

A Whole-Population Study of National Trends in Child Abuse and Neglect by Sex, Race, and Ethnicity in the US

Richard T. Liu, PhD; Rachel Y. Levin, MA; Margarid R. Turnamian, BA

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IMPORTANCE Child abuse and neglect are associated with risk of negative health outcomes, and children in minority racial and ethnic groups and female children are disproportionately affected. It is unclear whether the incidence of child maltreatment has changed over time.

OBJECTIVE To determine whether incidence of child maltreatment and its subtypes changed across sex, race, and ethnicity in the US from 2012 through 2023.

DESIGN, SETTINGS, AND PARTICIPANTS In this serial, population-based, cross-sectional study, all Child Protective Services cases in the US from January 2012 through December 2023 for children from birth to age 17 years were drawn from the National Child Abuse and Neglect Data System. Race and ethnicity were recorded as per the data system. Population estimates of US children for corresponding years were from the US Census Bureau.

MAIN OUTCOMES AND MEASURES Confirmed and referred cases of emotional abuse, physical abuse, sexual abuse, and neglect per 10 000 children by race, ethnicity, and sex.

RESULTS From 2012 through 2023, there were 7 326 987 confirmed cases (per 10 000 children: 87.51 female and 78.46 male; 79.52 American Indian and Alaska Native, 17.72 Asian, Native Hawaiian, Pacific Islander, 121.69 Black, 67.21 White, 91.22 of multiple races, and 75.72 Hispanic) and 32 980 613 referrals (per 10 000 children: 382.72 female and 361.35 male; 293.45 American Indian and Alaska Native, 88.81 Asian, Native Hawaiian, Pacific Islander, 550.54 Black, 294.80 White, 358.08 of multiple races, and 313.43 Hispanic) for child maltreatment. Overall, confirmed cases of all forms of maltreatment declined (average annual percent change [AAPC], −1.53; 95% CI, −2.07 to −1.05), except for sexual abuse, and remained unchanged for referrals (overall maltreatment AAPC, 0.11; 95% CI, −0.33 to 0.58). Decline in most confirmed subtypes of maltreatment was found for Asian, Native Hawaiian, and Other Pacific Islander (overall maltreatment AAPC, −1.77; 95% CI, −3.17 to −0.58), Hispanic (overall maltreatment AAPC, −1.81; 95% CI, −2.67 to −1.13), and White (overall maltreatment AAPC, −0.74; 95% CI, −1.08 to −0.42) children. Disparities persisted across the study period; incidence was lowest for all maltreatment subtypes among Asian, Native Hawaiian, and Other Pacific Islander children and generally highest among Black children. Both sexes experienced mostly decreases in confirmed cases and no changes in referrals for maltreatment overall (confirmed overall female maltreatment AAPC, −1.25; 95% CI, −1.64 to −0.90 and confirmed overall male maltreatment AAPC, −1.81, 95% CI, −2.53 to −1.21), but female children experienced more maltreatment, with disparities largest and widening over time for sexual abuse (z score, 5.52; $P < .001$).

CONCLUSIONS AND RELEVANCE In this study, child maltreatment declined for confirmed cases and remain unchanged for referrals. Disparities persisted, particularly for Black children. This group with the most room for improvement experienced none, whereas that with least room for decline—Asian, Native Hawaiian, and Other Pacific Islander individuals—experienced improvements. Progress is needed in combating drivers of maltreatment, particularly poverty, and in targeting differential barriers to access to public health benefits programs.

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Author Affiliations: Department of Psychiatry, Massachusetts General Hospital, Boston (Liu); Department of Psychiatry, Harvard Medical School, Boston, Massachusetts (Liu); Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, Massachusetts (Liu); Mt Hope Family Center, University of Rochester, Rochester, New York (Levin); Department of Psychology, University of Southern California, Los Angeles (Turnamian).

Corresponding Author: Richard T. Liu, Department of Psychiatry, Massachusetts General Hospital, 55 Fruit St, Boston, MA 02114 (rtliupsy@gmail.com).

Child maltreatment occurs at higher rates in the US than in other North American and European countries.¹ Within the US, racial and ethnic minority populations are disproportionately affected. There is evidence from several studies that Black, Hispanic, and Native American children are at greater risk of maltreatment experiences than their Asian and White peers.^{2,3} These disparities are consequential in several important ways. First, early maltreatment experiences are associated with a variety of negative physical and mental health outcomes later in life,⁴⁻⁶ as well as a treatment-refractory course, particularly for depression.⁷ Second, racial and ethnic minority individuals are significantly less likely to receive treatment for serious physical and mental health conditions,⁸ including suicide.^{9,10} Collectively, these findings suggest that greater exposure to child maltreatment experiences may place certain racial and ethnic minority groups at disproportionately increased risk of serious health conditions for which they are also less likely to receive needed treatment.

Beyond recognizing the existence of disparities in child maltreatment exposure across different racial and ethnic minority populations, a question of particular importance is whether the incidence of maltreatment experiences within these populations has changed over time. Monitoring temporal trends in child maltreatment is necessary for evaluating our progress in addressing this issue in racial and ethnic minority populations.

This study aimed to provide the first analysis of temporal trends at the national level of child maltreatment based on all official Child Protective Services (CPS) records in the US from January 2012 through December 2023. We characterized temporal trends in 12-month incidence of child maltreatment and its subtypes for the whole population and stratified by race and ethnicity. Given differences between female and male children in maltreatment experiences, particularly sexual abuse,⁶ analyses were also stratified by sex. We also evaluated demographic disparities across the study period.

Methods

Data Sources

The National Child Abuse and Neglect Data System (NCANDS) Child Files consist of case-level reports of child maltreatment reported to CPS in the US. All alleged cases of maltreatment reported by legally mandated individuals (eg, schoolteachers and clinicians) and from any other source (eg, relatives and neighbors) are received by CPS, which then screens these cases (ie, referred cases) and investigates those likely to involve maltreatment. Confirmed cases are reports that were substantiated or indicated, where CPS concluded that there was sufficient evidence that maltreatment had occurred. The current study included data on every referred and confirmed child maltreatment case from the first year that NCANDS included data for all 50 US states and Washington, DC, from 2012 to the most recent year data were available (2023).¹¹⁻²² Incidence of child maltreatment and its subtypes were calculated using Child File data and US Census Bureau data on children for corresponding years. Analyses were restricted to children and adoles-

Key Points

Question How has the incidence of child maltreatment among US children changed over time across sex, race, and ethnicity?

Findings This serial cross-sectional study of all Child Protective Services cases in the US from 2012 through 2023 (7 326 987 confirmed cases and 32 980 613 referrals) found that confirmed cases of overall child maltreatment declined and referrals remained unchanged, but disparities persisted, and in some cases widened, across time, particularly among Black children and female children.

Meaning These findings highlight the need to address leading drivers of risk for maltreatment, particularly poverty, including targeting differential barriers in access to public health benefits programs.

cents (hereafter, children) aged 0 to 17 years. Race and ethnicity were recorded as per the data system. This study was deemed not human subjects research by the institutional review board of Massachusetts General Hospital. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline was followed.

Measures

Case report information on child demographic characteristics, maltreatment type (emotional abuse, physical abuse, sexual abuse, and neglect), and investigation outcome (confirmed or not) were included in the current study. For NCANDS Child Files and the Census Bureau population data, sex was coded as binary (female/male), as was ethnicity (Hispanic/non-Hispanic). Race was recorded as Asian, American Indian and Alaska Native, Black, Native Hawaiian and Other Pacific Islander, White, and multiple races. Asian and Native Hawaiian and Other Pacific Islander groups were combined due to low maltreatment rates in the Asian population.

Statistical Analysis

Joinpoint regression was conducted to estimate piecewise log-linear trends in child maltreatment incidence over time, separately for confirmed and referred cases, collapsed within child per year to avoid double-counting children with multiple cases. After we fitted the regression to the natural logarithm of incidence per year as a regressor, significant turning points in temporal trends (joinpoints) were identified through a series of Monte Carlo permutation-based tests and model selection.²³ Annual percent change (APC) for each trend was calculated with 95% confidence intervals. If there was no significant change in trend, a straight line was fitted over the full study period based on a simple log-linear model. These analyses were conducted for the entire population for overall child maltreatment and its subtypes, and then repeated with analyses stratified by race, ethnicity, and sex. Analyses were conducted using Joinpoint Regression Program 5.3.0.0.²⁴ To evaluate racial and sex differences in child maltreatment at the beginning and end of the 12-year study period, risk ratios (RRs) were calculated with White and male, respectively, serving as reference groups. As race and ethnicity overlapped in NCANDS and US census

Table 1. Confirmed Cases of Child Maltreatment per 10 000 Children and Annual Percent Change in the US Population and Stratified by Sex, 2012-2023

Maltreatment type	Rate per 10 000 children		Segment 1			Segment 2			Segment 3		
	2012	2023	AAPC (95% CI)	P value	Years	APC (95% CI)	P value	Years	APC (95% CI)	P value	Years
Overall maltreatment											
Both sexes	84.19	71.78	-1.53 (-2.07 to -1.05)	<.001	2012-2018	1.19 (0.24 to 2.44)	.01	2018-2023	-4.68 (-6.49 to -3.49)	<.001	NA
Female	88.08	76.59	-1.25 (-1.64 to -0.90)	<.001	2012-2018	1.24 (0.47 to 2.12)	.003	2018-2023	-4.15 (-5.39 to -3.17)	<.001	NA
Male	79.90	66.70	-1.81 (-2.53 to -1.21)	<.001	2012-2018	1.15 (0.00 to 2.82) ^a	.05	2018-2023	-5.25 (-7.72 to -3.80)	<.001	NA
Emotional abuse											
Both sexes	7.01	4.89	-3.42 (-4.80 to -1.49)	<.001	2012-2014	-14.36 (-20.96 to -3.62)	<.001	2014-2023	-0.81 (-2.64 to 6.10)	.72	NA
Female	7.28	5.22	-3.10 (-4.51 to -1.02)	.003	2012-2014	-13.67 (-20.44 to -2.26)	.003	2014-2023	-0.58 (-2.81 to 7.93)	.92	NA
Male	6.74	4.57	-3.79 (-5.32 to -1.61)	<.001	2012-2014	-15.12 (-22.18 to -2.97)	.001	2014-2023	-1.08 (-3.48 to 7.95)	.69	NA
Physical abuse											
Both sexes	16.08	12.89	-1.71 (-2.30 to -1.24)	<.001	2012-2018	0.90 (0.13 to 2.04)	.03	2018-2021	-8.27 (-10.04 to -5.72)	.01	2021-2023
Female	15.56	12.66	-1.47 (-2.38 to -0.87)	<.001	2012-2018	0.79 (-1.16 to 2.81)	.12	2018-2021	-7.46 (-9.98 to 1.78)	.08	2021-2023
Male	16.50	13.03	-1.92 (-2.31 to -1.54)	<.001	2012-2018	1.01 (0.40 to 1.72)	.002	2018-2021	-8.97 (-10.22 to -7.58)	<.001	2021-2023
Sexual abuse											
Both sexes	8.26	7.33	-0.18 (-1.22 to 0.85)	.66	2012-2023	-0.18 (-1.22 to 0.85)	.66	NA	NA	NA	NA
Female	13.30	12.36	0.34 (-0.71 to 1.42)	.51	2012-2023	0.34 (-0.71 to 1.42)	.51	NA	NA	NA	NA
Male	3.40	2.49	-2.91 (-3.52 to -2.41)	<.001	2012-2015	-4.45 (-8.22 to -2.05)	<.001	2015-2018	1.50 (-1.01 to 3.45)	.23	2018-2023
Neglect											
Both sexes	64.04	54.82	-1.55 (-2.22 to -0.96)	<.001	2012-2018	1.57 (0.44 to 3.15)	.007	2018-2023	-5.16 (-7.33 to -3.75)	<.001	NA
Female	64.30	55.67	-1.42 (-2.05 to -0.87)	<.001	2012-2018	1.62 (0.55 to 3.12)	.004	2018-2023	-4.95 (-7.00 to -3.59)	<.001	NA
Male	63.35	53.62	-1.67 (-2.28 to -1.12)	<.001	2012-2018	1.53 (0.45 to 3.01)	.007	2018-2023	-5.38 (-7.31 to -3.99)	<.001	NA

^a The lower end of the confidence interval was rounded down but did not reach 0.

Abbreviations: AAPC, average annual percent change; APC, annual percent change; NA, not applicable.

Table 2. Risk Ratios for Child Maltreatment in Racial Minority Groups Compared to White Individuals in the US Population in 2012 and 2023

Race ^a	Overall maltreatment		Emotional abuse		Physical abuse		Sexual abuse		Neglect	
	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value
2012 Confirmed cases										
American Indian or Alaska Native	1.14 (1.11-1.16)	<.001	1.62 (1.52-1.72)	<.001	0.98 (0.93-1.03)	.39	0.60 (0.55-0.66)	<.001	1.22 (1.19-1.25)	<.001
Asian, Native Hawaiian, or Other Pacific Islander	0.29 (0.28-0.29)	<.001	0.36 (0.33-0.38)	<.001	0.32 (0.31-0.34)	<.001	0.23 (0.21-0.25)	<.001	0.28 (0.27-0.29)	<.001
Black	1.84 (1.83-1.85)	<.001	1.52 (1.49-1.56)	<.001	2.31 (2.28-2.34)	<.001	1.36 (1.33-1.39)	<.001	1.80 (1.79-1.81)	<.001
Multiple races	1.24 (1.22-1.25)	<.001	1.74 (1.67-1.80)	<.001	1.54 (1.50-1.58)	<.001	0.74 (0.71-0.78)	<.001	1.26 (1.24-1.28)	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023 Confirmed cases										
American Indian or Alaska Native	1.13 (1.11-1.16)	<.001	2.40 (2.27-2.54)	<.001	0.76 (0.72-0.81)	<.001	0.51 (0.46-0.55)	<.001	1.27 (1.24-1.30)	<.001
Asian, Native Hawaiian, or Other Pacific Islander	0.25 (0.24-0.25)	<.001	0.26 (0.23-0.28)	<.001	0.24 (0.23-0.25)	<.001	0.21 (0.19-0.23)	<.001	0.25 (0.25-0.26)	<.001
Black	1.83 (1.82-1.84)	<.001	1.24 (1.21-1.28)	<.001	2.12 (2.09-2.16)	<.001	1.02 (1.00-1.05)	.08	1.90 (1.88-1.91)	<.001
Multiple races	1.39 (1.38-1.41)	<.001	1.78 (1.72-1.85)	<.001	1.44 (1.41-1.48)	<.001	0.81 (0.78-0.85)	<.001	1.46 (1.45-1.48)	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012 Referred cases										
American Indian or Alaska Native	1.00 (0.99-1.01)	.92	1.23 (1.19-1.27)	<.001	0.81 (0.79-0.82)	<.001	0.61 (0.59-0.64)	<.001	1.07 (1.06-1.08)	<.001
Asian, Native Hawaiian, or Other Pacific Islander	0.30 (0.30-0.30)	<.001	0.42 (0.41-0.43)	<.001	0.37 (0.36-0.38)	<.001	0.21 (0.20-0.22)	<.001	0.26 (0.26-0.27)	<.001
Black	1.85 (1.84-1.85)	<.001	1.55 (1.53-1.56)	<.001	1.98 (1.97-1.99)	<.001	1.41 (1.40-1.43)	<.001	1.84 (1.84-1.85)	<.001
Multiple races	1.13 (1.12-1.14)	<.001	1.47 (1.45-1.50)	<.001	1.27 (1.26-1.28)	<.001	0.86 (0.84-0.88)	<.001	1.15 (1.14-1.16)	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023 Referred cases										
American Indian or Alaska Native	0.90 (0.89-0.91)	<.001	1.48 (1.45-1.52)	<.001	0.62 (0.61-0.63)	<.001	0.57 (0.55-0.59)	<.001	1.02 (1.01-1.04)	<.001
Asian, Native Hawaiian, or Other Pacific Islander	0.31 (0.31-0.31)	<.001	0.44 (0.43-0.45)	<.001	0.36 (0.35-0.36)	<.001	0.24 (0.23-0.25)	<.001	0.28 (0.28-0.29)	<.001
Black	1.84 (1.84-1.85)	<.001	1.24 (1.23-1.25)	<.001	1.87 (1.86-1.88)	<.001	1.21 (1.19-1.22)	<.001	1.92 (1.92-1.93)	<.001
Multiple races	1.21 (1.20-1.22)	<.001	1.19 (1.17-1.21)	<.001	1.23 (1.22-1.24)	<.001	0.89 (0.87-0.90)	<.001	1.28 (1.27-1.29)	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations: NA, not applicable; RR, risk ratio.

^a Race was recorded in the National Child Abuse and Neglect Data System and US Census Bureau as Asian, American Indian and Alaska Native, Black, Native Hawaiian and Other Pacific Islander, White, and multiple races.

Asian and Native Hawaiian and Other Pacific Islander groups were combined due to low maltreatment rates in the Asian population.

Table 3. Confirmed Cases of Child Maltreatment per 10 000 Children and Annual Percent Change in the US Population Stratified by Race and Ethnicity, 2012-2023^a

Maltreatment type	Rate per 10 000 children		Segment 1			Segment 2			Segment 3		
	2012	2023	AAPC (95% CI)	P value	Years	APC (95% CI)	P value	Years	APC (95% CI)	P value	Years
Overall maltreatment											
American Indian or Alaska Native	73.33	68.33	-0.66 (-1.64 to 0.26)	.15	2012-2018	4.34 (2.47 to 6.92)	<.001	2018-2023	-6.35 (-9.41 to -4.20)	<.001	NA
Asian, Native Hawaiian, or Other Pacific Islander	18.53	14.97	-1.77 (-3.17 to -0.58)	.02	2012-2019	0.97 (-0.45 to 4.14)	.17	2019-2023	-6.38 (-13.27 to -3.32)	<.001	NA
Black	118.83	110.36	-0.93 (-2.02 to 0.01)	.05	2012-2019	2.55 (0.28 to 3.76)	.02	2019-2023	-4.96 (-10.34 to -2.49)	<.001	NA
Hispanic	78.55	65.83	-1.81 (-2.67 to -1.13)	<.001	2012-2019	-0.22 (-1.01 to 1.57)	.66	2019-2023	-453 (-9.00 to -2.71)	<.001	NA
Multiple races	80.01	84.07	-0.06 (-0.88 to 0.78)	.86	2012-2018	3.69 (2.21 to 5.98)	<.001	2018-2023	-4.39 (-7.14 to -2.65)	<.001	NA
White	64.61	60.30	-0.74 (-1.08 to -0.42)	<.001	2012-2019	1.91 (1.37 to 2.51)	<.001	2019-2023	-5.19 (-6.40 to -3.85)	<.001	NA
Emotional abuse											
American Indian or Alaska Native	8.42	10.32	1.49 (0.22 to 2.70)	.03	2012-2019	6.80 (4.88 to 9.43)	<.001	2019-2023	-7.17 (-12.56 to -3.64)	<.001	NA
Asian, Native Hawaiian, or Other Pacific Islander	1.85	1.10	-4.98 (-6.07 to -4.27)	<.001	2012-2016	-7.72 (-13.41 to -5.18)	<.001	2016-2019	2.05 (-1.84 to 5.23)	.42	2019-2023
Black	7.92	5.34	-3.33 (-6.34 to -0.01)	.049	2012-2016	-12.41 (-29.22 to -2.68)	.02	2016-2023	2.28 (-3.92 to 24.81)	.28	NA
Hispanic	7.49	4.02	-5.65 (-6.16 to -5.33)	<.001	2012-2016	-7.96 (-10.37 to -6.88)	<.001	2016-2019	-2.59 (-4.42 to -1.20)	<.001	2019-2023
Multiple races	9.03	7.66	-0.61 (-3.45 to 2.49)	.67	2012-2023	-0.61 (-3.45 to 2.49)	.67	NA	NA	NA	NA
White	5.20	4.29	-1.66 (-3.33 to 0.78)	.19	2012-2014	-13.11 (-21.21 to -0.08)	.047	2014-2023	1.09 (-2.93 to 10.75)	.23	NA
Physical abuse											
American Indian or Alaska Native	11.53	8.08	-2.95 (-4.11 to -1.84)	<.001	2012-2023	-2.95 (-4.11 to -1.84)	<.001	NA	NA	NA	NA
Asian, Native Hawaiian, or Other Pacific Islander	3.83	2.53	-3.34 (-5.36 to -1.95)	<.001	2012-2018	-0.43 (-6.03 to 5.22)	.84	2018-2021	-13.19 (-18.47 to 3.22)	.08	2021-2023
Black	27.24	22.46	-1.45 (-2.39 to -0.78)	<.001	2012-2018	1.45 (0.41 to 3.10)	.02	2018-2021	-10.21 (-12.92 to -6.69)	.008	2021-2023
Hispanic	11.80	8.41	-3.60 (-4.44 to -2.82)	<.001	2012-2023	-3.60 (-4.44 to -2.82)	<.001	NA	NA	NA	NA
Multiple races	18.22	15.26	-2.25 (-3.33 to -0.87)	<.001	2012-2014	-5.34 (-11.38 to 3.39)	.29	2014-2017	4.97 (-8.11 to 9.41)	.29	2017-2023
White	11.81	10.58	-0.81 (-1.39 to -0.36)	<.001	2012-2018	2.18 (1.29 to 3.42)	.02	2018-2021	-6.94 (-8.62 to 1.23)	.07	2021-2023

(continued)

Table 3. Confirmed Cases of Child Maltreatment per 10 000 Children and Annual Percent Change in the US Population Stratified by Race and Ethnicity, 2012-2023^a (continued)

Maltreatment type	Rate per 10 000 children		Segment 1			Segment 2			Segment 3		
	2012	2023	AAPC (95% CI)	P value	Years	APC (95% CI)	P value	Years	APC (95% CI)	P value	Years
Sexual abuse											
American Indian or Alaska Native	4.08	3.66	0.85 (-1.16 to 2.98)	.37	2012-2023	0.85 (-1.16 to 2.98)	.37	NA	NA	NA	NA
Asian, Native Hawaiian, or Other Pacific Islander	1.56	1.52	1.93 (-0.63 to 4.86)	.13	2012-2023	1.93 (-0.63 to 4.86)	.13	NA	NA	NA	NA
Black	9.27	7.39	-1.81 (-2.29 to -1.33)	<.001	2012-2014	-2.64 (-5.12 to 0.54)	.11	2014-2019	1.64 (0.35 to 3.93)	.04	2019-2023
Hispanic	7.04	7.49	1.68 (0.58 to 2.86)	.003	2012-2023	1.68 (0.58 to 2.86)	.003	NA	NA	NA	NA
Multiple races	5.04	5.88	1.46 (0.88 to 2.08)	<.001	2012-2018	4.62 (3.46 to 6.31)	<.001	2018-2023	-2.21 (-4.11 to -0.89)	.002	NA
White	6.80	7.24	0.93 (0.23 to 1.83)	.01	2012-2021	1.85 (1.06 to 4.86)	.02	2021-2023	-3.11 (-7.25 to 1.22)	.29	NA
Neglect											
American Indian or Alaska Native	60.54	57.67	-0.69 (-1.69 to 0.29)	.15	2012-2018	4.77 (2.77 to 7.46)	<.001	2018-2023	-6.86 (-9.89 to -4.60)	<.001	NA
Asian, Native Hawaiian, or Other Pacific Islander	13.79	11.53	-1.35 (-2.49 to -0.34)	.02	2012-2019	1.96 (0.49 to 4.51)	.009	2019-2023	-6.88 (-12.40 to -3.92)	<.001	NA
Black	89.43	85.99	-0.58 (-1.82 to 0.46)	.19	2012-2019	1.91 (0.65 to 4.52)	.003	2019-2023	-4.80 (-10.91 to -2.11)	<.001	NA
Hispanic	62.15	52.95	-1.80 (-2.54 to -1.18)	<.001	2012-2019	0.21 (-0.65 to 1.79)	.56	2019-2023	-5.22 (-8.93 to -3.32)	<.001	NA
Multiple races	62.56	66.38	0.15 (-0.51 to 0.88)	.56	2012-2016	5.72 (3.45 to 10.47)	<.001	2016-2019	-0.19 (-4.33 to 4.77)	.87	2019-2023
White	49.63	45.37	-0.91 (-1.28 to -0.58)	<.001	2012-2019	2.08 (1.54 to 2.71)	<.001	2019-2023	-5.93 (-7.11 to -4.38)	<.001	NA

Abbreviations: AAPC, average annual percent change; APC, annual percent change; NA, not applicable.

^a Ethnicity was recorded in the National Child Abuse and Neglect Data System and US Census Bureau as Hispanic and non-Hispanic. Race was recorded as Asian, American Indian and Alaska Native, Black, Native Hawaiian and

Other Pacific Islander, White, and multiple races. Asian and Native Hawaiian and Other Pacific Islander groups were combined due to low maltreatment rates in the Asian population.

Table 4. Evaluations of Changes in Racial^a and Sex Disparities in Child Maltreatment in the US Population Between 2012 and 2023

Group	Overall maltreatment		Emotional abuse		Physical abuse		Sexual abuse		Neglect	
	z Score	P value	z Score	P value	z Score	P value	z Score	P value	z Score	P value
Confirmed cases										
American Indian or Alaska Native	-0.55	.58	9.22	<.001	-6.39	<.001	-2.50	.01	2.31	.02
Asian, Native Hawaiian, or Other Pacific Islander	-10.81	<.001	-5.27	<.001	-9.06	<.001	-1.38	.17	-5.45	<.001
Black	-1.39	.17	-10.99	<.001	-8.02	<.001	-17.14	<.001	10.96	<.001
Multiple races	13.80	<.001	0.85	.39	-3.70	<.001	2.78	.005	15.29	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Referrals										
American Indian or Alaska Native	-13.81	<.001	9.03	<.001	-21.26	<.001	-2.47	.01	-5.40	<.001
Asian, Native Hawaiian, or Other Pacific Islander	∞	<.001	2.77	.006	-1.76	.08	4.13	<.001	5.64	<.001
Black	-2.77	.006	-34.65	<.001	-15.23	<.001	-18.34	<.001	22.22	<.001
Multiple races	11.07	<.001	-17.35	<.001	-5.54	<.001	2.34	.02	17.96	<.001
White	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Confirmed cases										
Female	13.85	<.001	3.70	<.001	5.31	<.001	15.60	<.001	5.52	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Referrals										
Female	19.97	<.001	20.69	<.001	16.70	<.001	15.21	<.001	15.45	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviation: NA, not applicable.

^a Race was recorded in the National Child Abuse and Neglect Data System and US Census Bureau as Asian, American Indian and Alaska Native, Black, Native

Hawaiian and Other Pacific Islander, White, and multiple races. Asian and Native Hawaiian and Other Pacific Islander groups were combined due to low maltreatment rates in the Asian population.

data, respectively, Hispanic children were not included in these analyses. z Scores were calculated to determine whether racial and sex differences changed between the start and end of the study period. For RRs, small, medium, and large effects were considered less than 1.25, 1.25-2.00, and greater than 2.00, respectively.²⁵ Two-tailed P values less than .05 were considered statistically significant.

Results

From 2012 through 2023, there were 7 326 987 confirmed cases (per 10 000 children: 87.51 female and 78.46 male; 79.52 American Indian and Alaska Native, 17.72 Asian, Native Hawaiian, Pacific Islander, 121.69 Black, 67.21 White, 91.22 of multiple races, and 75.72 Hispanic) of 32 980 613 referrals (per 10 000 children: 382.72 female and 361.35 male; 293.45 American Indian and Alaska Native, 88.81 Asian, Native Hawaiian, Pacific Islander, 550.54 Black, 294.80 White, 358.08 of multiple races, and 313.43 Hispanic) of overall maltreatment. For maltreatment subtypes, 487 886 confirmed cases (3 426 709 referrals) were documented for emotional abuse, 1 319 775 confirmed cases (9 583 319 referrals) for physical abuse, 701 573 confirmed cases (3 240 989 referrals) for sexual abuse, and 5 676 764 confirmed cases (24 853 284 referrals) for neglect. The sum of confirmed cases and referrals across individual forms of maltreatment exceeds the number of confirmed cases and referrals for overall maltreatment, respectively, because an overall confirmed case or referral could involve multiple forms of maltreatment.

Overall Trends

Over the 12-year study period (Table 1; eFigure 1 in Supplement 1), confirmed cases of overall maltreatment declined (average APC [AAPC], -1.53; 95% CI, -2.07 to -1.05). This was characterized by an increase from 2012 to 2018, followed by a decrease from 2018 to 2023. Emotional abuse incidence declined across the study period (AAPC, -3.42; 95% CI, -4.80 to -1.49), with a decrease occurring from 2012 to 2014, before plateauing starting in 2014. Physical abuse also declined (AAPC, -1.71; 95% CI, -2.30 to -1.24), with an initial increase (2012-2018), followed by a decline (2018-2021), before leveling off (2021-2023). Sexual abuse incidence was unchanged throughout the study period (AAPC, -0.18; 95% CI, -1.22 to 0.85). Finally, neglect declined (AAPC, -1.55; 95% CI, -2.22 to -0.96), this trend characterized by an increase until 2018, followed by a decline over the rest of the study period. Referred cases for maltreatment and its subtypes remained largely unchanged over the study period (eg, overall maltreatment AAPC, 0.11; 95% CI, -0.33 to 0.58) (eTable 1 and eFigure 2 in Supplement 1).

Trends Stratified by Race and Ethnicity

In a series of analyses comparing the incidence of overall maltreatment by race at the start and end of the study period, a general pattern of disparity emerged (Table 2); most racial minority groups had greater incidence of confirmed cases and referrals than did White children. Among racial minorities, confirmed cases and referrals were highest among Black children, followed by children of multiple races, and then American Indian and Alaska Native children, with Asian, Native Hawaiian, and Other Pacific Islander children experiencing the

Table 5. Risk Ratios for Child Maltreatment in Female Children Compared to Male Children in the US Population in 2012 and 2023

Sex	Overall maltreatment		Emotional abuse		Physical abuse		Sexual abuse		Neglect	
	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value	RR (95% CI)	P value
2012 Confirmed cases										
Female	1.10 (1.10-1.11)	<.001	1.08 (1.06-1.10)	<.001	0.94 (0.93-0.95)	<.001	3.91 (3.83-3.99)	<.001	1.02 (1.01-1.02)	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023 Confirmed cases										
Female	1.15 (1.14-1.15)	<.001	1.14 (1.12-1.17)	<.001	0.97 (0.96-0.98)	<.001	4.97 (4.86-5.08)	<.001	1.04 (1.03-1.04)	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012 Referred cases										
Female	1.05 (1.05-1.05)	<.001	1.09 (1.08-1.10)	<.001	0.95 (0.95-0.96)	<.001	2.22 (2.20-2.24)	<.001	1.01 (1.01-1.02)	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023 Referred cases										
Female	1.10 (1.09-1.10)	<.001	1.24 (1.23-1.25)	<.001	1.01 (1.01-1.02)	<.001	2.44 (2.42-2.46)	<.001	1.05 (1.05-1.05)	<.001
Male	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations: NA, not applicable; RR, risk ratio.

lowest incidence among any racial group (as reflected by non-overlapping confidence intervals). This pattern was largely replicated in analyses of neglect.

Unique patterns emerged by abuse subtype, except for the consistent finding of significantly lower incidence of confirmed cases and referrals among Asian, Native Hawaiian, and Other Pacific Islander children than those of all other racial groups. The incidence of confirmed cases and referrals for emotional abuse were higher among all minority race groups compared to White children at the start and end of the study period. For physical and sexual abuse, among minority children, Black children experienced the highest incidence rates, followed by children of multiple races, then American Indian and Alaska Native children, and finally Asian, Native Hawaiian, and Other Pacific Islander children (as reflected by nonoverlapping confidence intervals). In the case of physical abuse, when compared to White children, Black children and those of multiple races experienced more physical abuse, whereas Asian, Native Hawaiian, and Other Pacific Islander children experienced lower physical abuse and American Indian and Alaska Native children were only exposed to less physical abuse at the end of the study period. For sexual abuse, when compared to White children, Black children only had higher incidence at the start of the study period, whereas all other minority groups experienced lower incidence at the start and end of the study period.

Over the 12-year study period, incidence of confirmed overall maltreatment (Table 3; eFigure 3 in Supplement 1) decreased among Hispanic (AAPC, -1.81; 95% CI, -2.67 to -1.13), Asian, Native Hawaiian, and Pacific Islander (AAPC, -1.77; 95% CI, -3.17 to -0.58), and White children (AAPC, -0.74; 95% CI, -1.08 to -0.42) but remained unchanged in all remaining racial groups. Across most racial and ethnic groups, incidence increased up to 2018 and 2019 and decreased across all groups thereafter. Although referrals for overall maltreatment did not change across the study period (eTable 2 and eFigure 4 in Supplement 1), the same general pattern was observed of an increase in incidence across most racial and ethnic groups up to 2018 and 2019, followed by a decrease.

For emotional abuse, an increase in confirmed cases (Table 3; eFigure 5 in Supplement 1) across the study period was observed among American Indian and Alaska Native children (AAPC, 1.49; 95% CI, 0.22 to 2.70) and a decrease among Asian, Native Hawaiian, and Other Pacific Islander (AAPC, -4.98; 95% CI, -6.07 to -4.27), Black (AAPC, -3.33; 95% CI, -6.34 to -0.01), and Hispanic (AAPC, -5.65; 95% CI, -6.16 to -5.33) children. American Indian and Alaska Native children similarly experienced an increase in referrals (AAPC, 3.17; 95% CI, 1.83 to 4.46) (eTable 2 and eFigure 6 in Supplement 1). Referrals also increased for Hispanic (AAPC, 1.39; 95% CI, 0.70 to 2.01) and White (AAPC, 1.51; 95% CI, 0.34 to 2.71) children.

As for physical abuse, decreased incidence of confirmed cases (Table 3; eFigure 7 in Supplement 1) across the study period was found for all racial and ethnic groups, ranging in AAPCs of -0.81 (95% CI, -1.39 to -0.36) for White children to -3.60 (95% CI, -4.44 to -2.82) for Hispanic children. For referrals (eTable 2 and eFigure 8 in Supplement 1), a decline was only observed across the study period in the case of American Indian and Alaska Native children (AAPC, -1.93; 95% CI, -3.62 to -0.27).

Confirmed cases of sexual abuse (Table 3; eFigure 9 in Supplement 1) increased across the study period for children of multiple races (AAPC, 1.46; 95% CI, 0.88 to 2.08), Hispanic children (AAPC, 1.68; 95% CI, 0.58 to 2.86), and White children to 0.93 (95% CI, 0.23 to 1.83), and decreased for Black children (AAPC, -1.81; 95% CI, -2.29 to -1.33). As for referrals (eTable 2 and eFigure 10 in Supplement 1), increases across the study period were found across all races and ethnicities, except for Black and American Indian and Alaska Native children.

For neglect, confirmed cases (Table 3; eFigure 11 in Supplement 1) across the study period decreased among Asian, Native Hawaiian, and Other Pacific Islander (AAPC, -1.35; 95% CI, -2.49 to -0.34), Hispanic (AAPC, -1.80; 95% CI, -2.54 to -1.18), and White (AAPC, -0.91; 95% CI, -1.28 to -0.58) children. However, across almost all racial and ethnic groups, incidence increased for at least the first 5 years before declining thereafter. Referrals (eTable 2 and eFigure 12 in Supplement 1) increased across the study

period among Black children (AAPC, 0.80; 95% CI, 0.22 to 1.37) and remained unchanged among all other racial and ethnic groups. This was characterized by increases across all groups until 2018, followed by decreases among American Indian and Alaska Native children, children of multiple races, and White children.

In comparisons of racial differences with White children in maltreatment between 2012 and 2023 (Table 4), Black children experienced decreased disparities for overall referrals, as well as confirmed and referred cases of emotional abuse, physical abuse, and sexual abuse, but they increased for confirmed and referred neglect. For American Indian and Alaska Native children, disparities decreased for referred cases of overall maltreatment, confirmed and referred cases of physical abuse and sexual abuse, and referrals for neglect. They increased for confirmed and referred cases of emotional abuse and confirmed neglect. Asian, Native Hawaiian, and Other Pacific Islander children experienced reduced disparities for confirmed cases of all forms of maltreatment, except sexual abuse, but also widening disparities for referred cases of all forms of maltreatment, except physical abuse. Disparities among multiracial children decreased for confirmed and referred cases of physical abuse, as well as emotional abuse referrals, but increased for confirmed and referred cases of all other forms of maltreatment, except for confirmed emotional abuse.

Trends Stratified by Sex

Analyses comparing overall maltreatment and its subtypes by sex at the start and end of the study period revealed consistently higher confirmed cases and referrals among female children than male children for overall maltreatment, emotional abuse, sexual abuse, and neglect (Table 5). For physical abuse, incidence of confirmed cases and referrals were higher for male children in 2012 but became more prevalent for referrals among female children in 2023.

Across the study period, confirmed cases of overall maltreatment and its subtypes declined (Table 1; eFigures 13, 15, 17, 19, and 21 in Supplement 1), ranging from AAPCs of -1.25 (95% CI, -1.64 to -0.90) for overall maltreatment among female children to -3.79 (95% CI, -5.32 to 1.61 vs -1.81 ; 95% CI, -2.53 to -1.21 among male children) for emotional abuse among male children. The one exception was sexual abuse among female children, which saw no change. For referrals (eTable 1 and eFigures 14, 16, 18, 20, and 22 in Supplement 1), apart from a decrease in neglect among male children (AAPC, -0.46 ; 95% CI, -1.07 to -0.02), no changes were observed across the study period for either sex. Sex differences in all forms of maltreatment increased between 2012 and 2023 (Table 4).

Discussion

This serial cross-sectional study presents what are, to our knowledge, the first whole-population estimates of temporal trends in CPS cases of child maltreatment across race, ethnicity, and sex in the US. Although overall maltreatment and its subtypes exhibited no change for referrals, declines occurred for con-

firmed cases of all forms of maltreatment, except for sexual abuse. Changes in incidence in confirmed cases of overall maltreatment, however, were largely characterized by increases across race, ethnicity, and sex through 2018 and 2019, followed by decreases through 2023. This pattern mostly replicated in referrals for overall maltreatment, but with declines ending in some cases in 2021. These findings support prior work suggesting that reported child maltreatment and related emergency department visits declined early in the COVID-19 pandemic.²⁶⁻²⁸ Although some of the initial decline likely resulted from hindrance in reporting maltreatment during the pandemic lockdown, the absence of a corresponding drop in maltreatment-related hospitalizations suggests that physically severe maltreatment necessitating hospitalization did not change during this period.²⁷ Furthermore, the additional years available in the current study indicate that underreporting during the pandemic is unlikely entirely to account for observed declines in overall maltreatment; these decreases began in 2018 in most cases, continued through 2023 for confirmed cases and had not returned to their 2018/2019 peak for referrals by the end of the study period.

Important patterns emerge in analyses disaggregating by key demographic characteristics. First, the overall decline in confirmed maltreatment appears largely driven by reductions in most maltreatment subtypes among Asian, Native Hawaiian, and Other Pacific Islander; Hispanic; and White children. Second, racial disparities persisted across the 12-year study period. For American Indian and Alaska Native children, decreases in confirmed cases and referrals for physical abuse were largely negated by increases in emotional abuse. Asian, Native Hawaiian, and Other Pacific Islander children consistently had the lowest incidence of confirmed and referred cases for any maltreatment subtype, significantly lower than among White children in 2012 and 2023. Contrastingly, Black children were persistently at highest risk of almost all outcomes. This disparity was largest for physical abuse; although differences relative to White children have declined, incidence of confirmed cases and referrals remained approximately double those of White children in 2023. These findings are concerning, as this maltreatment subtype is most associated with hospitalization because of injury risk.²⁹

Both sexes were largely consistent in experiencing temporal declines in confirmed cases and no changes in referrals for all forms of maltreatment. However, female children generally experienced more confirmed and referred cases in 2012, and these disparities persisted in 2023. Moreover, this gap was particularly pronounced for sexual abuse, as reflected by confidence intervals that did not overlap with those for other maltreatment subtypes, a finding consistent with the broader literature.³⁰⁻³² Moreover, this sex difference widened notably over time, as a function of decreases in confirmed cases among male children but no temporal change among female children. These broad temporal patterns generally parallel similar persistence or widening of disparities over time in girls relative to boys for several mental health outcomes (eg, depression³³ and suicide^{34,35}). Physical abuse was a notable exception, with initially higher incidence among male children but with disparities reducing over time.

Although most effect sizes were small, their impact is magnified at the whole-population level^{36,37} and when considering intergenerational transmission of maltreatment.³⁸ Within this context, the large effects for sex differences in sexual abuse and persistently higher maltreatment among Black children draw particular concern. Collectively, the current findings indicate that much remains to be done to reduce racial disparities in child maltreatment, particularly for Black children. Indeed, it is striking that this racial group with greatest room for improvement in overall maltreatment saw none, while that with least room for decline—Asian, Native Hawaiian, and Other Pacific Islander children—experienced improvements in this outcome.

Poverty is strongly implicated in risk for child maltreatment.³⁹⁻⁴¹ Targeting this risk factor may yield benefits across all demographics, but particularly Black children, given their greater exposure to economic disadvantage.⁴²⁻⁴⁴ Lending strength to this position is the finding that these racial disparities in maltreatment largely disappear after accounting for poverty.^{40,44,45} Government financial support and related policies for financially vulnerable families may yield dividends,^{26,46} as several studies have found expansion in Medicaid, Supplemental Nutrition Assistance Program, other benefit programs, and tax credits to be associated with reductions in child maltreatment and related emergency department visits.⁴⁷⁻⁵²

Limitations

This study has limitations. Although NCANDS' CPS data are the most reliable information on child maltreatment in the US,⁵² non-CPS indices of child maltreatment (eg, self-report) may generate different results.⁵³ They also yield higher child maltreatment rates,^{54,55} and thus current findings are likely conservative estimates of child maltreatment incidence. It is also possible that missing data reduced incidence estimates.⁵⁶ State-level differences, including state policies and funding, could also affect CPS rates across years.

Conclusions

This serial cross-sectional study found that the overall incidence of child maltreatment has declined for confirmed cases and remain unchanged for referrals. It also highlights persistent and, in some cases, worsening racial and sex disparities, especially among Black children and female children. Disparities in exposure to poverty may underlie much of the observed racial disparities, and evidence exists that reducing poverty through financial and other assistance programs may yield tangible reductions in risk for child maltreatment. Progress in addressing differential barriers in access to public health benefits programs will be critical for reducing these disparities.

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REFERENCES

- Gilbert R, Fluke J, O'Donnell M, et al. Child maltreatment: variation in trends and policies in six developed countries. *Lancet*. 2012;379(9817):758-772. doi:10.1016/S0140-6736(11)61087-8
- Cheng TC, Lo CC. Racial disparity in risk factors for substantiation of child maltreatment. *Child Youth Serv Rev*. 2013;35:1962-1969. doi:10.1016/j.chilcyouth.2013.09.016
- Putnam-Hornstein E, Needell B, King B, Johnson-Motoyama M. Racial and ethnic disparities: a population-based examination of risk factors for involvement with child protective services. *Child Abuse Negl*. 2013;37(1):33-46. doi:10.1016/j.chiabu.2012.08.005
- Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T. The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLoS Med*. 2012;9(11):e1001349. doi:10.1371/journal.pmed.1001349
- Liu RT, Scopelliti KM, Pittman SK, Zamora AS. Childhood maltreatment and non-suicidal self-injury: a systematic review and meta-analysis. *Lancet Psychiatry*. 2018;5(1):51-64. doi:10.1016/S2215-0366(17)30469-8
- Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. *Lancet*. 2009;373(9657):68-81. doi:10.1016/S0140-6736(08)61706-7
- Nanni V, Uher R, Danese A. Childhood maltreatment predicts unfavorable course of illness and treatment outcome in depression: a meta-analysis. *Am J Psychiatry*. 2012;169(2):141-151. doi:10.1176/appi.ajp.2011.11020335
- Sheehan A, Walsh R, Liu R. Racial and ethnic trends in mental health service utilisation and perceived unmet need in the USA. *J Epidemiol Community Health*. 2024;78(4):228-234. doi:10.1136/jech-2023-220683
- Sheehan AE, Walsh RFL, Liu RT. Racial and ethnic differences in mental health service utilization in suicidal adults: a nationally representative study. *J Psychiatr Res*. 2018;107:114-119. doi:10.1016/j.jpsychires.2018.10.019
- Nestor BA, Cheek SM, Liu RT. Ethnic and racial differences in mental health service utilization for suicidal ideation and behavior in a nationally representative sample of adolescents. *J Affect Disord*. 2016;202:197-202. doi:10.1016/j.jad.2016.05.021
- Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2012. Published 2012. doi:10.34681/DKTJ-KM27
- Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2013. Published 2013. doi:10.34681/B4Z1-HW82
- Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data

System (NCANDS) Child File, FFY 2014. Published 2014. doi:10.34681/CCGC-JJ02

14. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2015. Published 2015. doi:10.34681/SZHC-3V41

15. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2016. Published 2016. doi:10.34681/DAG6-8J36

16. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2017. Published 2017. doi:10.34681/TMRZ-JN03

17. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2018. Published 2018. doi:10.34681/O4hy-mc45

18. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2019. Published 2019. doi:10.34681/7gyO-e516

19. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2020. Published 2020. doi:10.34681/qwax-vb30

20. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2021. Published 2023. doi:10.34681/HORA-QN30

21. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2022. Published 2024. doi:10.34681/O3PP-GZ16

22. Children's Bureau, Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services. National Child Abuse and Neglect Data System (NCANDS) Child File, FFY 2023. Published 2025. doi:10.34681/TJFQ-GW50

23. Kim HJ, Fay MP, Feuer EJ, Midthune DN. Permutation tests for jointpoint regression with applications to cancer rates. *Stat Med*. 2000;19(3):335-351. doi:10.1002/(SICI)1097-0258(20000215)19:3<335::AID-SIM336>3.0.CO;2-Z

24. National Cancer Institute Statistical Methods and Applications Branch. Jointpoint Regression Program, Version 5.3.0. 2024. <https://www-surveillance.cancer.gov/jointpoint/>

25. Rubinstein SM, Terwee CB, Assendelft WJJ, de Boer MR, van Tulder MW. Spinal manipulative therapy for acute low-back pain. *Cochrane Database Syst Rev*. 2012;2012(9):CD008880. doi:10.1002/14651858.CD008880.pub2

26. Sege R, Stephens A. Child physical abuse did not increase during the pandemic. *JAMA Pediatr*. 2022;176(4):338-340. doi:10.1001/jamapediatrics.2021.5476

27. Swedo E, Idaikkadar N, Leemis R, et al. Trends in U.S. emergency department visits related to suspected or confirmed child abuse and neglect among children and adolescents aged <18 years before and during the COVID-19 pandemic—United States, January 2019–September 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(49):1841-1847. doi:10.15585/mmwr.mm6949a1

28. Shusterman GR, Fluke JD, Nunez JJ, Fetting NB, Kebede BK. Child maltreatment reporting during the initial weeks of COVID-19 in the US: findings from NCANDS. *Child Abuse Negl*. 2022;134:105929. doi:10.1016/j.chiabu.2022.105929

29. Wojciak AS, Butcher B, Conrad A, Coohy C, Oral R, Peek-Asa C. Trends, diagnoses, and hospitalization costs of child abuse and neglect in the United States of America. *Int J Environ Res Public Health*. 2021;18(14):7585. doi:10.3390/ijerph18147585

30. Stoltenborgh M, van Ijzendoorn MH, Euser EM, Bakermans-Kranenburg MJ. A global perspective on child sexual abuse: meta-analysis of prevalence around the world. *Child Maltreat*. 2011;16(2):79-101. doi:10.1177/1077559511403920

31. Stoltenborgh M, Bakermans-Kranenburg MJ, Alink LRA, van Ijzendoorn MH. The prevalence of child maltreatment across the globe: review of a series of meta-analyses. *Child Abuse Rev*. 2015;24:37-50. doi:10.1002/car.2353

32. Cagney J, Spencer C, Flor L, et al. Prevalence of sexual violence against children and age at first exposure: a global analysis by location, age, and sex (1990-2023). *Lancet*. 2025;405(10492):1817-1836. doi:10.1016/S0140-6736(25)00311-3

33. Platt JM, Bates L, Jager J, McLaughlin KA, Keyes KM. Is the US gender gap in depression changing over time? a meta-regression. *Am J Epidemiol*. 2021;190(7):1190-1206. doi:10.1093/aje/kwab002

34. Ormiston CK, Lawrence WR, Sulley S, et al. Trends in adolescent suicide by method in the US, 1999-2020. *JAMA Netw Open*. 2024;7(3):e244427. doi:10.1001/jamanetworkopen.2024.4427

35. Plemmons G, Hall M, Doupnik S, et al. Hospitalization for suicide ideation or attempt: 2008-2015. *Pediatrics*. 2018;141(6):e20172426. doi:10.1542/peds.2017-2426

36. Prentice DA, Miller DT. When small effects are impressive. *Psychol Bull*. 1992;112:160-164. doi:10.1037/0033-2909.112.1.160

37. Greenwald AG, Banaji MR, Nosek BA. Statistically small effects of the Implicit Association Test can have societally large effects. *J Pers Soc Psychol*. 2015;108(4):553-561. doi:10.1037/pspa0000016

38. Madigan S, Cyr C, Eirich R, et al. Testing the cycle of maltreatment hypothesis: meta-analytic evidence of the intergenerational transmission of child maltreatment. *Dev Psychopathol*. 2019;31(1):23-51. doi:10.1017/S0954579418001700

39. Pelton LH. The continuing role of material factors in child maltreatment and placement. *Child Abuse Negl*. 2015;41:30-39. doi:10.1016/j.chiabu.2014.08.001

40. Kim H, Drake B. Child maltreatment risk as a function of poverty and race/ethnicity in the USA. *Int J Epidemiol*. 2018;47(3):780-787. doi:10.1093/ije/dyx280

41. Sedlak AJ, Mettenberg J, Basena M, Petta I, McPherson K, Green A, Li S. Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress. US Department of Health and Human Services, Administration for Children and Families. Published 2010. https://acf.gov/sites/default/files/documents/opre/nis4_report_congress_full.pdf

42. Lanier P, Maguire-Jack K, Walsh T, Drake B, Hubel G. Race and ethnic differences in early childhood maltreatment in the United States. *J Dev Behav Pediatr*. 2014;35(7):419-426. doi:10.1097/DBP.000000000000083

43. Kim H, Wildeman C, Jonson-Reid M, Drake B. Lifetime prevalence of investigating child maltreatment among US children. *Am J Public Health*. 2017;107(2):274-280. doi:10.2105/AJPH.2016.303545

44. Maguire-Jack K, Cao Y, Yoon S. Racial disparities in child maltreatment: the role of social service availability. *Child Youth Serv Rev*. 2018;86:49-55. doi:10.1016/j.chiayouth.2018.01.014

45. Drake B, Lee SM, Jonson-Reid M. Race and child maltreatment reporting: are Blacks overrepresented? *Child Youth Serv Rev*. 2009;31(3):309-316. doi:10.1016/j.chiayouth.2008.08.004

46. Jindal M, Barnert E, Chomilo N, et al. Policy solutions to eliminate racial and ethnic child health disparities in the USA. *Lancet Child Adolesc Health*. 2024;8(2):159-174. doi:10.1016/S2352-4642(23)00262-6

47. Brown ECB, Garrison MM, Bao H, Qu P, Jenny C, Rowhani-Rahbar A. Assessment of rates of child maltreatment in states with Medicaid expansion vs states without Medicaid expansion. *JAMA Netw Open*. 2019;2(6):e195529. doi:10.1001/jamanetworkopen.2019.5529

48. Kovski NL, Hill HD, Mooney SJ, Rivara FP, Rowhani-Rahbar A. Short-term effects of tax credits on rates of child maltreatment reports in the United States. *Pediatrics*. 2022;150(1):e2021054939. doi:10.1542/peds.2021-054939

49. Bullinger LR, Boy A. Association of expanded child tax credit payments with child abuse and neglect emergency department visits. *JAMA Netw Open*. 2023;6(2):e2255639. doi:10.1001/jamanetworkopen.2022.55639

50. Austin AE, Shanahan ME, Frank M, et al. Association of state expansion of supplemental nutrition assistance program eligibility with rates of child protective services-investigated reports. *JAMA Pediatr*. 2023;177(3):294-302. doi:10.1001/jamapediatrics.2022.5348

51. Puls HT, Hall M, Anderst JD, Gurley T, Perrin J, Chung PJ. State spending on public benefit programs and child maltreatment. *Pediatrics*. 2021;148(5):e2021050685. doi:10.1542/peds.2021-050685

52. Johnson-Motoyama M, Ginther DK, Oslund P, et al. Association between state supplemental nutrition assistance program policies, Child Protective Services Involvement, and foster care in the US, 2004-2016. *JAMA Netw Open*. 2022;5(7):e2221509. doi:10.1001/jamanetworkopen.2022.21509

53. Widom CS, Czaja SJ, DuMont KA. Intergenerational transmission of child abuse and neglect: real or detection bias? *Science*. 2015;347(6229):1480-1485. doi:10.1126/science.1259917

54. Finkelhor D, Turner HA, Shattuck A, Hamby SL. Violence, crime, and abuse exposure in a national sample of children and youth: an update. *JAMA Pediatr*. 2013;167(7):614-621. doi:10.1001/jamapediatrics.2013.42

55. Sumner SA, Mercy JA, Dahlberg LL, Hillis SD, Kleven J, Houry D. Violence in the United States: Status, challenges, and opportunities. *JAMA*. 2015;314(5):478-488. doi:10.1001/jama.2015.8371

56. Drake B, Jones D, Kim H, et al. Racial/ethnic differences in child protective services reporting, substantiation and placement, with comparison to non-CPS risks and outcomes: 2005-2019. *Child Maltreat*. 2023;28(4):683-699. doi:10.1177/10775595231167320