

Rereporting and Recurrence

of

Child

July 2005

Maltreatment:

Findings from NCANDS



**U.S. Department of Health and Human Services
Office of the Assistant Secretary for Planning and Evaluation**

***Rereporting and Recurrence of Child Maltreatment:
Findings from NCANDS***

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REREPORTING AND RECURRENCE OF CHILD MALTREATMENT: FINDINGS FROM NCANDS

Executive Summary

Most children who are subjects of a report of maltreatment to the State or local child protective services (CPS) agency are involved just once with CPS during their lives. Other children are referred more than once and their referrals result in repeated investigations or assessments (rereporting). Some of these children are found to have been revictimized (recurrence). This paper focuses on rereporting and recurrence, and on gaining a better understanding of the circumstances surrounding these children with repeated involvement with CPS. Most previous studies of subsequent reports alleging maltreatment of the same child or of revictimization have included only small populations, administrative data from only one State, or relatively short observation periods. This study follows children for up to 5 years, using a multiyear, multistate case-level National Child Abuse and Neglect Data System (NCANDS) data set that spans the time period from 1998 to 2002. Research questions and key findings are as follows:

What proportion of reported children were rereported, and when?

- Approximately one-third of children were rereported within 5 years.
- Most subsequent reports occurred within a few months after the initial report.
- After 3 years, approximately 72 percent of children had no further contact with CPS. Among the remaining 28 percent, almost 17 percent had one more report and 11 percent of children had multiple reports.

What proportion of child victims had a recurrence of maltreatment, and when?

- Among victims, 17 percent became victims again within 5 years.
- Most subsequent victimizations occurred within a few months after the initial report.

What factors were associated with children who were rereported over a period of time?

- Reports by medical and law enforcement personnel were associated with a lower likelihood of rereporting.
- White children were more likely to be rereported compared with African-American children.
- Children who received services were more likely to be rereported than children who did not receive services. However, children who were found to be victims in their initial report, and who received services, were less likely to be rereported compared with nonvictims who received services.

- As the length of time following the report increased, the number of reports per child decreased.
- Younger children had more rereports compared with older children.

What factors were associated with children who had a recurrence of one or more maltreatments over time?

- Victims reported by daycare providers, foster care providers, or nonprofessionals were more likely to experience recurrence compared with victims reported by other professional sources.
- As the age of victims increased, the likelihood of their experiencing recurrence decreased.
- Victims were more likely to experience recurrence if their caregivers abused alcohol.
- Services also predicted recurrence—victims who received services were at higher risk, but victims placed in foster care were less likely to experience recurrence.
- As the length of time following the report increased, the number of recurrences per child decreased.
- Younger children had more recurrences compared with older children.

Findings from this study highlight needed areas of improvement in the system of intervention, such as a focus on the small group of children who experience a brief period of intense involvement with the CPS system. This study also underscores the perplexing issues surrounding the use of rereporting and recurrence as performance measures for CPS. For example the increased chances of rereporting and recurrence that appears to be tied to providing services. Ideally, the analysis will help to facilitate the design and implementation of more effective and targeted services, and help in focusing continued inquiry regarding children who are at risk.

Introduction

Children come to the attention of the State or local child protective services (CPS) agency based on referrals from the public alleging child abuse or neglect. It is the responsibility of the CPS agency to decide what, if any, response should be made to ensure the safety of the children. Referrals are made by professional reporters, such as school or medical personnel, or by persons who make the allegation based on familial or neighborhood contacts with the child. Referrals may be screened out and the caller may be referred to another agency. Screened-in referrals, or reports, may be subject to an investigation by CPS to determine the validity of the report and the safety issues of the child, or an assessment process which may focus more on the needs of the family.

During the investigation, decisions regarding ongoing services are made. Also, the decision is made whether the children in the report have been maltreated or are at risk of maltreatment. Beyond the investigation process, a particular family can take various paths through the service delivery system. Services may terminate with the investigation, or in-home services or substitute care may be provided. At some point, children in substitute care may be reunited with their families and receive family reunification services or parental rights may be terminated and the child freed for adoption.

Regardless of the case flow process, most children who are the subject of a referral are involved just once over the course of their lives with CPS. Other children are referred more than once and their referrals result in repeated investigations or assessments (rereporting). Some of these children are found to have been revictimized (recurrence). These two phenomena, rereporting and recurrence, are the subjects of this paper.

Most previous studies of subsequent reports alleging maltreatment of the same child or of revictimization have included only small populations, administrative data from only one State, or relatively short observation periods. Furthermore, the literature has not always been clear as to which category of repeated activity has occurred. Was the child rereported? Was the child rereported and found to be a victim? Was the child rereported and not found to be a victim? This paper uses the following terminology:

- *Referral*: the process that results in the agency's decision to either provide an investigation or assessment or to screen out the referral;
- *Report*: a referral that has been accepted for investigation or assessment;
- *Initial Report*: the first investigation or assessment within an observation period that occurs for a specific child who has not been the subject of a prior investigation or assessment;
- *Rereport*: the second, third, fourth, or subsequent report that alleges a child has been maltreated and that receives an investigation or assessment by the CPS agency (also called *reinvestigation*);
- *Victim*: a child who has been determined by the CPS agency to have been maltreated;

- *Recurrence*: the second, third, fourth, or subsequent time that a child has been found to be a victim of maltreatment (also called *revictimization* or *repeated maltreatment*); and
- *Nonvictim*: a child who has not been found to have been maltreated.

In addition to these terms describing these events, the length of time that children are followed can influence the number of events that can be observed. Therefore, this study follows children for up to 5 years.

Relevant Research

The research relevant to this topic encompasses studies on the following topics:

- Factors associated with repeated involvement (rereporting or recurrence) with CPS;
- Factors associated with just recurrence;
- The impact of service provision; and
- Patterns of maltreatment events.

Factors Associated with Repeated Involvement with CPS

Studies found the following factors to be associated with a higher likelihood of multiple occurrences of involvement with CPS:

- A prior history of involvement with CPS (Hamilton & Browne, 1999; Littell, 1997; U.S. Department of Health and Human Services, 2004);
- Younger children (Ferleger, Glenwick, Gains, & Green, 1988; Fluke, Yuan, & Edwards, 1999; Fryer & Miyoshi, 1994; Hamilton & Browne, 1999; Marshall & English, 1999; Drake, Jonson-Reid, Way, & Chung, 2003);
- The presence of disability (Marshall & English, 1999; Hamilton & Browne, 1999; Palusci, 2002);
- The presence of neglect or multiple types of maltreatment (Herrenkohl, Herrenkohl, Newman & Egolf, 1978; Baird, 1988; DePanfilis & Zuravin, 1999a; Fluke et al., 1999; Marshall & English, 1999; U.S. Department of Health and Human Services, 2004; Drake et al., 2003), particularly lack of supervision (Jonson-Reid, Drake, Chung & Way, 2003); and
- Larger family size (Baird, 1988; Johnson & L'Esperance, 1984).

While the evidence is somewhat weaker, repeated involvement with CPS also has appeared greater for the following situations:

- Family situations in which a parent was the perpetrator, rather than situations in which the perpetrator was another relative, friend of the family, or unrelated acquaintance (Drake et al., 2003);
- A stepparent perpetrator was present (Hamilton & Browne, 1999);
- The caregiver abused alcohol or drugs or was a subject of domestic violence (Baird, 1988; DePanfilis & Zuravin, 1999b; Palusci, 2002; English, Wingard, Marshall, Orme & Orme, 2000; Terling, 1999);

- The family had few social supports (DePanfilis & Zuravin, 1999b) or is of low economic status (Drake et al., 2003; English & Marshall, 1998; Levy, Markovic, Chaudhry, Ahart, & Torres, 1995; Way, Chung, Jonson-Reid & Drake, 2001; Jonson-Reid, 2003); or
- The child lived in previous, multiple, foster care settings (Jonson-Reid, 2003).

In one study, children whose parents abused alcohol or other drugs were found more likely to be rereported if the caretaker was judged to be at high risk for criminal involvement, there was no police involvement during the investigation, and if the family was headed by an African-American single mother. The authors posited that the higher reporting rates of pregnant African-American women with lower incomes and problems with alcohol or other drugs may have influenced this finding (Fuller & Wells, 2003).

Factors Associated with Recurrence

State administrative data on child abuse have consistently indicated that African-American children were less likely to experience recurrence compared with White children (U.S. Department of Health and Human Services, 2004). Other studies have suggested there may be regional variations in recurrence rates experienced by children of color (Fuller, Wells & Cotton, 2001). These rates were perhaps influenced by factors associated with poverty (Way et al., 2001) or living in a rural area (Baird, 1988; English, Marshall, Brummel & Orme, 1999; Marshall & English, 1999).

There is evidence that the factors that best predict recurrence may change over the life of a case (Fuller et al., 2001; Jonson-Reid et al., 2003). For example, longitudinal analysis has suggested that the response of the CPS system may change with the age of the child or with the number of times that a child was referred to the agency (Jonson-Reid et al., 2003). Female victims of sexual abuse have been found to be more likely to be rereported for the same type of maltreatment; older children are more likely to have been rereported for physical abuse (Johnson-Reid et al., 2003).

The Impact of Service Provision

Some studies have found that the provision of services was associated with an increased likelihood of rereporting. Children who received services may have been more likely to be rereported because they were more in contact with professional reporters, were the subjects of a heightened awareness of the public, or because the services were not effective in ameliorating their living conditions (Johnson, 2000; Fluke et al., 1999; DePanfilis, 1995; Johnson & Clancy, 1989; Sundell & Vinnerljung, 2004).

Other studies have found that service provision following a substantiated report reduced the likelihood of rereporting, particularly for cases involving neglect (Drake et al., 2003). Another study found that children who remained in foster care for fewer than 3 months were more likely to be rereported, found to be a repeated victim of maltreatment, and returned to foster care than were children who stayed in foster care for longer periods of time (Jonson-Reid, 2003). The provision of in-home services following foster care did not appear to reduce the likelihood of revictimization (Jonson-Reid, 2003). Other specific services or methods of service provision, such as attention to the fidelity of the service plan, family compliance with the service plan, or service quantity, appeared to reduce the

likelihood of recurrence (see DePanfilis & Zuravin, 2002; Johnson, 2000; Inkelas & Halfon, 1997; Lutzker & Rice, 1987).

Patterns of Maltreatment Events

Some studies have shown that patterns of rereports and revictimization intensify with time for some groups of children, and in turn these patterns impact the nature and intensity of the intervention (English, 2003). Further, a study of alternative response program outcomes suggested that within a 6-month period, families who were diverted to an alternative response program but did not receive services were rereported sooner than other families who had not received services. However, overall, rates of rereporting were similar between those families who received traditional CPS response, those who were rereported but received no services or only an assessment from the alternative response program, and families who received services following an alternative response assessment (English et al., 2000).

Study Questions

The first two research questions determined baseline statistics for this study.

1. What proportion of reported children were rereported, and when?
2. What proportion of child victims had a recurrence of maltreatment, and when?

The second two research questions addressed the factors associated with rereporting and recurrence.

3. What factors were associated with children who were rereported over a period of time?
4. What factors were associated with children who had a recurrence of one or more maltreatments over time?

The following categories of factors were examined for their impact on the likelihood of a child experiencing any single rereport or recurrence:

- Child demographics;
- Circumstances of maltreatment;
- Family and child risk factors; and
- Outcomes of intervention.

Two factors were examined for their association with repeated CPS interventions:

- Length of time between events; and
- Child age at initial report.

Methodology

This section describes the process used for data construction of a multiyear, multistate NCANDS data set that spans the time period from 1998 to 2002. It also describes the analytic procedures used to develop the study findings.

NCANDS case-level data consist of CPS investigation events at the child level. Only reports that receive an investigation or assessment response from a CPS agency are included. Each record in the data file is referred to as a report-child pair, which indicates that there is a record for each child in each report who receives an investigation or assessment. Each report has a unique ID and more than one child can share the same report ID. Each child has a unique ID, thus the report-child pair is uniquely identified by the combination of its report and child IDs.

The number of States that voluntarily submit these data to the NCANDS increased from 11 States during 1993 to 42 States during 2002. For each investigation, CPS makes a disposition decision which involves determining whether or not a child or children have experienced or are at risk of maltreatment. A child is considered to be a victim of maltreatment if he or she has at least one maltreatment type that is coded as substantiated, indicated, or alternative response.

Compiling the data set for this study consisted of two stages—evaluating the quality of State submissions to determine which States' data met the analytic requirements, and constructing a database with all the variables needed for analyses.¹ More detailed information concerning these selection criteria is located in appendix A.

State Selection

Nine States were included in this study based on an examination of the following characteristics of their data submissions to NCANDS.

- Years of Submissions—States were considered for inclusion if they had submitted case-level data to the NCANDS for calendar years 1998–2002. Twenty States met this requirement.
- Unique Child Identifiers—Child identifier data were examined to ensure that the data were of adequate integrity to support the analytic goals of the project. Twelve of the 20 States met this criterion for inclusion in the analysis.
- Prior Victimization—Nine of the 12 States met the criterion of having at least 2 percent of records indicating that data on prior victimization were included.

The characteristics of the population in the resulting nine States were comparable to the national population on a range of demographic characteristics including age, race distribution, and poverty level. (See table 1.) However, the findings in this study should not be construed as representative of all reporting States or the entire nation.

¹ More detailed information concerning the methodology is located in appendix A.

Table 1. Demographic and Reporting Characteristics of the Population in Nine States in the Longitudinal Data Set Compared with National Data 2002²

Demographic Indicators		All States	Nine States
Total Population		285,230,516	40,746,575
Percentage of U.S. Population		100%	14%
Population younger than 18 years: Total		26%	27%
Families	Percent of total population living in family settings	80%	82%
	Married-couple family, with own children younger than 18 years (percent of families)	9%	9%
	Families with female householder, no husband present, with own children younger than 18 years (percent of families)	3%	3%
Average Child Poverty Rate		16.7%	17.0%
Race	White (not Hispanic), percent of total population	68%	65%
	Black or African-American (not Hispanic), percent of total population	12%	12%
	American Indian and Alaska Native (not Hispanic), percent of total population	1%	1%
	Asian or Pacific Islander (not Hispanic), percent of total population	4%	2%
	Other or Multiple Race (not Hispanic), percent of total population	2%	1%
	Hispanic or Latino, percent of total population	14%	19%
Sex	Male, percent of total population	49%	49%
	Female, percent of total population	51%	51%
Child Abuse and Neglect ³	Rate of children investigated per 1,000 children in population	43.8	45.3
	Rate of victims of child maltreatment per 1,000 children in population	12.3	10.7

Data Construction

The process for creating the data construction consisted of the following steps.

- Combine data for all years—A single file including the data submitted for calendar years 1998–2002 was created for each State.
- Create derived independent variables—Certain variables were derived from standard fields used by the States when submitting data to NCANDS. The derived variables included:
 - Source of report;
 - Maltreatment type;
 - Race/ethnicity;
 - Child age category;
 - Victim status (yes/no);
 - Prior victimization (before the initial report in the data set);
 - Postinvestigation service provision (yes/no);
 - Removal from home (yes/no);
 - Child disability (yes/no);

² U.S. Census Bureau; generated using American FactFinder; <<http://factfinder.census.gov>>; (May 9, 2005).

³ U.S. Department of Health and Human Services, 2004.

- Caregiver alcohol abuse (yes/no); and
- Caregiver substance abuse (yes/no).
- Derive rereport and recurrence dependent variables—Data from multiple reports involving the same child were combined to develop variables indicating one or more subsequent reports or subsequent victimizations.
- Children whose records indicated that they had been victims of maltreatment prior to the study period were excluded.

Following this process, data from all States were combined into a single file with all data at the level of the unique child. Finally, data extracts were developed to support specific analyses. Further examinations of the data were conducted to address potential compatibility issues for specific analyses, and States may have been excluded accordingly.

Analytic Techniques

The study variables were designed to use event history analytical techniques—including survival analysis and trajectory analysis. Such techniques are used when the objective of the study is to examine the time between events for the subjects, or the numbers of subsequent events. In this case the subjects were children who were reported. Once a child was reported, he or she was considered “at risk” for a subsequent report and the probability of the event occurring was considered the hazard probability. Event history analysis and survival analysis adjust for the bias associated with estimating hazards with differing lengths of observation periods.

A survival analysis technique, referred to as life tables, was used to analyze the length of time to rereports and recurrence events. Cox regression (proportional hazards analysis), a form of multivariate survival analysis, was used to study the factors that were associated with single rereports and recurrences. A type of event history analysis that focuses on counts of multiple repeated events, referred to as trajectory analysis, was used to address patterns of multiple rereports and recurrences.

Findings

This section is organized to address the topics posed by the research questions as stated in the introduction. The three topics include baselines for single and multiple subsequent rereport and recurrence events, factors associated with increased rereporting, and factors associated with increased recurrence.

Rereporting and Recurrence Baselines

This section presents findings regarding single subsequent rereports and recurrences, as well as for multiple rereports and recurrences.

- A single subsequent rereport implies an examination of the first rereport event, regardless of the number of later rereports. A single recurrence implies an examination of the first revictimization, regardless of the number of later victimizations.

- Multiple rereports implies that a child experienced at least more than one rereport. Multiple recurrence implies that a child experienced at least more than one recurrence.

Single Rereports and Recurrences

For this analysis we obtained estimates of the proportions of children who had a subsequent investigation or assessment within 60 months of the first investigation or assessment. Table 2 shows the distribution of rereports and recurrences for children who were rereported in 6-month time intervals over 5 years.

Most subsequent reports or victimizations occurred within a few months after the initial report.

Table 2. Cumulative Percentage of Children with Subsequent Reports or Revictimizations

Elapsed Months	Cumulative Percent of Children Rereported (n=1,396,998 reported children)	Cumulative Percent of Children Revictimized (n=336,022 victims)
0-5	10.3%	5.2%
6-11	16.4%	8.2%
12-17	20.6%	10.2%
18-23	23.6%	11.9%
24-29	26.0%	13.2%
30-35	27.8%	14.2%
36-41	29.4%	15.1%
42-47	30.7%	15.8%
48-53	31.7%	16.4%
54-59	32.3%	16.7%

Of the 1,396,998 children reported, 32 percent were rereported within 60 months. Of the 336,022 victims, 17 percent became victims again within 60 months. From Table 2 it is apparent that subsequent events, whether rereporting or recurrence, were much more likely to occur soon after the initial report. For example, 16 percent of children were rereported during the first 12 months, but it took until the end of the study period’s 5 years for the rereport rate to double to 32 percent. Similarly, 8 percent of children recurred within the first 12 months, but an additional 3 years was needed before this percentage doubled to 17 percent.

Multiple Rereports and Recurrences

Baseline analysis was also conducted on multiple subsequent events. The analytical tools require that children were followed for equal periods of time. Thus, the analysis used a cohort of children with initial reports from 1998 through 1999. Of the 803,320 children in this cohort, approximately 72 percent had no further contact with CPS after 3 years.

After 3 years, 28 percent of children were rereported at least once, and 11 percent were rereported two or more times.

Among the remaining 28 percent, almost 17 percent had one more report and 11 percent had multiple reports. The maximum number of rereport events was 22. The average number of rereports for all children in this data set was 1.7. The maximum number of recurrences was 8. The average number of recurrences across all children was 1.3.

Baseline Patterns of Multiple Rereporting and Recurrence

The objective of this aspect of the baseline analysis was to describe patterns of rereporting and recurrence through the CPS service delivery system. This analysis has methodological constraints due to the complex nature of the patterns of interest. Consequently, the analysis presented here is descriptive and more exploratory in nature.

For this analysis, the data were arrayed as patterns of victimization and nonvictimization events. For example, a child with three report events could have two nonvictim reports and then a victimization, or two victimizations and one nonvictim report, and so forth. A total of 819 unique patterns of victim and nonvictim report events were observed in the data set. Figure 1 illustrates the patterns of reporting for the initial report and up to three subsequent reports (as illustrated by tiers 1, 2, and 3). The diagram is read chronologically from top to bottom, and each circle represents a subsequent event and the determination of whether or not the child was victimized.

As expected, a child's likelihood of further contact with CPS declined with each tier. However, for children not returning the proportion was generally greater for children with only one report. Thus, approximately 70 percent of nonvictim and victim children did not come back after a first report,

No matter how many times they were rereported, children were more likely to become victims if they were previously victims.

whereas around 60 percent of children did not come back after a second or third report. Children who were victims in their initial event were more likely to be identified as victims in subsequent events than were children initially identified as nonvictims. Interestingly, children who were initially victimized and then subsequently not identified as a victim were less likely to be identified as victims in a third event, compared with children who were victimized twice. These findings point to complex patterns associated with the chances of being identified as a nonvictim or victim across multiple rereports.

Risk Factors Associated with Rereporting

Similar to the previous section regarding baseline analysis, this section begins with a presentation of findings for single rereporting and then turns to multiple rereport events.

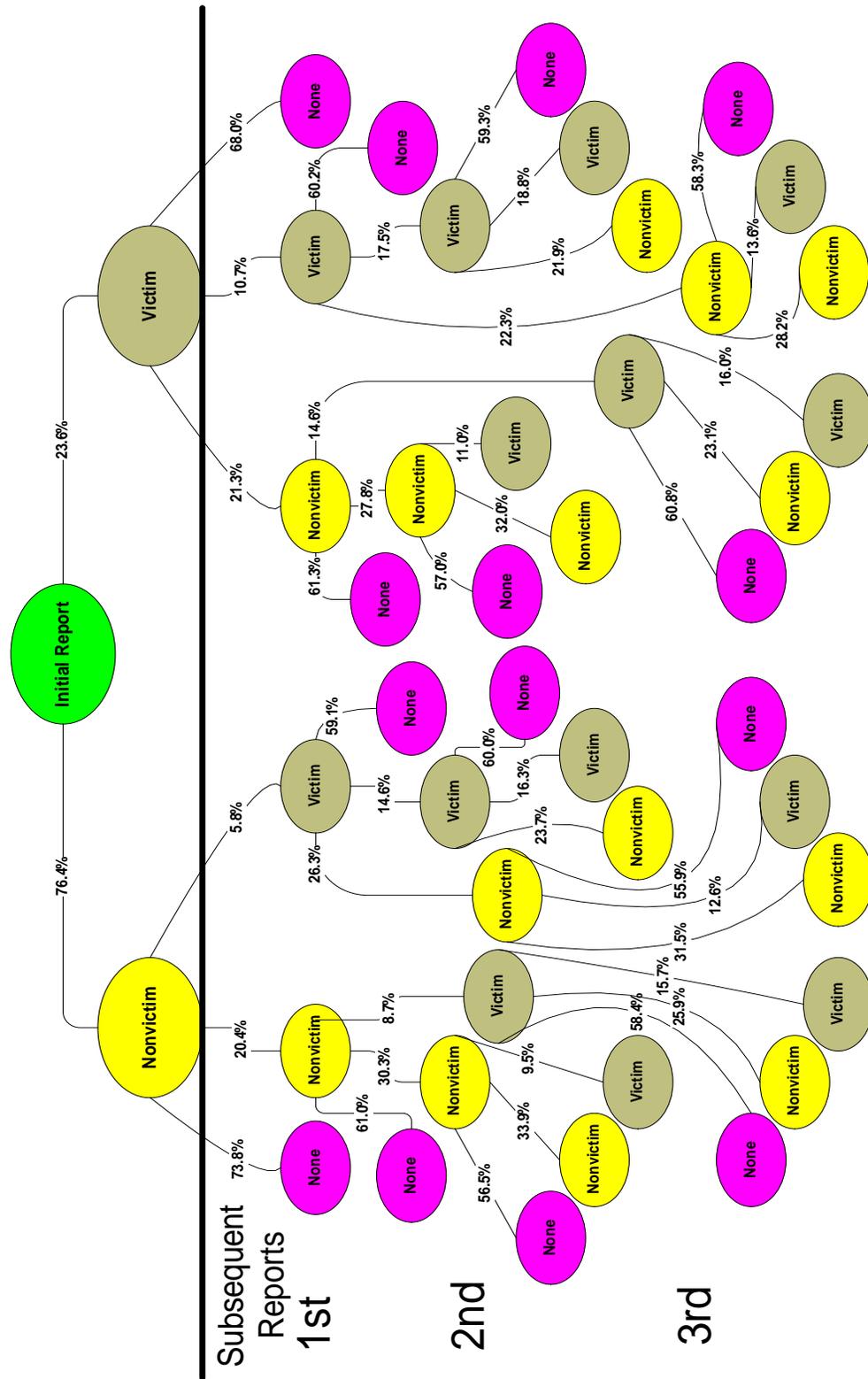
Single Rereports

For these analyses, a data set of 495,900 unique children from 8 States who were reported during 2001 or 2002 was created.⁴ Cox regression analyses were conducted to determine which factors may have influenced the likelihood that each child would be rereported within a 2-year period. Table 3 presents the results of the data model for rereporting.⁵

⁴ One additional State was dropped from the analysis due to the absence of risk factor data.

⁵ Risk ratios tied to *p* values less than 0.0001 indicate that with respect to the reference category for each variable in the model, the children associated with the other categories are at higher risk (risk ratio greater than one), lower risk (risk ratio less than one), or the same risk of a subsequent event.

**Figure 1. Subsequent Events within 3 Years: Children Reported 1998–1999
(N=803,320—9 States)**



**Table 3. Factors Associated with Rereporting
(N=495,900)**

Variables	Factor Categories	Category Type	Risk Ratio with Rereporting	P
Source of Initial Report	Social and Mental Health Services	Reference	1.0000	0.0000
	Medical Personnel		0.8699	0.0000
	Law Enforcement or Legal Personnel		0.8748	0.0000
	Education Personnel		1.0346	0.0367
	Daycare and Foster Care Providers		1.0049	0.8787
	Nonprofessional and Other		1.1433	0.0000
	Unknown		1.0611	0.0296
Child Age at Initial Report	Infants	Reference	1.0000	0.0000
	1-Year Olds		1.0106	0.4976
	2-4		0.9186	0.0000
	5-7		0.8273	0.0000
	8-10		0.7419	0.0000
	11-13		0.7160	0.0000
	14-18		0.5257	0.0000
	Over 18		0.1480	0.0000
Unknown		0.2544	0.0000	
Child Sex	Female	Reference	1.0000	0.0000
	Male		0.7626	
Child Race and Ethnicity	White only	Reference	1.0000	0.0000
	American Indian and Alaskan Native only		1.0465	0.0352
	Asian and Pacific Islander only		0.5979	0.0000
	African-American only		0.8361	0.0000
	Hispanic		0.8677	0.0000
	Other and multiple race, non-Hispanic		1.2838	0.0000
	Unable to determine and missing		0.5609	0.0000
Child With Indication of Disability	No	Reference	1.0000	0.0000
	Yes		1.4667	
Caretaker Abuse of Alcohol	No	Reference	1.0000	0.0001
	Yes		1.1086	
Child's Initial Investigation Victimization Status	Nonvictim	Reference	1.0000	0.0000
	Victim		1.1102	
Postinvestigation Services Provided	No	Reference	1.0000	0.0000
	Yes		1.3504	
Child Placement in Foster Care	No	Reference	1.0000	0.0000
	Yes		2.1813	
Interaction of Victimization and Postinvestigation Services	No	Reference	1.0000	0.0006
	Yes (child victim and services provided)		0.9342	
Interaction of Victimization and Placement in Foster Care	No	Reference	1.0000	0.0000
	Yes (child victim and placed)		0.3547	

Source of Initial Report. Children who were rereported were less likely to have been initially reported by medical or law enforcement personnel than by report sources such as social services or mental health services providers. In contrast, reports by nonprofessional and other sources were tied to an increased likelihood of rereporting compared with social and mental health services providers.

Initial reports by medical and law enforcement personnel were associated with a lower likelihood of rereporting.

Child Demographics. In general, as the age of children at initial report increased, the likelihood of rereporting decreased. No distinction was observed between infants and children who were 1 year old. Girls were more likely to be rereported than boys. White children were more likely to be rereported compared with African-American, Asian or Pacific Islanders, and Hispanic children. However, children of other or multiple races were 1.3 times more likely than White children to be rereported. White children were just as likely as Native Americans and Alaska Natives to be rereported.

White children had a greater likelihood of experiencing a rereport compared with African-American children.

Family and Child Risk Factors. Children with disabilities were approximately 1.5 times more likely to be rereported than children without disabilities. Children with caretakers who abused alcohol were also more likely to be rereported. The presence of drug abuse among the child's caretakers did not statistically increase or decrease the likelihood of rereporting; therefore, this variable was excluded from the model.

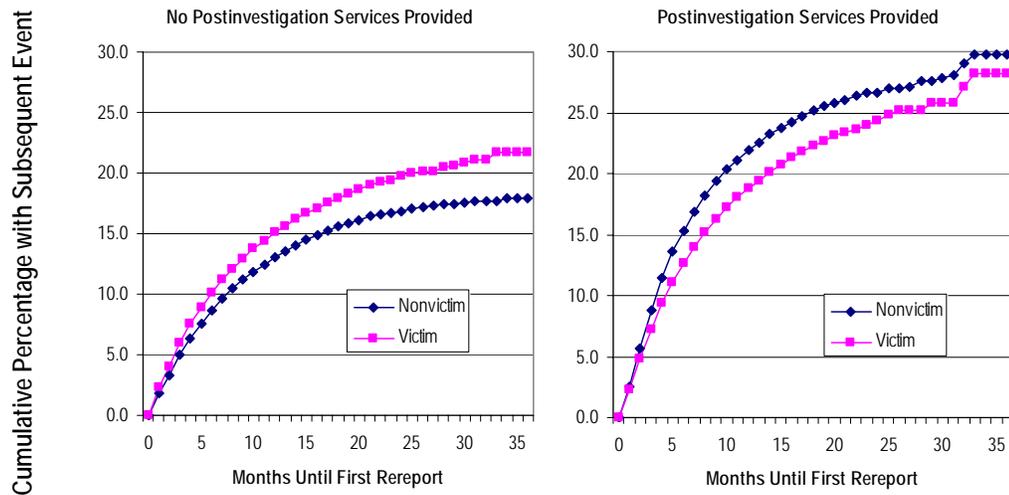
Outcomes of Initial Intervention. If, following an initial investigation, the child was found to be a victim, he or she was slightly more likely (1.11 times) to be rereported than children who were initially nonvictims. The receipt of postinvestigation services or foster care services elevated the likelihood of rereporting. In particular, the provision of foster care appears to double the likelihood of rereporting.

Children who received services had an increased likelihood of being rereported than children who did not receive services.

A statistical interaction effect was found between the initial victimization of the child and the receipt of postinvestigation services. Figure 1 illustrates this interaction by displaying two survival distribution graphs: one for children who received postinvestigation services and one for those who did not. Both curves show that, overall, children who received services were more likely to be rereported than children who did not receive services, regardless of initial victimization. However, among children who did not receive services, victims were more likely to be rereported than nonvictims, while among children who received services, fewer victims were rereported than nonvictims.

Victims who received services were less likely to be rereported compared with nonvictims who received services.

Figure 2. Interaction of Victimization with Postinvestigation Services



Multiple Rereports

Beyond the question of whether a child was rereported or not, this analysis focuses on how many subsequent events occurred for an individual child, and the impact of the passage of time and the age of the child on this number of events. A total of 803,320 children who were initially reported during 1998 and 1999 in 9 States were included in the analysis.

Time from Initial Report. This analysis examined how many events per child occurred for each 6-month period after the first report. Table 4 illustrates that the number of subsequent CPS rereports per child declined steadily during each additional 6 months of followup. For all reported children, the average number of subsequent reports was 0.13 per child during the first 6 months of followup whereas the number dropped to 0.05 reports during months 31–36.

Table 4. Number of Rereports, by Time from Initial Report

Event Category	Time from Initial Report					
	6 Months or Less	7–12 Months	13–18 Months	19–24 Months	25–30 Months	31–36 Months
Children with no Further Reports	714,695	737,411	749,177	759,030	765,497	771,411
Children Subsequently Reported During Interval	88,625	65,909	54,143	44,290	37,823	31,909
Total Rereports During Interval	106,348	77,388	63,439	51,412	43,576	36,316
Total Unique Children Reported	803,320	803,320	803,320	803,320	803,320	803,320
Rereports Per Child During Interval	0.13	0.10	0.08	0.06	0.05	0.05

Age of the Child. As shown in Table 5, the number of subsequent reports was examined for children, grouped by age at the time of the initial report.⁶ The number of rereports declined as the age of the child increased. Infants had the highest number of rereports with an average of 0.59 per child, compared with children age 14–18 at 0.38 per child. Both the timing of rereports and the age of children appear to be associated with the number of rereports that a child experiences. These findings also appear to be consistent with what is observed for single rereports.

Table 5. Number of Rereports, by Age of Child

Event Category	Age of Child at Initial Report								Total
	Infants	1	2–4	5–7	8–10	11–13	14–18	Age Unknown	
Children Reported for Age Group	70,160	51,779	155,913	153,677	128,844	105,532	34,325	5,100	705,330
Total Rereports for Age Group	41,475	28,936	83,580	78,815	59,926	47,919	13,061	8,416	362,128
Rereports Per Child for Age Group	0.591	0.559	0.536	0.513	0.465	0.454	0.381	1.650	0.513

Factors Associated With Increased Recurrence

Findings on single recurrences are presented in this section, followed by findings on multiple recurrent events. As noted previously, all children included in these analyses had not been found to be victims based on any report prior to the first victimization event in the data set.

Single Recurrences

For this analysis, 190,552 unique children from 8 States who were reported between 1998 and 2002, and found to be victims, were included.⁷ Cox regression analyses were conducted to determine which factors may have influenced the likelihood that each of these victims would be revictimized within a 5-year period. Table 6 presents the results of the model for recurrence.

⁶ Children who reached age 18 before the end of the observation period of 3 years were excluded from this analysis.

⁷ One additional State was dropped from the analysis due to the absence of risk factor data.

**Table 6. Factors Associated with Recurrence
(N=190,552)**

Variables	Factor Categories	Category Type	Risk Ratio Associated with Recurrence	P
Source of Initial Report	Social and Mental Health Services	Reference	1.0000	0.0000
	Medical Personnel		1.0168	0.7203
	Law Enforcement or Legal Personnel		0.9245	0.0816
	Education Personnel		1.1222	0.0093
	Daycare and Foster Care Providers		1.5347	0.0000
	Nonprofessional and Other		1.2678	0.0000
	Unknown		1.2866	0.0000
Child Age at Initial Report	Infants	Reference	1.0000	0.0000
	1-Year Olds		0.8610	0.0001
	2-4		0.7430	0.0000
	5-7		0.7006	0.0000
	8-10		0.6683	0.0000
	11-13		0.6469	0.0000
	14-18		0.4591	0.0000
	Over 18		0.0014	0.6072
Unknown		0.7020	0.0001	
Child Race and Ethnicity	White only	Reference	1.0000	0.0000
	American Indian and Alaskan Native Only		1.3784	0.0283
	Asian and Pacific Islander Only		0.6792	0.0324
	African-American Only		0.8994	0.0011
	Hispanic		1.0074	0.7807
	Other and multiple race, non-Hispanic		1.1296	0.1418
	Unable to determine and missing		0.6291	0.0000
Maltreatment Type	Physical Abuse Only		1.0000	0.0000
	Neglect or Medical Neglect Only		1.3457	0.0000
	Sexual Abuse Only		0.9311	0.0938
	Other Abuse Only		1.1955	0.0000
	Multiple Abuse Types		1.1195	0.0034
Postinvestigation Services Provided	Nonvictim	Reference	1.0000	0.0000
	Victim		1.5774	
Child Placement in Foster Care	No	Reference	1.0000	0.0000
	Yes		0.8785	
Caretaker Abuse of Alcohol	No	Reference	1.0000	0.0025
	Yes		1.1023	

Source of Initial Report. Victims reported initially by daycare providers, foster care providers, or nonprofessionals were associated with a greater likelihood of experiencing recurrence compared with those reported by social services or mental health services providers.

Victims reported by daycare providers, foster care providers or nonprofessionals had a greater likelihood of experiencing recurrence compared with victims reported by other professional sources.

Child Demographics. Generally, as the age of child victims at initial report increased, their likelihood of experiencing recurrence declined. Although the gender of the victim was tested as a factor in the model, it was not found to impact recurrence. While the effect of race and ethnicity on the likelihood of repeat victimization approached statistical significance, no single category except “unable to determine” and “missing” met the cutoff for statistical significance used in this study.

Circumstances of Maltreatment. Victims who were neglected were 1.3 times more likely to experience recurrence, compared with physically and sexually abused victims.⁸ Victims who experienced an “other” form of abuse or multiple forms of abuse tended to have a higher likelihood of experiencing recurrence.

As the age of victims increased, the likelihood of recurrence decreased.

Family and Child Risk Factors. Victims whose caregivers abused alcohol were more likely to experience recurrence. The influence of parental substance abuse and victims with disabilities was tested but was not found to contribute significantly to the likelihood of recurrence. That said, the results suggested that the presence of these factors was associated with higher likelihood of recurrence.

Victims were more likely to experience recurrence if their caregivers abused alcohol.

Outcomes of Initial Intervention. Victims who received postinvestigation services were 1.5 times more likely to experience recurrence than those who had not. However, victims placed in foster care were less likely to experience recurrence.

Victims who received services had a higher likelihood of experiencing recurrence, but victims placed in foster care were at lower risk of experiencing recurrence.

Multiple Recurrences

Similar to the analyses of multiple rereporting events, this analysis focuses on how many subsequent victimizations occurred for an individual victim, and the impact of the passage of time and the age of the child on this number of events. A total of 189,557 children who were victimized the first time between 1998 through 1999 in 9 States were included in the analyses.

⁸ Maltreatment data are reported for this analysis because the data are available for all NCANDS victims. Not all States provided data on maltreatment if the child was not determined to be a victim, thus this variable was not included in the rereporting analysis described above.

Time from Initial Report. This analysis examined how many victimization events per child occurred for each 6-month period after the first report. As shown in Table 7, the number of recurrences per child declined steadily during each additional 6 months of followup. In a pattern similar to rereports, among children who were initially found to be victims, the number of recurrences during the first 6 months was 0.05 per child and declined to 0.02 per child by month 31–36. Thus, just as the likelihood of a single recurrence declined over time, the longer children were observed, the number of recurrences experienced by children declined as well.

Table 7. Number of Revictimizations, by Time from Initial Report

Event Categories	Time from Initial Report					
	6 Months and Under	7–12 Months	13–18 Months	19–24 Months	25–30 Months	31–36 Months
Child Victims With No Further Victimization	180,383	183,332	184,389	185,142	186,028	186,678
Child Victims Subsequently Victimized During Interval	9,174	6,225	5,168	4,415	3,529	2,879
Total Revictimizations During Interval	10,231	6,744	5,619	4,788	3,802	3,079
Total Child Victims	189,557	189,557	189,557	189,557	189,557	189,557
Revictimizations Per Child During Interval	0.05	0.04	0.03	0.03	0.02	0.02

Age of Child. The same pattern found for rereporting was found for recurrence, where generally the number of recurrences per child declined as age at first victimization increased. As shown in Table 8, infants experienced 0.19 recurrences per child and 14–18 year olds had 0.09 events per child. However, unlike rereporting, children between age 1 and age 7 had more recurrences than infants.

Younger children had more rereports and recurrences compared with older children.

Table 8. Number of Revictimizations, by Age of Child

Event Categories	Age at Initial Report								
	Infants	1	2–4	5–7	8–10	11–13	14–18	Age Unknown	Total
Child Victims For Age Group	25,554	12,161	35,370	35,422	30,099	24,957	24,371	1,544	189,478
Total Revictimizations For Age Group	4,909	2,630	7,466	7,103	5,418	4,327	2,241	167	34,261
Revictimizations Per Child For Age Group	0.19	0.22	0.21	0.20	0.18	0.17	0.09	0.11	0.18

Discussion and Conclusions

Approximately one-third of children with an allegation that they had been maltreated experienced at least one additional report within a 5-year period. When a subset of children were followed for 3 years, it was found that, on average, children who were rereported experienced approximately two rereports (the average was 1.7 rereports per child who had more than one report). Among children who were initially identified as victims, 17 percent were again identified as victims within a 5-year period. Based on 3 years of followup, victims who were revictimized were found to be victims one more time within the 3 years (the average was 1.3 recurrences per children who were ever victimized). In other words, the phenomenon of being rereported was approximately two times as likely as being found to be revictimized. Most children who experienced more than one rereport or revictimization experienced these events within a short time after the initial event. As the length of the followup observation period increased, the frequency of rereports and revictimizations per child decreased.

Factors Associated with Rereporting and Recurrence

Although they occur with different frequency, many similar factors were related to rereporting and recurrence. Similar factors were related to single subsequent events and to multiple subsequent events. For example, both rereporting and recurrence occurred more frequently among younger children; younger children experienced more subsequent reports compared with older children. Service provision was associated with a greater likelihood of rereporting and recurrence. Caretaker alcohol abuse was associated with increased likelihood of the child experiencing rereporting and recurrence. The shared risk factors that influenced both rereporting and recurrence lends credence to the idea that the children experienced these events for similar reasons.

However, some differences were found between the factors that increased children's likelihood of rereporting and recurrence. To some extent these differences were due to the nature of the available data. For example, children who were found to be victims in an initial report were more likely to be rereported, compared with children who were not initially victims—a factor that cannot be examined for recurrence since all children were initially victims by definition. Likewise, although it could not be tested for rereporting, children who experienced neglect, multiple types of maltreatment, and “other” forms of maltreatment were more likely to experience recurrence, compared with children who experienced physical or sexual abuse. However, differences between these two populations may be intrinsic. For example, children who were placed in foster care were more likely to be rereported, but less likely to experience recurrence. Girls were found to be somewhat more likely than boys to be rereported, but not to experience recurrence. Child disability was associated with a higher likelihood of rereporting, but not with more recurrence. Despite the elevated risk for younger children for any subsequent event, infants were not more likely to be rereported, compared with toddlers, but were more likely to experience recurrence. In a seemingly contradictory manner, infants had comparatively more multiple rereports, but fewer multiple revictimizations.

Implications for Reducing Rereporting and Recurrence

One prevalent assumption with respect to rereporting and recurrence is they represent events in which CPS was not successful in keeping children safe from further harm. Given this assumption, reducing the frequency of rereporting—and especially recurrence—are important goals for the system. This study has shown that some factors that influence likelihood of rereporting and recurrence are directly related to the provision of services. This poses a problem in identifying and understanding system indicators of safety.

To further attempt to understand the relationship between service provision and CPS re-involvement, statistical interactions between services and initial victimization among all children who were reported were tested. The analysis found that rereporting was higher among victims and nonvictims who had received services than those who did not receive services. Nonvictims who received services had the highest likelihood of rereporting. Although the action of rereporting is not directly controlled by the CPS agency and unobserved factors may be operating, it appears from these data that service provision raises the possibility of being rereported for both victims and nonvictims.

Foster care placement data provided another example of how intervention is associated with rereporting and recurrence. Victims who were removed from the home were less likely to be rereported or revictimized, whereas nonvictim children who were placed in foster care were more likely to be rereported. A fuller understanding of how placement services interact with rereporting and recurrence could be addressed by linking the NCANDS data set with the Adoption and Foster Care Analysis and Reporting System (AFCARS) data set. The process of linking these data sets is currently in the formative phase.

The variation among other factors related to rereporting and likelihood of recurrence suggest some interesting hypotheses. For example, caretaker alcohol abuse appeared to increase children's likelihood of both rereporting and recurrence, whereas child disability was only tied to increased rereporting, but was not a statistically significant risk factor for recurrence. One might hypothesize that even though children with disabilities were at risk, the CPS agency was more effective at responding to victims with disabilities than nonvictim children with disabilities. In contrast, the system may have had more limited success in mitigating risk for children whose parents abused alcohol. A possible implication of this hypothesis is that more effective alcohol treatment services for parents generally could reduce reporting and recurrence. Another implication is that effective services should be provided whenever the investigated children are disabled.

Conclusions

Previous research has highlighted the difficulty of developing comprehensive services that are effective in reducing rereporting. Policies and practices designed to address the common risk factors may be effective in addressing the range of rereporting outcomes. For example, policies aimed at reducing maltreatment among young children and children whose parents abuse alcohol may be effective in addressing both rereporting and recurrence.

Findings from this study also draw attention to a group of children who experience a brief period of intense involvement with the CPS system. While this is a relatively small fraction of the children, gaining a clearer understanding of this population may serve to highlight needed areas of improvement in the system of intervention. In particular, young children who have already experienced multiple victimizations are at particular risk for continuing to recur and to have these events occur rapidly. Among these children, both intense services and surveillance may be a continuous requirement to help insure their safety and prevent serious long-term harm.

In some cases, providing services will increase rereporting. The source of the increased risk associated with service provision—intrinsic risk or surveillance—is difficult to identify. It is likely to be some combination of the two. However, another important issue raised by this research is the usual consideration of rereporting and recurrence as negative outcomes. If rereporting is being increased by the surveillance effect of service provision, actual maltreatments are being reported that otherwise would never have been made known. Following initial investigations that did not result in findings of victimization, families who were sent home without any services may have actually been continuing to maltreat their children. Without continued services, and without surveillance of continued CPS involvement, such maltreatments may continue behind closed doors. Under these circumstances, a lower rate rereporting alone does not necessarily indicate success of the CPS system.

The use of NCANDS data in this study has been successful in surfacing consistent, yet perplexing, issues surrounding the use of rereporting and recurrence as performance measures for CPS. Many of these issues can be resolved if the data are supplemented with data that are more precise in the area of risk factor identification and with more detail about service provision. Further, the analysis of trajectories was limited to bivariate analysis and could benefit from multivariate approaches that would help to isolate clusters of children that share common trajectories. Nevertheless, this first-time look at rereporting and long-term recurrence in the NCANDS data has revealed some important patterns, including the continued role of services associated with elevated risk, the differential risk tied to maltreatment type, and the importance of the age of the child. Ideally, the analysis will encourage continued discussion regarding how rereporting and recurrence are measured as performance indicators, facilitate the design and implementation of more effective and targeted services, and help in focusing continued inquiry regarding children who are at risk.

While the condition of being found to be a victim of child maltreatment may be assumed to be more severe than the condition of having been reported to the CPS agency, there is some evidence that all children who are reported represent a group for whom developmental delays, poor health, and other negative aspects of well-being are common (English, 2003). For this reason, it may be appropriate for CPS agencies to consider increasing their attention on all children who are rereported, regardless of their dispositional finding.

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Appendix A. Methodological Notes

This appendix contains additional detailed information regarding specific aspects of the methods used to construct the database and analyze the data.

Years of State Data Submissions

States were considered for inclusion if they had submitted case-level data to the NCANDS for calendar years (CY) 1998–2002. CY 1998 and 1999 data submissions were made in Detailed Case Data Component (DCDC) format; CY 2000, 2001, and 2002 data submissions were made in the Child File (CF) format. Prior to use in the analysis, the DCDC data sets were converted to CF format.

Evaluation of Unique Child Identifiers

Tests of unique child identification numbers (IDs) were conducted to determine whether a reasonable number of children were recorded as rereported, and the extent to which demographic data were the same from report to report. First, each State's multiyear data set was examined to determine whether at least 2 percent of all the report-child pairs in the data set had matching unique child IDs. While no CPS system is able to prevent children from being rereported, some States do not adequately identify children who are rereported. Thus, States that do not identify the same child over repeated events will have close to 0 percent duplicate child IDs. The 2 percent threshold for matching unique IDs, while arbitrary, was chosen to exclude States that do not adequately identify rereported children and to include States with actual low rates of rereporting.

If a State's multiyear data set met this threshold, at least 95 percent of children with the same IDs also needed to match on demographic characteristics. Additional tests were performed to assess whether the cumulative percentage of IDs that were reused from one year to the next increased systematically from year to year. Finally, all of the ID tests were repeated to assess whether the criteria for IDs were met for both the set of children who were considered victims and those children not considered victims.

Prior Victimization

Given the clear importance of history of victimization, analyses focused primarily on children with no such history of victimization. In order to identify these children, the prior victimization variable was used. Two States were excluded because their data indicated that more than 98 percent of report-child pairs had no history of prior victimization. In addition, one State was excluded due to anomalous data for prior victimization which was deemed internally inconsistent.⁹ For the remaining nine States, it was possible to identify children who had not been victimized prior to their initial investigation in the data set and therefore to compare children who had a history of victimization (n=117,874) with those who did not (n=1,396,998). The data set included data from these 9 States.

⁹ In this State, children who were not victims in the current report were never being identified as prior victims. Conversely, only children identified as victims in the current report were being identified as victims prior to the current report.

Combining Data for All Years

A single file that included all the data submitted for the calendar years 1998–2002 was created for each State. To standardize the data files, investigations with a disposition date after December 31, 1997, but with a report date prior to January 1, 1998, were excluded.

Derived Independent Variables

Certain variables were derived from standard NCANDS fields to simplify and support the anticipated analyses. These recoded variables allowed for either production of single variables containing mutually exclusive categories or to combined categories which otherwise have a small number of cases. The derived variables are shown in Table A–1.

Table A–1. Derived Independent Variables

Variables	Recoding and Derivation of Variables	Factor Categories
Source of Initial Report	Sources such as friends and neighbors, and victims were combined into a single category of nonprofessional	Social and Mental Health Services
		Medical Personnel
		Law Enforcement or Legal Personnel
		Education Personnel
		Daycare and Foster Care Providers
		Nonprofessional and Other
		Unknown
Child Age at Initial Report	Age at time of report was grouped into categories	Infants
		1–Year Olds
		2–4
		5–7
		8–10
		11–13
		14–18
		Over 18
Child Race and Ethnicity	Race and Hispanic ethnicity were combined into single variable with mutually exclusive categories	White only
		American Indian and Alaskan Native Only
		Asian and Pacific Islander Only
		African-American Only
		Hispanic
		Other and multiple race, non-Hispanic
		Unable to determine and missing
Maltreatment Type	A single variable with mutually exclusive categories was derived from a multiple response variable	Physical Abuse Only
		Neglect or Medical Neglect Only
		Sexual Abuse Only
		Other Abuse Only
		Multiple Abuse Types
Caretaker Abuse of Alcohol	Flags for the presence at the time of the report	No
		Yes

Table A–1. Derived Independent Variables (continued)

Variables	Recoding and Derivation of Variables	Factor Categories
Child With Indication of Disability	Flag for the presence of any: <ul style="list-style-type: none"> • Mental Retardation • Emotionally Disturbed • Visually or Hearing Impaired • Learning Disability • Physically Disabled • Behavior Problem 	No
		Yes
Child's Initial Investigation Victimization Status	Flag	Nonvictim
		Victim
Postinvestigation Services Provided	Flag, yes or no	No
		Yes
Child Placement in Foster Care	Flag, yes or no	No
		Yes

Derived Dependent Variables

The data from multiple reports involving the same child ID were combined to develop variables that indicated whether the child experienced one or more subsequent reports or subsequent victimizations. These variables were constructed to support the use of event history analysis procedures. This step also combined reports made within the same 24-hour period since children who were reported more than once within 24 hours were considered to be reports of the same incident. Derived variables are shown in table A–2.

Table A–2. Derived Dependent Variables

Variables	Recoding and Derivation of Variables	Factor Categories
Rereport Indicator	Flag for the presence of a second report for the same child	No
		Yes
Length of Time to Rereport	Time in days between initial report date and subsequent report date was calculated	
Revictimization Indicator	Flag for the presence of a subsequent victim disposition report for the same child victim	No
		Yes
Length of Time to Recurrence	Time in days from initial report date to subsequent victimization was calculated	

Study Limitations

It is important to note that there are some limitations to the analysis. First, as with any analysis utilizing administrative data, the analysis is limited by both what data are collected and the accuracy of the data. Data were tested for quality and validation procedures were performed. However, only reported child maltreatment can be analyzed; therefore, the above findings pertain only to reported child maltreatment, not to child maltreatment in general.

Further, while receipt of services was noted in the data analyzed, it was beyond the scope of this study to explore related issues such as assessment, referral and refusal of services, compliance with case plan, the length of services, worker and provider contacts, the number of services, or other factors that might aid in explaining the findings observed.

While the data analyzed represent a sizable number of cases, generalizations of the findings to the national level are not recommended. However, the degree to which the findings replicate those noted in other related research suggests that the factors identified above are important for policymakers fashioning plans for intervention and prevention of children's reentry into the child welfare system.