# **Child Maltreatment**

### 2001-2002

#### Definitions

For the purposes of this report, child maltreatment includes Minnesota residents age nine or younger who were physically, sexually, or psychologically abused or neglected by a person directly or indirectly responsible for the child, including a parent (biological, adoptive, step or foster), legal guardian, parent's significant other, or caretaker (such as a babysitter or residential facility staff).

The maltreatment or suspected maltreatment had to be documented by a treating health care provider for a patient who was hospitalized, seen in the emergency department, or substantiated maltreatment by CPS. The intent to maltreat or legal culpability was not required.

#### Background

Child maltreatment is a significant public health problem affecting thousands of Minnesota children each year. County agencies collect and report data on child maltreatment to child protective services (CPS). Limited information has been available from other statewide sources to further measure or describe child maltreatment in Minnesota. Some children who experience child maltreatment receive treatment in a hospital, as an inpatient or in the emergency department, for their injuries or other resulting health conditions.

This report focuses on child maltreatment cases treated and identified by hospitals, and cases substantiated by CPS between 2001 and 2002.

#### Maltreatment of Children in Minnesota

From 2001 to 2002, CPS substantiated 10,537 cases of maltreatment to children under age ten. Twelve percent of CPS cases documented that the child sustained a physical injury due to the maltreatment.

During the same years, Minnesota hospitals documented hospital visits for 503 children under age 10 due to child maltreatment. Hospitals are mandated to report suspected child maltreatment to CPS, yet only fifteen percent of hospital cases were also substantiated CPS cases. CPS did not substantiate some of the cases and some cases may be duplicates that were unable to be linked with CPS. It is unclear why the remaining cases are not in the CPS data. It is likely many of the injured CPS children not treated in a hospital received aid from some other source, such as urgent care, a clinic or even at home by a caregiver.

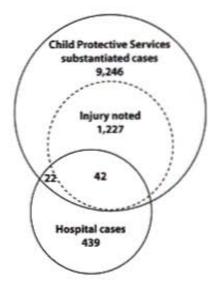
#### In this data brief

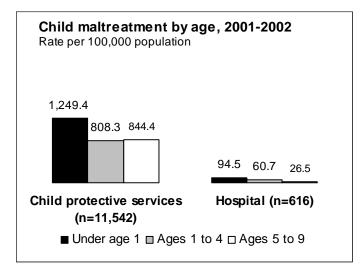
Child maltreatment cases identified by Minnesota hospitals and child protective services

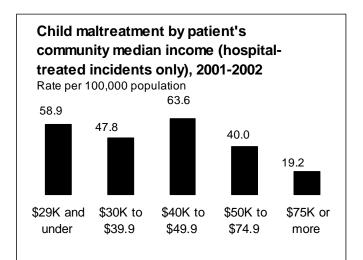
- Numbers and rates of child maltreatment cases and incidents
- Victim demographics
- Type of maltreatment
- Inflicted traumatic brain injury (Shaken Baby Syndrome)
- Hospital charges
- Perpetrator demographics
- Data sources and methodology

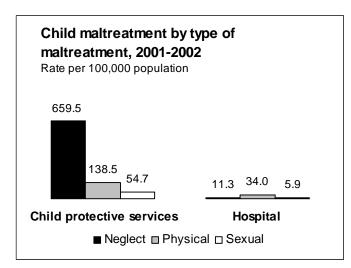
#### Overlap of hospital-treated child maltreatment with child protective services cases, 2001-2002

A child may have experienced multiple incidents of maltreatment in one year. In this diagram each child is included only one time. All other data in this report describe incidents.









#### Age and Gender

The youngest children were at highest risk for maltreatment among both CPS and hospital-treated incidents. Child maltreatment incidents substantiated by CPS were primarily children under age five. The majority of hospital-treated child maltreatment cases were under age 3. Children under age 1 experienced the highest rates of child maltreatment with a CPS rate of 1,249 and a hospital rate of 95 per 100,000 population.

From 2001 to 2002, the rate of CPS substantiated incidents was slightly higher for boys than girls, 873 and 866 per 100,000 population respectively. The rate of hospital-treated child maltreatment incidents showed a reverse trend with girls at a rate of 53 and boys at 40 per 100,000 population.

#### **Community Median Household Income**

There is no clear relationship between community median household income and the rate of hospitaltreated child maltreatment. The rate of hospital-treated child maltreatment is lowest for children living in zip codes with a community median household income of greater than \$75,000.

Patient zip code was used to identify community median household income. These data only capture hospital care. Some individuals who experienced child maltreatment did not seek health care or used health care other than hospitals, such as clinics and may account for a portion of the differences between income brackets.

#### **Type of Maltreatment**

The majority of CPS child maltreatment incidents involved some form of neglect, 77 percent. Among hospital-treated incidents, physical abuse was the most common type of maltreatment and accounted for 80 percent.

Hospital data are able to capture far more incidents of physical abuse than other types of maltreatment. These differences between CPS and hospital incidents may be because physical abuse would be more likely than neglect to cause the need for hospital care. Additionally, it may be more difficult for hospital staff to identify neglect.

Previous abuse by the same or some other perpetrator was noted in nearly half of all hospital cases of child maltreatment, 47 percent.

#### **Inflicted Traumatic Brain Injury**

Inflicted traumatic brain injury (iTBI) is of special importance due to the high likelihood of serious injury and lasting disability or death. Due to the seriousness of iTBI, MDH is conducting a special investigation of incidents between 1999 and 2002. These iTBI data are preliminary as this investigation is not complete.

For this data brief, iTBI includes any death or hospitaltreated child maltreatment incident that led to a traumatic brain injury, including Shaken Baby Syndrome. From 1999 to 2002, 163 Minnesota children suffered an iTBI and twenty-seven of them died. Seventy-two percent of the victims were children under age 1, a rate of 46 per 100,000 population. All victims were age four or younger. Boys accounted for the majority of incidents with a rate of 16 and girls a rate of 9 per 100,000 population.

#### **Charges and Payer**

The total hospital charges for visits with identified child maltreatment between 2001 and 2002 were \$3.1 million. The majority of the charges were for inpatient care, \$2.9 million. Emergency department care made up the remaining \$200,000. The median charge per patient was \$7,465 (inpatient) and \$343 (emergency department).

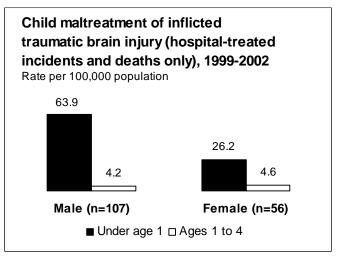
Inflicted traumatic brain injuries were the most costly of all child maltreatment injuries, with a median charge of \$15,230 per inpatient incident. These incidents accounted for 50 percent of the total child maltreatment hospital charges between 2001 and 2002.

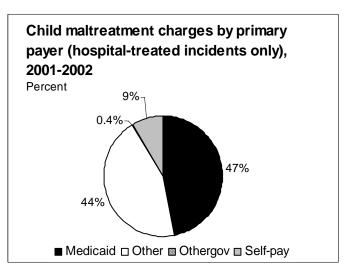
Payment of child maltreatment hospital charges was predominately split between two provider types, commercial health insurance (44 percent) and Medicaid (47 percent).

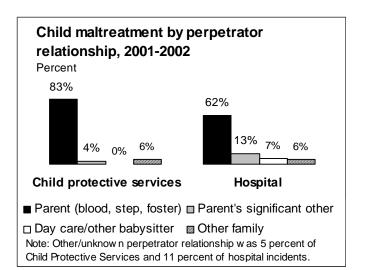
#### Perpetrator Demographics

Birth, step-, and foster parents were the most common abusers in both CPS and hospital-treated incidents of child maltreatment, 83 percent and 62 percent, respectively.

For about three-fifths of CPS incidents, a female committed the maltreatment act. Among hospitaltreated cases males were the perpetrator in just over half of the incidents.







#### Summary

There are thousands of incidents of child maltreatment in Minnesota each year with several hundred that result in hospital treatment. Identifying and describing child maltreatment is a critical first step in effective prevention and treatment. CPS data provides valuable information about child maltreatment in Minnesota and is able to describe large numbers of children affected. Other data sources, such as hospital data, may also shed light on the problem. It appears that hospitaltreated child maltreatment represents a subset of all child maltreatment, which may or may not be captured by CPS data. Hospital-treated child maltreatment incidents most often involve young children who have experienced physical abuse. Inflicted traumatic brain injury, a particularly damaging form of child maltreatment, accounted for 9 percent of incidents and 50 percent of all hospital charges related to child maltreatment.

#### **Data Sources and Methodology**

The Minnesota Department of Health's Injury and Violence Prevention Unit conducts ongoing investigations into injuries and violence in Minnesota to aid in prevention and intervention. A Cooperative Agreement from the Centers for Disease Control and Prevention funded this effort.

CPS data include substantiated incidents of child maltreatment. All incidents involved children age nine or younger. Hospital data reflect patient visits that resulted in emergency department or inpatient care. No urgent care or clinic visits are reflected in these data.

Data were obtained from the Universal Billing dataset maintained by the Minnesota Hospital Association. This dataset includes information from about 95 percent of all hospital patient discharges in Minnesota. Data were also obtained by abstracting medical records.

When hospital medical records are created, codes for diagnoses, treatments, and, if applicable, the cause of injury are assigned. For this investigation, six codes were identified that are assigned to child maltreatment incidents. These codes, along with other suspicious codes were investigated to ensure accuracy in counts and description of incidents.

The ICD codes used to identify hospital-treated child maltreatment patients were child and adult battering and other maltreatment (E967.0, .2, .6, .8, .9), counseling for victim of child abuse (V61.21), observation for suspected abuse and neglect (V71.81),

hunger, thirst, exposure and neglect (E904.X), effects of hunger (994.2), effects of thirst (994.3), criminal neglect (E968.4), and child maltreatment syndrome (995.5X).

## What to do if you suspect child maltreatment

If you know a child whom you suspect is being maltreated, you should call your county social service agency or the police.

If a child is at risk of serious and immediate harm, you should call 911.

Other resources:

### Midwest Children's Resource Center 651.220.6750

Provides telephone consultation available 24 hours a day, 7 days a week for child protection and law enforcement agencies, physicians, therapists, attorneys, and concerned parents.

#### Cornerhouse

612.813.8300

Assesses suspected child sexual abuse, conducts forensic interviews, and provides training for other professionals.

If you require this document in another format, such as large print, Braille or cassette tape, call 651.281.9857.

*Child Maltreatment Violence Data Brief* was prepared by: Sara Seifert, Debra Hagel, Maureen Holmes, Ayo Adeniyi and Jon Roesler.

Injury and Violence Prevention Unit Minnesota Department of Health. P.O. Box 64882 St. Paul, MN 55164-0882 651.281.9857 (Voice), 651.215.8980 (TDD)

E-mail Injury and Violence Prevention: injury.prevention@health.state.mn.us

Minnesota Department of Health Web site: www.health.state.mn.us