

**Report to Congress on the National Incidence Study of Child Abuse and  
Neglect, Supplementary Analysis**

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Children's Bureau  
Administration on Children, Youth and Families  
Administration for Children and Families  
U.S. Department of Health and Human Services

## Overview

The Child Abuse Prevention Treatment Act Reauthorization Act of 2010 (P.L. 111-320) requires the Department of Health and Human Services (HHS) to submit a report to Congress on research conducted on the national incidence of child abuse and neglect, including research focused on the incidence of child maltreatment by a wide array of demographic characteristics. This report is being submitted as an interim report to update Congress on a supplementary analysis conducted following completion of the Fourth National Incidence Study of Child Abuse and Neglect (NIS-4).<sup>1</sup>

The report provides an overview of the purpose of the supplementary analysis as well as a summary of key findings. In the supplementary analysis, data from the NIS-4 and the National Child Abuse and Neglect Data System (NCANDS) were used to examine the comparability of information reported by the two studies on children investigated by Child Protective Services (CPS), including data on the number of children investigated, the dispositional outcome of investigation, the types of maltreatment experienced by children, and the children's age, sex, and race/ethnicity.

At the conclusion of the report, we present some implications of the findings for planning currently underway for the design of future national incidence studies. While the principal objectives of such studies would remain the same as prior incidence studies, the planning process is intended to explore methodological issues and design enhancements that would contribute to the overall design efficiency and accuracy of the findings of future studies. Methodological considerations and potential enhancements include, but are not limited to: strategies for maximizing the contribution of existing administrative data (including NCANDS) and other data sources not available in prior rounds of the NIS; obtaining more accurate data on socioeconomic status; obtaining better coverage of settings where the youngest children (0 to 2 years old) receive care; and understanding and interpreting changes in policy and practice that may affect NIS findings across time. A series of targeted technical workgroup discussions is planned to obtain input and consultation on these topics.

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<sup>1</sup> A Report to Congress on findings from the NIS-4 was submitted in 2010. See Sedlak, A.J., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010).

## Background

The Department of Health and Human Services (HHS), Administration for Children and Families (ACF) supports two major efforts that examine the extent of child abuse and neglect in the United States: The National Incidence Study (NIS) and the National Child Abuse and Neglect Data System (NCANDS).

The NIS is a congressionally mandated, periodic effort of HHS. The principal objectives of the NIS are to provide estimates of the national incidence of child abuse and neglect and to measure changes in incidence and severity over time. The NIS measures the incidence and prevalence of child maltreatment overall and for subgroups defined by demographic characteristics, such as age, sex, race, family structure, household relationship, school enrollment and educational attainment, disability, primary caregiver, and household economic status. Four national incidence studies have been conducted to date.<sup>2</sup>

The NCANDS is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect. NCANDS was established in response to the Child Abuse and Prevention Maltreatment Act of 1988. States submit data on allegations of child abuse and neglect that are investigated or assessed by child protective services agencies (CPS).<sup>3</sup> The data are used to examine trends in child abuse and neglect across the country on an annual basis.

This report summarizes findings from a special analysis of NIS and NCANDS data to examine the comparability of data reported by the two studies on children investigated by CPS. The objectives of the comparison analyses were to describe the similarities and differences between the statistics they provide after making appropriate adjustments to equalize the studies' inclusion and classification rules. By examining the extent of agreement and the points of disagreement, this comparison offers insights into the relative strengths of the different approaches to reporting on child maltreatment at the national level, clarifies the limitations of the different types of data,

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<sup>2</sup> In 1974, Public Law (P.L.) 93–247 mandated the first National Incidence Study of Child Abuse and Neglect (NIS–1), which collected data in 1979 and 1980. P.L. 98–457 (1984) mandated the NIS–2, which collected data in 1986. The NIS–3, mandated by the Child Abuse Prevention, Adoption, and Family Services Act of 1988 (P.L. 100–294) and the Child Abuse, Domestic Violence, Adoption and Family Services Act of 1992 (P.L. 102–295), collected data in 1993. The Keeping Children and Families Safe Act of 2003 (P.L. 108–36) mandated the Fourth National Incidence Study of Child Abuse and Neglect (NIS–4), which collected data in 2005 and 2006.

<sup>3</sup> For the remainder of this report, the term “states” will include all states, the District of Columbia, and Puerto Rico.

and provides a perspective on the children in CPS investigations that goes beyond the view that either study can individually provide.

## **Comparison of the NIS and NCANDS**

The NIS is unique with respect to what it tells us about the incidence of child maltreatment because the study collects information beyond the abused and neglected children who come to the attention of CPS. The NIS design assumes that the children who are investigated by CPS agencies represent only a portion of all children who are maltreated. The NIS casts a broader net to provide information about all cases that come to the attention of community professionals (“sentinels”). The NIS estimates are derived both from child abuse and neglect reported to CPS and from child abuse and neglect reported to the study by community sentinels.<sup>4</sup> The NIS uses standard definitions of abuse and neglect, so its estimates of the numbers of maltreated children and incidence rates have a calibrated, standard meaning across data collection sites and sources, and over time. In the NIS classifications, maltreatment encompasses abuse (physical abuse, sexual abuse, and emotional abuse) and neglect (physical neglect, emotional neglect, and educational neglect). Each of these categories comprises more specific forms of abuse and neglect.

The NCANDS collects child-specific data on all children who are the subject of an investigation or assessment by CPS. It also collects some aggregate counts on data that are not child-specific or are not maintained by CPS agencies in their automated information systems. Since inception, a strong collaborative working partnership between ACF’s Children’s Bureau and the states has produced substantial improvements in data quality across the states and increasing levels of comparability. The original design for the NCANDS envisioned two components—a summary data component of aggregate statistics and a detailed case data component of child-specific data. In 1991, all states reported on the summary data component. In 1994, some states began to submit case-level data in addition to the aggregated statistics. By the 2000 reporting year, the national statistics were based upon case-level data as much as possible, and by the 2007 reporting year, all but four states were submitting case-level, or child-specific data (U.S. Department of Health and Human Services, Administration on Children, Youth and Families, 2007).

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<sup>4</sup> See Sedlak, A.J., Gragg, F., Mettenburg, J., Ciarico, J., Winglee, M., Shapiro, G., Hartge, J., Li, S., Greene, A., and McPherson, K. (2010) for a comprehensive description of the NIS-4 design and methods.

Both the NIS and the NCANDS collect child maltreatment data from CPS agencies, including data on the number of children investigated by CPS, the dispositional outcome of the investigation, the type(s) of maltreatment experienced by the children, and the children's age, sex and race/ethnicity. Although the two studies use different methodologies, they independently gather similar data on these same measures. This means that it is possible to compare their findings directly, after making appropriate adjustments to equalize their inclusion rules and categorizations. Examining the cases the CPS sees through the two different methodologies can provide a richer perspective on the characteristics of cases CPS investigates and the maltreatment CPS encounters than a single methodology can reveal.

The first comparison of the NIS the NCANDS was conducted as follow-up to the NIS-3, examining the common data gathered by the two studies for the same 1993 time period (Yuan, Sedlak, and Fluke, 1997). At that time, the NCANDS was at an early stage of development, primarily based on the collection of aggregate data (the Summary Data Component), and it had no data from three states and only partial data from six states. Considering the variations in the data collected from the states, the comparison of the NCANDS and NIS-3 found highly congruent results for the national duplicated estimate of investigated children (then slightly over 2,600,000 children). Also, the NCANDS and the NIS-3 were comparable in the duplicated number of substantiated and indicated victims.

By the time of the NIS-4, the NCANDS had matured in both quality of data and coverage. As in the earlier comparison, the current analysis considered only children included in CPS investigations, since both the NIS and the NCANDS obtain data on this subpopulation of alleged maltreated children. This means that the current comparison was limited to the CPS component of the NIS-4, omitting those children who are only identified as maltreated by the NIS-4 sentinels (i.e., children either not reported to child protective services or reported to child protective services but not investigated by those agencies).

### **Comparison Study Design**

The NIS-4 data were collected in a national sample of 122 counties.<sup>5</sup> The 126 CPS agencies serving these counties provided basic demographic data on all children in CPS investigations

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<sup>5</sup> The NIS-4 sample design improved on that used in the NIS-3 by tripling the number of counties (122 vs. 42).

(regardless of the source of the report to CPS). For a representative sample of these cases, the NIS-4 obtained further details about the child's maltreatment and the outcome of the CPS investigation. NIS-4 data collection focused on maltreatment that took place during two specific 3-month reference periods—either in the fall of 2005 (for two-thirds of the counties) or in the spring of 2006 (for the remaining one-third of counties). CPS agencies submitted data on children in reports received during their reference period that they assigned for investigation. The estimates in this report are for the 12-month period from July 1, 2005 to June 30, 2006. This 12-month period includes the two 3-month NIS-4 study reference periods. The NIS data reflected all children in reports that CPS received and assigned for investigation during these periods. They were annualized to the full 12-month period according to the NIS annualization method.

NCANDS analysts constructed an equivalent file from NCANDS data, containing the reports received within this same 12-month period. Note that whereas the NIS defines reference periods based on the date of the report to CPS, the NCANDS defines annual time periods based on the date of the final CPS disposition. Therefore, in order to construct an equivalent NCANDS file that reflected all children reported to CPS during the targeted 12-month period, it was necessary to integrate data from three NCANDS federal fiscal year (FFY) files: FFY 2005, FFY 2006, and FFY 2007.<sup>6</sup>

Before undertaking the comparison study, analysts defined which children were equivalent across the two studies and therefore could be included in the comparison analysis. They constructed specialized NIS-4 and NCANDS databases comprising the records for these specific equivalent children. Additionally, a new coding structure was created to reconcile the different maltreatment categorizations used by the NIS-4 and the NCANDS (see Appendix A).

Exhibit 1 portrays the conceptual relationships between all the children in the NIS-4 and NCANDS data for the comparable time period who were investigated by CPS, as well as all other children whom NIS defines as “countable” (i.e., children NIS includes in its national estimates of maltreated children).

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<sup>6</sup> The FFY 2005 file provided reports received during the period from July 1, 2005 to September 30, 2005 where CPS a final disposition before October 1, 2005. The FFY 2006 file provided reports received during the period from July 1, 2005 to June 30, 2006, where CPS assigned a final disposition between October 1, 2005 and September 30, 2006. The FFY 2007 file provided reports received between July 1, 2005 and June 30, 2006, for which CPS assigned a final disposition after September 30, 2006.

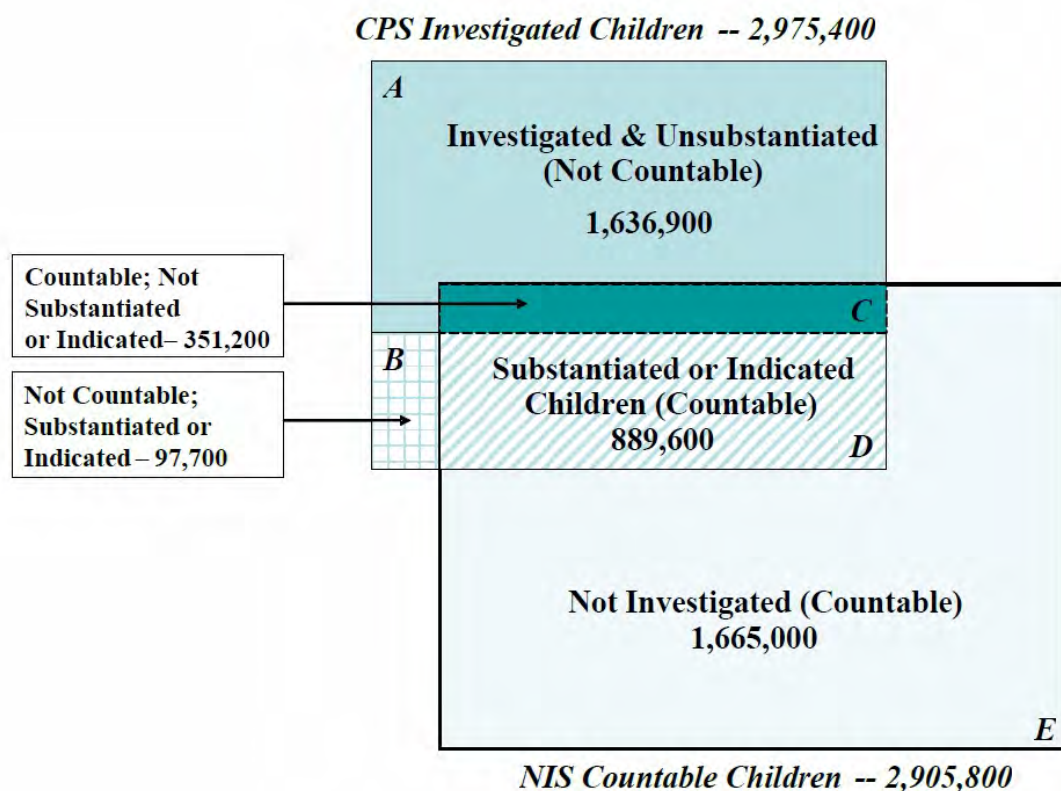


Exhibit 1. Relationship between CPS-Investigated Children by Disposition and NIS-Countable Children<sup>7</sup>

As shown above, both the NIS and NCANDS obtain data about the CPS-investigated children and both studies can provide statistics on these children. The top square, which comprises areas *A*, *B*, *C*, and *D* (all more darkly shaded or patterned, in contrast to area *E*), represents the children investigated by CPS. These children are the subject of the current comparison, since both NIS and NCANDS obtain data on them.<sup>8</sup> The bottom square (areas *C*, *D*, and *E*) overlaps the top

<sup>7</sup> The estimated totals in this exhibit are all derived from the NIS data.

<sup>8</sup> In applying the adjustments to provide comparable statistics from the NIS and the NCANDS, the resulting findings do not reflect the full perspective that either study independently can provide. The findings here omit the countable children who come to the NIS only through sentinels, so they do not reflect all children in the United States who experience maltreatment as defined by the NIS standards. They also do not include children who receive other (noninvestigative) CPS responses and so do not reflect the full scope of children CPS addresses.

square. It represents the children who come into the NIS data from sentinels (area *E*) or from CPS (areas *C* and *D*), and are “countable” by the NIS definitions.<sup>9</sup>

The diagram further subdivides the CPS-investigated children on two dimensions. First, it separates these children by their CPS disposition, substantiated/indicated (areas *B* and *D*), or unsubstantiated (areas *A* and *C*). Second, it subdivides the CPS investigated children into those who were not “countable” under the NIS definitional standards (areas *A* and *B*) and those who were “countable” (areas *C* and *D*). Note that some children whose maltreatment was substantiated or indicated by CPS are not countable by the NIS (area *B*), while some children whose maltreatment was not substantiated by CPS are countable in the NIS (area *C*).

Analyses were conducted to compare the NIS-4 and NCANDS overall estimates for the number of children investigated by CPS. Further comparisons of three subpopulations were conducted: the NCANDS substantiated/indicated children (the total of areas *B* and *D* in Exhibit 1 from the NCANDS data), NIS-4 substantiated/indicated children (area *D* in Exhibit 1 from the NIS-4 data), and the NIS-4 Endangerment Standard countable children (Exhibit 1 areas *C* and *D*). The children in each of these key subpopulations were further classified and compared according to the corresponding NIS-4/NCANDS maltreatment categories. The analysis also compared the estimates by sex, age, and race/ethnicity for all children investigated and for the three subpopulations and further compared the sex, age, and race/ethnicity within each maltreatment category. The congruency or consistency of the NIS-4 and the NCANDS findings was determined on the basis of whether or not the 95-percent confidence interval of the NIS-4 estimate included the corresponding NCANDS total (see Appendix B).

## Summary of Findings

Analyses comparing the NIS-4 and the NCANDS data for CPS-investigated children identified substantial similarities and several differences. Comparisons revealed these key findings:

- The NIS-4 and the NCANDS yielded comparable estimates of the number and incidence rates of children investigated by CPS and comparable distributions of these children by sex, age, and race/ethnicity.

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<sup>9</sup> Some children in sections *C* and *D* entered the NIS data from both sources—sentinels and CPS investigation records.



- The NIS-4 estimates of substantiated/indicated children are significantly higher than the NCANDS estimates.
- Substantiated/indicated children in the NIS-4 included significantly higher percentages of emotionally maltreated and medically neglected children.
- Among substantiated/indicated children, the two studies observed similar distributions of males and females overall, but the NIS-4 found higher percentages of males among children who were emotionally maltreated.
- Overall, the NIS-4 identified lower percentages in the youngest age group (0-2 years) and higher percentages at older ages (12 to 17 years). However, the reverse applied among children who were emotionally maltreated—the percentage in the youngest age group was higher in the NIS.
- Overall, race/ethnicity distributions were comparable across the two studies. However, the percentages of Black children in the NIS-4 were higher among children emotionally maltreated and lower among children medically neglected. The percentage of Hispanic children in the emotional maltreatment category was lower in the NIS-4.
- The NIS-4 estimate of countable children investigated by CPS is significantly higher than either study's estimates of substantiated/indicated children. CPS agencies do not always address all the forms of maltreatment the NIS includes and decisions to unsubstantiate are affected by many factors apart from case evidence about the maltreatment events.

Some of the differences described above can be explained by the methodologies used in each data collection, in the evaluative coding of the data collected in the NIS-4, by policies and practices regarding CPS investigations and the coding and classification of case dispositions and maltreatments in the state child protective services system. The NIS-4 uses a sample of counties, relies on in-depth review of case record narratives, and codes all the available information in the CPS case file. The NCANDS relies upon codified data found in each state's automated information system. The case narratives reviewed for the NIS-4 revealed more incidences of multiple-maltreatment, offering a different view of the prevalence of certain types of maltreatment and their demographic distributions.

### **Implications for Planning Future National Incidence Studies**

Following completion of the supplementary analysis described here, the study team offered the following recommendations regarding data collection approaches that impact both the NIS and

NCANDS. These recommendations will have implications for enhancing the utility and comparability of data collected through both efforts as planning begins for the next iteration of NIS:

- To a large extent, this analysis confirmed the strength of the NIS-4 sample size and estimation techniques.<sup>10</sup> Many of the NIS-4 and the NCANDS statistics are comparable. This is most evident in the national statistics on investigations, as seen in the proportions of children who receive an investigation by sex, age, and race/ethnicity.
- The NIS-4 identified more children as having experienced multiple types of maltreatment than indicated in the NCANDS system. If state coding systems are to be relied on for comprehensive data about children's maltreatment experiences, then CPS agencies could encourage workers to more thoroughly code information on the children they assess and the families they investigate. Specifically, states should review their coding frameworks and identify strategies that could enable their caseworkers to use the classifications more completely.
- Even after coordinating the NIS-4 maltreatment codes with the NCANDS classification system, the NIS-4 found considerably more emotionally maltreated children compared to the NCANDS. This is not surprising in light of the authors' earlier work examining mandatory reporting laws (Sedlak, Mettenburg, Schultz, and Cook, 2003), which found that these state statutes only infrequently mentioned any of the NIS forms of emotional abuse or neglect. If most CPS agencies do not define the NIS forms of emotional maltreatment to be under their purview, then it may be appropriate for NIS to revisit its inclusive definition of emotional maltreatment, which contributes substantially to its national estimates. However, any decision to revise definitions must be considered against the potential trade-off of losing ability to track changes over time in certain estimates.
- The NIS-4 estimates of countable investigated children were generally significantly higher than both studies' estimates of substantiated/indicated children. Considering that the NIS-4 countability codes were based on documentation found in the case records, this finding implies that the substantiated/indicated disposition does not accurately identify the full set of children who can be considered maltreated on the basis of evidence cited in the investigation record. To a considerable extent, this discrepancy reflects the fact that CPS agencies do not always address all the forms of maltreatment the NIS includes (as noted above). However, decisions not to substantiate may also be affected by factors apart from the case evidence (Child Welfare Information Gateway, 2003). Moving forward, it may be useful to consider the extent to which some state codes exclude maltreated children from the NCANDS statistics.
- CPS agencies should examine their responses to older children. Although younger children predominate among children who are screened in and receive an investigation, the conditions

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<sup>10</sup> Design enhancements were introduced in the NIS-4 in order to improve the efficiency of the sample and precision of the estimates relative to the NIS-3 and earlier studies.

and statuses of older children are of concern. The comparisons show that the NIS-4 and NCANDS statistics are more dissimilar for older children in some categories, with the NIS finding higher percentages of children in the oldest age groups in the categories of physical abuse, general neglect, and other maltreatment.

## **Conclusions**

The special analysis described in this report was undertaken to examine the comparability of data obtained through two national efforts that provide key statistics on the extent of child abuse and neglect in the United States. The comparisons explored in this analysis generated results that have implications for the child protective services field, as well as for conducting future incidence studies of child abuse and neglect. Several general conclusions are noted:

- The spread of automated information systems and increased participation in national reporting allows for comparisons between different methodologies, specifically the comparison of the national study that uses samples (NIS) to the national system that uses predominantly a census methodology (NCANDS). Such comparisons shed light on both strengths and weaknesses of various approaches.
- The availability of automated information systems in child protective services has increased the availability of both coded data, and also uncoded text in electronic case files. The uncoded text provides details that can be of substantial use to both practitioners and researchers.
- Despite the differences that emerged in a number of comparisons, the analyses also identified many areas of consistency, including the two studies' estimates of all investigated children. The areas of consistency are noteworthy because they indicate substantial commonalities between the results of evaluative coding by trained reviewers and the targeted data coded in state data systems by CPS workers.

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