



*Impacts of Child Maltreatment in Canada:
Examining the social consequences and economic costs*

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ABOUT THIS REPORT

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In this report, we provide a summary of recent evidence regarding the prevalence of childhood maltreatment in Canada, the estimated preventable costs attributed to childhood maltreatment, and the associated social consequences and economic costs most commonly linked with child maltreatment. The evidence is drawn from the most relevant and recent Canadian literature. We conducted a systematic search and review of the peer-reviewed literature published in scientific journals, with a focus on studies that include a Canadian sample, present population-level data, and/or use advanced research methods approaches. These studies are the most recently published as of June 2020.

CHILD MALTREATMENT AS A ROOT CAUSE & DIRECT IMPACT ON RELATED ISSUES

Childhood adversity is well-documented in the extant literature as a key social determinate associated with an increased risk for poor health and wellbeing across the life course, including mental illness, problematic substance use, homelessness, and family violence.¹⁻⁷

There are significant social consequences and economic costs associated with child maltreatment. Broadly, the social consequences associated with child maltreatment include 1) mental and physical health problems, 2) problematic substance use, 3) homelessness, and 4) family violence. Generally, the economic costs of child maltreatment include the direct costs associated with healthcare, child welfare, and law enforcement, but also include a portion of the costs associated with mental illness, poor physical health, problematic substance use, homelessness, and family violence.

While many of the costs associated with child maltreatment may overlap, conservative estimates suggest that Canadians spend approximately \$100 billion annually in the costs associated with child maltreatment. Importantly, the research also indicates that early intervention and prevention services have the potential to address social consequences and reduce economic costs associated with child maltreatment.

In the following report, we provide:

1. Evidence about the prevalence and direct costs associated with child maltreatment
2. Evidence about the key social consequences linked with child maltreatment, and the economic burden associated with indirect and direct costs
3. Provide a discussion regarding the quality of the evidence used to produce this report
4. Suggest next steps and overall conclusions

Childhood Adversity in Canada includes but is not limited to:

- Childhood maltreatment
 - Physical, sexual, emotional, or psychological abuse
 - Neglect
- Exposure to Family Violence
- Parental substance use and/or mental illness

Childhood maltreatment, including abuse and neglect, continues to be a problem for the most vulnerable members of our community. This prevalent and costly problem requires that communities provide efficient and effective services to ensure positive immediate and long-term outcomes for children and their families. Research has clearly demonstrated that child abuse and neglect remains a pervasive problem in Canada, with significant costs and consequences. In order to address these issues, we must consider the limitations of the current social, health, and justice systems, and the ways to improve these system.

The Statistics:

- 1 in 3 Canadians nationwide report experiencing child abuse⁸
 - In BC, 35.8% of adults reported some form of child abuse, with the 3rd highest rate among Canadian provinces (1: Manitoba (40%); 2: Alberta (36.1%))
- Types of Childhood Maltreatment among Canadian population⁸
 - 26.1% of Canadians have experienced physical abuse
 - 10.1% of Canadians have experienced sexual abuse
 - 7.9% of Canadians have had childhood exposure to intimate parent violence
- Intergenerational continuation of maltreatment without intervention – parent experience of child maltreatment associated future maltreatment of own child⁹
- 93% of survivors of child abuse do not report the abuse to the police or child protection services before the age 15, and 67% do not report to anyone, including family or friends⁷
- Child maltreatment has been linked to the increased prevalence of deaths of despair, which are deaths due to suicide, overdose, and illnesses related to substance use (e.g. cirrhosis of the liver due to alcohol misuse)^{10,11}
- **Costs:**^a In 2003, Canada was estimated to be spending over **\$5 billion annually on direct child protection services**, and **more than \$15 billion per year on the indirect costs** of child maltreatment.¹² Today, assuming all costs being equal, that would amount to **\$6.6 billion dollars** in direct costs and nearly **\$20 billion dollars** in indirect costs.

^a This article is the most recent comprehensive estimation of costs associated with child maltreatment, yet may be significantly different due to inflation and changes in health and child welfare services costs. Inflation calculated using bankofcanada.ca inflation calculator: <https://www.bankofcanada.ca/rates/related/inflation-calculator/>.

MENTAL HEALTH PROBLEMS

Prevalence: In a given year, 1 in 5 Canadians will experience a mental health or addiction problem. By age 40, 1 in 2 Canadians have experienced a mental health problem, with 70% of individuals having the onset of those mental health problems during childhood or adolescence.¹³

Costs: The economic burden of mental illness in Canada is estimated to be between **\$6.3-\$18.1 billion annually for direct health care costs**, as well as between **\$22.7-\$51.6 billion for indirect costs**. In total, the overall costs of mental illness range from **\$12.3-51.6 billion dollars annually**.¹⁴

Child maltreatment is associated with a:

- **2.7-3.6x** increased risk of developing a mental illness (depression, anxiety, or bipolar)⁸
 - 2 types of abuse: **3-6x** increased risk of any mental illness
 - 3 types of abuse: **4.5-10.8x** increased risk of any mental illness
- **4.1x** increased risk of suicidal ideation⁸
 - 2 types of abuse: **5x** increased risk of suicidal ideation
 - 3 types of abuse: **13.8x** increased risk of suicidal ideation
- **6.1x** more likely to attempt suicide⁸
 - 2 types of abuse: **7.5x** increased risk of suicide attempts
 - 3 types of abuse: **27.5x** increased risk of suicide attempts

ADDICTION

Prevalence: More than 1 in 5 Canadians (21%) will meet criteria for addiction in their lifetime.¹⁵

Costs: As of 2014, problematic substance use cost Canadians more than **\$38 billion dollars**, with \$15.7 billion attributed to lost of productivity, \$11.1 billion to increased healthcare costs, and \$9 billion to criminal justice costs.¹⁶

Child maltreatment is associated with:

- Increased risk of problematic alcohol use:
 - **5.8x** greater likelihood of developing problematic alcohol use⁵
 - **2.5x** greater likelihood of developing an alcohol use disorder¹¹
- Increased risk of problematic drug use, including cannabis, opioids, and other drugs:
 - **5.6x** greater likelihood of problematic drug use⁵
 - **3.4x** greater likelihood of developing a drug use disorder¹¹
- 2 types of abuse: 3-6x increase risk of a substance use problem¹¹
- 3 types of abuse: 4.5-10.8x increase risk of a substance use problem¹¹

PHYSICAL HEALTH PROBLEMS

Prevalence: In Canada, noncommunicable disease and disorders (i.e. chronic diseases, cancer, heart disease, diabetes) are the leading cause of death, accounting for 88% of all premature deaths and are rooted in early childhood experiences.¹⁷

Costs: Noncommunicable diseases and disorders are estimated to cause a global cumulative loss of **\$47 trillion** between 2011-2030.¹⁸ In Canada, noncommunicable diseases cost **\$190 billion annually**, with \$122 related to indirect productivity losses and \$68 billion related to direct healthcare costs.¹⁹

Child maltreatment is associated with a:

- **2.9-4.4x** more likely to report having poor self-perceived health⁵
- **1.4-2.0x** more likely to have arthritis⁵
- **1.5-1.8x** more likely to have back problems⁵
- **1.1-1.3x** more likely to have high blood pressure⁵
- **1.7-2.4x** more likely to have migraines⁵
- **1.3-1.7x** more likely to have cancer⁵
- **2.6-3.2x** more likely to have chronic fatigue syndrome⁵

- Child abuse linked to changes in the structure and functioning of the brain, and to changes in gene expression, with immediate and lasting effects on the individual and future generations^{20,21}

- **1.12-1.30x** Increased rate of health care services utilization in a Canadian sample²²

HOMELESSNESS

Prevalence: According to the State of Homelessness in Canada 2016 report, there are approximately 235,000 Canadians that experience homelessness in a given year.²³ This does not include hidden homelessness, which consists of those who have unstable housing conditions (e.g. living in hotels, living with friends) or did not contact an emergency shelter. Nearly 1 in 10 Canadians, or 2.3 million individuals, have experienced hidden homelessness in their lifetime.⁷

Costs: As of 2016, homelessness cost **\$7.05 billion dollars annually**, up from \$4.5-6 billion in 2007.²³

Child maltreatment is associated with a:

- **2.36x** greater likelihood of experiencing homelessness before the age of 25 among youth with a history of foster care²⁴
- **1.6-1.95x** greater likelihood of long-term (> 1 year) homelessness with a history of foster care²⁴
- **1 in 4 (25%) Canadians** with a history of child abuse before age 15 will experience an episode of hidden homelessness⁷

INTIMATE PARTNER VIOLENCE AND FAMILY VIOLENCE

Prevalence: Of all reported crime in 2016, more than 1 in 4 (26%) were related to family violence, and more than half (67%) of victims were women and girls.²⁵ Family violence rates tend to be underreported.²⁶

Costs: According to a 2013 study, family violence costs **\$7.4 billion per year**, with 80.7% of the costs related to healthcare costs and lost productivity.²⁷

Child maltreatment is associated with:

- **2x** greater risk of experiencing violence as adult, including intimate partner violence²⁵
- **1 in 10** Canadians reported exposure to family violence before age 15, and **7 in 10** of those who witnessed intimate partner violence were also physically abused²⁵
- In Canada, child maltreatment has been associated with²⁸
 - **2x** more likely to have police contact due to adult criminality
 - **2.3x** more likely to have police contact due to adult victimization
- In a systematic review and meta-analysis of over 11,000 studies on the risks of childhood adversity, including studies from Canada, child adversity was associated with the risk of:⁵
 - Violence victimization: **7.51x** greater
 - Violence perpetration: **8.10x** greater

MITIGATING THE HARM OF CHILD MALTREATMENT

Child maltreatment is a prevalent problem that contributes to many social consequences and economic costs related to the increased risk of mental and physical illness, addiction, homelessness, and family violence. The key to reducing these problems is to prevent maltreatment, and provide services for those who have experienced maltreatment.²⁹

Access to integrated and comprehensive services using a CAC model approach to care can reduce the costs and consequences associated with child maltreatment by providing timely and effective services that support children and families. An assessment of one CAC agency found an estimated savings of ~\$550,000 annually just related to productivity improvements through the use of integrated services.³⁰ CACs offer better access to medical exams and mental health services, more coordinated investigations, and faster decision making in criminal charges.³¹ Of note, these figure do not include the reduction in anticipated costs due to increased risk of mental and physical illness, addiction, homelessness, or family violence.

Of the 31 studies included in this report, 14 were cross-sectional quantitative analyses, 7 were government or centre reports, and 6 were systematic/narrative reviews or meta-analyses. Most studies were exclusively with Canadian samples (n = 17) or included a subsample of Canadians (n = 5). The majority of analyses used data from large population-level studies, like the Canadian Community Health Survey or the Canadian General Social Survey, with sample sizes upwards of 33,000 Canadians. Of note, this report focused mainly on large nationally representative studies and systematic reviews/meta-analyses, as these types of studies provided the highest quality evidence with regards to cause and effect.

Many of the statistics reported provide the odds of experiencing a specific outcome as related to child maltreatment. This means calculating the chances of having specific consequence for those with a history of child maltreatment as compared to those without a history of maltreatment. For example, in Canada, the chances of developing a mental illness is 1 in 5,¹³ for those with history of child abuse the risk is 3.6 times greater than those with no abuse history.⁸ Many of these studies include additional “control” variables, which account for differences based on other factors (e.g. poverty). By doing this, the chances of experiencing a particular social consequence is assumed to be primarily related to child maltreatment.

Sources:

1. Bush, N. R., Edgar, R. D., Park, M., MacIsaac, J. L., McEwen, L. M., Adler, N. E., . . . Boyce, W. T. (2018). The biological embedding of early-life socioeconomic status and family adversity in children's genome-wide DNA methylation. *Epigenomics*, 10(11), 1445-1461. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6462839/>
2. Felitti, V. J. (2002). The relation between adverse childhood experiences and adult health: Turning gold into lead. *The Permanente Journal*, 6(1), 44. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6220625/>
3. Brown, D. W., Anda, R. F., Tiemeier, H., Felitti, V. J., Edwards, V. J., Croft, J. B., & Giles, W. H. (2009). Adverse childhood experiences and the risk of premature mortality. *American journal of preventive medicine*, 37(5), 389-396. <https://doi.org/10.1016/j.amepre.2009.06.021>
4. Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology & behavior*, 106(1), 29-39. <https://doi.org/10.1016/j.physbeh.2011.08.019>
5. Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., ... & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356-e366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
6. Rodrigue, S. (2016). Insights on Canadian society: Hidden homelessness in Canada. Statistics Canada. Available from Statistics Canada: <http://www.statcan.gc.ca/pub/75-006-x/2016001/article/14678-eng.htm>
7. Burczycka, M. (2017). Section 1: Profile of Canadian adults who experienced childhood maltreatment. *Statistics Canada*. Available from: <https://www150.statcan.gc.ca/n1/pub/85-002-x/2017001/article/14698/01-eng.htm>
8. Afifi, T. O., MacMillan, H. L., Boyle, M., Taillieu, T., Cheung, K., & Sareen, J. (2014). Child abuse and mental disorders in Canada. *Canadian Medical Association Journal*, 186(9), E324-E332. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4050024/>
9. Madigan, S., Cyr, C., Eirich, R., Fearon, R. M. P., Ly, A., Rash, C., . . . Alink, L. R. A. (2019). Testing the cycle of maltreatment hypothesis: Meta-analytic evidence of the intergenerational transmission of child maltreatment. *Development and Psychopathology*, 31(1), 23-51. <https://doi.org/10.1017/S0954579418001700>
10. Lang, J. J., Alam, S., Cahill, L. E., Drucker, A. M., Gotay, C., Kayibanda, J. F., ... & Orpana, H. M. (2018). Global Burden of Disease Study trends for Canada from 1990 to 2016. *Canadian Medical Association Journal*, 190(44), E1296-E1304. <https://doi.org/10.1503/cmaj.180698>
11. Fuller-Thomson, E., Roane, J. L., & Brennenstuhl, S. (2016). Three types of adverse childhood experiences, and alcohol and drug dependence among adults: An investigation using population-based data. *Substance use & Misuse*, 51(11), 1451-1461. <https://pubmed.ncbi.nlm.nih.gov/27326749/>

12. Bowlus, A., McKenna, K., Day, T., & Wright, D. (2003). *The economic costs and consequences of child abuse in Canada*. Report to the Law Commission of Canada. <https://cwrp.ca/sites/default/files/publications/en/Report-Economic-Cost-Child-AbuseEN.pdf>
13. Centre for Addiction and Mental Health. (2020). Mental illness and addiction: Facts and statistics. From: <https://www.camh.ca/en/driving-change/the-crisis-is-real/mental-health-statistics>
14. Jacobs, P., Knoop, F., & Lesage, A. (2018). A Review of Measures of Aggregate Mental Health Costs in Canada. *Canadian Journal of Community Mental Health*, 36, 127-143. From: <https://www.cjcmh.com/doi/pdf/10.7870/cjcmh-2017-032>
15. Statistics Canada. (2015). Mental Health and Substance Use Disorders in Canada. Retrieved from: <http://www.statcan.gc.ca/pub/82-624-x/2013001/article/11855-eng.htm>
16. Canadian Substance Use Costs and Harms Scientific Working Group. (2018). Canadian substance use costs and harms (2007–2014). From: <https://www.ccsa.ca/canadian-substance-use-costs-and-harms-2007-2014-report>
17. World Health Organization. (2018). Noncommunicable Diseases (NCD) Country Profiles, 2018. From: https://www.who.int/nmh/countries/can_en.pdf?ua=1
18. Bloom, D., Cafiero, E., Jané-Llopis, E., Abrahams-Gessel, S., Bloom, L., Fathima, S., . . . Weiss, J. (2012). The global economic burden of noncommunicable diseases. *Program on the Global Demography of Aging*. From: <http://econpapers.repec.org/paper/gdmwpaper/8712.htm>
19. Public Health Agency of Canada. (2013). Backgrounder: United Nations NCD Summit 2011. From: https://www.researchgate.net/publication/328749123_Backgrounder_on_UN_Summits
20. Essex, M. J., Boyce, W. T., Hertzman, C., Lam, L. L., Armstrong, J. M., Neumann, S. M. A., & Kobor, M. S. (2013). Epigenetic vestiges of early developmental adversity: Childhood stress exposure and DNA methylation in adolescence. *Child Development*, 84(1), 58-75. <https://pubmed.ncbi.nlm.nih.gov/21883162/>
21. Shonkoff, J. P., Boyce, T., & McEwen, B. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *The Journal of the American Medical Association*, 301(21), 2252-2259. <https://pubmed.ncbi.nlm.nih.gov/19491187/>
22. Chartier, M. J., Walker, J. R., & Naimark, B. (2010). Separate and cumulative effects of adverse childhood experiences in predicting adult health and health care utilization. *Child Abuse & Neglect*, 34(6), 454-464. <https://pubmed.ncbi.nlm.nih.gov/20409586/>
23. Gaetz, S., Dej, E., Richter, T., & Redman, M. (2017). The state of homelessness in Canada 2016. *Canadian Observatory on Homelessness*. <https://www.homelesshub.ca/SOHC2016>
24. Patterson, M. L., Moniruzzaman, A., & Somers, J. M. (2015). History of foster care among homeless adults with mental illness in Vancouver, British Columbia: a precursor to trajectories of risk. *BMC psychiatry*, 15(1), 32. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4349718/>
25. Burczykca, M. & Conroy, S. (2018). "Family violence in Canada: A statistical profile, 2016." *Juristat, Canadian Centre for Justice Statistics*, Statistics Canada, Catalogue no. 85-002-X. https://www150.statcan.gc.ca/n1/en/pub/85-002-x/2018001/article/54893-eng.pdf?st=TR_zsnJg
26. Canadian Centre for Justice Statistics (2016). "Family violence in Canada: A statistical profile, 2014." *Juristat, Statistics Canada*, Statistics Canada, Catalogue no. 85-002-X. 4. <https://www150.statcan.gc.ca/n1/pub/85-002-x/2016001/article/14303-eng.htm>
27. Zhang, T., Hoddenbagh, J., McDonald, S., and Scrim, K. (2013). *An Estimation of the Economic Impact of Spousal Violence in Canada, 2009*. Department of Justice Canada. Ottawa. From: https://www.justice.gc.ca/eng/rp-pr/cj-ij/fv-vf/rr12_7/index.html
28. Tiwari, A., Andrews, K., Casey, R., Liu, A., Tonmyr, L., & Gonzalez, A. (2019). Associations Among Child Maltreatment, Mental Health, and Police Contact in Adulthood: Findings From a National Canadian Sample. *Journal of Interpersonal Violence*. <https://doi.org/10.1177/0886260519851789>
29. Hawkins, J. D., Jenson, J. M., Catalano, R., Fraser, M. W., Botvin, G. J., Shapiro, V., ... & Rotheram-Borus, M. J. (2016). Unleashing the power of prevention. *American Journal of Medical Research*, 3(1), 39. <https://aaswsw.org/wp-content/uploads/2013/10/Unleashing-the-Power-of-Prevention-formatted-4.29.15.pdf>
30. KPMG (2015). *The Sheldon Kennedy Child Advocacy Centre Social Return on Investment Study*. Vancouver, CA. Retrieved from: <http://calio.org/images/social-return-on-investment-study.pdf>
31. Herbert, J. L., & Bromfield, L. (2016). Evidence for the Efficacy of the Child Advocacy Center Model: A Systematic Review. *Trauma, Violence, & Abuse*, 17(3), 341–357. <https://doi.org/10.1177/1524838015585319>