

# **CANADIAN INCIDENCE STUDY OF REPORTED CHILD ABUSE AND NEGLECT – 2008: STUDY METHODS**

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## Introduction

The CIS-2008 is the third national study examining the incidence of reported child abuse and neglect in Canada. The CIS-2008 captured information about children and their families as they came into contact with child welfare services over a three-month sampling period. Children who were not reported to child welfare services, screened-out reports, or new allegations on cases currently open at the time of case selection were not included in the CIS-2008. A multi-stage sampling design was used, first to select a representative sample of 112 child welfare sites across Canada, and then to sample cases within these sites. Information was collected directly from the investigating workers at the conclusion of the investigation. The CIS-2008 sample of 15,980 investigations was used to derive estimates of the annual rates and characteristics of investigated children in Canada.

As with any sample survey, estimates must be understood within the constraints of the survey instruments, the sampling design, and the estimation procedures used. This paper presents the CIS-2008 methodology and discusses its strengths, limitations, and impact when interpreting the CIS-2008 estimates. This January 2012 Revised version includes an updated description of the weighting procedures used for the 2008 study.

## Background

Responsibility for protecting and supporting children at risk of abuse and neglect falls under the jurisdiction of the 13 Canadian provinces and territories and a system of Aboriginal child welfare agencies which have increasing responsibility for protecting and supporting Aboriginal children. Because of variations in the types of situations that each jurisdiction includes under its child welfare mandate as well as differences in the way service statistics are kept, it is difficult to obtain a nation-wide profile of the children and families receiving child welfare services. The Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) is designed to provide such a profile by collecting information on a periodic basis from every jurisdiction using a standardized set of definitions. With core funding from the Public Health Agency of Canada and in-kind and financial support from a consortium of federal, provincial, territorial, Aboriginal and academic stakeholders, the CIS-2008 is the third nation-wide study of the incidence and characteristics of investigated child abuse and neglect across Canada.

### *Objectives and Scope*

The CIS collected information directly from a national sample of child welfare workers at the point when they completed their initial investigation of a report of possible child abuse or neglect. The scope of the study is therefore limited to the type of information available to them at that point. As shown in the CIS Iceberg Model (Figure 1), the study documented only situations that were reported to and investigated by child welfare sites. The study **did not include** information about **unreported maltreatment** or information

about cases that are **only investigated by the police**<sup>1</sup>. Similarly, the CIS **did not include screened out cases** (referrals that were not open for investigation). While the study reports on short-term outcomes of child welfare investigations, including substantiation status, initial placements in out-of-home care, and court applications, the study **did not track longer-term service events that occur beyond the initial investigation**.



(\*) adapted from Trocmé, N., McPhee, D. et al. (1994). *Ontario incidence study of reported child abuse and neglect*. Toronto, ON: Institute for the Prevention of Child Abuse. and Sedlak, A. J., & Broadhurst, D.D. (1996). *Executive summary of the third national incidence study of child abuse and neglect*. Washington, DC: U.S. Department of Health and Human Services.

Figure 1: CIS Iceberg Model

Changes in investigation mandates and practices over the last ten years have further complicated what types of cases fall within the scope of the CIS. In particular, child welfare authorities are receiving many more reports about situations where the primary concern is that a child may be at risk of future maltreatment but where there are no specific concerns about a possible incident of maltreatment. Because the CIS was designed to track investigations of alleged incidents of

<sup>1</sup> In some jurisdictions cases of physical or sexual abuse involving extra-familial perpetrators, for example a baby-sitter, a relative who does not live in the home, or a stranger, are investigated by the police and only referred to child welfare services if there are other concerns about the safety or well-being of children.

**Table 1: Provincial and Territorial child welfare administrations**

Province	Administration <sup>2</sup>	Statute	Age Coverage
Newfoundland and Labrador	The Department of Health and Community Services is responsible for the provision of child welfare programs and services. Child protection is provided through four regional integrated health authorities	Child, Youth and Family Services Act	Under 16
Prince Edward Island	The Ministry of Social Services and Seniors, Child and Family Services Division is responsible for child welfare programs and services. Child protection is delivered through four regional offices.	Child Protection Act	Under 16 or 16-18 if developmental, mental, physical challenges
Nova Scotia	The Department of Community Services, Children Youth and Families Division is responsible for child welfare programs and services. Child protection services are provided through 20 child welfare offices, six of which are district offices and 14 privately run societies/family and children's services agencies. One of these agencies is mandated to serve the Mi'kmaw First Nation community.	Children and Family Services Act	Under 16
New Brunswick	Child welfare is the responsibility of the Department of Social Development. Child protection services are provided through 18 delivery sites in eight regions. In addition, there are 11 agencies providing services to the First Nations communities of New Brunswick.	Family Services Act	Under 16 or to a disabled youth 19 and under
Québec	The Ministère de la Santé et des Services Sociaux funds child welfare programs and services through 19 Centres Jeunesse in 18 regions.	Youth Protection Act	Under 18
Ontario	The Ministry of Children and Youth Services provides the funding for child welfare programs and services, which are provided by Children's Aid Societies throughout the province. There are 53 Children's Aid Societies, which are governed by a Board of Directors, elected by from the local community. Six Children's Aid Societies were fully mandated to serve First Nations communities in Ontario in 2008.	Child and Family Services Act	Under 16
Manitoba	Child welfare is the responsibility of the Ministry of Family Services and Consumer Affairs, Child and Family Services Division. Child Protection services are provided by four departmental offices, six private non-profit agencies, 14 mandated First Nations agencies and one Métis agency supported by four authorities.	Child and Family Services Act	Under 18
Saskatchewan	Child welfare is the responsibility of the Ministry of Social Services. Child protection services are provided through 20 service offices in six regions. There are 17 fully delegated First Nations child protection agencies in Saskatchewan.	Child and Family Services Act	Under 16
Alberta	The Ministry of Children and Youth Services is responsible for child welfare programs and services. Child intervention services are provided through 10 Child and Family Services Authorities; nine of which are regionally based and one provides services to Métis settlements throughout the province. In addition there are 18 First Nations agencies providing child protection services.	Child Youth and Family Enhancement Act	Under 18
British Columbia	The Ministry of Children and Family Development, Child Protection Division is responsible for child welfare programs and services. Workers in 429 offices, in five regions, provided child protection services with support provided by the provincial office of the Child Protection Division. There are seven fully mandated First Nations child protection agencies in British Columbia.	Children, Family and Community Services Act	Under 19
Yukon	The Department of Health and Social Services, Family and Children's Services is responsible for the provision of child welfare programs and services. Child protection services are provided through 11 offices.	Children's Act	Under 18
Northwest Territories	The Department of Health and Social Services is responsible for child welfare programs and services. Child protection is delivered through six regional health and social service boards. <sup>3</sup>	Child and Family Services Act	Under 16
Nunavut	The Department of Health and Social Services provides child protection services to the communities in Nunavut. Child protection services are provided from three regional offices.	Child and Family Services Act	Under 16

<sup>2</sup> Information was compiled through interviews with Ministerial officials and reviewing information posted on provincial and territorial websites.

<sup>3</sup> There are now eight Health and Social Services Boards in Northwest Territories.

maltreatment, it is important to maintain a clear distinction between risk of future maltreatment, and investigations of maltreatment. The CIS-2008 was redesigned to separately track both types of cases; however this has complicated comparisons with past cycles of the study.

### ***CIS Research Partnership***

The CIS-2008 gathered information from nearly 16,000 investigations, conducted by over 2,000 child welfare workers in 112 agencies in every province and territory in Canada. Nearly 40 researchers were involved in developing the study, training participants, and collecting, verifying and analyzing data. As with the two previous national cycles of the CIS, the core study was initiated and funded by the Public Health Agency of Canada (PHAC) and serves as a central component of the Agency's maltreatment surveillance program. Considerable staff support was provided by all provinces and territories through their child welfare workers, support staff and administrators. Five provinces provided additional support and funding for enriched samples to allow for province-specific estimates in Quebec, Ontario, Saskatchewan, Alberta, and British Columbia. In addition a number of stakeholders provided funding to support a First Nations CIS, including the provinces of Manitoba, Ontario, and British Columbia, Indian and Northern Affairs Canada through PHAC, and a project development grant from the Social Sciences and Humanities Research Council. The Canadian Foundation for Innovation provided a grant to support the development of an integrated CIS database.<sup>4</sup>

Nico Trocmé (McGill University) is the principal investigator of the study, the study's director and the principal investigator for the Ontario Incidence Study is Barbara Fallon (University of Toronto). The principal investigator for the Saskatchewan, Alberta, and British Columbia incidence studies is Bruce MacLaurin (University of Calgary), the principal investigator for the First Nations Incidence Study is Vandna Sinha (McGill University), and the co-investigators for the Quebec Incidence Study are Sonia Helie (Université du Québec à Montréal) and Daniel Turcotte (Université Laval). The PHAC CIS-2008 Steering Committee provides input into the design and dissemination plans for the national study and in particular the revisions to the CIS data collection instruments. Staff from the PHAC Injury and Child Maltreatment Section provide ongoing support for the planning, organization and dissemination of the study. The First Nations components of study are overseen by the CIS -2008 First Nations Advisory Committee.

### ***Child Welfare Services in Canada: A changing mosaic.***

The objectives and design of the CIS-2008 are best understood within the context of the decentralized structure of Canada's child welfare system and with respect to changes over time in mandates and intervention standards. Child welfare legislation and services are organized in Canada at the provincial and territorial levels. Child welfare is a mandatory service, directed by provincial and territorial child welfare statutes. Although all child welfare systems share certain basic characteristics organized around investigating reports of alleged maltreatment, providing various types of counseling and supervision, and

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<sup>4</sup> CFI project number 16579. Public Health Agency of Canada contract number 6D014-070001/001/SS.

looking after children in out-of-home care, there is considerable variation in the organization of these service delivery systems (see Table 1)<sup>5</sup>. Some provinces and territories operate under a centralized, government-run child welfare system; others have opted for decentralized models run by mandated agencies. A number of provinces and territories have recently moved towards regionalized service delivery systems.

Child welfare statutes vary considerably. Some jurisdictions limit their investigation mandates to children under 16, while others extend their investigations to youth under 19. Provincial and territorial statutes also vary in terms of the specific forms of maltreatment covered, procedures for investigation, grounds for removal, and timelines for determining permanent wardship. In addition to these legislative differences, there are important differences in regulations and investigation policies. These differences may be further accentuated by the implementation of different structured assessment tools and competency based training programs.

Although provincial and territorial child welfare statutes apply to all Aboriginal people, special considerations are made in many statutes with respect to services to Aboriginal children and families. The responsibility for funding services to First Nations children and families living on reserve rests with federal government under the *Indian Act*.<sup>67</sup> The structure of Aboriginal child welfare services is changing rapidly. A growing number of services are being provided either by fully mandated Aboriginal agencies or by Aboriginal counseling services that work in conjunction with mandated services<sup>8</sup>.

In addition to variations in mandates and standards between jurisdictions, it is important to consider that these mandates and standards have been changing over time. From 1998 to 2003 the CIS found that rates of investigated maltreatment had nearly doubled (Trocmé, Fallon, MacLaurin et al, 2005)<sup>9</sup>. Most of the available data point to changes in detection, reporting and investigation practices rather than an increase in the number of children being abused or neglected. Using the analogy of the iceberg (Figure 1-1), there is no indication that the iceberg is increasing<sup>10</sup>, rather, it would appear that the detection line (water line on the iceberg model) is dropping leading to an increase in the number of reported and substantiated cases. The CIS-2003 report points in particular to four important changes: (1) an increase in reports made by professionals, (2) an increase in reports of emotional maltreatment and exposure to intimate partner violence, (3) a larger number of children investigated in each family, and (4) an increase in substantiation

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<sup>5</sup> For more detailed description of provincial, territorial and Aboriginal services go to the Canadian Child Welfare Research Portal: [cwrp.ca](http://cwrp.ca)

<sup>6</sup> *Indian Act*, R.S.C., c. I-6, s. 88.

<sup>7</sup> The Constitution Act (1982) recognizes three groups of Aboriginal peoples: 'Indians' - now commonly referred to as First Nations, Métis and Inuit. First Nations children constitute 64% of the Aboriginal child population (Statistics Canada, 2001, 2006)

<sup>8</sup> Blackstock, C. (2003) First nations Child and Family Services: Restoring Peace and harmony in First Nations Communities. In Kufeldt, K. and McKenzie B. (Eds.). *Child Welfare: Connecting Research, Policy and Practice*. Waterloo: Wilfrid Laurier Press. pp. 331-343.

<sup>9</sup> Trocmé, N, Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., et al. (2005). Canadian Incidence Study of Reported Child Abuse & Neglect - 2003: Major Findings. Ottawa, ON Public Health Agency of Canada, 148 pages.

<sup>10</sup> For example there was not a statistically significant increase in the number of children sustaining severe injuries. However, because the CIS does not measure rates of unreported maltreatment (cases below the detection line), one cannot rule out increases in the number of victims as one of the factors leading to the overall increase in reports.



rates<sup>11</sup>. These changes are consistent with modifications to legislation and investigation standards in many provinces and territories where statutes and regulations have been broadened to include more forms of maltreatment and investigation standards in some jurisdictions require that siblings of reported children be systematically investigated.

A fifth factor that may have also led to an increase in the number of reports was the unintentional inclusion of investigations conducted solely because of concerns about possible risk of future maltreatment. A file review of a sample of CIS-2003 cases conducted in preparation for the CIS-2008 identified a number of cases that actually involved risk-only investigations which had been included in the CIS-2003 because workers identified them as investigations involving incidents of alleged maltreatment. Unfortunately, because the CIS-2003 was not designed to track risk of future maltreatment cases, we cannot estimate the extent to which risk assessments may have contributed to the increase in cases between 1998 and 2003. The CIS-2008 is designed to separately track risk of future maltreatment cases separately.

In summary, differences in legislation and investigation practices across provinces and territories, as well as changes over time have posed a real challenge in documenting the annual incidence of reported maltreatment in Canada. Using a standard set of definitions the CIS-1998, 2003 and 2008 provide the best available estimates of the incidence and characteristics of reported child maltreatment across Canada over a ten year period.

## **Sampling**

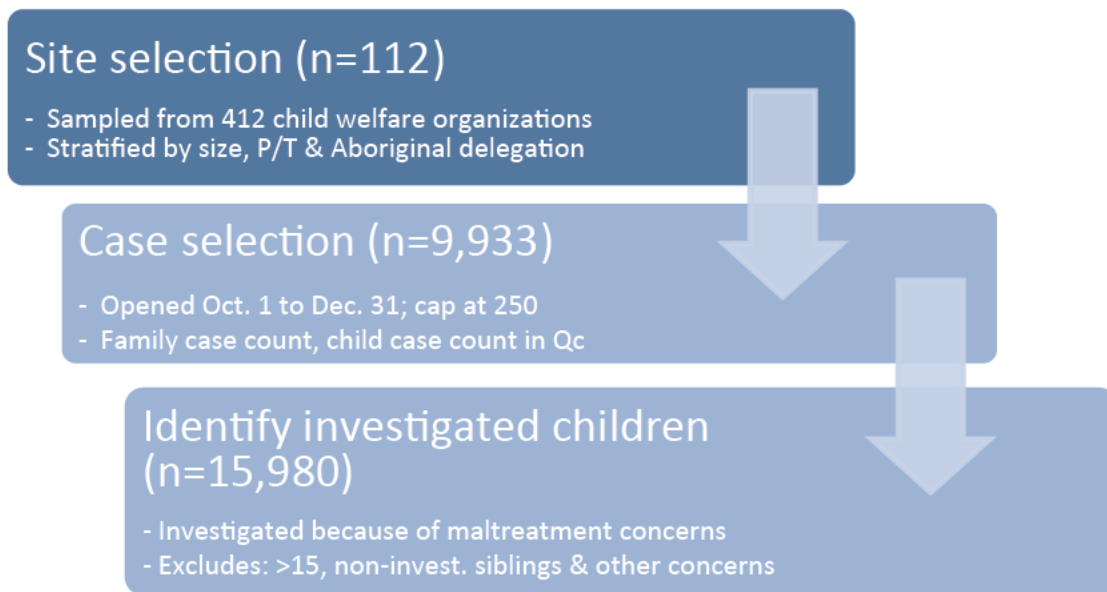
The CIS-2008 sample was drawn in three stages: first a representative sample of child welfare sites from across Canada was selected, then cases were sampled over a three month period within the selected sites, and finally child investigations that met the study criteria were identified from the sampled cases.

### ***Site selection***

The primary sampling unit for the CIS was the local organization responsible for conducting child maltreatment-related investigations. In some jurisdictions these organizations were autonomous agencies; in others, they were local offices for the provincial or territorial child protection authority (Table 1). In the latter case, decisions needed to be made to determine the appropriate sampling unit. In most jurisdictions, organizations served the entire population in a specific geographic area, however, in some instances several organizations served different populations in the same area on the basis of religion, language or Aboriginal background. While in most jurisdictions a provincial or territorial list of organizations was readily available, a more extensive review process was required to obtain a list of Aboriginal organizations with fully delegated investigation authority. A final count of 412 organizations constituted the sampling frame for the 2008 study (see Figure 2).

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<sup>11</sup> In addition to Chapter 9 from the CIS-2003 report, see Trocmé, N., MacLaurin, B., Fallon, B., Black, T., & Lajoie, J. (2005). Child Abuse and Neglect Investigations in Canada: Comparing 1998 and 2003 Data. CECW Information Sheet #26E. Montreal, QC: McGill University, School of Social Work.



**Figure 2: Sampling Stages**

Organizations were stratified by province and territory, and, in larger provinces, they were further stratified by size of the organization (defined by the number of case openings in a year) and by region. In addition, separate strata were developed for Aboriginal organizations. Stratification ensured that all subpopulations are represented in the sample. The number and structure of the strata were set first to ensure representation of each province and territory and to represent the relative population sizes. Alberta, British Columbia, Ontario, Québec and Saskatchewan provided additional funds to oversample in their jurisdiction with the aim of producing province-specific estimates. Aboriginal organizations were also oversampled in order to better understand investigations in Aboriginal organizations. In total 39 strata provided the sampling structure from which 112 agencies were selected.

Most sites were selected randomly within their regional strata using the SPSS Version 15.0<sup>12</sup> random selection application. Exceptions included sites sampled with certainty, sites that could not be feasibly included because of size (less than 50 investigations a year) or distance (geographical remoteness), and Aboriginal sites that were selected in consultation with the First Nations CIS-2008 Advisory Committee (see First Nations Component of the Canadian Incidence Study of Reported Child Abuse and Neglect 2008: Major Findings<sup>13</sup>). Agencies in the largest metropolitan areas were sampled with certainty. The sites from the Nunavut, the Yukon and the Northwest territories were sampled by convenience, on the basis of accessibility, expected case volume and regional representation. In two of the oversampling provinces – Québec and Saskatchewan – all of the non-Aboriginal sites were included, with the exception of regions 17 and 18 in Northern Québec (Hudson Bay, James Bay and Nunavik). Seven agencies declined to be

<sup>12</sup> SPSS Statistics 15.0. (2007s). Chicago, Illinois: IBM Company.

<sup>13</sup> Available at: <http://cwrp.ca/fn-cis-2008>

involved because of their particular circumstances; seven replacement agencies were randomly selected from the remainder.

**Table 2: Sites & Sample Sizes by Jurisdiction**

Region	Child Population (0-15)*	Total Child Welfare Agencies***	Number of CIS Agencies	CIS Agency Child Population (0-15)	Annual Agency Case Openings	Case Openings Sampled for CIS
Atlantic Provinces	392,905	82	4	80,410	1,245	247
Québec	1,352,615	16	16	1,352,615	26,520	2,901
Ontario	2,373,305	47	19	1,437,535	35,805	4,214
Manitoba	217,768	10	2	32,225	498	102
Saskatchewan	187,635	19	19	187,635	3,622	897
Alberta	667,555	55	13	532,595	11,155	1,218
British Columbia	731,435	76	13	211,085	8,461	1,861
Northern Territories	27,575	23	3	10,815	1,262	250
Total Mainstream	5,950,793	328	89	3,844,915	88,568	11,690
Aboriginal**	71,177	84	23	18,420	3,315	706
<b>Canada</b>	<b>6,022,005</b>	<b>412</b>	<b>112</b>	<b>3,863,335</b>	<b>91,883</b>	<b>12,396</b>

\*Source: Canada Statistics Canada *Census of Canada 2006: Age and Sex for Population, for Canada, Provinces, Territories, Census Divisions and Census Subdivisions, 2006 Census - 100% Data* [computer file] Ottawa: Ont : Statistics Canada [producer and distributor], July 17, 2007 (97551xcb2006011) Census data quality can be found at <http://www12.statcan.ca/english/census06/reference/qualityver.cfm> Total for Canada is not equal to the sum of the provincial totals because of suppressed populations

### *Case selection*

The second sampling stage involved selecting cases opened in the study sites during the three month period of October 1, 2008 to December 31, 2008<sup>14</sup>. Three months was considered to be the optimum period to ensure high participation rates and good compliance with study procedures. Consultation with service providers indicated that case activity from October to December was considered to be typical of the whole year. However, follow-up studies are needed to systematically explore the extent to which seasonal variation may affect estimates that are based on this three-month sampling period.

<sup>14</sup> Due to later recruitment two sites collected data from December 1, 2008 – February 28, 2009 and one site collected data from January 1, 2009 to March 31, 2009.

In small to mid-sized sites, every case opened during the three month sampling period was selected. In larger agencies that conducted over 1,000 investigations per year, a random sample of 250 cases was selected for inclusion in the study<sup>15</sup>. In agencies from Québec, a random sample of approximately 50% of investigations was selected<sup>16</sup>.

In most jurisdictions outside of Québec and Alberta families are the **unit of service** at the point of the initial decision to open a case. In Québec the child is the unit of service and cases were selected on that basis. This meant that there were several instances where several siblings were investigated, but only one was selected for inclusion in the CIS. Although the unit of service is also the child in Alberta, cases were selected into the CIS on a family basis.

Several caveats must be noted with respect to case selection. To ensure that systematic and comparable procedures were used, the formal process of opening a case for investigation was used as the method for identifying cases. The following procedures were used to ensure consistency in selecting cases for the study:

- situations that were reported but **screened out** before the case was opened were not included (see Figure 1-1). There is too much variation in screening procedure to be able to feasibly track these cases within the budget of the CIS;
- reports on **already open cases** were not included. This meant that in jurisdictions that count reports on already open cases as new openings – as is done in Québec – careful attention had to be given to separating out new cases from already open ones;
- only the first report was included for cases that were **reported more than once** during the three-month sampling period;
- some jurisdictions have been **developing differential or alternative response** models that could have posed a challenge in capturing cases opened in the alternative non-protection stream. However, because in most sites the decisions to stream occurred after the initial investigation, the CIS was able to capture both types of openings.

These procedures resulted in the selection of 9,933 cases (1,930 child-based cases from Québec and 8,003 family-based cases from the rest of Canada).

### ***Identifying Investigated Children***

The final sampling stage involved identifying children who had been investigated as a result of concerns related to possible maltreatment. As noted above, since in most jurisdictions cases are opened at the level of the family, procedures had to be developed to determine which specific children in each family had been investigated for

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<sup>15</sup> Trocmé, N., Fallon, B., MacLaurin, B., Sinha, V., Black, T., Chabot, M., & Knoke, D. (2009). *Reliability of the 2008 Canadian incidence study of reported child abuse and neglect (CIS-2008) data collection instrument*. Public Health Agency of Canada, Injury and Maltreatment Section.

<sup>16</sup> Randomization was done in Québec by using the time stamp from the agencies information systems: all odd minute cases were included in the study.

maltreatment related reasons. Furthermore, cases can be opened for reasons that do not involve maltreatment concerns. For instance, in Québec a case could have been opened because a family is requesting support when a child is displaying serious behavioural problems. Similarly, some jurisdictions classify home studies for prospective adoptive of foster homes as case openings.

In jurisdictions outside of Québec, children eligible for inclusion in the final study sample were identified by having child welfare workers complete the *Intake Face Sheet* from the *CIS-2008 Maltreatment Assessment Form* (see Instruments and Data Collection procedures for more details). The *Intake Face Sheet* allows the investigating worker to identify any children who were being investigated because of maltreatment related concerns (i.e., investigation of possible past incidents of maltreatment or assessment of risk of future maltreatment). In Québec, the identification of maltreatment related investigations was done by including all “retained”<sup>17</sup> cases with maltreatment-related case classification codes.

The age range covered by provincial and territorial child welfare statutes varies from 0-15 to 0-19 years. To ensure consistency in developing national estimates only children 15 and under are included in the final sample.

These procedures yielded final sample of 15,980 children, 15 years of age and younger investigated because of maltreatment related concerns.

### **Investigating Maltreatment versus Assessing Future Risk of Maltreatment**

The primary objective of the CIS is to document investigations of situations where there are concerns that a child may have already been abused or neglected. While investigating maltreatment is central to the mandate of child protection authorities, their mandates can also apply to situations where there is no specific concern about past maltreatment but where the risk of future maltreatment exists. Cases that were being assessed for risk of future maltreatment were not explicitly included in previous cycles of the CIS. To better capture both types of cases, the CIS-2008 was redesigned to track investigations versus cases opened only to assess the risk of future maltreatment. Investigating workers were asked to complete a data collection instrument for both types of cases. For cases involving maltreatment investigations, workers described the specific forms of maltreatment that were investigated and whether the investigation was substantiated. In cases that were opened only to assess future risk of maltreatment, the investigating workers were asked to indicate whether the risk was confirmed, but they were not asked to specify the specific forms of future maltreatment about which they may have had concerns. Identifying the specific form of future maltreatment being assessed was not feasible, given that risk assessments are based on a range of factors including the child’s and the caregivers’ strengths and vulnerabilities, and sources of familial support and familial stress.

While this change provides important additional information about risk of future

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<sup>17</sup> Agencies in Quebec use a structured phone screening process whereby approximately half of all referrals are “retained” for evaluation. In Québec, the CIS sampled retained maltreatment related reports that involved cases that were not already open.

maltreatment cases, it has complicated comparisons with past cycles of the study. Thus, comparisons with previous cycles are limited to comparisons of rates of all maltreatment-related investigations including risk assessments. In contrast, risk of future maltreatment cases are excluded from the 2008 estimates of rates and characteristics of substantiated maltreatment.

### **Forms of Maltreatment included in the CIS-2008**

The CIS-2008 definition of child maltreatment includes 32 forms of maltreatment grouped into five categories of maltreatment: physical abuse, sexual abuse, neglect, emotional maltreatment, and exposure to intimate partner violence (Appendix A: CIS -2008 Guidebook). This classification reflects a fairly broad definition of child maltreatment and includes forms of maltreatment that are not specifically indicated in some provincial and territorial child welfare statutes (e.g., exposure to intimate partner violence)<sup>18</sup>. The CIS-2008 tracked up to three forms of maltreatment for each investigation.

A source of potential confusion in interpreting child maltreatment statistics is an inconsistency in the categories of maltreatment included. Most child maltreatment statistics refer to physical and sexual abuse, but other categories of maltreatment, such as neglect and emotional maltreatment, are not systematically included. There is even less consensus with respect to subtypes or forms of maltreatment<sup>19</sup>.

### **Investigated Maltreatment vs. Substantiated Maltreatment**

Child welfare statutes in most jurisdictions require that professionals working with children and the general public report all situations where they have concerns that a child may have been maltreated or where there is a risk of maltreatment. The investigation phase is designed to determine whether the child was in fact maltreated. Some jurisdictions use a two-tiered substantiation classification system that distinguishes between substantiated and unfounded cases, or verified and not verified cases. The CIS uses a three-tiered classification system for investigated incidents of maltreatment, in which a “suspected” level provides an important clinical distinction in cases where there is not sufficient evidence to substantiate maltreatment, but where maltreatment cannot be ruled out (see Trocme et al., 2009<sup>20</sup> for more information on the distinction between these three levels of substantiation).

In reporting and interpreting maltreatment statistics, it is important to clearly distinguish between risk of future maltreatment investigations, maltreatment investigations, and substantiated cases of maltreatment.

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<sup>18</sup> Portwood, S. G. (1999). Coming to terms with a consensual definition of child maltreatment. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children*, 4(1), 56-68.

<sup>19</sup> Intimate partner violence is noted in child protection legislation in seven of thirteen Canadian jurisdictions. Five jurisdictions make no mention of exposure to intimate partner violence while one jurisdiction includes violence in the home as a reason for protection intervention but does not specify violence between intimate partners.

<sup>20</sup> Trocme, N., Knoke, D., Fallon, B., & MacLaurin, B. (2009). Differentiating between substantiated, suspected, and unsubstantiated maltreatment in Canada. *Child Maltreatment*, 14(1), 4 – 16.

## **Risk of harm vs. harm**

Cases of maltreatment that draw public attention usually involve children who have been severely injured or, in the most tragic cases, have died as a result of maltreatment. In practice, child welfare workers investigate and intervene in many situations in which children have not yet been harmed, but are **at risk of harm**. For instance a toddler who has been repeatedly left unsupervised in a potentially dangerous setting may be considered to have been neglected, even if the child has not yet been harmed.

Provincial and territorial statutes cover children who have suffered demonstrable harm due to abuse or neglect, and children at risk of harm. Substantiation standards in all jurisdictions across Canada include situations where children have been harmed as a result of maltreatment as well as situations where there is no evidence of harm but where children are at substantial risk of harm as a result of maltreatment. The CIS-2008 included both types of situations in its definition of substantiated maltreatment. The study also gathered information about physical and emotional harm attributed to substantiated maltreatment.

The CIS-2008 documents both physical and emotional harm; however, definitions of maltreatment used for the study did not require harm. This is similar to the fourth United States (U.S.) *National Incidence Study of Child Abuse and Neglect NIS-4 (2010)*, which included two standards in calculating estimates of maltreatment: a narrow standard based on evidence of harm to the child, and a broader endangerment standard that includes cases of children at risk of harm.<sup>21</sup>

There can be confusion around the difference between *risk of harm* and *risk of maltreatment*. A child who has been placed **at risk of harm** has experienced an event that endangered her/his physical or emotional health. Placing a child at risk of harm is considered a form of maltreatment. For example, neglect can be substantiated for an unsupervised toddler, regardless of whether or not harm occurs, because the parent is placing the child at substantial risk of harm. In contrast, **risk of future maltreatment** refers to situations where a specific incident of maltreatment has not yet occurred, but circumstances, for instance parental substance abuse, indicate that there is a significant risk that maltreatment could occur in the future.

## **Instrument**

The CIS-2008 survey instruments were designed to capture standardized information from child welfare workers conducting maltreatment investigations or investigations of risk of future maltreatment. Because investigation procedures vary considerably across Canada, a key challenge in designing the CIS-2008 survey instrument was to identify elements across jurisdictions that could provide data in a standardized manner. Given the time constraints faced by child welfare workers, the instrument also had to be kept as short and simple as possible.

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<sup>21</sup> Sedlak A.J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). *Fourth national incidence study of child abuse and neglect (NIS-4): Report to Congress, Executive summary*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.

### ***The CIS-2008 Maltreatment Assessment Form***

The main data collection instrument used for the study was the *Maltreatment Assessment Form* which was completed by the primary investigating child welfare worker upon completion of each child welfare investigation (see Appendix B). The data collection form consisted of an *Intake Face Sheet*, a *Household Information Sheet*, and a *Child Information Sheet*.

#### **Intake Face Sheet**

Workers completed the *Intake Face Sheet* for all cases opened during the study period where a specific allegation of maltreatment had been made or where there was a concern about future risk of maltreatment. This initial review of all child welfare case openings provided a consistent mechanism for differentiating between cases investigated for suspected maltreatment or risk of maltreatment and those referred for other types of child welfare services (e.g., preventive services).

Information about the report or referral as well as identifying information about the child(ren) involved was collected on the *Intake Face Sheet*. The form requested information on: the date of referral; referral source; number of children in the home; age and sex of children; the reason for the referral; whether the case was screened out; the relationship between the caregiver and each child; and the type of investigation (maltreatment or risk of future maltreatment)<sup>22</sup>. The section of the form containing any partially identifying information was kept at the site. The remainder of the form was completed if abuse or neglect was suspected at any point during the investigation, or if the worker completed a risk investigation only.<sup>23</sup>

#### **Household Information Sheet**

The *Household Information Sheet* was completed when at least one child in the family was investigated for alleged maltreatment or risk of maltreatment. The household was defined as all the adults living at the address of the investigation. The *Household Information Sheet* collected detailed information on up to two caregivers living in the home at the time of referral. Descriptive information was requested about workers' assessment of the level of cooperation by the caregiver with the investigation, other adults in the home, type of housing, housing safety, caregiver functioning, case status (i.e. whether the case was closed), and referral(s) to other services (Appendix B).

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<sup>22</sup> The *CIS-2008 Guidebook*, (Appendix E) defines a **risk investigation only** as "Indicate if the child was investigated because of risk of maltreatment only. Include situations in which no allegation of maltreatment was made and no specific incident of maltreatment was suspected at any point during the investigation." A **maltreatment investigation** is defined as "Indicate if the child was investigated because of an allegation of maltreatment... include only those children where, in your clinical opinion, maltreatment was alleged or you investigated an incident or event of maltreatment."

<sup>23</sup> The *CIS-2008 Guidebook* and training sessions emphasized that workers should base their responses to these questions on their clinical expertise rather than simply transposing information collected on the basis of provincial or local investigation standards.



## **Child Information Sheet**

The third page of the instrument, the *Child Information Sheet*, was completed for each child who was investigated for maltreatment or for whom there was a risk assessment completed.<sup>24</sup> The *Child Information Sheet* documented up to three different forms of maltreatment, and included levels of substantiation, alleged perpetrator(s), and duration of maltreatment. In addition, it collected information on child functioning, physical and emotional harm to the child attributable to the alleged maltreatment, child welfare court activity, out-of-home placement and transfers to ongoing services. Workers who conducted investigations of risk of future maltreatment did not answer questions pertaining to investigated maltreatment but did complete items about child functioning, placement, court involvement, previous reports and spanking. In those investigations involving risk assessments, workers were asked whether they were concerned about future maltreatment.

## **Québec Child Assessment Form**

The CIS-2008 *Child Maltreatment Assessment Form* was adapted to appear as an electronic pop-up form integrated into the client information system in Québec (Projet Intégration Jeunesse {PIJ}). The form appeared as a series of nine tabbed windows following the basic structure of the form. However, unlike the CIS-2008 *Child Maltreatment Assessment Form* which was designed around a family-based case opening system (one form per investigated family), the Québec electronic form was designed to reflect their system: one form per investigated child. Nearly one quarter of the data fields in the Québec form were automatically completed by the client information system. Due to differences in the structure of child welfare services in Québec and to constraints inherent in the use of a client information system based electronic, it was not possible to match all the items on the Québec data form with the items on the CIS-2008 *Child Maltreatment Assessment Form* (see Appendix C).

## **Guidebook**

A significant challenge for the study was to overcome the variations in the definitions of maltreatment used in different jurisdictions. Rather than anchor the definitions in specific legal or administrative definitions, a single set of definitions corresponding to standard research classification schemes was used. All items on the case selection forms were defined in an accompanying *CIS-2008 Guidebook* (Appendix A).

## ***Revising & Validating the Maltreatment Assessment Form***

The CIS-2008 data collection instrument was based on the CIS-2003<sup>25</sup>, CIS-1998<sup>26</sup> and OIS-1993<sup>27</sup> data collection instruments in order to maximize the potential for comparing

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<sup>24</sup> Two Child Information Sheets were included as a component of the *CIS-2008 Maltreatment Assessment Form*, and additional Child Information Sheets were available in every office.

<sup>25</sup> Trocmé, N., Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., et al. (2005). *Canadian incidence study of reported child abuse and neglect – 2003: Major findings*. Minister of Public Works and Government Services Canada.

<sup>26</sup> Trocmé, N., MacLaurin, B., Fallon, B., Daciuk, J., Billingsley, D., Tourigny, M., et al. (2001). *Canadian incidence study of reported child abuse and neglect: Final report*. Minister of Public Works and Government Services Canada.

CIS findings across cycles of the studies. A key challenge in updating instruments across cycles was to find the right balance between maintaining comparability while making improvements based on the findings from previous cycles. For instance, very low response rates on income questions in previous studies lead to the development of a simpler question about families running out of money. In addition, changes over time in child welfare practices may also require that changes be made to the data collection forms. At the time of the original OIS-1993 study, for example, exposure to intimate partner violence was generally not considered to be a form of maltreatment and was not a specific maltreatment category on the CIS-1998 form. It was added in subsequent cycles of the study.

Changes to the CIS-2008 version of the forms were made in close consultation with the Research Working Group, a subcommittee of the National CIS-2008 Steering Committee. Changes were based on data collection problems noted during the CIS-2003, an analysis of response rates<sup>28</sup>, a validation study, focus groups with child welfare workers in several jurisdictions, and a reliability study which compared different versions of the form.

Changes to the data collection instrument included: the addition of a series of questions designed to distinguish maltreatment investigation from risk only cases, a more detailed procedure to identify the relationship between each child and the caregivers in the home, a more elaborate housing safety question, a new measure of poverty, more specific intimate partner violence maltreatment codes, and revised emotional maltreatment categories. The final version of the data collection instrument is in Appendix B.

### **Case File Validation Study**

Review of the data collection instrument for the 2008 cycle of the study started with a case file validation study<sup>29</sup>. Data collected in 2003 using the CIS-2003 version of the form was compared with information in the case files from one of the larger CIS-2003 sites. While there was good correspondence on many items, it became apparent that despite specific instruction in 2003 to only include investigations of child maltreatment, a number of cases that appeared to involve only concerns about future risk had been coded as maltreatment investigations.

### **Validation Focus Groups**

The CIS-2008 Research Team conducted six focus groups with front-line child protection workers and supervisors across Canada from late July to late October 2007<sup>30</sup>. The purpose of the groups was to give feedback on the proposed changes to the CIS-2008 data collection instrument. The process was iterative. Feedback from each focus group

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<sup>27</sup> Trocmé, N., McPhee, D., et al. (1994). *Ontario incidence study of reported child abuse and neglect*. Toronto, ON: Institute for the prevention of Child Abuse.

<sup>28</sup> Tonmyr, L. (2004). Missing data in the Canadian incidence study of reported child abuse and neglect: Relevance to mental health promotion. *International Journal of Mental Health Promotion*, 6(4), 33 – 41.

<sup>29</sup> Trocmé, N., Fallon, B., MacLaurin, B., Sinha, V., Black, T., Chabot, M., & Knoke, D. (2009). *Reliability of the 2008 Canadian incidence study of reported child abuse and neglect (CIS-2008) data collection instrument*. Public Health Agency of Canada, Injury and Maltreatment Section.

<sup>30</sup> Trocmé, N., Fallon, B., MacLaurin, B., Sinha, V., Black, T., Chabot, M., & Knoke, D. (2009). *Reliability of the 2008 Canadian incidence study of reported child abuse and neglect (CIS-2008) data collection instrument*. Public Health Agency of Canada, Injury and Maltreatment Section.

was used to make changes to the instrument prior to the next focus group. Groups were held in Montréal, Toronto, St. John's, Halifax, Regina and Calgary. One of the participating groups was an Aboriginal site.

### **Reliability Study**

A reliability study<sup>31</sup> examined the test re-test reliability of the data collection instrument. The consistency of worker judgments was evaluated by comparing case ratings on the instrument at two points in time. Test re-test reliability was examined for a wide range of variables, such as characteristics of the alleged maltreatment, the household, caregivers, children, maltreatment history and service-related variables. A convenience sample of eight child welfare sites was selected based on availability and proximity to study team research personnel. Workers participated in the study on a voluntary basis.

The test re-test procedure was arranged as follows: workers completed the instrument for new investigations that had an allegation or suspicion of child maltreatment (Time 1), then an average of 3.8 weeks later, the same worker completed the instrument a second time for the same investigation (Time 2). At Time 1 the sample size was 130 investigations. Time 2 for some sites could not be scheduled prior to the finalization of the instrument and therefore their data were not included in the analysis.

All sites were collapsed, yielding a sample of 100 children from 68 households. Two measures of agreement were calculated for categorical variables: percent agreement and the Kappa statistic. The Kappa statistic adjusts for agreement that occurs by chance alone; values between 0.4 and 0.6 are usually interpreted as moderate agreement; between 0.6 and 0.8 substantial agreement; and values that exceed 0.8 reflect excellent agreement (Landis and Koch, 1977).

The vast majority of items on the CIS-2008 form showed good to excellent test re-test reliability. Among the most reliable groups of variables were primary forms of maltreatment, family's maltreatment history, child age and gender, case disposition items and indices related to emotional harm. 'Any service referral' and 'any family-focused referral', and the majority of items related to household and caregiver characteristics also showed good to excellent agreement.

A number of items fell slightly below the criterion for acceptable reliability. In order to address the low reliability of two questions (e.g., accessible drugs/drug paraphernalia and police involvement in the child maltreatment investigation), questions were re-ordered and/or clarified on the final CIS-2008 data collection instrument. The low reliability for secondary and tertiary maltreatment codes was similar to that found for the CIS-2003 data collection instrument. Analysis of secondary and tertiary maltreatment should be interpreted with caution. However, co-occurring maltreatment has been a significant predictor of service provision in multiple secondary analyses of the CIS data (e.g. Black, Trocmé, Fallon & MacLaurin, 2008).

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<sup>31</sup> Trocmé, N., Fallon, B., MacLaurin, B., Sinha, V., Black, T., Chabot, M., & Knoke, D. (2009). *Reliability of the 2008 Canadian incidence study of reported child abuse and neglect (CIS-2008) data collection instrument*. Public Health Agency of Canada, Injury and Maltreatment Section.

The study team's review of the brief written description of the investigation provided by the worker in the reliability study revealed that the newly developed procedures to categorize risk cases were creating confusion and inconsistent results. This led to an unplanned set of revisions to the way that risk was operationalized on the data collection instrument. Time constraints prevented final reliability testing of the *CIS-2008 Maltreatment Assessment Form*. Although the final data collection instrument differed from the versions that had been tested, the final set of changes was limited to only a few items.

## **Data collection and verification procedures**

### **Training**

Site Researchers coordinated training and case selection at each CIS-2008 site. The case selection phase began with a training session, conducted by a Site Researcher to introduce participating child welfare workers to the CIS-2008 instruments and case selection procedures. After a review of the forms and procedures, workers completed the form for a selected case vignette (Appendix C). The completed forms were then discussed and discrepancies in responses reviewed to ensure that items were being properly interpreted. Each worker was given a *CIS-2008 Guidebook*, which included definitions for all the items and study procedures (see Appendix A).

### **Timing of Form Completion**

The data collection instrument was completed at the point when workers finished their written report of the investigation. The length of time between the receipt of the referral and the completion of the written assessment differed according to provincial, regional, and site practices, although in most instances some type of report was required within six weeks of the beginning of an investigation. In instances where a complex investigation took more time, workers were asked to complete the data collection instrument with their preliminary assessment report.

### **Site Visits**

Site Researchers visited the CIS-2008 sites on a regular basis to collect forms, respond to questions, and monitor study progress. In most instances six visits to each location were required. Additional support was provided depending on the individual needs of workers at each site. Site Researchers collected the completed forms during each site visit and reviewed them for completeness and consistency. Every effort was made to contact workers if there was incomplete information on key variables (e.g. child age or category of maltreatment) or inconsistencies. Identifying information was stored on site, and non-identifying information was sent to the central data verification locations.

Data collection was organized in Québec to accommodate the established approaches to conducting site-based research, as well as take into account the particularities of using an electronic data collection form. Instead of using Site Researchers, each participating youth centre identified a liaison person who facilitated and monitored the data collection within their own jurisdiction. Three CIS Research Coordinators worked with the liaisons to support and to maintain consistent data collection and verification procedures.

## **Data Verification and Data Entry**

Data collection forms were verified twice for completeness and inconsistent responses: first on site by the Site Researchers or liaison personnel, and a second time at the University of Toronto, McGill University or University of Calgary locations.

Consistency in form completion was examined by comparing the data collection instrument to the brief case narratives provided by the workers.

Data collection forms sent to the CIS-2008 office in Toronto and Montréal were entered by scanner using TELEform Elite scanning software, V.8.1. *Intake Face Sheet* information was entered manually using Microsoft Access 2000. The data were then combined into an SPSS Version 17.0 database (SPSS Statistics, 2008). Inconsistent responses, missing responses, and miscodes were systematically identified. Checks for duplicate cases were made at the child welfare site and duplicates deleted on the basis of site identification numbers, family initials, and date of referral.

The Québec data was gathered in an electronic format from each site. The Microsoft Excel 2003 based data collection forms were programmed to extract data from the client information system for a quarter of the items; the remaining three quarters were completed by the worker. Item completion was tracked to ensure that forms could not be finalized until all items had been adequately addressed. The liaison workers verified each form for completeness and checked for inconsistent responses. Excel files were then downloaded to a flash drive and sent to the Research Coordinators who completed a second verification. The files were then uploaded to an SPSS data file.

## ***Participation and Item Completion Rates***

The case selection form was kept as short and simple as possible to minimize response burden and ensure a high completion rate. Completion rates were over 98% on most items.<sup>32</sup>

The participation rate was estimated by comparing the number of cases for which data collection instruments were completed to the actual number of cases opened during the case selection period (October 1 to December 31, 2008).<sup>33</sup> The overall participation rate in sites where a participation rate could be estimated was 96%, ranging from a low of 30%<sup>34</sup> to a high of 100%. Participation rates below 95% were discussed with the CIS-2008 liaisons for each agency to examine the possibility of skewed sampling. In all cases, low participation could be attributed to events such as staff holidays and staff turnover and no evidence of systematic bias was found.

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<sup>32</sup> The high item completion rate can be attributed both to the design of the case selection instrument and to the verification procedures. In designing the form, careful attention was given to maintaining a logical and efficient ordering to questions. The use of check boxes minimized completion time. An “unknown” category was included for many questions to help distinguish between missed responses and unknown responses.

<sup>33</sup> Participation rate is the proportion of cases open between Oct. 1 and Dec. 31, 2008, for which the data collection form was completed.

<sup>34</sup> There were two agencies with a participation rate of 30%, however, the number of outstanding forms was less than five investigations.

## Estimation procedures

### *Weighting*<sup>35</sup>

The data collected for the CIS 2008 were weighted to derive national annual incidence estimates by applying a composite regionalization weight and an annualization weight. The regionalization weight was developed to estimate the number of investigations completed within the three-month data collection period by child welfare organizations across Canada. The annualization weight is used to estimate annual investigation volume based on the investigation volume during the three month data collection period of CIS-2008.

### *Regionalization weight*

The regionalization weights were used to account for the sampling and subsampling used during the three month data collection period. The weight is composed of a sample weight, a subsampling weight, and an agency size correction.

**Sample weight** – The CIS-2008 sampled a higher proportion of agencies in British Columbia, Alberta, Saskatchewan, Ontario and Quebec. These five provinces supported inclusion of a sufficient number of agencies in the CIS-2008 sample in order to enable analysis of province-specific data. As a result, the proportion of agencies sampled in these provinces was higher than the proportion sampled in other provinces/territories, and the unweighted data disproportionately reflects the investigation rates and profiles of the oversampling provinces. The first factor, the “sample weight” or “ $W_s$ ”, adjusts for the disproportional selection of agencies from oversampling provinces. This weighting factor represents the ratio of the total number of agencies in a stratum (a group of child welfare organizations within a geographic region from which sites were randomly sampled) to the number of agencies sampled from that stratum. For example if we sampled only one agency from a province with 10 agencies, that agency would have been given a weight of 10 (10/1). In contrast, if we consider the example of an oversampling province with 10 agencies, from which we sampled 4 agencies, each of the sampled agencies would be assigned a weight of 2.5 (10/4)

It should be noted that some sites were not randomly sampled, either because they represented a large metropolitan centre that was automatically included in the study, or were from Quebec or Saskatchewan where all provincial agencies were included in the study. In these instances the sample weight was 1.

$$W_s = \frac{\text{\# of agencies in stratum}}{\text{\# of agencies sampled in stratum}}$$

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<sup>35</sup> The overall weights used to derive national annual estimates described in this revised description of the weighting procedures are the same as the overall weights described in previous CIS reports including the CIS-2008 Major Finding report. The revised wording differs from the original in two ways: (1) the original annualization weight combined the annualization weight and the subsampling weight, the subsampling weight is now included as a component of the revised regionalization weight, and (2) the original regionalization weight did not separate out the sample weight from the agency size correction, the revised procedure identifies both components separately. While mathematically there has been no change to the final weight applied to each site, the revised wording provides a more accurate statistical interpretation of the weights used to derive national annual estimates.

**Subsampling weight** – In most agencies, data were collected for every new, maltreatment-related investigation opened during the three month data collection period; however, in order to reduce burden on workers, sample size was limited to 250, randomly selected investigations in 20 very large agencies and data on one out of two investigations was selected for data collection in 16 Quebec agencies. The subsampling weight –  $W_{ss}$  – accounts for this random subsampling of investigations within the three-month data collection period. This factor represents the ratio of the number of investigations opened by an agency during the three-month data collection period to the number of investigations from that agency which were included in the CIS sample. For example, a subsampling weight of 4 (1,000/250) would have been assigned to cases from an agency where data were collected for a random sample of 250 cases in an agency that investigated 1,000 cases during the data collection period.

$$W_{ss} = \frac{\# \text{ of investigations Oct 1 – Dec 31}}{\# \text{ of investigations sampled}}$$

**Agency Size Correction** – Child welfare organizations, including those in the study sample, vary greatly in terms of the number of children they serve and the number of investigations they conduct. The “sample weight” described above adjusts for differences in the number of agencies selected from each stratum, but does not account for variations in the size of the agencies within these strata. The third component of the regionalization weight, which we can call  $PS_r$ , is designed to adjust for variations in the size of agencies within a stratum. It represents the ratio of the average child population for all the agencies in the stratum to the average child population served by the agencies sampled within that stratum. For example in a stratum of 10 agencies serving 100,000 children (average child population in agencies in stratum = 10,000), one sampled agency serves a region with 6,000 children and the second serving a region with 18,000 children (average child population in sampled agencies = 12,000), the agency size correction would be  $10,000 / 12,000 = 0.83$ .

$$PS_r = \frac{\text{average child population in stratum}}{\text{average child population in sampled agencies}}$$

An important limitation to the method used to derive the agency size correction must be noted. Ideally, this factor would adjust for variations in the number of investigations opened by agencies within a stratum. But, because reliable statistics on number of investigations completed by an agency have not been consistently available, child population is used as a proxy for agency size<sup>36</sup>. Accordingly, this factor assumes that the

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<sup>36</sup> This approach was originally developed for the 1993 OIS and used in the 1998 CIS, which built on OIS methods, because, at the time, most jurisdictions could not report on investigation counts and there were dramatic discrepancies in the counts reported. While the quality of investigation statistics has improved, we continue to find important discrepancies in the ways investigations statistics are reported. Site researchers carefully review all case counts provided by the child welfare authorities participating in the study, however, this level of quality control is not available for authorities that were not part of the CIS sample.

numbers of investigations opened by the agencies within a stratum are strictly proportional to agency child population and it does not account for variations in the per capita rate of investigations.

**Regionalization Weight:** Together, these three factors,  $W_s \times W_{ss} \times PS_r$ , are used to create the regionalization weights which are used to estimate the number of investigations completed within the three-month data collection period by all child welfare organizations in Canada. This would mean, using the examples provided above, that every sampled case from the oversampling province agency illustration would receive a weight of  $2.5 \times 4 \times 0.83 = 8.33$ .

### ***Annualization weight***

Because the CIS collects data only during a three-month period from sampled child welfare agencies, data from the agencies were weighted to estimate the number of investigations conducted by the sampled agencies during the full year. Accordingly, all data were multiplied by an annualization weight, which we can call  $PS_a$ , which represents the ratio of all investigations conducted by a sampled agency during 2008 to all investigations opened by the sampled agency during the case selection period: Oct 1 – Dec 31 2008. For example, if an agency conducted 1,800 investigations during in 2008, 500 of which were investigated from October 1 to December 31, the annualization weight would be  $1,800/500 = 3.6$ .

$$PS_a = \frac{\# \text{ of investigations in 2008}}{\# \text{ of investigations oct 1 – dec 31}}$$

Two key limitations of the annualization weights must be noted. This factor corrects for seasonal fluctuation in the number of investigations, but it does not correct for any seasonal variations in the types of investigations conducted. In addition, while cases reported more than once during the three-month case sampling period were unduplicated (see *Case Selection* section in this chapter), the weights used for CIS-2008 annual estimates include cases that were investigated more than once in the year as a result of the case being re-opened following a first investigation completed earlier in the same year. Accordingly, the weighted annual represent new child maltreatment-related investigations conducted by the sampled agencies in 2008, rather than investigated children.

### ***Full weight ( $W_{RA}$ )***

The weight used to derive national annual estimates, called  $W_{RA}$ , is the agency specific weight that is the product of the regionalization weight by the annualization weight. Using the examples developed above, cases from the oversampling agency illustration would be given a final weight of  $3.6 \times 8.3 = 30$ .

$$W_{RA} = W_s \times W_{ss} \times PS_r \times PS_a$$



### ***Case Duplication***

Cases reported more than once during the three- month case sampling period were unduplicated, however, the weights used for CIS-2008 annual estimates include an unknown number of “duplicate” cases, i.e. children or families reported and opened for investigation two or more times during the year. Although each investigation represents a new incident of maltreatment, confusion arises if these investigations are taken to represent an unduplicated count of children. To avoid such confusion, the CIS-2008 uses the term “child investigations” rather than “investigated children”.

An estimate of how often maltreated children will be counted more than once can be derived from those jurisdictions that maintain separate investigation-based and child-based counts. The U.S. National Child Abuse and Neglect Data System (NCANDS),<sup>37</sup> reports that for substantiated cases of child maltreatment, the six-month recurrence rate during 2003 was 8.4 per cent. Further estimates of recurrence have been made in the U.S.: in a 24-month follow up of all investigations from eight states, 16% of children were re-reported within 12 months, and another 6% were re-reported in the subsequent 12 months.<sup>38</sup> In Québec, the recurrence rate was 8.8% of screened-in investigations over a 12-month period.<sup>39</sup>

### **Ethics Procedures**

The CIS-2008 data collection and data-handling protocols and procedures were reviewed and approved by McGill University, the University of Toronto, and the University of Calgary Ethics Committees. Written permission for participating in the data collection process was obtained from the Provincial/Territorial Directors of Child Welfare as well as from each site administrator or director. Where a participating site had an ethics review process, the study was also evaluated by that site.

The study utilized a case file review methodology. The case files are the property of the delegated site or regional authority. Therefore, the permission of the site was required in order to access case files. Confidentiality of case information and participants, including workers and sites, was maintained throughout the process. No directly-identifying information was collected on the data collection instrument. The *Intake Face Sheet* collected near-identifying information about the children including their first names and ages. The tear-off portion of the *Intake Face Sheet* had a space for the file/case number the site assigns and the study number the CIS-2008 Site Researchers assigned and also provided space for the first two letters of the family surname. This information was used for verification purposes only. Any names on the forms were deleted prior to leaving the site.

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<sup>37</sup> U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2005). *Child Maltreatment 2003*. Washington, DC: U.S. Government Printing Office.

<sup>38</sup> Fluke, J, Shusterman, G.R., Hollinshead, D.M. and Yuan, Ying Ying T. (2008). Longitudinal Analysis of Repeated Child Abuse Reporting and Victimization: Multistate Analysis of Associated Factors. *Child Maltreatment*, 13 (1), 76-88.

<sup>39</sup> Hélie, S. (2005). Fréquence et déterminants de la récurrence du signalement en protection de la jeunesse: Analyse de survie d'une cohorte Montréalaise. Unpublished doctoral dissertation, Université du Québec à Montréal, Psychologie Département.

The data collection instruments (that contain no directly-identifying information) were either scanned into an electronic database at the Universities of Toronto or McGill, or uploaded from encrypted CD's or flash drives. At both locations this electronic data was stored on a locked, password-protected hard drive in a locked office and on a CD stored in a locked cabinet off-site. Only those University of Toronto and McGill University research personnel with security clearance from the Government of Canada had access to this information through password-protected files. All paper data collection instruments were archived in secure filing cabinets.

### *Aboriginal Ethics*

The First Nations component of the CIS-2008 adhered to the principles of ownership, control, access and possession (OCAP), which must be negotiated within the context of individual research projects. Adherence to OCAP principles was one of three shared concerns which shaped the collaborative relationship between the advisory committee and the research team, and which guided the approach to research design and implementation. The First Nations CIS-2008 Advisory Committee, which mediates Aboriginal ownership of and control over the project, had a mandate of ensuring that the CIS respects OCAP principles to the greatest degree possible given that the CIS-2008 respects OCAP principles to the greatest degree possible, given that the CIS is a cyclical study which collects data on First Nations, other Aboriginal and non-Aboriginal investigations. The First Nations CIS-2008 Advisory Committee is responsible for guiding and approving analyses of First Nations data, including potential comparisons with non-Aboriginal sites.

This report contains only national estimates of child abuse and neglect and does not identify any participating agency or office. Information about additional analyses is available on the Canadian Child Welfare Research Portal website at: <http://www/cwrp.ca>.

### **Study Limitations**

Although every effort was made to make the CIS-2008 estimates precise and reliable, several limits inherent in the nature of the data collected must be taken into consideration:

- As a result of changes in the way **risk of future maltreatment** cases are identified in the CIS-2008, comparisons between study cycles must be made with caution.
- The agency size correction uses child population as a proxy for agency size; this does not account for variations in per capita investigation rates across agencies in the same strata. The annualization weight corrects for seasonal fluctuation in the volume of investigations, but it does not correct for seasonal variations in types of investigations conducted.
- The agency size correction used to derive national estimates uses child population as a proxy for agency size; this **does not account for variations in per capita investigation rates** across agencies in the same strata.
- The annualization weight corrects for seasonal fluctuation in the volume of investigations, but it **does not correct for seasonal variations in types of investigations conducted**.

- The annualization weight includes cases that were investigated more than once in the year as a result of the case being re-opened following a first investigation completed earlier in the same year. Accordingly, the weighted annual estimates **represent the child maltreatment-related investigations**, rather than investigated children.
- The CIS tracks information **during the first 6 weeks** of case activity, however there are slight provincial and territorial differences in this length of time; service outcomes such as out-of-home placements and applications to court included only events that occurred during those first approximately 4-6 weeks.
- The CIS **tracks only reports investigated by child welfare** sites and does not include reports that were screened out, cases that were investigated only by the police and cases that were never reported. Estimates do not include incidents of that were investigated only by the police, and it does not include incidents that were never reported to either the police nor child welfare authorities;
- the study is based on the assessments provided by the investigating child welfare workers and **could not be independently verified**. The investigating workers determined if the child subject of the investigation demonstrated functioning concerns, for instance depression or anxiety. However, these child functioning concerns were not verified by an independent source;
- the annual national counts presented are **weighted estimates**.

## Appendices

*A: CIS-2008 Guidebook*<sup>40</sup>

*B: CIS Maltreatment Assessment Form*<sup>41</sup>

*C: Quebec Maltreatment Assessment Form*<sup>42</sup>

*D: Study Vignettes*<sup>43</sup>

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<sup>40</sup> [http://cwrp.ca/sites/default/files/publications/en/CIS-2008\\_Guidebook.pdf](http://cwrp.ca/sites/default/files/publications/en/CIS-2008_Guidebook.pdf)

<sup>41</sup> [http://cwrp.ca/sites/default/files/publications/en/CIS-2008\\_Maltreatment\\_Assessment\\_FINAL.pdf](http://cwrp.ca/sites/default/files/publications/en/CIS-2008_Maltreatment_Assessment_FINAL.pdf)

<sup>42</sup> [http://cwrp.ca/sites/default/files/publications/en/English\\_EIQ\\_Form.pdf](http://cwrp.ca/sites/default/files/publications/en/English_EIQ_Form.pdf)

<sup>43</sup> <http://cwrp.ca/sites/default/files/publications/en/CIS-VignetteEN.pdf>