

Costs Associated with Child Abuse and Exploitation

A Bibliography



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Scope

This bibliography provides citations and abstracts to publications regarding costs associated with child sexual abuse, exploitation, and maltreatment. This bibliography is not comprehensive.

Organization

This bibliography is arranged chronologically, from most recent to oldest publication date, within each topic area listed below. Links to open access publications are provided.

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Costs Associated with Child Abuse and Exploitation

A Bibliography

Costs associated with child maltreatment (abuse and neglect)

Harris, M., & Pratt, E. (2023). [The economic costs of child abuse and neglect in Tennessee](#). Knoxville: Boyd Center for Business and Economic Research, University of Tennessee.

In this study, we use a human capital-based approach to place a value on the lifetime cost of the average first-time substantiation, and data on the number of first-time reports to estimate the annual statewide economic impact. Following a similar methodology as other recent state reports³, we focus on first-time substantiated victims so that there is no “double counting” children who are victims in multiple years.

Rosinsky, K., Fischer, M., & Haas, M. (2023). [Child Welfare Financing SFY 2020: A survey of federal, state, and local expenditures](#). *Child Trends*. DOI:10.56417/669519085q

This document presents information about spending of state and local funds by child welfare agencies in SFY 2020 collected through Child Trends’ national survey of child welfare agency expenditures.

Wojciak, A. S., Butcher, B., Conrad, A., Coohy, C., Oral, R., & Peek-Asa, C. (2021). [Trends, diagnoses, and hospitalization costs of child abuse and neglect in the United States of America](#). *International Journal of Environmental Research and Public Health*, 18(14), 7585. DOI:10.3390/ijerph18147585

We conducted a secondary analysis of the National Inpatient Sample (NIS) to examine child abuse and neglect hospitalization from 1998–2016. The NIS is the largest all-payer, inpatient care database in the United States and is maintained by the Health Care Utilization Project. Participants were youth 18 years and younger with discharged diagnoses of child abuse and neglect from hospitals. The rate of child abuse or neglect hospitalizations did not vary significantly over the study period (1998–2016), which on average was 6.9 per 100,000 children annually. Males (53.0%), infants (age < 1; 47.3%), and young children (age 1–3; 24.2%) comprised most of the child maltreatment cases. Physical abuse was the most frequent type of maltreatment leading to hospitalization. Government insurance was the most common payer source, accounting for 77.3%

of all child maltreatment hospitalizations and costing 1.4 billion dollars from 2001–2016. Hospitalizations due to child abuse and neglect remain steady and are costly, averaging over \$116 million per year. The burden on government sources suggests a high potential for return on investment in effective child abuse prevention strategies.

Klika, J. B., Rosenzweig, J., & Merrick, M. (2020). [Economic burden of known cases of child maltreatment from 2018 in each state](#). *Child and Adolescent Social Work Journal*, 37, 227-234. DOI:10.1007/s10560-020-00665-5

Child abuse and neglect are a major public health problem with significant effects for individual victims and for society. Previous research has estimated the economic burden of child maltreatment at a national level but has not provided social work advocates with state-level estimates or provided information regarding the correct interpretation of these estimates. Using data from the National Child Abuse and Neglect Data System (NCANDS) from 2018 and per victim estimates of the economic burden of fatal and non-fatal cases of child maltreatment, this study calculates state-level estimates of the economic burden of known cases of child maltreatment from the year 2018. Rationale for estimating the economic burden of investigated versus substantiated cases is discussed, as is interpretation of study findings. The findings of this study provide social work and other advocates with state-level estimates of the economic burden of child maltreatment and facilitate the interpretation of the findings to be used in advocacy efforts. Limitations of NCANDS data and economic burden estimation are discussed.

University of Alabama College of Human Environmental Sciences. (2020). [The Cost of Child Maltreatment to the Alabama Economy-2018](#). Montgomery, AL: Alabama Department of Child Abuse and Neglect Prevention, The Children's Trust Fund.

A study conducted by The University of Alabama College of Human Environmental Sciences and The University of Alabama Center for Business and Economic Research in collaboration with the Department of Child Abuse and Neglect Prevention/The Children's Trust Fund provides insight for the critical public policy issue of child maltreatment in our State. These entities released, "The Cost of Child Maltreatment to the Alabama Economy" during a press conference held Tuesday, April 20th at the State House in Montgomery, AL. Using the latest data available from 2018, this report is an extensive study that breaks out the economic impact that child maltreatment has on the state of Alabama.

Jaffee, S. R., Ambler, A., Merrick, M., Goldman-Mellor, S., Odgers, C. L., Fisher, H. L., ... & Arseneault, L. (2018). [Childhood maltreatment predicts poor economic and educational outcomes in the transition to adulthood](#). *American Journal of Public Health, 108*(9), 1142-1147. DOI:10.2105/AJPH.2018.304587

The objectives were to test whether childhood maltreatment was a predictor of (1) having low educational qualifications and (2) not being in education, employment, or training among young adults in the United Kingdom today. Participants were from the Environmental Risk (E-Risk) Longitudinal Twin Study, a nationally representative UK cohort of 2232 twins born in 1994 to 1995. Mothers reported on child maltreatment when participants were aged 5, 7, 10, and 12 years. Participants were interviewed about their vocational status at age 18 years. The unadjusted odds of having low educational qualifications or of not being in education, employment, or training at age 18 years were more than 2 times greater for young people with a childhood history of maltreatment versus those without. These associations were reduced after adjustments for individual and family characteristics. Youths who reported having a supportive adult in their lives had better education outcomes than did youths who had less support. Closer collaboration between the child welfare and education systems is warranted to improve vocational outcomes for maltreated youths.

Miller, T. R., Steinbeigle, R., Lawrence, B. A., Peterson, C., Florence, C., Barr, M., & Barr, R. G. (2018). [Lifetime cost of abusive head trauma at ages 0–4, USA](#). *Prevention Science, 19*, 695-704. DOI:10.1007/s11121-017-0815-z

This paper aims to estimate lifetime costs resulting from abusive head trauma (AHT) in the USA and the break-even effectiveness for prevention. A mathematical model incorporated data from Vital Statistics, the Healthcare Cost and Utilization Project Kids' Inpatient Database, and previous studies. Unit costs were derived from published sources. From society's perspective, discounted lifetime cost of an AHT averages \$5.7 million (95% CI \$3.2–9.2 million) for a death. It averages \$2.6 million (95% CI \$1.0–2.9 million) for a surviving AHT victim including \$224,500 for medical care and related direct costs (2010 USD). The estimated 4824 incident AHT cases in 2010 had an estimated lifetime cost of \$13.5 billion (95% CI \$5.5–16.2 billion) including \$257 million for medical care, \$552 million for special education, \$322 million for child protective services/criminal justice, \$2.0 billion for lost work, and \$10.3 billion for lost quality of life. Government sources paid an estimated \$1.3 billion. Out-of-pocket benefits of existing prevention

programming would exceed its costs if it prevents 2% of cases. When a child survives AHT, providers and caregivers can anticipate a lifetime of potentially costly and life-threatening care needs. Better effectiveness estimates are needed for both broad prevention messaging and intensive prevention targeting high-risk caregivers.

Peterson, C., Florence, C., & Klevens, J. (2018). [The economic burden of child maltreatment in the United States, 2015](#). *Child Abuse & Neglect*, 86, 178-183.
DOI:10.1016/j.chiabu.2018.09.018

Child maltreatment incurs a high lifetime cost per victim and creates a substantial US population economic burden. This study aimed to use the most recent data and recommended methods to update previous (2008) estimates of 1) the per-victim lifetime cost, and 2) the annual US population economic burden of child maltreatment. Three ways to update the previous estimates were identified: 1) apply value per statistical life methodology to value child maltreatment mortality, 2) apply monetized quality-adjusted life years methodology to value child maltreatment morbidity, and 3) apply updated estimates of the exposed population. As with the previous estimates, the updated estimates used the societal cost perspective and lifetime horizon, but also accounted for victim and community intangible costs. Updated methods increased the estimated nonfatal child maltreatment per-victim lifetime cost from \$210,012 (2010 USD) to \$830,928 (2015 USD) and increased the fatal per-victim cost from \$1.3 to \$16.6 million. The estimated US population economic burden of child maltreatment based on 2015 substantiated incident cases (482,000 nonfatal and 1670 fatal victims) was \$428 billion, representing lifetime costs incurred annually. Using estimated incidence of investigated annual incident cases (2,368,000 nonfatal and 1670 fatal victims), the estimated economic burden was \$2 trillion. Accounting for victim and community intangible costs increased the estimated cost of child maltreatment considerably compared to previous estimates. The economic burden of child maltreatment is substantial and might off-set the cost of evidence-based interventions that reduce child maltreatment incidence.

Pereira, S. M. P., Li, L., & Power, C. (2017). Child maltreatment and adult living standards at 50 years. *Pediatrics*, *139*(1): e20161595. DOI:10.1542/peds.2016-1595

Child maltreatment (abuse and neglect) has established effects on mental health. Less is known about its influence on adult economic circumstances. We aimed to establish associations of child maltreatment with such outcomes and explore potential pathways. We used 1958 British birth cohort data (N = 8076) to examine associations of child neglect and abuse with adult (50 years) long-term sickness absence, not in employment, education or training (NEET), lacking assets, income-related support, poor qualifications, financial insecurity, manual social class, and social mobility. We assessed mediation of associations by 16-year cognition and mental health. Abuse prevalence varied from 1% (sexual) to 10% (psychological); 16% were neglected. A total of 21% experienced 1 maltreatment type, 10% experienced ≥ 2 types. Sexual and nonsexual abuse were associated with several outcomes; eg, for sexual abuse, adjusted odds ratio (aOR) of income-related support was 1.75 (95% confidence interval[CI], 1.12–2.72). Associations were little affected by potential mediating factors. Neglect was associated with several adult outcomes (eg, aOR of NEET was 1.43 [95% CI, 1.10–1.85]) and associations were mediated by cognition and mental health (primarily by cognition): percent explained varied between 4% (NEET) to 70% (poor qualifications). In general, the risk of poor outcome increased by number of maltreatment types (eg, aOR for long-term sickness absence increased from 1.0 [reference] to 1.76 [95% CI, 1.32–2.35] to 2.69 [95% CI, 1.96–3.68], respectively, for 0, 1, and ≥ 2 types of maltreatment. Childhood maltreatment is associated with poor mid adulthood socioeconomic outcomes, with accumulating risk for those experiencing multiple types of maltreatment. Cognitive ability and mental health are implicated in the pathway to outcome for neglect but not abuse.

Campbell, K. A., Telford, S. R., Cook, L. J., Waitzman, N. J., & Keenan, H. T. (2016). Medicaid expenditures for children remaining at home after a first finding of child maltreatment. *Pediatrics*, *138*(3). DOI:10.1542/peds.2016-0439

Child maltreatment is associated with physical and mental health problems. The objective of this study was to compare Medicaid expenditures based on a first-time finding of child maltreatment by Child Protective Services (CPS). This retrospective cohort study included children aged 0 to 14 years enrolled in Utah Medicaid between January 2007 and December 2009. The exposed group included children enrolled in Medicaid during the month of a first-time CPS finding of

maltreatment not resulting in out-of-home placement. The unexposed group included children enrolled in Medicaid in the same months without CPS involvement. Quantile regression was used to describe differences in average nonpharmacy Medicaid expenditures per child-year associated with a first-time CPS finding of maltreatment. A total of 6593 exposed children and 39 181 unexposed children contributed 20 670 and 105 982 child-years to this analysis, respectively. In adjusted quantile regression, exposed children at the 50th percentile of health care spending had annual expenditures \$78 (95% confidence interval [CI], 65 to 90) higher than unexposed children. This difference increased to \$336 (95% CI, 283 to 389) and \$1038 (95% CI, 812 to 1264) at the 75th and 90th percentiles of health care spending. Differences were higher among older children, children with mental health diagnoses, and children with repeated episodes of CPS involvement; differences were lower among children with severe chronic health conditions. Maltreatment is associated with increased health care expenditures, but these costs are not evenly distributed. Better understanding of the reasons for and outcomes associated with differences in health care costs for children with a history of maltreatment is needed.

Thielen, F. W., Ten Have, M., de Graaf, R., Cuijpers, P., Beekman, A., Evers, S., & Smit, F. (2016). Long-term economic consequences of child maltreatment: A population-based study. *European Child & Adolescent Psychiatry, 25*, 1297-1305. DOI:10.1007/s00787-016-0850-5

Child maltreatment is prognostically associated with long-term detrimental consequences for mental health. These consequences are reflected in higher costs due to health service utilization and productivity losses in adulthood. An above-average sense of mastery can have protective effects in the pathogenesis of mental disorders and thus potentially cushion adverse impacts of maltreatment. This should be reflected in lower costs in individuals with a history of child maltreatment and a high sense of mastery. The aims of the study were to prognostically estimate the excess costs of health service uptake and productivity losses in adults with a history of child maltreatment and to evaluate how mastery may act as an effect modifier. Data were used on 5618 individuals participating in the Netherlands Mental Health Survey and Incidence Study (NEMESIS). We focused on measures of child maltreatment (emotional neglect, physical, psychological and sexual abuse) and economic costs owing to health-care uptake and productivity losses when people with a history of abuse have grown into adulthood. We evaluated how mastery acted as an effect modifier. Estimates were adjusted for demographics and parental

psychopathology. Post-stratification weights were used to account for initial non-response and dropout. Due to the non-normal distribution of the costs data, sample errors, 95 % confidence intervals, and p values were calculated using non-parametric bootstrapping (1000 replications). Exposure to child maltreatment occurs frequently (6.9–24.8 %) and is associated with substantial excess costs in adulthood. To illustrate, adjusted annual excess costs attributable to emotional neglect are €1,360 (95 % CI: 615–215) per adult. Mastery showed a significant effect on these figures: annual costs were €1,608 in those with a low sense of mastery, but only €474 in those with a firmer sense of mastery. Child maltreatment has profound mental health consequences and is associated with staggering long-term economic costs, rendering lack of action very costly. Our data lends credibility to the hypothesis that mastery may help to cushion the adverse consequences of child maltreatment. Further research on mastery may help to ameliorate individual burden and in addition offer some economic benefits.

College of Human Environmental Sciences, Center for Business and Economic Research
Culverhouse College of Commerce, University of Alabama (2015). [The Cost of Child Maltreatment to the Alabama Economy in 2013](#). Tuscaloosa, AL: Author.

This report presents the cost of child maltreatment (or child abuse and neglect) to the Alabama economy in 2013. Child abuse is defined by the Federal Child Abuse Prevention and Treatment Act as any recent act or failure to act on the part of a parent or caretaker that results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act that presents an imminent risk of serious harm. Four common types of child maltreatment—physical, sexual, emotional, and neglect—are recognized by the Centers for Disease Control and Prevention (CDC).

Ferrara, P., Corsello, G., Basile, M. C., Nigri, L., Campanozzi, A., Ehrich, J., & Pettoello-Mantovani, M. (2015). [The economic burden of child maltreatment in high income countries](#). *The Journal of Pediatrics*, 167(6), 1457-1459.
DOI:10.1016/j.jpeds.2015.09.044

Maltreatment is a common cause of children’s functional and emotional impairment.¹ Costs for the society are high, as a substantial amount of resources have been allocated for various types of services connected to maltreatment of children. These include acute treatment, long-term care, family rehabilitation programs, and judiciary activities. There is a long-lasting debate on how child

abuse could be prevented or reduced. How can the costs of related services be contained? What is the role of pediatricians in such efforts? This article raises these important questions within the framework of the debate opened by the article by Gerber-Grote et al regarding the role of health economics in improving children's health care.

DeVooght, K., Fletcher, M., & Cooper, H. (2014). Federal, state, and local spending to address child abuse and neglect in SFY 2012. Bethesda, MD: Child Trends.

Key findings show some continued trends, but also reveal new and interesting spending patterns. Most notably, the data show an overall decline in expenditures by child welfare agencies in the U.S.—the first decline since the survey began in SFY 1996. Also of particular note is the measurable decrease in federal funds over the two year period the survey examined (SFYs 2010-2012), and the finding that federal expenditures on child welfare activities are at their lowest level since the SFY 1998 survey.

[Suffer the Little Children: An Assessment of the Economic Cost of Child Maltreatment](#) (2014). Waco, TX: The Perryman Group.

The physical and emotional consequences to the victims of child maltreatment represent a truly incalculable and often irreparable harm which should be sufficient justification for a massive national effort to both address the underlying causes and minimize the impacts on the victims. In reality, however, budget constraints and changing priorities have led to reduced funding to the agencies confronting the issue and fewer public resources for prevention, investigation, and amelioration. In addition to the very real effects on the individuals involved, child maltreatment imposes substantial economic costs which can be quantified in a comprehensive manner. When properly measured, every year that the situation is allowed to persist at current levels drains literally trillions of dollars in long-term business activity.

Florence, C., Brown, D. S., Fang, X., & Thompson, H. F. (2013). [Health care costs associated with child maltreatment: Impact on Medicaid](#). *Pediatrics*, *132*(2), 312-318.
DOI:10.1542/peds.2012-2212

The objective was to estimate the increased Medicaid expenditures associated with child maltreatment. Data on child maltreatment were collected from the National Survey of Child and Adolescent Well-Being, a nationally representative sample of cases investigated or assessed by local Child Protective Services agencies between October 1999 and December 2000. Medicaid claims data for 2000 to 2003 were obtained from the Medicaid Analytic Extract (MAX). Children from the National Survey of Child and Adolescent Well-Being who had Medicaid were matched to the MAX data by Social Security number or birthdate, gender, and zip code. Propensity score matching was used to select a comparison group from the MAX data. Two-part regression models were used to estimate the impact of child maltreatment on expenditures. Data with individual identifiers were obtained under confidentiality agreements with the collecting agencies. Children who were identified as maltreated or as being at risk of maltreatment incurred, on average, Medicaid expenditures that were >\$2600 higher per year compared with children not so identified. This finding accounted for ~9% of all Medicaid expenditures for children. Child maltreatment imposes a substantial financial burden on the Medicaid system. These expenses could be partially offset by increased investment in child maltreatment prevention.

Fang, X., Brown, D. S., Florence, C. S., & Mercy, J. A. (2012). [The economic burden of child maltreatment in the United States and implications for prevention](#). *Child Abuse & Neglect*, *36*(2), 156-165. DOI:10.1016/j.chiabu.2011.10.006

The objectives were to present new estimates of the average lifetime costs per child maltreatment victim and aggregate lifetime costs for all new child maltreatment cases incurred in 2008 using an incidence-based approach. This study used the best available secondary data to develop cost per case estimates. For each cost category, the paper used attributable costs whenever possible. For those categories that attributable cost data were not available, costs were estimated as the product of incremental effect of child maltreatment on a specific outcome multiplied by the estimated cost associated with that outcome. The estimate of the aggregate lifetime cost of child maltreatment in 2008 was obtained by multiplying per-victim lifetime cost estimates by the estimated cases of new child maltreatment in 2008. The estimated average lifetime cost per victim of nonfatal child

maltreatment is \$210,012 in 2010 dollars, including \$32,648 in childhood health care costs; \$10,530 in adult medical costs; \$144,360 in productivity losses; \$7,728 in child welfare costs; \$6,747 in criminal justice costs; and \$7,999 in special education costs. The estimated average lifetime cost per death is \$1,272,900, including \$14,100 in medical costs and \$1,258,800 in productivity losses. The total lifetime economic burden resulting from new cases of fatal and nonfatal child maltreatment in the United States in 2008 is approximately \$124 billion. In sensitivity analysis, the total burden is estimated to be as large as \$585 billion. Compared with other health problems, the burden of child maltreatment is substantial, indicating the importance of prevention efforts to address the high prevalence of child maltreatment.

Currie, J., & Widom, C. S. (2010). [Long-term consequences of child abuse and neglect on adult economic well-being](#). *Child Maltreatment, 15*(2), 111-120.
DOI:10.1177/1077559509355316

Child abuse and neglect represent major threats to child health and well-being; however, little is known about consequences for adult economic outcomes. Using a prospective cohort design, court substantiated cases of childhood physical and sexual abuse and neglect during 1967–1971 were matched with nonabused and nonneglected children and followed into adulthood (mean age 41). Outcome measures of economic status and productivity were assessed in 2003–2004 (N = 807). Results indicate that adults with documented histories of childhood abuse and/or neglect have lower levels of education, employment, earnings, and fewer assets as adults, compared to matched control children. There is a 14% gap between individuals with histories of abuse/neglect and controls in the probability of employment in middle age, controlling for background characteristics. Maltreatment appears to affect men and women differently, with larger effects for women than men. These new findings demonstrate that abused and neglected children experience large and enduring economic consequences.

Wang, C. T., & Holton, J. (2007). [Total estimated cost of child abuse and neglect in the United States](#). Chicago, IL: Prevent Child Abuse America.

The costs of responding to the impact of child abuse and neglect are borne by the victims and their families but also by society. This brief updates an earlier publication documenting the nationwide costs as a result of child abuse and neglect (Fromm, 2001). Similar to the earlier document, this brief places costs in two categories: direct costs, that is, those costs associated with the immediate needs of children

who are abused or neglected; and indirect costs, that is, those costs associated with the long-term and/or secondary effects of child abuse and neglect. All estimated costs are presented in 2007 dollars. Adjustments for inflation have been conducted using the price indexes for gross domestic product published by the Bureau of Economic Analysis (<http://www.bea.gov>).

Scarcella, C. A., Bess, R., Zielewski, E. H., & Green, R. (2006). [The cost of protecting vulnerable children V: Understanding state variation in child welfare financing.](#) Washington, DC: Urban Institute.

This survey was the fifth in a series analyzing states' financing of child welfare activities. The methodology was the same as previous rounds of the survey. In April 2005, we mailed the survey to each state child welfare director. Urban Institute staff conducted extensive phone, facsimile, and e-mail follow-up with each state to ensure data were properly interpreted. We received survey responses from 48 states and the District of Columbia. For the purposes of this paper, the District of Columbia is treated as a state.

Medical/Health Costs Associated with Child Sexual Abuse

Dolezal, T., McCollum, D., & Callahan, M. (2009). [Hidden costs in health care: The economic impact of violence and abuse](#). Eden Prairie, MN: Academy on Violence and Abuse.

This paper reviews a sampling of the literature that supports the contention that violence and abuse lead to a significant increase in health care utilization and costs.

Bonomi, A. E., Anderson, M. L., Rivara, F. P., Cannon, E. A., Fishman, P. A., Carrell, D., & Thompson, R. S. (2008). [Health care utilization and costs associated with childhood abuse](#). *Journal of General Internal Medicine*, 23(3), 294-299. DOI:10.1007/s11606-008-0516-1

Physical and sexual childhood abuse is associated with poor health across the lifespan. However, the association between these types of abuse and *actual* health care use and costs over the long run has not been documented. To examine long-term health care utilization and costs associated with physical, sexual, or both physical and sexual childhood abuse. Three thousand three hundred thirty-three women (mean age, 47 years) randomly selected from the membership files of a large integrated health care delivery system. *Automated* annual health care utilization and costs were assembled over an average of 7.4 years for women with physical only, sexual only, or both physical and sexual childhood abuse (*as reported in a telephone survey*), and for women without these abuse histories (reference group). Significantly higher annual health care use and costs were observed for women with a child abuse history compared to women without comparable abuse histories. The most pronounced use and costs were observed for women with a history of both physical and sexual child abuse. Women with both abuse types had higher annual mental health (relative risk [RR] = 2.07; 95% confidence interval [95%CI] = 1.67–2.57); emergency department (RR = 1.86; 95%CI = 1.47–2.35); hospital outpatient (RR = 1.35 = 95%CI = 1.10–1.65); pharmacy (incident rate ratio [IRR] = 1.57; 95%CI = 1.33–1.86); primary care (IRR = 1.41; 95%CI = 1.28–1.56); and specialty care use (IRR = 1.32; 95%CI = 1.13–1.54). Total adjusted annual health care costs were 36% higher for women with both abuse types, 22% higher for women with physical abuse only, and 16% higher for women with sexual abuse only. Child abuse is associated with long-term elevated health care use and costs, particularly for women who suffer both physical and sexual abuse.

Tang, B., Jamieson, E., Boyle, M., Libby, A., Gafni, A., & MacMillan, H. (2006). The influence of child abuse on the pattern of expenditures in women's adult health service utilization in Ontario, Canada. *Social Science & Medicine*, 63(7), 1711-1719. DOI:10.1016/j.socscimed.2006.04.015

Childhood maltreatment is a common and serious problem for women, particularly in relation to impairment in adulthood. To our knowledge, no system-wide study has addressed the influence of childhood maltreatment on the cost of these women's adult health service utilization. This paper examines this relationship. The 1990 Ontario Health Survey (OHS) gathered information regarding determinants of physical health status and the use of health services. The 1991 Ontario Mental Health Supplement (OHSUP) examined a variety of childhood experiences as well as the prevalence of psychiatric disorders from a sample of OHS respondents. These were province-wide population health surveys of a probability-based sample of persons aged 15 years and older living in household dwellings in Ontario. The OHSUP randomly selected one member from each participating OHS household to be interviewed regarding personal experiences and mental health. This analysis used data from women aged 15–64 who participated in both the OHS and OHSUP. Self-reported health service utilization was collected in four groups of women—those who reported no history of child abuse, those with a history of physical abuse only, those who reported sexual abuse only, and those who reported both physical and sexual (combined) abuse. We hypothesized that a history of child abuse would result in greater adult health care costs. The results indicated that having a history of combined abuse nearly doubles mean annual ambulatory self-reported health care costs to \$775 (95% CI \$504–\$1045) compared to a mean cost of \$400 with no abuse (95% CI \$357–\$443). Median annual ambulatory self-reported health care costs were also increased in the combined abuse group, to \$314 (95% CI \$220–\$429), compared to \$138 (95% CI \$132–\$169) in those with no abuse. We conclude that child abuse in women is significantly associated with increased adult self-reported health care costs.

Hulme, P. A. (2000). Symptomatology and health care utilization of women primary care patients who experienced childhood sexual abuse. *Child Abuse & Neglect*, 24(11), 1471-1484. DOI:10.1016/s0145-2134(00)00200-3

The purpose of this study was to (1) determine the symptomatology of women primary care patients who experienced childhood sexual abuse (CSA), using both a self-report survey and a chart review, and (2) determine their health care utilization patterns, using chart and information

system reviews. An ex post facto research design was used. Women primary care patients who experienced CSA were compared with those who reported no CSA. Participants were recruited from a random sample of women patients from a large primary care clinic. They were mailed the survey; chart and information system reviews were conducted on those who returned surveys. Of the 395 participants, 23% reported past CSA on the survey. Women who experienced CSA reported 44 out of 51 physical and psychosocial symptoms more frequently than their counterparts who reported no past CSA. Further, they experienced these symptoms more intensely and in greater number. In their charts, however, far fewer differences in symptoms between groups were found. Nonetheless, women who experienced CSA visited the primary care clinic an average of 1.33 more times than women with no CSA, and they incurred an average of \$150 more in primary care charges over a 2-year period. The findings indicate that many women primary care patients who experienced CSA suffer multiple symptoms that are not reflected in their charts. In addition, the findings demonstrate that not only is CSA associated with increased primary care visits, but also increased primary care costs, as measured by charges.

Walker, E. A., Unutzer, J., Rutter, C., Gelfand, A., Saunders, K., VonKorff, M., & Katon, W. (1999). [Costs of health care use by women HMO members with a history of childhood abuse and neglect](#). *Archives of General Psychiatry*, 56(7), 609-613.
DOI:10.1001/archpsyc.56.7.609

Early childhood maltreatment has been associated with adverse adult health outcomes, but little is known about the magnitude of adult health care use and costs that accompany maltreatment. We examined differences in annual health care use and costs in women with and without histories of childhood sexual, emotional, or physical abuse or neglect. A random sample of 1225 women members of a health maintenance organization completed a 22-page questionnaire inquiring into childhood maltreatment experiences as measured by the Childhood Trauma Questionnaire. Health care costs and use data were obtained from the automated cost-accounting system of the health maintenance organization, including total costs, outpatient and primary care costs, and emergency department visits. Women who reported any abuse or neglect had median annual health care costs that were \$97 (95% confidence interval, \$0.47-\$188.26) greater than women who did not report maltreatment. Women who reported sexual abuse had median annual health care costs that were \$245 (95% confidence interval, \$132.32-\$381.93) greater than costs among women who did not

report abuse. Women with sexual abuse histories had significantly higher primary care and outpatient costs and more frequent emergency department visits than women without these histories. Although the absolute cost differences per year per woman were relatively modest, the large number of women in the population with these experiences suggests that the total costs to society are substantial.

Hankivsky, O., & Draker, D. A. (2003). The economic costs of child sexual abuse in Canada: A preliminary analysis. *Journal of Health & Social Policy, 17*(2), 1-33.
DOI:10.1300/J045v17n02_01

This paper describes a study of the economic costs attributable to child sexual abuse in Canada for the 1997-98 Fiscal Year. The preliminary cost estimate of child sexual abuse in Canada exceeds \$3.6 billion dollars annually. This includes both public and private costs across four policy areas: health, social/public services, justice, and education/research and employment. These estimates have important policy implications in the area of child sexual abuse. The effectiveness of remedies, and options for new initiatives, policies and programs can be further evaluated using these economic calculations.

General Economic Impact Associated with Child Sexual Abuse and Exploitation

Assini-Meytin, L. C., Thorne, E. J., Sanikommu, M., Green, K. M., & Letourneau, E. J. (2022). Impact of child sexual abuse on socioeconomic attainment in adulthood. *Journal of Adolescent Health, 71*(5), 594-600. DOI:10.1016/j.jadohealth.2022.05.013

While child sexual abuse (CSA) victimization is linked to adverse mental and behavioral health outcomes, few studies have examined the association between CSA and socioeconomic attainment in adulthood, particularly for men. This study assesses the impacts of CSA victimization on socioeconomic outcomes in adulthood, separately for men and women. Analyses are based on the National Longitudinal Study of Adolescent to Adult Health restricted use dataset. Adolescent to Adult Health is a nationally representative cohort of teenagers in grades 7–12 (1994–1995; N = 20,000) followed to ages 33–44 (2016–2018; N = 12,300). These analyses were based on N = 10,119 participants. We used propensity score weighting to equate on observed confounders of those who experienced CSA victimization with those who had not. All analyses were conducted in the R statistical software. In this analytical sample, 25.2% of women and 9.8% of men reported of having been sexually abused as a child. Results from propensity score weighted models showed that by their late 30s, men and women who experienced CSA had lower educational attainment, lower odds of being financially stable, and a decrease in household income compared to their peers. CSA was associated with lower odds of being employed among women only. Findings from this study suggest that men and women who survive CSA, experience socioeconomic disadvantages in adulthood relative to peers who did not experience CSA. Preventive programs and treatment and other services for survivors of CSA could positively impact individuals' economic productivity over the life course, reducing the individual and societal costs associated with CSA victimization.

Henkhaus, L. E. (2022). [The lasting consequences of childhood sexual abuse on human capital and economic well-being](#). *Health Economics, 31*(9), 1954-1972. DOI:10.1002/hec.4557

Childhood sexual abuse is a prevalent problem, yet understanding of later-in-life outcomes is limited due to unobservable determinants. I examine impacts on human capital and economic well-being by estimating likely ranges around causal effects, using a nationally representative U.S. sample. Findings suggest that childhood sexual abuse leads to lower educational attainment and worse labor market outcomes. Results are robust to partial identification methods applying varying

assumptions about unobservable confounding, using information on confounding from observables including other types of child abuse. I show that associations between childhood sexual abuse and education outcomes and earnings are at least as large for males as for females. Childhood sexual abuse by someone other than a caregiver is as influential or more so than caregiver sexual abuse in predicting worse outcomes. Considering the societal burden of childhood sexual abuse, findings could inform policy and resource allocation decisions for development and implementation of best practices for prevention and support.

Letourneau, E. J., Brown, D. S., Fang, X., Hassan, A., & Mercy, J. A. (2018). [The economic burden of child sexual abuse in the United States](#). *Child Abuse & Neglect*, 79, 413-422. DOI: 10.1016/j.chiabu.2018.02.020

The present study provides an estimate of the U.S. economic impact of child sexual abuse (CSA). Costs of CSA were measured from the societal perspective and include health care costs, productivity losses, child welfare costs, violence/crime costs, special education costs, and suicide death costs. We separately estimated quality-adjusted life year (QALY) losses. For each category, we used the best available secondary data to develop cost per case estimates. All costs were estimated in U.S. dollars and adjusted to the reference year 2015. Estimating 20 new cases of fatal and 40,387 new substantiated cases of nonfatal CSA that occurred in 2015, the lifetime economic burden of CSA is approximately \$9.3 billion, the lifetime cost for victims of fatal CSA per female and male victim is on average \$1,128,334 and \$1,482,933, respectively, and the average lifetime cost for victims of nonfatal CSA is of \$282,734 per female victim. For male victims of nonfatal CSA, there was insufficient information on productivity losses, contributing to a lower average estimated lifetime cost of \$74,691 per male victim. If we included QALYs, these costs would increase by approximately \$40,000 per victim. With the exception of male productivity losses, all estimates were based on robust, replicable incidence-based costing methods. The availability of accurate, up-to-date estimates should contribute to policy analysis, facilitate comparisons with other public health problems, and support future economic evaluations of CSA-specific policy and practice. In particular, we hope the availability of credible and contemporary estimates will support increased attention to primary prevention of CSA.

Gelles, R. J., & Perlman, S. (2012). [*Estimated Annual Cost of Child Abuse and Neglect*](#). Chicago IL: Prevent Child Abuse America.

The present report addresses the Corso and Fertig (2010) critique and includes additional refinements. We use Wang and Holton's (2007) categories of direct and indirect costs and add two additional indirect costs: early intervention and homelessness. Cost estimates for each of the indirect costs (early intervention, special education, adult homelessness, juvenile delinquency, and involvement in the criminal justice system (i.e. the additional cost of treating a maltreated child, over and above the cost of treating a child who has not been victimized). For the hospitalization calculation for treating severe abuse, we addressed the Corso and Fertig critique by employing the cost-to-charge ratio. Additionally, all costs reported are the annual costs associated with child maltreatment – and not lifetime costs.

Zielinski, D. S. (2009). Child maltreatment and adult socioeconomic well-being. *Child Abuse & Neglect*, 33(10), 666-678. DOI:10.1016/j.chiabu.2009.09.001

Little empirical research has examined the impact that child maltreatment may have on victims' long-term socioeconomic well-being. The current study sought to address this gap by exploring the relationship between childhood experiences of abuse and neglect and several indicators of socioeconomic well-being in adulthood. Data from the nationally representative National Comorbidity Survey (NCS) ($n = 5004$) were analyzed using logistic regression models to examine whether maltreatment in childhood (any maltreatment, physical abuse, sexual abuse, severe neglect, and multiple types of maltreatment) affected employment status, income, and health care coverage in adulthood. Several potential confounds of this relationship were included as covariates in the models, including race, sex, age, and several indicators of childhood socioeconomic status (SES). The results show that adults who had experienced maltreatment differed significantly from non-maltreated adults across each of the socioeconomic domains examined. Effects were additionally found to differ depending on the number of types of maltreatment experienced. Increased rates of unemployment, poverty, and Medicaid usage indicate the significant long-term personal impact of early victimization. They also suggest a substantial societal cost from this problem through lost economic productivity and tax revenue, and increased social spending. Low socioeconomic status among parents has also been identified as a salient risk factor for the

perpetration of maltreatment, and, as such, these results indicate a potential mechanism in the intergenerational transmission of violence.

Rovi, S., Chen, P., & Johnson, M. S. (2004). [The economic burden of hospitalizations associated with child abuse and neglect](#). *American Journal of Public Health, 94*(4), 586-590. DOI:10.2105/ajph.94.4.586

This study assessed the economic burden of child abuse-related hospitalizations. We compared inpatient stays coded with a diagnosis of child abuse or neglect with stays of other hospitalized children using the 1999 National Inpatient Sample of the Healthcare Costs and Utilization Project. Children whose hospital stays were coded with a diagnosis of abuse or neglect were significantly more likely to have died during hospitalization (4.0% vs 0.5%), have longer stays (8.2 vs 4.0 days), twice the number of diagnoses (6.3 vs 2.8), and double the total charges (\$19 266 vs \$9513) than were other hospitalized children. Furthermore, the primary payer was typically Medicaid (66.5% vs 37.0%). Earlier identification of children at risk for child abuse and neglect might reduce the individual, medical, and societal costs.

Willis, B. M., & Levy, B. S. (2002). Child prostitution: Global health burden, research needs, and interventions. *The Lancet, 359*(9315), 1417-1422. DOI:10.1016/S01406736(02)08355-1

Child prostitution is a significant global problem that has yet to receive appropriate medical and public health attention. Worldwide, an estimated 1 million children are forced into prostitution every year and the total number of prostituted children could be as high as 10 million. Inadequate data exist on the health problems faced by prostituted children, who are at high risk of infectious disease, pregnancy, mental illness, substance abuse, and violence. Child prostitution, like other forms of child sexual abuse, is not only a cause of death and high morbidity in millions of children, but also a gross violation of their rights and dignity. In this article we estimate morbidity and mortality among prostituted children, and propose research strategies and interventions to mitigate such health consequences. Our estimates underscore the need for health professionals to collaborate with individuals and organisations that provide direct services to prostituted children. Health professionals can help efforts to prevent child prostitution through identifying contributing factors, recording the magnitude and health effects of the problem, and assisting children who have

escaped prostitution. They can also help governments, UN agencies, and non-governmental organisations (NGOs) to implement policies, laws, and programmes to prevent child prostitution and mitigate its effects on children's health.

Hyman, B. (2000). The economic consequences of child sexual abuse for adult lesbian women. *Journal of Marriage & Family*, 62(1), 199-211.
DOI:10.1111/j.17413737.2000.00199.x

This study is designed to extend the investigation of the long-term consequences of child sexual abuse (CSA) into the workplace and to consider the effects on the economic welfare of 1,925 lesbian women from the National Lesbian Health Care Survey. It seeks to develop a two-stage, least-squares model that considers simultaneously the effects of child sexual abuse on four spheres of a woman's life--her physical health, mental health, educational attainment, and economic welfare; and to investigate the differential impacts of diverse forms of child sexual abuse on the adult woman's functioning. The CSA survivors experienced adverse health and mental health consequences. The type of CSA experienced was also a significant predictor of a woman's educational attainment and annual earnings.

Miller, T. R., Cohen, M. A., & Wiersema, B. (1996). [Victim costs and consequences: A new look](#). Washington, DC: U.S. Department of Justice.

This Research Report documents the results of a 2-year multidisciplinary research effort to estimate the costs and consequences of personal crime for Americans. Personal crime is estimated to cost \$105 billion annually in medical costs, lost earnings, and public program costs related to victim assistance. These tangible losses do not account for the full impact of crime on victims, however, because they ignore pain, suffering, and lost quality of life. Including pain, suffering, and the reduced quality of life increases the cost of crime to victims to an estimated \$450 billion annually.