly equally divided between the sexes, data from the CIS indicate that more substantiated cases of physical abuse involve boys (60 percent), while girls make up the majority of sexual abuse cases (69 percent). Boys and girls experience neglect and emotional maltreatment with almost equal frequency.

The experience of physical and emotional harm also differs by sex. In general, physically and sexually abused girls are more likely to display signs of emotional harm than are boys, although the differences are not statistically significant (see Table 2). Similarly, physical harm is slightly more likely to occur among girls experiencing physical abuse or sexual abuse (see Table 3). ▶

Figure 2: **Child Maltreatment and Immediate Emotional Harm, by Type of Maltreatment and Need for Treatment, 1998**



Source: CIS, 1998.

Table 2: **Child Maltreatment and Immediate Emotional Harm, by Type of Maltreatment and Sex, 1998**

Percentage of substantiated cases where emotional harm is noted				
	Physical abuse	Sexual abuse	Neglect	Emotional maltreatment
Female	37%	50%	36%	32%
Male	32%	42%	36%	31%

Table 3: **Child Maltreatment and Immediate Physical Harm, by Type of Maltreatment and Sex, 1998**

Percentage of substantiated cases where physical harm is noted				
	Physical abuse	Sexual abuse	Neglect	Emotional maltreatment
Female	49%	9%	11%	—
Male	45%	—	12%	—

— Estimates small and not statistically reliable.

Source: CIS, 1998.

### Long-Term Outcomes: The ESCSY

Child maltreatment can also have long-term health outcomes that may be complex and far-reaching. The ESCSY provides an opportunity to examine the association between maltreatment and subsequent behaviours that put at risk the long-term health and well-being of a unique population of young people.

As Figure 3 shows, 28 percent (477) of street youth reported some form of abuse as a reason for leaving home. Twenty-two percent of street youth said they left because of emotional abuse, while physical abuse was cited by 17 percent and sexual abuse by 5 percent.

Analysis of ESCSY data shows that the experience of abuse — whether emotional, physical or sexual — is associated with a number of risk behaviours. For example, street youth who had been maltreated were significantly\*\* more likely to have been told they had an STI than those who had not been maltreated (28 percent vs. 18 percent). Maltreated street youth also reported a significantly higher average number of lifetime partners than street youth who were not maltreated (34 partners vs. 16 partners). In addition, street youth who had experienced some form of abuse were significantly more likely to have traded sex at some point in their lives than those who had not (34 percent vs. 18 percent). Among the items most often traded were money

\*\*All statistically significant relationships had a p-value less than 0.05.

(69 percent), drugs, alcohol or cigarettes (15 percent), and shelter (10 percent). Finally, maltreated street youth were significantly more likely to have injected drugs than non-maltreated street youth (26 percent vs. 18 percent). Physical, sexual and emotional abuse were, independently, significantly associated with injection drug use and trading sex.

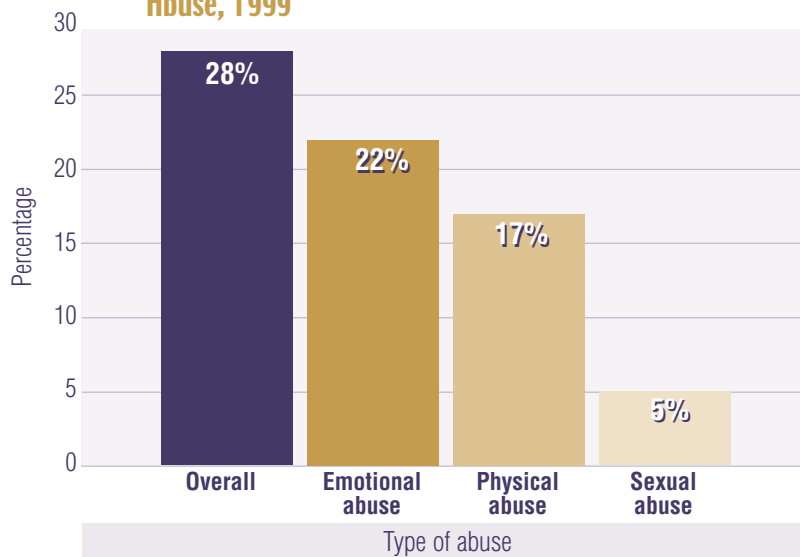
### Differences by Sex

Sex is an important factor in the study of street youth and risk behaviours. In this cycle of the ESCSY, the male-to-female ratio was 1.6:1. As shown in Figure 4,

female street youth were significantly more likely than their male counterparts to report abuse — be it emotional, physical or sexual — as a reason for leaving home (34 percent vs. 24 percent).

Furthermore, female street youth were significantly more likely than males to report each specific type of abuse: emotional abuse (28 percent of females vs. 19 percent of males); physical abuse (22 percent vs. 14 percent); and sexual abuse (8 percent vs. 3 percent). The associations between a history of abuse and sex trade, injection drug use and average number of lifetime partners remained significant when analyzed for males and females separately.

Figure 3: **Street Youth Who Left Home Due to Abuse, by Type of Abuse, 1999**



Source: ESCSY, 1999.

## A Complex Relationship

The results from these two data sources provide insights into some of the immediate and long-term physical, emotional and behavioural health outcomes for Canadian children and youth who have been maltreated. Data from both sources indicate that common perceptions about the nature of child maltreatment require reassessment. While policy and media attention generally focuses on physical and sexual abuse, child neglect and emotional maltreatment are pervasive and potentially harmful.

The research shows that the relationship between child maltreatment and harm is complex and the consequences are not always obvious. As for many health issues, the relationship between a predisposing factor and an outcome is often affected by contextual factors. For example, whether a child who has been sexually abused experiences emotional harm often depends on the duration and type of the abusive act, the child's age and relationship to the perpetrator and whether the child has access to adequate social and emotional supports.<sup>7</sup> Moreover, harm does not necessarily occur immediately. Rather, it often exists in a complex interplay between stressors and protective factors, such as social support and self-esteem, that interact at different points during a person's life course. Understanding this complex relationship

### Some Other Factors Likely Associated with Harm

- duration and severity of maltreatment
- age and sex of child
- relationship to the perpetrator
- support from non-offending caregiver

is the key to effective intervention and treatment.

Although important questions remain, the CIS and ESCSY are significant components in a comprehensive national surveillance strategy for child maltreatment. Both sources illustrate the negative consequences of physical, sexual

and emotional abuse. In addition, the CIS demonstrates the negative health impact of child neglect. Effective intervention and prevention efforts need to take this into account.

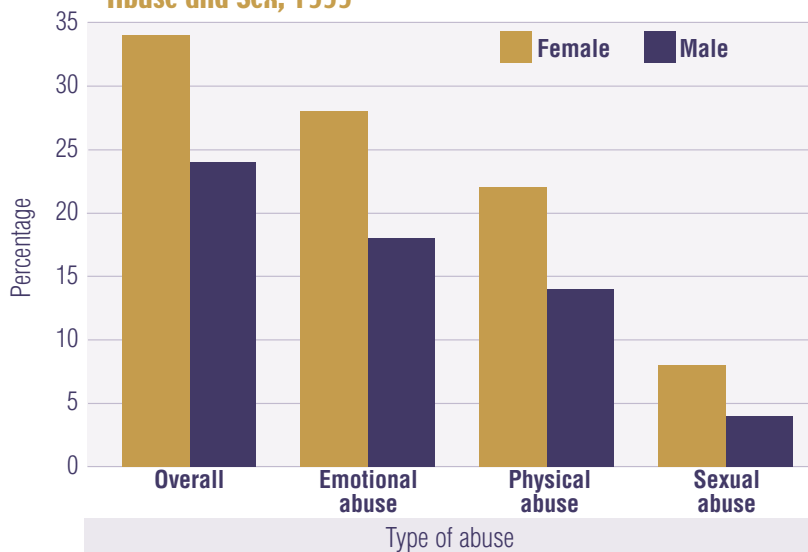
## Implications

The data give rise to a number of important policy and program implications. First, public health service providers need to take into account the maltreatment history of clients who live on the street. Street youth are at greater risk for engaging in unsafe behaviour, especially if they experienced maltreatment as a child. Therefore, youth assessments should include questions about abuse history. Once identified, these higher risk youth could be given extra guidance and support to help reduce their risky behaviours. Second, given that child maltreatment increases a person's risk for engaging in behaviours that can endanger his or her health, the findings underscore the need for increased vigilance in protecting children from abuse and neglect. In the case of street youth, early experiences of abuse

significantly affect a number of important health outcomes, *even though* their current lifestyle is fraught with extreme difficulties and challenges. If the effects of child maltreatment are this far-reaching and potentially hazardous, clearly the issue needs to be emphasized in the context of public health policy. The information gathered in these two Health Canada data sources provides the basis for broader prevention efforts to be undertaken within a comprehensive public health framework. 🌐

*The authors wish to acknowledge the contributions of Margaret Herbert, Cara Bowman and Michelle Wesley in the preparation of this article.*

Figure 4: **Street Youth Who Left Home Due to Abuse, by Type of Abuse and Sex, 1999**



Source: ESCSY, 1999.

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

# From Evidence to Action: An Ongoing Journey

Peter Dudding, *Executive Director, Child Welfare League of Canada, and Margaret Herbert, Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada*

**C**hild welfare legislation, policy and practice have been predominantly influenced by values and ideology, experience and resource availability. However, a growing body of evidence is beginning to provide a basis for policy and practice. This article examines the evolving evidence base, discusses the strengths and limitations of current data collection systems, and provides examples of the growing links between knowledge and action.

## The Context for Change

Historically, the child welfare community in Canada has had limited access to information derived from data collection, monitoring and evaluation activities. Consequently, change has often occurred without the benefit of a comprehensive understanding of the contextual factors and potential impacts that systematic surveillance and related research can provide. However, the situation is beginning to change. The *Canadian Incidence Study on Reported Child Abuse and Neglect* (CIS) now provides a national reference point for those concerned with the protection and health of children. Although limited in scope, this national surveillance system supplies critical information that can support the efforts of those involved in child protection and child welfare services to improve the quality of life for vulnerable children.

In carrying out the CIS, Health Canada and its partners are making a key contribution in the development of an integrated and comprehensive system for monitoring child health and development in Canada. The relationships that have been established with provincial and territorial governments, civil society organizations, and professionals and researchers are critical in building a consensus on the development and application of Canadian data sources that will create a culture of “evidence to action.”

## The Challenge of Knowledge Mobilization

The current movement towards increased accountability in the development and delivery of child welfare services places greater emphasis on research, monitoring and evaluation. The surveillance systems and multidisciplinary research networks now being developed will generate knowledge needed to inform legislation, policy and practice.

A critical step is ensuring that knowledge gets to those best placed to take action. To accomplish





Figure 1: Knowledge Mobilization Cycle for Child Health and Well-Being



this, passive dissemination methods must evolve into creative and interactive knowledge mobilization activities as described in Figure 1. In this model, information from several sectors and sources is integrated into knowledge products and actively communicated to relevant users. This knowledge then becomes a basis for actions that may be tracked and evaluated with further surveillance and research. The goal is a National Child Health and Welfare Surveillance System with both forward and backward feedback loops to ensure that monitoring and surveillance activities inform policy and practice, and vice versa.

### A Good Starting Point

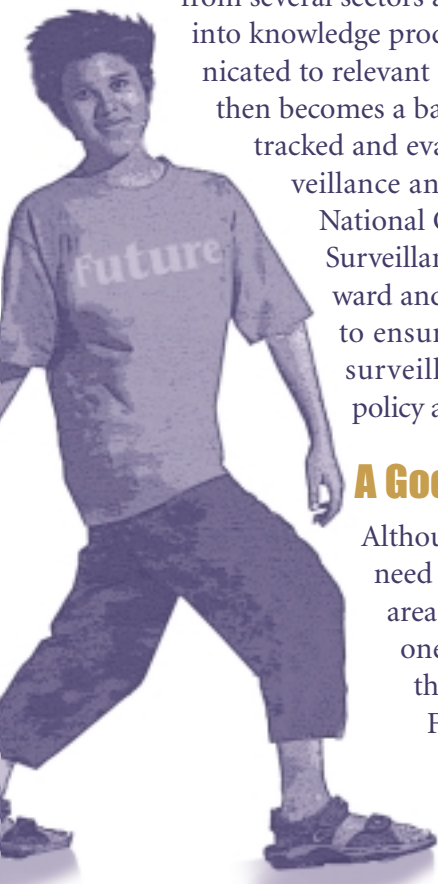
Although the CIS fills a unique need for current data in the area of child welfare, it is only one of many building blocks that need to be assembled. For example, information on unreported cases and

occurrences that are directed to other services — such as the police and hospitals — is needed.

There are a number of other data collection activities focusing on the health and well-being of children that, combined with the CIS, can broaden understanding of these complex issues. The *Child and Family Services Statistical Report (CFS)*, the *National Longitudinal Study on Children and Youth (NLSCY)*, *Canadian Looking After Children (CANLAC)* and the *National Child Welfare Outcomes Matrix (NOM)* are potential sources of information about vulnerable children (see *Who's Doing What?* on page 28). Up to now, however, there has been limited research capacity for comparing the findings from these various sources.

There are challenges in moving from periodic, limited sampling methodologies (such as the CIS), to broader based systems, for example:

- There is limited comparability within and between provincial and territorial systems due to variations in case definitions, classification and collection of key variables. Moreover, significant investments are required to expand and enhance current systems.
- There is a risk of data collection overload for already “paper burdened” front-line staff. ▶



- Limited capacity and the lack of clear frameworks impede the use of data within organizations.
- Reaching vulnerable child populations is difficult and costly.
- None of the large population health surveys gather information on abuse and neglect during childhood.

The capacity to compare data across national surveys and studies, and to disaggregate data for regional, provincial/territorial and local use needs to be further developed. This exchange of information across levels relies on sound documentation at the local level, common definitions and classification systems, and similar collection variables. Systems must also have meaning and purpose for multiple users and audiences. Data holdings in justice, law enforcement, education and health sectors will need to be linked and strengthened to better support trend and outcome analysis.

## Linking Evidence and Action

Developing surveillance and research capacity is an ongoing process. As the following examples illustrate, however, findings from the CIS and other sources are already influencing policy and practice in a few key areas.

### Increasing Focus on Neglect

Alberta is the first jurisdiction to initiate widespread changes in its child welfare system, based on knowledge derived from CIS data. In November 2001, the Alberta Children's Services Ministry began a transformational set of policy changes with implementation of the new "Alberta Response Model" (ARM) for child welfare services. ARM is based on the principle that protecting

children, preventing maltreatment and strengthening families requires a continuum of services.<sup>1</sup>

CIS data provided information vital to the policy development process. For example, understanding that most child protection referrals are closed at intake or after initial assessment was crucial to the development of ARM's "differential response" approach. This new service model provides for both child protection and family enhancement service streams. The family enhancement stream offers a range of community-based services that are designed particularly to resolve problems associated with child neglect. As a result of its transition to ARM, the Ministry has committed to measuring outcomes, identifying the recurrence of maltreatment as a key indicator. Alberta is oversampling the CIS-2003 to ensure that child maltreatment data are available at the provincial level.

A number of other provinces and territories, including British Columbia, have expressed interest in similar models.

### Changing Child Protection Practices

There is a prevailing view among the general public and in the child welfare community that paramount importance must be given to the prevention of fatalities and physical harm. As a result, it has been common practice to remove children from the custody of primary caregivers to alternate family or public care. However, the CIS findings indicate that physical harm requiring medical attention occurs in only 4 percent of substantiated cases.<sup>2</sup> These findings suggest that, in most cases, serious consideration should be given to options that do not disrupt the child's attachments. If data from the CIS-2003 and other sources continue to confirm a low incidence of cases involving physical harm, there may be a gradual shift in intervention practice towards

## Meeting International Commitments

Following its ratification of the *United Nations Convention on the Rights of the Child* (CRC) in 1991, Canada provided two reports to the Committee on the Rights of the Child. In response, the Committee has recommended that "the State party strengthen and centralize its mechanism to compile and analyze systematically disaggregated data on all children under 18 [years]," specifically including abused and neglected children. Further, "the [UN] committee urges the State party to use the indicators developed and the data collected effectively for the formulation and evaluation of legislation, policies and programmes for resource allocation and for the implementation and monitoring of the Convention."

Canada recently released *A Canada Fit for Children*, which sets out National Action Plan goals to 2015. Senator Landon Pearson, Advisor on Children's Rights to the Minister of Foreign Affairs, underscored the value of the Plan: "*Canada's National Action Plan for Children* will reinforce the importance of a better integrated and more detailed data collection system, particularly with reference to the most vulnerable groups of children." The profile of child maltreatment provided by the CIS makes an important contribution in this area.

increased use of child and family support services that do not involve removing children. There is also a need to ensure that a thorough assessment of harm by appropriately trained staff occurs.

### Promoting Healthy Child Development

Although Health Canada's most direct contribution to the prevention of child maltreatment continues to be the CIS and knowledge translation activities using surveillance and research data, the Department's national health promotion activities provide a broad backdrop of supports for children and families. Programs such as the Community Action Program for Children, the Aboriginal Head Start program and the Canada Prenatal Nutrition Program, as well as supports like the Child Tax Credit, reflect the federal government's child-oriented policies on child development, family life, parenting, community development and public education.

The Department also conducts ongoing tracking and evaluation of collective efforts at the national level and works to increase awareness and understanding of health promotion and child maltreatment among professionals and the general public. These activities support and complement other efforts at federal, provincial, territorial and local levels in the areas of health promotion, child protection and family services.

### Improving Knowledge Translation

As part of the CIS training process for data collection, regionally-based research teams meet with hundreds of front-line child welfare workers in selected sites across Canada to discuss the survey's research methodology, purpose and potential uses. One important but unanticipated consequence of this work has been the high level of interest generated among these

groups. This participatory training has resulted in much greater awareness of and interest in using data from the CIS for program and practice development at the local level — in fact creating a culture of evidence-based policy and practice development.

## Moving Forward

The development of better integrated, comprehensive data collection and analysis systems is under way in Canada. Widespread support for the CIS in all provinces and territories is indicative of a growing interest in evidence-based policy and practice, and activities to enhance measurement and monitoring are encouraging. As well, the *Social Union Framework Agreement* provides leadership and commitment from federal, provincial and territorial governments, working in partnership with non-governmental organizations to enhance transparency and accountability through improved monitoring and reporting.

Moving forward on our commitments to Canadian children requires investments in the design and development of appropriate data collection, analysis and reporting systems. However, the goal of “evidence to action” will not be achieved with the development of data collection systems alone. Equally important is the need to build capacity in data analysis, interpretation, synthesis and knowledge delivery. And, most importantly, partners from all concerned sectors must be willing to take action by using research-based evidence to advance policy and practice. 🌐

**M**oving forward on our commitments to Canadian children requires investments in the design and development of appropriate data collection, analysis and reporting systems. However, the goal of “evidence to action” will not be achieved with the development of data collection systems alone. Equally important is the need to build capacity in data analysis, interpretation, synthesis and knowledge delivery. And, most importantly, partners from all concerned sectors must be willing to take action by using research-based evidence to advance policy and practice.

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.



# Who's Doing What?

**W**ho's Doing What? is a regular column of the Health Policy Research Bulletin that looks at key players involved in policy research related to the theme area. This article profiles a sample of initiatives by governmental and non-governmental organizations working in the area of child maltreatment.

**Tiffany Thornton**, Research Management and Dissemination Division, Applied Research and Analysis Directorate, Information, Analysis and Connectivity Branch, Health Canada, and **Lil Tonmyr**, Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada

## On the National Front

### Family Violence Initiative (FVI)

The FVI supports and complements activities across federal government departments, agencies and Crown Corporations. Health Canada is responsible for coordinating the FVI and managing the National Clearinghouse on Family Violence, which provides a comprehensive reference, referral and distribution service for information on family violence prevention, protection and treatment. For more information, visit: <http://www.hc-sc.gc.ca/nc-cn>.

### Centre of Excellence for Child Welfare (CECW)

Health Canada's CECW encourages collaborative projects that integrate child maltreatment prevention and interventions across a variety of sectors, including health care, education, justice and recreation. The Centre recently released the results of a syndicated research study that collected baseline information through a national telephone survey. Entitled *Public Attitudes Toward Family Violence*, the report shows that Canadians define family violence in broad terms and that violence towards children, particularly under the age of 12, elicits the greatest concern. For a copy of this study and other research, visit: <http://www.cecw-cepb.ca/home.shtml>.

### Canadian Centre for Justice Statistics (CCJS)

*Family Violence in Canada: A Statistical Profile 2004* summarizes current data on the extent and nature of family violence.

The focus of this annual report by CCJS is on sentencing in family violence cases, including those involving assaults against children and youth. The publication is aimed at helping policy makers identify emerging issues and monitor trends in family violence in Canada. For more information, visit: <http://www.statcan.ca>.

## In the Non-Governmental Sector

### Teen Moms in Care

This initiative by the National Youth in Care Network recommends improvements to child welfare policies by focusing on the stories and experiences of youth who are classified as children of the state. *Teen Moms in Care: A Policy, Research and Program Development Initiative* identifies interventions that provide adequate housing, education and employment, and explores measures that should be taken to support healthy choices for pregnant/parenting teens in the child welfare system. For more information, visit: <http://www.youthincare.ca>.

### Caring Across Boundaries

The First Nations Child & Family Caring Society of Canada (FNCFCS) is a national, non-profit organization that provides research, policy and professional development support to First Nations child and family service agencies. A partner in the Centre of Excellence for Child Welfare, FNCFCS operates the First Nations research site in Winnipeg,

Manitoba. It recently released a research report entitled *Caring Across the*

*Boundaries* that explores the nature and extent of voluntary sector engagement with

First Nations child and family service agencies.

The research findings will be used to inform government, the voluntary sector and the philanthropic community. For more information, visit:

<http://www.fncfcs.com/docs/index.html>.



## Youth Relationship Project (YRP)

Adolescence is a key window for violence prevention and health promotion. The YRP provides support to young people by exploring their concept of relationships and helping them build positive relationship and coping skills. Early results from a randomized control trial conducted during a two-year follow-up period showed that youth who were involved in the project had fewer incidents of physical and emotional abuse with their partners and fewer symptoms of post-traumatic stress. Studying the effectiveness of YRP is ongoing with a recent focus on measuring co-occurring substance use during program intervention to assess any broader program effects. For more information, contact: <cwerkerle@uwo.ca>.

## Maltreatment and Adolescent Pathways (MAP)

With funding support from the Canadian Institutes of Health Research (CIHR) and the Canadian Alliance of Health Research, MAP is exploring the overlap between child maltreatment and adolescent risky behaviours, including the various moderators (e.g., attachment styles) and mediators (e.g., cognitive processes) that may affect these relationships. Specifically, the study examines substance abuse/use, dating violence, risky sexual behaviour and psychological/psychiatric problems in teenagers 14 to 17 years old who are involved with child welfare authorities. The results from MAP can be used to help tailor effective screening, assessment and prevention strategies, as well as support needs assessment and priority planning for youth who have been maltreated. For more information, visit: <<http://www.cecw-cepb.ca/Research/ResearchStat.shtml>>.

## An International Perspective

### U.S. Child and Adolescent Well-Being

The U.S. Department of Health and Human Services Administration for Children and Families is conducting a nationally representative longitudinal study about the well-being of children who come to the attention of child welfare agencies. The sample consists of 5,504 children (aged 0 to 14 years) from 97 child welfare agencies nationwide

who were investigated by child protective services and 727 children who have been in foster care for approximately one year. For more information, visit: <[http://www.acf.dhhs.gov/programs/core/ongoing\\_research/afc/wellbeing\\_intro.html](http://www.acf.dhhs.gov/programs/core/ongoing_research/afc/wellbeing_intro.html)>, or contact: <mbwebb@acf.hhs.gov>.

## Data Collection Initiatives

### Child and Family Services Statistical Report

The *Child and Family Services Statistical Report* of the Federal/Provincial Working Group on Child and Family Services Information (CIF) presents data obtained from provincial/territorial systems on a range of services provided to children who are under child protection, adopted or in care. However, a lack of common standards does not allow aggregation of CIF data to a national level or comparison across jurisdictions.

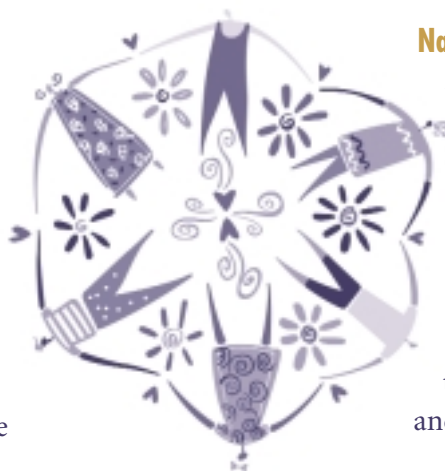


### Looking After Children

*Looking After Children* (LAC) is a longitudinal study conducted by the Child Welfare League of Canada on children living in public (foster) care that collects data on child maltreatment and child development trajectories at the provincial/territorial level. It includes comparisons of key variables between the population of children in care and the general population of children as reported in the *National Longitudinal Study on Children and Youth*. The study is currently used by child welfare organizations in seven provinces and three territories (including First Nations organizations). For more information, visit: <<http://www.cwlc.ca>>.

### National Outcome Measures Matrix

A Provincial/Territorial Outcomes Coordination Working Group is developing the capacity to measure and report on a National Outcome Measures Matrix on child welfare. Using several of the data sources described above, the Matrix will address the relationship between the recurrence of child maltreatment and serious injury or death. 🌟





# Did You Know?

**Did You Know?** is a regular column of the Health Policy Research Bulletin examining aspects of health information, data and research that may be subject to misconception. In this issue, we examine a number of misconceptions related to child maltreatment.

## Fact or Fiction?

**Valérie Gaston**, Health Surveillance and Epidemiology Division, Centre for Healthy Human Development, Population and Public Health Branch, Health Canada

Unfortunately, the media often reports the most extreme cases of child maltreatment. The stories that grab national headlines are about, for example, parents renting their children for sex or children being locked in clothes dryers. These sensational stories are horrible indeed and, unfortunately, do occur. However, they are not the reality for most of the children coming into contact with the child welfare system.

The *Canadian Incidence Study of Reported Child Abuse and Neglect* (CIS) is an important source of data that can help dispel many of the misconceptions held by the public and advanced by the media. As with stereotypes, these misconceptions can be harmful to both the maltreated children and to their families.

### Most cases of child maltreatment involve sexual abuse. Fact or fiction?

As described in previous articles, CIS data have shown that, contrary to popular belief, neglect is the main form of maltreatment experienced by children. In 1998, 40 percent of all substantiated cases of child maltreatment involved neglect as the primary form of abuse. Sexual abuse accounted for only 10 percent of substantiated maltreatment cases (see Figure 1). It is important to bear in mind that this includes only cases of maltreatment substantiated by child welfare and therefore underestimates the total number of children abused and neglected during the year (see also the article on page 9).<sup>1</sup>

### Maltreatment is experienced differently depending on the child's age and sex. Fact or fiction?

- Sixty percent of substantiated **physical abuse** involves boys. The age group most affected among both boys and girls is teens between 12 and 15 years. Most often, physical abuse cases are single incidents involving inappropriate punishment.<sup>2</sup>
- Sixty-nine percent of substantiated **sexual abuse** involves girls. Most of the cases are girls between the ages of 4 and 7 years, and 12 and 15 years. The most commonly observed sexual abuse is fondling. Boys aged 4 to 7 years were three times more likely to experience sexual abuse than boys in any other age group.<sup>2</sup>
- The age and sex distribution for boys and girls is generally the same in cases of substantiated **neglect** and **emotional abuse**. Boys three years of age and younger are the most likely to experience neglect or emotional maltreatment.<sup>2</sup>
- Among girls, neglect seems to peak between the ages of 12 and 15 years, while girls between 4 and 7 years are the most affected in cases of emotional abuse. Failure to supervise leading to physical harm or risk

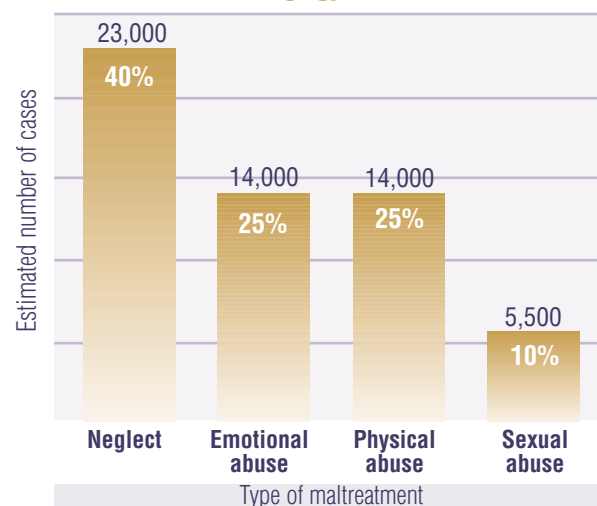
of physical harm is the main subtype of substantiated neglect. (For example, a 5-year-old is playing alone on a second-storey balcony where there is a risk of falling, but the child does not actually fall.)<sup>2</sup>

### Exposure to domestic violence is the main form of substantiated emotional abuse. Fact or fiction?

Exposure to domestic violence was a factor in over half the cases of substantiated emotional abuse. Specifically, the *Ontario Incidence Study of Reported Child Abuse and Neglect* showed an alarming

increase of 770 percent in the number of cases of exposure to domestic violence between 1993 and 1998.<sup>3</sup> One of the main reasons for this increase is the introduction of a requirement in most provinces and

Figure 1: **Estimated Cases of Substantiated Child Maltreatment, by Type of Maltreatment, 1998**



territories for police to report cases of domestic violence to child welfare authorities if there are children in the household.

**Families on social assistance abuse their children more often than families not on social assistance. Fact or fiction?**

Contrary to popular belief, the CIS data show that over half of the families in substantiated cases of child maltreatment derived their primary income from full- or part-time employment. Thirty-five percent relied on social assistance or some other form of benefit. However, it is important to bear in mind that full-time employment does *not* mean that the family is not living in poverty<sup>2</sup> (see also page 15).

**Child maltreatment is a more serious problem in urban than rural areas. Fact or fiction?**

A common belief is that city living has resulted in a breakdown in family values and increased rates of child maltreatment. However, a comparison of CIS data from large metropolitan agencies and agencies in rural areas paints a different picture. Of the total number of cases investigated, 39 percent were in large metropolitan areas, 24 percent were in rural settings and the remainder in mixed rural/urban areas (i.e., areas where agencies provide services within a wide population density range). About two fifths (39 percent) of the cases in large metropolitan areas were substantiated as maltreatment, compared to almost half (49 percent) of the investigations in rural settings (see Figure 2). Forty percent of investigations conducted in mixed rural/urban areas were substantiated.<sup>1</sup>

**Biological parents are most likely to be the alleged perpetrators of abuse. Fact or fiction?**

This is true across all maltreatment types, except for cases of sexual abuse. Although people typically envision an unknown sexual predator, the child generally knows the abuser. Most alleged perpetrators of sexual abuse were other relatives or non-relatives (a child's older peer, a family friend or other acquaintance, a babysitter, or a teacher or other professional).<sup>2</sup>

Fact

Fiction

*A common belief is that city living has resulted in a breakdown in family values and increased rates of child maltreatment.*

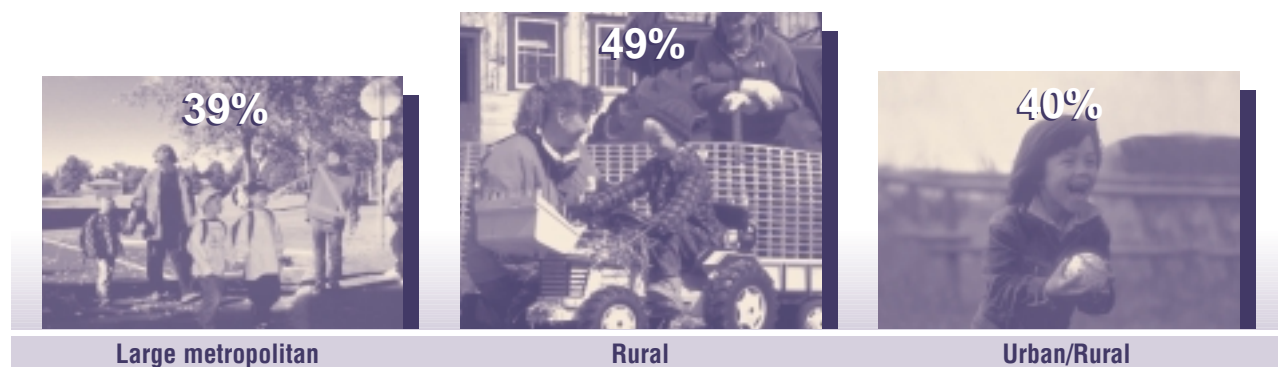
**Many of the unsubstantiated cases of maltreatment are the result of malicious or false referrals. Fact or fiction?**

Results show that most unsubstantiated referrals or reports are made in good faith. Unsubstantiated maltreatment does not equate with malicious referrals. In fact, of the 33 percent of the unsubstantiated cases only 4 percent were judged to be intentionally false and these were mainly from anonymous sources. Children sometimes falsely disclose abuse as well, although this does not happen often and mainly involves cases of physical abuse.<sup>1</sup>

Close to 60 percent of the referrals to child welfare agencies are made by professionals through their contact with children. School personnel are the greatest source of referrals, followed by police and health personnel. Non-professional referrals are primarily made by parents, relatives, friends and neighbours, or by the children themselves. 🌐

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

Figure 2: **Percentage of Substantiated Maltreatment Cases, by Urban/Rural Location, 1998**





**U**sing Canada's Health Data is a regular column of the Health Policy Research Bulletin highlighting some of the methodologies used in collecting and analyzing health data. This issue focuses on the types of surveys and data files available.

## A Pocket Guide to Survey Data Files

Sylvie Moreau and Chris Oster, Applied Research and Analysis Directorate, Information, Analysis and Connectivity Branch, Health Canada

Researchers need to choose the most appropriate survey and microdata file for their research projects. Similarly, policy analysts must understand the strengths and limitations of the different surveys and microdata files used in policy research. The purpose of this article is to differentiate between the major types of surveys and provide some information about the microdata files that are available for each Statistics Canada survey.

### Cross-Sectional or Longitudinal?

When starting a survey-based research project, researchers must decide whether to base their analysis on a cross-sectional or a longitudinal survey. Policy analysts also need to know which type of survey will provide data relevant to their particular policy questions.

### Cross-Sectional Surveys

Most people think of a cross-sectional survey as a “conventional” survey. This type of survey is used to measure the state of the population at one specific point in time — the time at which the survey is carried out. The survey can be as simple as a one-question public opinion poll, or as complex as a national health survey such as Statistics Canada's *Canadian Community Health Survey*.<sup>1</sup> A cross-sectional survey can estimate particular characteristics of a population (e.g., the smoking rate

or the percentage of overweight people), while a series of cross-sectional surveys can be used to measure population trends.

### Longitudinal Surveys

A longitudinal survey tracks a group of people (or sample) over a long period of time by surveying and re-surveying the same group of people over the life of the survey. Statistics Canada's *National Population Health Survey*, which surveys the same group of respondents every two years over a 20-year period, is one example of a longitudinal survey.

Because information on the individuals surveyed is available over a period of many years, longitudinal surveys are useful for measuring changes in individuals over time or for measuring an individual's so-called “life path.” A longitudinal survey cannot estimate population characteristics or measure population trends over time because it only accurately reflects

the entire population during its first cycle, when the sample was drawn.

### Master, Public or Share File?

In addition to understanding the different types of surveys, policy analysts and researchers need to know about the various types of microdata files that are available for each survey. Statistics Canada produces up to three different data files per survey: the **Master File**, the **Public Use Microdata File (PUMF)** and the **Share File**.

### Master File

The Master File is the complete data file containing all reported information for every survey respondent. It is only available on Statistics Canada premises and at Statistics Canada's Research Data Centres (RDCs). RDCs present an alternative for accessing the Master File if neither the Share File nor the PUMF are sufficient.



**R**esearchers need to choose the most appropriate survey and microdata file for their research projects. Similarly, policy analysts must understand the strengths and limitations of the different surveys and microdata files used in policy research.



### Public Use Microdata File

The PUMF is derived from the Master File but, as the name suggests, it is available for public use. In preparing the PUMF, Statistics Canada takes steps to ensure respondents' confidentiality, which could be jeopardized where populations are small (e.g., in northern regions), or where certain variables occur only rarely (e.g., younger respondents with Parkinson's Disease). In cases such as these, the variables are either collapsed (regrouped into a smaller number of categories) or suppressed. The PUMF contains exactly the same number of respondents or records as in the Master File, but has fewer variables (see Figure 1).

### Share File

When collecting data, Statistics Canada asks respondents for permission to make their information available to its share partners (usually federal, provincial and territorial ministries). A Share File containing the records of all consenting respondents is then produced and provided to the partners. The Share File differs from the PUMF in two ways:

- it contains information about all the variables
- the sample is smaller (see Figure 1)

Partners such as Health Canada often use the Share File because there is no regrouping or suppression of variables, which allows policy researchers to explore specific topics in greater

detail than does the PUMF. However, it is the partner's responsibility to ensure that individual respondents cannot be identified from the output. In addition, if the Share File sample is less than 85 percent of the Master File sample, the Share File should be used with caution as the data may not be representative of the whole population.

### Which Type of Data File is Appropriate?

Researchers who are beginning a new project should first look at the PUMF because it has a larger sample than the Share File and individual respondents cannot be identified in the output. However, researchers should use the Share File if:

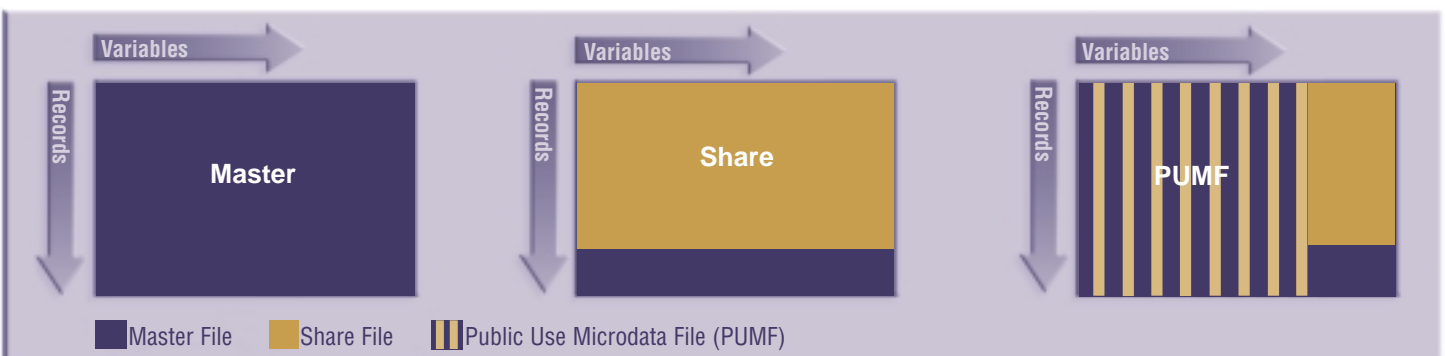
- the variables of interest have been collapsed or suppressed in the PUMF, or
- the variables are in the PUMF, but the statistical analysis requires specific estimates of the variance<sup>2</sup> (e.g., to calculate a confidence interval<sup>3</sup>), which cannot be done with the PUMF

It is important that policy analysts understand the differences between these files as well. For instance, analysts should know if there was manipulation of variables (as in the PUMF) or not (as with the Share File) before recommending policies based on specific research. 📌

@ Please note: Full references are available in the electronic version of this issue of the Bulletin: <<http://www.hc-sc.gc.ca/arad-draa>>.

**W**hen collecting data, Statistics Canada asks respondents for permission to make their information available to its share partners (usually federal, provincial and territorial ministries). A Share File containing the records of all consenting respondents is then produced and provided to the partners.

Figure 1: Comparing Types of Data Files



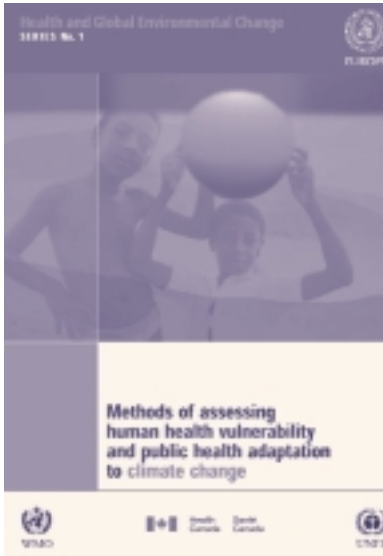


# New and Noteworthy

**New and Noteworthy** is a regular column of the Health Policy Research Bulletin highlighting “up and coming” policy research in the health field.

## Adapting to Climate Change

Health Canada’s Climate Change and Health Office (CCHO) and the World Health Organization have jointly released *Methods of Assessing Human Health Vulnerability and Public Health Adaptation to Climate Change*. The publication identifies research approaches and methods appropriate for all levels of government that help assess the vulnerability of human health to climate change. It will also help other countries enhance their policy research knowledge base. A summary document is available from CCHO by contacting <climatinfo@hc-sc.gc.ca>. For more information, visit: <<http://www.euro.who.int/globalchange>>.



## National Trauma Registry

The Canadian Institute for Health Information (CIHI) recently released the 2003 *National Trauma Registry Report: Major Injury in Canada*, which provides a descriptive analysis of patients hospitalized with major trauma in the 2001–2002 fiscal year. The results show that men accounted for 72 percent of all major traumas and 67 percent of all severe injuries due to motor vehicle collisions in Canada. The most common types of injuries are head injuries, followed by orthopaedic injuries, including fractures and/or amputations, and superficial injuries. For a copy of the release or to see the report itself, visit: <<http://www.cihi.ca>>.

## Social and Economic Inclusion in Ontario

The Social and Economic Inclusion Initiative (SEII) in Ontario is an integrated funding strategy developed by the Population and Public Health Branch, Ontario

and Nunavut Region. It demonstrates how communities can mobilize to develop healthy public policies and practices that foster social and economic inclusion, thereby improving the conditions needed for good health. Key elements of the strategy include funding to community development projects (via the Population Health Fund [PHF]), horizontal and vertical partnerships across governments and sectors, public education and promotion campaigns, and a multi-layered evaluation. The initiative will create a new body of research and knowledge about SEI, while a process evaluation will assess the initiative’s planning effectiveness. This assessment can be used to inform future delivery of the PHF and other initiatives in the Ontario Region. For more information, contact: Sawson Saraf at (416) 952-3568.

## Children’s Social Networks and Health

Using the *National Longitudinal Survey of Children and Youth, 1998–1999*, the Data Development and Dissemination Division of Health Canada conducted a statistical analysis of children’s social networks and their relationship with health. The research analyzes the social support networks of children, their parents and peers, and shows how they relate to their health behaviours. Current findings show a significant relationship between social support and children’s health. For more information, contact: <chris\_oster@hc-sc.gc.ca>.



## Community Action Program for Children

The long-term effects of child abuse can include a variety of sustained physical and mental health problems. For this reason, Health Canada’s Community Action Program for Children (CAPC) provides funding for programs that promote the health and social development of children and their families living in conditions of risk. One CAPC-sponsored initiative, entitled the Child Abuse Prevention Program, is based in Stettler,

Alberta. It offers training, support and education and initiates public awareness activities about the impact of child abuse through partnering with health, educational and community-based organizations. For more information, contact: <Karen\_Garant-Radke@hc-sc.gc.ca> or <acaa@telusplanet.net>.

### Assessing Woman Abuse in Health Care

Violence against women is a societal problem with major impacts on the health and well-being of women and children. To date, research has not identified the most effective health care response for identifying women who are abused. With funding from the Canadian Institutes of Health Research (CIHR), a number of related research projects will explore the views of women who are abused and those who are not, and their health care providers. Current approaches will be tested on how to ask about abuse in various health care settings, including public health, family practice, emergency and specialty clinics. The studies will use a randomized control design to evaluate universal screening for violence against women and subsequent referral for services on their effectiveness in reducing further exposure and improving health outcomes. For more information, visit: <<http://www.fhs.mcmaster.ca>>.



### Support for Health Policy Research

Health Canada's Health Policy Research Program (HPRP) funds extramural, peer-reviewed research that contributes to the evidence base for the Department's policy decisions. HPRP supports primary, secondary and synthesis research, as well as policy

research workshops and conferences. Twenty-two initiatives have been funded since the program's inception in 2001. Three recently completed projects are summarized below. For more information about HPRP or to obtain copies of these reports, contact: <RMDDinfo@hc-sc.gc.ca>.



### Migration Health (Dr. Sheela Basrur, Association of Local Public Health Agencies)

Due to growing globalization and technological development, migration health is quickly emerging as a significant health issue. This was the impetus for a two-day national conference entitled Migration Health, held in Ottawa in March 2003. Looking at the current state of research, the conference focused on communicable diseases, non-communicable diseases and access to health services. Attendees strongly recommended that future research focus on the dynamics of population mobility and its impact on immigrants' health, public health, and community and government policies.

### Community Capacity (Dr. Richard G. Crilly, Lawson Health Research Institute)

This study assessed available evidence on the conceptualization and measurement of community capacity and discussed the implications for policy, research and action. The results illustrate that community capacity has been broadly conceptualized, with most definitions acknowledging the potential of community capacity to improve health and quality of life. Strategic directions and next steps in the conceptualization of community capacity were also identified.

### Integration of End of Life Care (Donna Wilson, Ph.D., University of Alberta)

Most of the 220,000 Canadians who die each year — principally of old age and progressive ill health — do not have access to integrated end-of-life care (EOL). This can put them in the difficult position of having to actively seek out health and social services. As a result, this synthesis research identifies EOL care delivery models and approaches that could foster integrated EOL care in Canada. 🌐

# Mark Your Calendar



What	When	Theme
International Conference: Toward a New Perspective — From Ageing to Ageing Well	October 3–5, 2004 Montréal, Québec < <a href="http://www.geronto.org/">http://www.geronto.org/</a> >	Stimulate discussion and exchange, and develop a new knowledge base to generate original recommendations that influence policy and services
Staying the Course: Literacy and Health in the First Decade	October 17–19, 2004 Ottawa, Ontario < <a href="http://www.cpha.ca/literacyandhealth">http://www.cpha.ca/literacyandhealth</a> >	National forum to discuss contributions being made to improve the health of Canadians with low literacy skills in the areas of policy, practice and research
7th National Safe Communities Conference: Keys to Safety	October 17–19, 2004 Perth, Ontario < <a href="http://www.safecommunities.ca/events.htm">http://www.safecommunities.ca/events.htm</a> >	Discuss action plans to reduce injuries at the local, provincial and national levels, and provide the latest information on injury prevention and health promotion programs
5th Annual Scientific Meeting of the Canadian Rural Health Research Society and 4th International Rural Nurses Congress	October 21–23, 2004 Sudbury, Ontario < <a href="http://crhrs-scrsr.usask.ca/sudbury2004/">http://crhrs-scrsr.usask.ca/sudbury2004/</a> >	Explore issues related to rural nursing and health care and the special issues that impact on the health of people in rural areas
2004 National Conference on Health Care and Domestic Violence	October 22–23, 2004 Boston, Massachusetts < <a href="http://endabuse.org/health/conference/">http://endabuse.org/health/conference/</a> >	Latest research and innovative health care prevention and clinical responses to domestic violence
2004 National Rural Women's Health Conference	October 28–30, 2004 Hershey, Pennsylvania < <a href="http://www.hmc.psu.edu/ce/RWH2004/index.htm">http://www.hmc.psu.edu/ce/RWH2004/index.htm</a> >	Promote an international dialogue devoted exclusively to the mental and physical health concerns of women living in rural communities
Health, Work and Wellness 2004	October 28–30, 2004 Vancouver, British Columbia < <a href="http://www.healthworkandwellness.com/program/sessions.php">http://www.healthworkandwellness.com/program/sessions.php</a> >	Explore issues related to workplace health and wellness
4th European Conference on Paediatric Asthma and Allergy	November 22–23, 2004 Amsterdam, The Netherlands < <a href="http://www.mahealthcareevents.co.uk/1041n.html">http://www.mahealthcareevents.co.uk/1041n.html</a> >	Latest research findings and their impact on the current understanding and treatment of paediatric asthma and allergy
9th Annual Farm Safety and Health Conference	December 2–4, 2004 Québec City, Québec < <a href="http://www.casa-acsa.ca/english/index.html">http://www.casa-acsa.ca/english/index.html</a> >	Highlight agriculture safety and health intervention, outreach and educational approaches; develop collaborative opportunities
6th Canadian National Immunization Conference	December 5–8, 2004 Montréal, Québec < <a href="http://www.hc-sc.gc.ca/pphb-dgspsp/cnic-ccni/">http://www.hc-sc.gc.ca/pphb-dgspsp/cnic-ccni/</a> >	Cutting edge information on immunization science, policy, programs and practice, and a forum for networking and knowledge sharing

## References

### References for *A Statistical Snapshot of Canada's Children* (p. 2)

1. Statistics Canada. (2003). *2003 Population Estimates*. Retrieved June 3, 2004, from <<http://www.statcan.ca>>.
2. Statistics Canada. (2001). *Census: Analysis Series: Income of Canadian Families*. Catalogue No. 96F0030XIE2001014. Note: Statistics Canada determines whether a family is low income by comparing its income to a low-income cutoff (LICO), which varies according to family size and the size of the area of residence.
3. Vanier Institute of the Family. (2000). *Profiling Canada's Families II*. Available at: <<http://www.vifamily.ca/library/profiling2/profiling2.html>>.
4. Statistics Canada. (n.d). *Infant Mortality Rates*. Retrieved June 3, 2004, from <<http://www.statcan.ca>>.
5. Statistics Canada. (2001). *Statistics Canada Shelf Tables: Injury Mortality*. Retrieved June 4, 2004, from <<http://www.statcan.ca>>.
6. Canadian Institute for Health Information. (2001–2002). *Hospital Morbidity Database*. Available at: <[http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=services\\_hmdb\\_e](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=services_hmdb_e)>.
7. Health Canada. (2001). *2000–2001 Health Canada Canadian Injury Data Sampler: Injury Hospitalizations*.

### Reference for *Evidence and Action: A Necessary Partnership* (p. 3)

1. Trocmé, N., MacMillan, H., Fallon, B., & De Marco, R. (2003, October). Nature and severity of physical harm caused by child abuse and neglect: results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 169(9), 911–915.

### References for *What is Child Maltreatment?* (p. 6)

1. Hick, S. (2002). *Social Work in Canada: An Introduction*. Toronto, ON: Thompson Education Publishing, Inc.
2. Badgley, R., et al. (1984). *Sexual Offences Against Children in Canada*. Ottawa, ON: Ministry of Supply and Services.
3. Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.

4. Visit: <[http://www.who.int/violence\\_injury\\_prevention/violence/world\\_report/wrvh7/en/](http://www.who.int/violence_injury_prevention/violence/world_report/wrvh7/en/)>.
5. Visit: <<http://www.unicef.org/crc/crc.htm>>.
6. Visit: <[http://www.unicef.org/specialsession/docs\\_new/documents/A-RES-S27-2E.pdf](http://www.unicef.org/specialsession/docs_new/documents/A-RES-S27-2E.pdf)>.
7. Visit: <<http://www.sen.parl.gc.ca/lpearson/specialsession/>>.
8. McCreary Centre Society. (2002). *Violated Boundaries: A Health Profile of Adolescents Who Have Been Abused*. Available at: <[http://www.mcs.bc.ca/r\\_ahs.htm](http://www.mcs.bc.ca/r_ahs.htm)>.

### Reference for *The Canadian Incidence Study: Establishing an Evidence Base* (p. 9)

1. Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.

### References for *The Scope of Child Maltreatment in Canada* (p. 12)

1. Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services Canada.
2. Tonmyr, L. (1998). *International studies on the incidence and prevalence of child maltreatment*. Ottawa, ON: Health Canada.
3. MacMillan, H.L., Fleming, J.E., Trocmé, N., Boyle, M.H., Wong, M., Racine, Y.A., et al. (1997). Prevalence of child physical and sexual abuse in the community: results from the Ontario Health Supplement. *Journal of the American Medical Association*, 278, 131–135.
4. MacMillan, H.L., Jamieson, E., & Walsh, C. (2003). Exposure to child maltreatment and contact with child protection services: What is the relationship? *Child Abuse and Neglect*, 27(12), 1397–1408.
5. Trocmé, N., Fallon, B., MacLauren, B., & Copp, B. (2002). *The changing face of child welfare investigations in Ontario: Ontario Incidence Studies of Reported Child Abuse and Neglect (OIS 1993/1998)*. Toronto, ON: Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto.
6. Blackstock, C., Trocmé, N., & Bennett, M. (2004). Child welfare response to Aboriginal and non-Aboriginal children in Canada: A comparative analysis. *Violence Against Women Journal*. In press.

7. MacMillan, H.L. (2000). Child Maltreatment: What We Know in the Year 2000. *Canadian Journal of Psychiatry*, 45, 702–709.
8. Chamberland, C., Laporte, L., Lavergne, C., Malo, C., Torigny, M., Mayer, M., & Hélie, S. (2003). Psychological maltreatment of children reported to youth protection services: Initial results from the Quebec Incidence Study. In K. Kufeldt & B. McKenzie (Eds.), *Child Welfare Connecting Research Policy and Practice*. Waterloo, ON: Wilfred Laurier University Press.
9. Brown, J., Cohen, P., Johnson, J.G., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: findings of a 17-year prospective study of officially recorded and self-reported child abuse and neglect. *Child Abuse and Neglect*, 22(11), 1065–1078.
10. Kraemer, H.C., Kazadin, A., Offard, D.R., Kessler, R.C., Jensen, P.S., & Kupfer, D.J. (1997). Coming to Terms with the Terms of Risk. *Archives of General Psychiatry*, 54, 337–343.
11. Kaplan, S.J., Pelcovitz, D., & Labruna, V. (1999). Child and Adolescent Abuse and Neglect Research: A Review of the Past 10 Years. Part I — Physical and Emotional Abuse and Neglect. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1214–1222.
7. English, D., Fluke, J., & Yuan, Y. (2003). Alternative response to child protective services investigations in the United States. In N. Trocmé, D. Knocke & C. Roy (Eds.), *Community collaboration and differential response: Canadian and international research and emerging models of practice* (pp. 64–74). Ottawa, ON: Child Welfare League of Canada.
8. Peterson, L., Gable, S., & Saldana, L. (1996). Treatment of maternal addiction to prevent child abuse and neglect. *Addictive Behaviors*, 21, 789–801.
9. Miller, W.R., Westerberg, V.S., & Waldron, H.B. (1995). Evaluating alcohol problems in adults and adolescents. In R.K. Hester & W.R. Miller (Eds.), *Handbook of alcoholism treatment approaches: Effective alternatives* (2nd ed.) (pp. 61–88). Boston: Allyn & Bacon.

### References for Maltreatment Outcomes: Immediate and Long-Term (p. 19)

### References for Substance Abuse and Child Maltreatment (p. 16)

1. Wekerle, C., & Wall, A.-M. (2002). *The violence and addiction equation: Theoretical and clinical issues in substance abuse and relationship violence*. New York: Brunner-Routledge.
2. Trocmé, N., & Wolfe, D. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Selected Results*. Ottawa, ON: Minister of Public Works and Government Services.
3. Wekerle, C., & Wolfe, D.A., (2003). Child Maltreatment. In E.J. Mash & R.A. Barkley (Eds.), *Child Psychopathology* (2nd ed.) (pp. 632–684). New York: Guilford.
4. DeBellis, M.D. (2001). Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment, and policy. *Development and Psychopathology*, 13, 539–564.
5. Wolock, I., & Magura, S. (1996). Parental substance abuse as a predictor of child maltreatment re-reports. *Child Abuse and Neglect*, 20, 1183–1193.
6. Wall, A.-M., Wekerle, C., Trocmé, N., & Leung, E. (2003, August). *Violent experiences and adolescent substance abuse among high-risk youth*. Paper presented at the annual meeting of the American Psychological Association, Toronto, Ontario.
1. Bagley, C., & Mallick, K. (2000). Prediction of sexual, emotional, and physical maltreatment and mental health outcomes in a longitudinal cohort of 290 adolescent women. *Child Maltreatment*, 5(3), 218–226.
2. Fields, S.A., & Ogles, B.M. (2002). An empirical typology of youth with severe emotional disturbances. *American Journal of Orthopsychiatry*, 72(2), 250–261.
3. Johnson, P. (2001). In their own voices: Report of a study on the later effects of child sexual abuse. *The Journal of Sexual Aggression*, 7(2), 41–56.
4. Trocmé, N., MacMillan, H., Fallon, B., & De Marco, R. (2003, October). Nature and severity of physical harm caused by child abuse and neglect: results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 169(9), 911–915.
5. Neumark-Sztainer, D., Story, M., French, S.A., & Resnick, M.D. (1997). Psychosocial correlates of health compromising behaviors in adolescents. *Health Education Research*, 12(1), 37–52.
6. Trocmé, N., & Wolfe, D. (2001). *Child Maltreatment in Canada: Selected Results from the Canadian Incidence Study of Reported Child Abuse and Neglect*. Ottawa, ON: Minister of Public Works and Government Services Canada.
7. Beitchman, J.H., Zucker, K.J., Hood, J.E., da Costa, G.A., Akman, D., & Cassavia, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse and Neglect*, 16(1), 101–118.

### References for *From Evidence to Action: An Ongoing Journey* (p. 24)

1. Anselmo, S., Pickford, R., & Goodman, P. (2003). Alberta Response Model: Transforming Outcomes for Children. In N. Trocmé, D. Knoke & C. Roy (Eds.), *Community Collaboration and Differential Response: Canadian and International Research and Emerging Models of Practice* (p. 99). Centres of Excellence for Child Welfare. Available at: <<http://www.cecw-cepb.ca/DocsEng/BanffBookflyerv21.pdf>>.
2. Trocmé, N., MacMillan, H., Fallon, B., & De Marco, R. (2003, October). Nature and severity of physical harm caused by child abuse and neglect: results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 169(9), 911–915.

### References for *Did You Know?* (p. 30)

1. Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., Mayer, M., Wright, J., Barter, K., Burford, G., Hornick, J., Sullivan, R., & McKenzie, B. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa, ON: Minister of Public Works and Government Services.
2. Trocmé, N., & Wolfe, D. (2001). *Child Maltreatment in Canada: Selected Results from the Canadian Incidence Study of Reported Child Abuse and Neglect*. Ottawa, ON: Minister of Public Works and Government Services Canada.
3. Trocmé, N., Fallon, B., MacLaurin, B., & Copp, B. (2002). *The changing face of child welfare investigations in Ontario: Ontario Incidence Studies of Reported Child Abuse and Neglect (OIS 1993/1998)*. Toronto, ON: Centre of Excellence for Child Welfare, Faculty of Social Work, University of Toronto.

### References for *Using Canada's Health Data* (p. 32)

1. Gravel, R., & Hamel, M. (2000). *Canadian Community Health Survey on Mental Health and Wellbeing*. Ottawa, ON: Statistics Canada, Health Statistics Division.
2. Blalock, H.M. (1972). *Social Statistics* (2nd ed.). New York: McGraw-Hill, p. 22.
3. Ducharme, M. (2002, October). A Journey into Statistical Significance. *Health Policy Research Bulletin*, 4, 27–28.