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ABSTRACT

AMANDA E. FAULKNER
Do Variations in State Mandatory Child Abuse and Neglect Report Laws Affect Report Rates Among Medical Personnel?
(Under the direction of Russell B. Toal, Faculty Member)

Each state and territory within the United States is required by the Child Abuse Prevention and Treatment Act [42 U.S.C. 5101 et seq.] to maintain a mandatory suspected child abuse and neglect reporting law, requiring certain professionals who regularly see children to report any suspicions of child maltreatment to child protective services. It is well documented that mandatory reporters fail to report each case of suspected child maltreatment they witness. This study sought to determine whether differences in three specific variables within the mandatory report laws had an effect on the frequency with which medical personnel report suspected child abuse and neglect. The three variables analyzed were: definitional scope of emotional abuse; standard of knowledge required for a report; and severity of penalty imposed on those who knowingly fail to report cases of child abuse and neglect. Data was obtained from the *Child Maltreatment 2006* annual report printed by the Health and Human Services Administration of Children, Youth and Families. Of the three variables assessed, only severity of penalty yielded a significant association with report rate. States with lower report rates were significantly more likely to have lenient penalties for failure to report compared with those who had report rates above the national average (O.R. = 5.0, 95% C.I. = 1.165-21.465). It is recommended that states consider increasing the severity of the sanctions enforced for failure to report suspected child abuse and neglect. Although standard of knowledge requirements were not significantly associated with report rates, the literature suggests that standardization of this portion of the mandatory report laws could improve report rates, particularly among physicians.

INDEX WORDS: child abuse, child neglect, mandatory abuse reporting, CAPTA, state law

DO VARIATIONS IN STATE MANDATORY CHILD ABUSE AND NEGLECT REPORT LAWS AFFECT REPORT RATES AMONG MEDICAL PERSONNEL?

by

AMANDA E. FAULKNER

B.S., BERRY COLLEGE

A Thesis Submitted to the Graduate Faculty
of Georgia State University in Partial Fulfillment
of the Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA

2009

DO VARIATIONS IN STATE MANDATORY CHILD ABUSE AND NEGLECT REPORT LAWS AFFECT REPORT RATES AMONG MEDICAL PERSONNEL?

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My greatest thanks and appreciation go to my husband, whose unfailing love, support and encouragement have kept me going throughout this process.

AUTHOR'S STATEMENT

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CHAPTER I

INTRODUCTION

1.1 Background

In 2006, 3.6 million allegations of child abuse and neglect were reported in the United States (U.S.), involving nearly 6 million children under the age of 18 (U.S. H.H.S., 2008). This problem is not new to the U.S. In 1974 U.S. lawmakers acknowledged the problem of child maltreatment by passing the Child Abuse Prevention and Treatment Act of 1974 [42 U.S.C. 5101 et seq.] (CAPTA). In order for states to receive federal funding for surveillance and prevention of child maltreatment, CAPTA requires each of the 50 states, the District of Columbia (D.C.) and the Commonwealth of Puerto Rico to provide legislation mandating certain individuals to report suspected cases of child abuse and neglect to appropriate state child protective services (CPS) authorities or to a law enforcement agency [42 U.S.C. 5101 et seq.]. Mandatory child abuse and neglect reporting legislation exists for the purpose of increasing intervention in existing cases of child maltreatment to better prevent future and more severe incidents of abuse.

In general, most states specify the professionals who are required to report suspected cases of child abuse and neglect. These mandatory report individuals can be categorized as follows: educational personnel, law enforcement and legal personnel, social services personnel, medical personnel, mental health personnel, and child care workers. Several states, however, use a broader definition of mandatory reporter, and require any adult who witnesses a suspected case of child abuse or neglect to report his or

her suspicions to the appropriate authorities.

Of the major mandated reporter categories, there are four particular groups who consistently report the greatest proportion of cases each year: educational personnel, law enforcement and legal personnel, social services personnel, and medical personnel (U.S. H.H.S., 1999; 2000; 2001). This list is not surprising in that each of these four mandatory reporter groups has regular contact with children, which increases the opportunity to witness possible abuse or neglect. Additionally, the four predominant mandatory reporter groups have a similar opportunity to obtain education regarding identification of potential abuse or neglect through their professional education and training.

What is disturbing, however, is that despite their extensive training, studies have shown that many mandatory reporters knowingly fail to report incidents of suspected child abuse or neglect (Zellman, 1990; Kesner and Robinson, 2002; Alvarez et al., 2004; Gunn et al., 2005; Goebbels et al., 2008). That medical personnel frequently fail to report each case of suspected child maltreatment they encounter is an issue of considerable concern, given the vital role they play in the prevention of child abuse and neglect. Compared with their professional counterparts, medical personnel have the unique opportunity to more comprehensively evaluate a child. Physicians and nurses in particular typically see more of a child's body than teachers, law enforcement, or social workers do, giving them more opportunity to notice less obvious signs of abuse or neglect. Additionally, identification of abuse can be defined as a "discrimination task", one that physicians are skilled to perform based on their experiences in the clinic and their ability to differentiate between accidental and abusive symptoms (Warner and

Hansen, 1994). Given these advantages, medical personnel arguably have the best opportunity to prevent both first cases and future incidents of abuse and neglect.

While there is substantial evidence that increased education in identifying signs of abuse and neglect would likely improve medical personnel's willingness to report suspicions of child maltreatment, little has been done to provide increased educational opportunities to medical professionals in the area of child abuse and neglect (Alvarez et al., 2004; Flaherty et al., 2004). As such, it may be useful to assess other aspects of medical personnel's report behavior to determine areas in which policy changes could improve compliance with the mandatory reporting legislation. One area that has received minimal attention is how the mandatory report legislation affects mandatory reporters' self-perceived ability to report. This can be studied indirectly by assessing differences in child abuse and neglect report rates among medical personnel in the 50 states, D.C. and Puerto Rico, whose laws differ in discrete ways.

Each state is given relative autonomy in creating its particular mandatory report law, although the majority are based on model child protection legislation described in *The Abused Child*, a report published by The Children's Bureau (1963). As a result, most of the mandatory report laws are similar; however, there are distinct differences among the state laws. There are three aspects of the mandatory report laws in which states may employ different terminology or principles:

1. The definition used to specify what types of signs and symptoms equate with emotional abuse;

2. The terminology used to describe the standard of knowledge a reporter must have regarding a case of suspected abuse or neglect prior to reporting the incident; and
3. The severity of penalty each state enforces on individuals who knowingly fail to report a suspected case of child abuse or neglect.

By analyzing the potential effect the variables listed above have on report rates among medical personnel, it is possible to assess how effective the current laws are in persuading medical personnel to comply with mandatory report legislation.

1.2 Purpose of Study

This study was designed to determine the whether variables within state mandatory report laws play a role in how frequently medical professionals report suspected child abuse and neglect. To assess this relationship, the research questions listed below were developed and hypotheses tested.

1.3 Research Questions

Question 1: Does the definitional scope of emotional abuse employed by a state impact the rate of report among medical personnel?

Hypothesis: States with more explicit definitions of emotional abuse have higher suspected abuse and neglect report rates among medical personnel compared with states who employ less descriptive definitions.

Null Hypothesis: States with more explicit definitions of emotional abuse and those who employ less descriptive definitions have equivalent report rates among medical personnel.

Question 2: Does the standard of knowledge required to make a report of suspected child abuse or neglect affect the rate of report among medical personnel?

Hypothesis: States with more stringent standard of knowledge specifications elicit a lower rate of report among medical personnel compared with states employing less restrictive terminology.

Null Hypothesis: States with more restrictive standard of knowledge specifications and those employing less restrictive terminology have equivalent report rates among medical personnel.

Question 3: Does the severity of penalty a state imposes for failure to report suspected cases of child abuse and neglect affect report rates among medical personnel?

Hypothesis: States with harsher penalties for failure to report have greater rates of report among medical personnel compared with those who have less severe consequences.

Null Hypothesis: States with harsher penalties for failure to report have equivalent rates of report among medical personnel compared with those who have less severe consequences.

1.4 Introduction to Paper

The following sections of this paper discuss the impact of child abuse and neglect on public health, the CAPTA legislation, literature examining failure to report, the study's methodology and results, possible recommendations for law and policymakers, and areas for further study. Appendix A includes operation definitions that will be utilized throughout the manuscript.

CHAPTER II

REVIEW OF THE LITERATURE

2.1 Child Abuse and Neglect: An Overview

2.1.a Prevalence Data

Child abuse and neglect is an issue of considerable proportions. It is an issue that transcends economic status; both low-income and high-income nations identify child maltreatment as a source of concern (Gilbert et al., 2009). Perhaps most disturbing are the number of fatalities reported yearly, resulting from child abuse and neglect. The World Health Organization (WHO) reported in 2006 that nearly 160,000 children under 15 died following some form of abuse or neglect, which accounts for nearly 13% of all deaths in that cohort (Pinheiro, 2006).

Child maltreatment in the United States (U.S.) is no better. In 1996, the U.S. Department of Health and Human Services (H.H.S.) estimated that approximately 3 million children were the victims of abuse and neglect. This number makes up nearly 4% of the U.S. child population, and is likely far lower than the actual incidence of abuse and neglect (U.S. H.H.S., 1996). For reasons further explored in the discussion section of this paper, there are a number of limitations associated with child abuse and neglect research, which underestimates the true burden of child abuse and neglect. Regardless, the numbers that are available point to an issue of sizeable concern, which serves to emphasize the need for a better understanding of why maltreatment occurs, to whom it is occurring, and how it can be prevented

2.1.b Risk Factors

To understand a multifaceted problem like child abuse and neglect, it is essential that those at risk be identified. A number of studies in the last several decades have explored this subject. With respect to the U.S., it is clear that poverty and educational attainment are key players in laying the framework for child victimization. Indeed, Zielinski and Bradshaw identified low parental socioeconomic status (SES) as one of the greatest predictors for child maltreatment (2006). Another study reported that children living in families making less than $15,000 per year were 22 times more likely to experience abuse compared with those living in families making over $30,000 per year (Kapp et al., 2001).

While child abuse by definition applies to individuals up to age 18, the majority of maltreatment occurs in young children, mostly under age three (Friedlaender et al., 2005). Younger children's inability to defend themselves puts them at greater risk for abuse. This same mentality applies to disabled children, who are the most likely group of children to experience maltreatment (Hibbard et al., 2007). Maltreatment of disabled children is commonly associated with increased parental stress in response to the challenge of caring for a special-needs child (Westby, 2007).

Race has a somewhat ambiguous association with child abuse and neglect. While numerous studies indicate that non-Caucasian children are more likely to be identified as victims of abuse or neglect, there is evidence that this is not an accurate representation of the actual incidence of victimization (Charlow, 2001-2002). Indeed, racial stereotypes likely contribute to increased rates of minority child abuse reported, although white children likely experience similar rates of abuse. Cultural norms and values significantly

affect this issue, and it has been hypothesized that medical professionals and other professionals who deal closely with children, are less likely to identify a Caucasian child who has been abused (Westby, 2007). This, too, is an issue that must be addressed in order to better serve child victims.

2.2 Consequences of Child Abuse and Neglect

Individuals who experience child maltreatment are subject to an increased risk for lifelong negative health and social repercussions (Afifi et al., 2007). One of the most telling studies in recent years was the Adverse Childhood Experiences (ACEs) Study, which was conducted by the Centers for Disease Control (CDC) and Kaiser Permanente between 1994 and 1997. ACEs provided compelling evidence linking exposure to child abuse and neglect (typically defined as being exposed to physical or sexual abuse, domestic violence, drug abuse, etc.) with many of the leading causes of morbidity and mortality, including stroke, cancer, heart disease, depression, suicide, hypertension, and substance abuse. This study elicited staggering results, indicating that more than 50% of the adults surveyed had been exposed to one or more of these adverse experiences at some point during their childhood (Felitti et al., 1998).

In addition to the ACEs study, a number of other reports have indicated that those who are subject to child abuse and neglect have significantly greater odds for developing chronic disease and physical illness (Goodwin and Stein, 2004; Biggs et al., 2004; Romans et al., 2002), experiencing depression and other mental health disorders (Afifi et al., 2006; Brown et al., 2005; Battle et al., 2004; Edwards et al., 2003), perpetrating youth and intimate partner violence (Fang and Corso, 2007), abusing alcohol and other

substances (Min et al., 2007), attaining lower levels of education (Zolotor et al., 1999), and having lower levels of employment (Gilbert et al., 2009). The following sections provide further discussion of these issues.

2.2.a Physical Health Outcomes

One of the major long-term associations with child abuse and neglect is future physical health problems. Obesity has been strongly correlated with a history of child maltreatment, even when childhood obesity and family risk factors have been controlled for (Johnson et al., 2002; Noll et al., 2007; Thomas et al., 2008; Lissau and Sorensen, 1994). This link with obesity is only one of many. Child maltreatment has been associated with an increased risk for ischemic heart disease, various cancers, chronic lung disease, skeletal fractures, and liver disease (Felitti et al., 1998; Draper et al., 2008). From a public health standpoint, this increased risk for long-term physical health issues has a substantial impact on health care service usage. Indeed, studies report increased service use and costs for individuals who have experienced child abuse or neglect (Bonomi et al., 2008; Chartier et al., 2007).

2.2.b Mental Health Outcomes

Child victims of abuse and neglect also suffer significantly higher rates of mental health problems in both adolescence and adulthood (Gilbert et al., 2009). Maltreated children experience depression and anxiety at higher rates than their non-abused peers. In fact, between 25% and 33% of maltreated children suffer from depression by the time

they reach 20 years of age (Fergusson et al., 2008; Widom et al., 2007a; Widom et al., 2007b).

Not surprisingly, a history of child abuse and neglect is associated with increased risk for post-traumatic stress disorder, which can significantly affect an individual's ability to function normally, reducing his or her ability to perform at work, school, or even social situations (Lunsford et al., 2002; Banyard et al., 2001; Widom, 1995).

There is also an association between past abuse and increased risk for attempting suicide. This link exists most strongly within those who experienced physical and sexual abuse, although neglect, in association with other family co-factors, was moderately correlated with increased suicidality, as well (Widom, 1998; Fergusson et al., 2008). The link between child maltreatment and future mental health complications is clear and contributes significantly to the already high prevalence of depression and anxiety experienced by adults (Gilbert et al., 2009).

2.2.c Substance Abuse and Criminality

Exposure to child abuse and neglect is significantly associated with abuse of alcohol and other drugs in adulthood. Indeed, up to 80% of adult women in drug treatment centers report having been victims of child abuse and neglect, compared with between 26% and 30% of the general population (Gil-Rivas et al., 1997; Liebschutz et al., 2002; Kendler et al., 2000; MacMillan et al., 2001). Use of alcohol and other drugs has been shown to serve as an avoidant coping mechanism for individuals who experience child abuse and neglect (Min et al., 2007). Abuse of both legal and illegal substances

also contributes to higher rates of physical health problems and further reduces an individual's ability to function in socially, as well.

Child maltreatment is also linked to future criminality in youth and early adulthood, particularly in the form of youth violence and intimate partner violence (Fang and Corso, 2007). Other studies have shown correlations between physical abuse and an increased risk for carrying a weapon in adolescence (Lewis et al., 2007). There also appears to be some evidence that physical abuse which extends into the teen years can have a cumulative effect on expression of youth violence, highlighting the importance of intervention at the earliest possible time point (Maas et al., 2008). While the data is relatively limited in this area, it is clear that abuse and neglect experienced in childhood can significantly increase the likelihood that an individual will engage in future incidents of violence, contributing to the already high rates of morbidity and mortality attributed to acts of violence in the U.S.

2.2.d Education and Employment Trends

There is substantial evidence linking exposure to child maltreatment with lower academic performance (Zolotor et al., 1999; Kentall-Tackett et al., 1996; Eckenrode et al., 1993; Kurtz et al., 1993; Leiter and Johnsen, 1994; Salzinger et al., 1984; Wodarski et al., 1990; Perez and Widom, 1994). Kendall and Tackett et al. showed, more specifically, that child victims of both neglect, as well as some other form of physical or sexual abuse, had significantly lower grades and increased number of suspensions, as well as a high risk for grade repetition (1996). Perez and Widom report increased rates of truancy and expulsion. Perhaps most significant, however, is their conclusion that

maltreated children were significantly less likely to have graduated high school (1994). These educational outcomes are of considerable concern, in that educational attainment is strongly correlated with socioeconomic status, which leads into the next consequence of child maltreatment, difficulty acquiring stable employment.

A limited body of literature indicates that former child victims of abuse are more likely to have menial or semi-skilled jobs compared with their non-abused counterparts. In addition, previously maltreated adults were less likely to have maintained employment for five consecutive years than those who had never been abused (Widom, 1998). Further research is needed to better understand long-term effects of abuse and neglect on economic outcomes in adulthood.

2.2.e A Public Health Perspective

Given the significant long-lasting effects child abuse and neglect appears to have on those who experience it early in life, there are tremendous implications for the public's health. Increased rates of obesity linked with child maltreatment have the capacity to increase the already heavy burden of type 2 diabetes, in addition to a number of other disorders, like heart disease and stroke. Increased risk for mental health issues, particularly depression, also plays a role in negatively affecting a maltreated individual's ability to thrive in adolescence and adulthood. Both physical and mental health deficits then contribute to a decreased ability to succeed academically, making economic success more difficult to obtain. Additionally, increased levels of physical and mental dysfunction contribute to a higher usage rate of health services, which increase costs, adding to the already heavy burden of health costs in the U.S.

This cumulative effect is illustrated starkly in a cost report done by Prevent Child Abuse America (PCAA). Founded in 1972, PCAA is a national child abuse prevention advocacy organization that has chapters within each state and serves to help implement and advocate for child maltreatment prevention initiatives (PCAA, 2009). The PCAA cost assessment estimated that each year the direct and indirect costs associated with child abuse and neglect amount to nearly $104 billion in 2007 U.S. dollars (Wang and Holton, 2007). Although this figure is staggering, it cannot possibly capture the true costs that each victim experiences, personally. Thus, child abuse and neglect clearly requires the attention of the public health community in order to better determine effective solutions to this complicated issue.

Mandatory reporting legislation has the potential to serve as a powerful tool for early intervention in child maltreatment. If medical professionals appropriately report their suspicions when they encounter children who appear to be either abused or at risk for future abuse, the incidence of child maltreatment could be significantly reduced. Indeed, it is for this reason that child advocates recommended inclusion of mandatory reporting legislation in the first laws to address child abuse. Although mandatory reporting of child maltreatment is unlikely to result in any significant primary prevention, it contributes significantly to secondary prevention efforts. The events leading to the development of such legislation will be discussed in the following sections.

2.3 Legislation Addressing Child Abuse and Neglect

For many years child abuse and neglect went virtually unnoticed by lawmakers in the U.S. Although the child welfare system was created in the late 1800s with the establishment of the American Human Association and others (AHA, 2009), it was not

until the 1960s, when Kempe defined “battered child syndrome”, that policymakers and Congress began to pay attention (Kempe et al., 1962). Among the many concerns raised as a result of this seminal publication was the need for reliable reporting of signs of abuse. An advisory committee assembled by the Children’s Division of the American Humane Society deemed that reporting of suspected child maltreatment must be made mandatory (Paulsen et al., 1966). The first laws addressing child maltreatment were put forth between 1963 and 1967, following a publication produced by the Children’s Bureau, *The Abused Child—Principles and Suggested Language for Legislation and Reporting of the Physically Abused Child* (Children’s Bureau, 1963). This document provided the legislative framework from which the majority of the states’ current mandatory reporting legislation is derived (Paulsen et al., 1967).

A number of other countries simultaneously developed legislation addressing child abuse and neglect. In fact, of 72 participating nations, 49 reported having some form of mandatory child abuse reporting legislation in place (Daro, 2007). Perhaps not surprisingly, Canada and Australia have the most similar laws compared with the U.S. Interestingly, though, the United Kingdom and New Zealand refuse to legislate mandated reporting of suspected child maltreatment, believing that mandates will result in a substantial increase in unfounded reports (Matthews and Kenny, 2008). The primary argument against making reporting mandatory is the concern that mandatory reporting legislation will lead to unnecessary increases in false-positive reports. This is considered harmful to families in that it could create undue stress for those who are incorrectly suspected of abuse or neglect. In addition, there is a common belief that CPS will

significantly increase the number of children removed from families and placed in foster care (Matthews and Kenny, 2008; Melton, 2005).

There continues to be great debate among policymakers and child advocates as to whether mandated reporting is a benefit or detriment to the children and families affected. While extensive data exists to show a significant increase in the rate of report following implementation of mandated reporting legislation, opponents argue that the majority of abused children still go unnoticed and unreported (Melton, 2005). Advocates, however, argue that while such laws cannot capture all cases of abuse and neglect, a significantly larger proportion of child victims would go unnoticed without them (Drake and Johnson-Reid, 2007; Matthews and Bross, 2008). Indeed, Besharov reports that child deaths in the U.S. have fallen from between 3,000 and 5,000 per year, to approximately 1,100 per year, as a result of increased reporting and investigation of child maltreatment (2005).

Although the current legislation addressing child abuse and neglect reporting is not a perfect solution to the daunting problem at hand, it does contribute to identifying a greater proportion of the child victims who would otherwise go unnoticed. The next sections will discuss specifics regarding mandatory reporting legislation in the U.S.

2.3.a Child Abuse Prevention and Treatment Act

While the majority of U.S. states and territories voluntarily passed legislation addressing reporting of child abuse and neglect in the 1960s, it was not mandatory to do so (Paulsen, 1967). It was later in the 1970s, following more extensive research on child abuse and neglect, that legislators further addressed the issue.

The Child Abuse Prevention and Treatment Act (CAPTA) was first enacted in 1974 (42 U.S.C. 5101 *et seq*.). CAPTA has been amended numerous times in the last three decades, most recently in 2003, and includes a number of issues extending beyond that of merely reporting child abuse. Perhaps most importantly, CAPTA provides federal funding to the states so they can implement programs to better assess, investigate, prosecute, and treat the problem of child maltreatment in the U.S. in order to, ultimately, prevent child abuse and neglect (Child Welfare Information Gateway, 2004). There are some strings attached to this funding, however. CAPTA requires each state to have legislation providing for mandatory reporting of suspected child abuse and neglect in order to qualify for federal funds (Section 42 U.S.C. § 5106b(2)). Through CAPTA, each state is eligible to receive federal funding to assist in the surveillance and prevention of child abuse and neglect. Through Title I grants, CAPTA funds child abuse prevention, assessment, and treatment initiatives, as well as grant money to public and non-profit organizations to develop programs. Title II grants support additional prevention initiatives within communities (Child Welfare Information Gateway, 2004). Thus, each of the 50 states, as well as each of the U.S. territories, has a mandatory report law.

2.3.b State Mandatory Report Laws

As was previously mentioned, each of the state laws is relatively similar, and most are based on model laws. Each state, however, has autonomy with regard to the specifics of its mandatory report law. As such, there are slight variations in the various components of the mandatory reporting legislation within each state and territory. There are several components that each state addresses, without exception. These components

include who should report child abuse and neglect, how child abuse and neglect is defined, to what extent a reporter must be sure child abuse has occurred prior to reporting, and penalties for failure to report a suspected case of maltreatment (Smith, 2007). These features will be examined in the following sections.

2.3.b.i Mandatory Reporters

There are 18 states, as well as Puerto Rico, who specify that all adults are mandatory reporters. However, the remaining states and territories identify certain professionals as mandatory reporters. These individuals can be divided into six categories: education personnel, legal and law enforcement personnel, social services personnel, medical personnel, mental health personnel, and child care personnel. Additionally, clergy are now required to report in 25 states, and 11 states require photograph developers to report when they witness inappropriate images of children (Child Welfare Information Gateway, 2008). Mandatory reporters are required by the mandatory reporting legislation to contact local CPS agencies or law enforcement if CPS is unavailable. Reporters may contact the CPS or law enforcement agencies directly, however, each state also has a child abuse reporting hotline to which reports can be made 24 hours a day (Child Welfare Information Gateway, 2005).

Of the six major categories of mandatory reporters, four contribute the greatest number of reports each year: education personnel, legal and law enforcement personnel, social work personnel, and medical personnel (U.S. H.H.S., 1999; 2000; 2001).

2.3.b.ii Scope of Definition of Child Abuse and Neglect

Within each state's mandatory reporting law is a section that outlines what constitutes child abuse and neglect. There are four predominant types of maltreatment identified in most mandatory report laws including physical abuse, neglect, sexual abuse, and emotional abuse. While each of the states and territories identifies the first three types of maltreatment, two states fail to include emotional abuse in their scope of child maltreatment: Georgia and Washington (Child Welfare Information Gateway, 2008). When child abuse legislation was first suggested in the 1960s, the predominant form of abuse considered was gross physical abuse, although a small number of states also included neglect, with particular concern regarding malnutrition as a result of neglect (Paulsen et al., 1966). In the following decades, as additional types of maltreatment were identified in the clinical community, states responded by updating their legislation to reflect these additions. Emotional abuse, however, has yet to be addressed adequately.

One of the greatest difficulties associated with reporting of child abuse is the reporters' ability to confidently identify abuse or neglect (Goebbels et al., 2008; Kesner and Robinson, 2002; Alvarez et al., 2004; Flaherty and Sege, 2005). While physical abuse often can be identified visually, emotional abuse is subtler. For this reason, it is important that a state adequately elucidate diagnostic indications for emotional abuse. Although many states mention emotional abuse in their legislation, much fewer explicitly define what conditions, signs and symptoms equate with a reportable offense (Child Welfare Information Gateway, 2008). This could contribute to the difficulty many mandatory reporters experience when determining whether to report their suspicions of abuse.

2.3.b.iii Extent of Knowledge Clause

One of the most ambiguous aspects of each state's mandatory reporting law is the section identifying the extent of knowledge required to activate a report of suspected abuse or neglect. In short, each state employs some type of terminology explaining to what extent a reporter need be certain that abuse or neglect has taken place. Most states expect reporters to have a "reasonable suspicion" or "reasonable cause to believe" that maltreatment has taken place, or some other variation of this phrase (Child Welfare Information Gateway, 2005).

In some cases, however, the "reasonable suspicion" clause is preceded by the word "know". Typically, in these states, the phrasing is such that a reporter must "know or suspect", or "know or have reasonable cause to believe", or a similar form of phrasing (Levi and Loeben, 2004). While the inclusion of "or" reduces the level of certainty a reporter must have in order to report his or her suspicions, inclusion of the word "know", may cause a reporter to hesitate proceeding with a report if he or she feels uncertain in his knowledge of what has occurred. Further sections will discuss the effect this ambiguity has on mandatory reporters.

2.3.b.iv Penalties for Failure to Report

A final common aspect of each of the states' mandatory reporting laws is the provision for criminal sanctions for knowingly or willingly failing to report suspected child abuse and neglect. This is another area in which states may exercise autonomy. Unanimously, each state classifies failure to report as some degree of misdemeanor,

although the severity of the penalties applied vary from state to state (Child Welfare Information Gateway, 2007).

For the most part, states can be separated into two distinct groups based on their specific penalties for failure to report. The first group enforces fairly lenient consequences, usually imposing no more than six months jail time, and typically, a fine of no greater than $500. The second group imposes a more severe set of penalties and allows for imprisonment of up to one year and a wider range of possible fines from $500 up to $5,000 in some cases (Child Welfare Information Gateway, 2005).

2.4 Reporting Practices Among Medical Personnel

As was previously mentioned, educational personnel, law enforcement and legal personnel, social services personnel, and medical personnel contribute the greatest number of reports of child abuse and neglect each year. Of these professionals, medical personnel, arguably, have the greatest chance for preventing new and future cases of abuse. Indeed, medical personnel, in particular physicians, have a unique opportunity to witness parent-child interactions, giving them a chance to observe the parent's behaviors toward the child. Additionally, medical personnel often see more extensive areas of a child's body, lending them to better identify less-noticeable signs of physical abuse or neglect. Finally, of all the mandatory reporters, physicians, in particular, have traditionally been identified as a line of first defense against child maltreatment. In fact, the first meetings that led to the development of the model child abuse laws specifically directed the legislation at doctors, due to their increased knowledge of signs and symptoms related to abuse (Paulsen et al., 1966).

For the above-mentioned reasons, medical personnel are critical reporters of child abuse and neglect. Annual report data, however, indicate that these individuals submit the fewest number of reports, proportionally, in comparison with the other three major mandatory report groups (U.S. H.H.S., 1999; 2000; 2001). It is true that every group of mandatory reporters admits failure to report each and every case of suspected maltreatment, but this is a particularly disturbing finding given the vital role medical personnel play in prevention of future incidents of abuse.

The following sections address medical personnel's report behavior, with a special emphasis on physicians, as they are the major focus of research that has been conducted in this area. While nurses and physicians play an especially significant role in the reporting of child abuse and neglect, little research has been conducted regarding nurses' report behaviors. The volume of literature that does exist, however, focuses predominately on pediatricians and family practitioners, as they are the most likely to encounter children regularly. While this particular paper is focused on the effects of variables within mandatory report legislation on medical personnel, the main source of interest is truly physicians. Unfortunately, report data is generally broken down only into the major mandatory reporter categories, and not by specific subtypes. This subject will be addressed further in the section on limitations.

2.4.a Failure to Report Among Medical Personnel

Studies have shown that approximately 40% of all mandatory reporters admit to failing to report every instance of suspected child maltreatment they encounter (Alvarez et al., 2004). In fact, one report estimated that 68% of abused and neglected children go

unnoticed by Child Protective Services (CPS) (Meriwether, 1986). It is clear that medical personnel encounter maltreated children, but that they repeatedly fail to report suspected cases of child abuse and neglect (Flaherty et al., 2004). The majority of the individuals surveyed are physicians, particularly pediatricians and family practitioners.

While this does not entirely represent medical professionals as a whole, physicians are a vital subset whose behaviors are essential to the identification of child victims. Failure to report among physicians contributes to child fatality (Berkowitz, 2008; Oral et al., 2008; Jenny et al., 1999). Indeed, one study that examined children with abusive head trauma indicated that 31% of the children had been previously seen for signs of abuse, but the examining physician failed to identify and report the earlier symptoms. 28% of the children received further injuries following their first missed-diagnosis, and 9% died as a result of future abuse (Jenny et al., 1999). Another report describes two cases in which physicians failed to sufficiently examine children presenting with suspicious symptoms, which resulted in their subsequent deaths (Berkowitz, 2008). In 2006, a physician and nurse failed to report bruising seen in a child brought to the emergency department. The child was later brought in to the same walk-in clinic, and seen by the same physician and nurse, for abdominal pain, nausea and vomiting. Ten months later the child died from severe abdominal trauma inflicted by his parents (Legal Eagle Eye Newsletter, 2006). Intervention by the physician and nurse may have saved this child's life. Thus, improving report rates among physicians could contribute significantly to increasing the number of child victims identified in the clinic.

2.4.b Barriers to Identification of Child Abuse and Neglect

A common question asked by child maltreatment researchers is what inhibits medical professionals, particularly doctors, from reporting suspected child abuse and neglect. The majority of physicians cite one of their primary reasons for failure to report as a lack of confidence in their ability to correctly identify cases of child abuse and neglect (Alvarez et al., 2004). Indeed, the average time spent by pediatric residents learning about child abuse and neglect amounts to two hours, and there is no mandate for this training in order to be licensed (McCarthy, 2008).

There are a number of other barriers outside of a lack of education that contribute to physicians' inability to identify cases of abuse and neglect. Psychological barriers are a significant source. Doctors often believe they are capable of identifying the types of parents or caretakers who would be capable of abuse, leading to a significant underestimation of the number of families experiencing abuse (Leventhal, 1999). Similarly, physicians with a strong report with their clients may be less willing to acknowledge abuse when they suspect it (Flaherty et al., 2004).

As was mentioned in the above discussion of risk factors for abuse, physicians' preconceived notions regarding race and child maltreatment can also stand in the way of accurate identification of abuse or neglect. Evidence supports the notion that physicians anticipate lower rates of abuse in Caucasian children compared with their non-white counterparts (Jenny et al., 1999). Another study reported that injured African-American children were seven times more likely to be diagnosed as abused compared with injured white children (Lane et al., 2002).

Each of these reasons plays a significant role in prohibiting sufficient identification of cases of child abuse and neglect, which further contributes to medical professionals' difficulty in complying with mandatory reporting of abuse and neglect.

2.4.c Barriers to Reporting Suspected Cases of Child Abuse and Neglect

A large volume of research exists that describes specific reasons physicians, in particular, give for failing to comply with mandatory report laws. Although lack of confidence in their ability to accurately identify cases of abuse plays a significant role in preventing a report, there are numerous other reasons that physicians cite for their failure to follow-through with their suspicions.

Relationships with families play a significant role in how physicians respond to suspected abuse. As was mentioned previously, close ties to families can hinder a doctor's ability to objectively identify abuse in the first place, but once the suspicion has been identified, a physician may fear compromising his or her relationship with the family if they follow through with a report (Gunn et al., 2005).

Another significant contribution to medical professionals' report behavior is their fear that intervening at the report level will negatively impact the child by aggravating an already tenuous home environment (King et al., 1998). Along these lines, many physicians mistrust CPS professionals and believe that no benefit will result from any report that is made. This lack of trust typically stems from previous experience with CPS personnel and the likelihood that information is rarely made available regarding the status of the child, which makes physicians feel disconnected from the process (Flaherty and Sege, 2005). In addition, physicians also often feel that they have a better ability to help

the family than CPS, usually because they are not fully acquainted with CPS protocol, and because they worry that CPS intervention will disrupt their treatment of the child (Delaronde et al., 2000; King et al., 1998).

Medical providers also fear having to spend undue time in court testifying as a result of their reporting suspicions of abuse or neglect (Flaherty and Sege, 2005). A survey looking at physicians' past experiences testifying in cases of abuse reported that 15% of physicians claimed that spending time in court was one adverse consequence they experienced from reporting to CPS (Flaherty et al., 2000). Others reported the amount of time spent in court testifying was a hindrance to physicians' reporting of abuse, one claiming that the median time spent preparing and testifying in court amounted to five hours per case (McDonald, 1979; Saulsbury and Campbell, 1985). Another related reason providers give for failure to report is fear of making an incorrect report and being sued for their incorrect suspicions (Flaherty et al., 2000). In theory, this should not be a concern, because each of the state laws provides immunity to reporters from both civil and criminal liability (Smith, 2007). However, one study indicated that physicians were still being sued, despite this legally provided immunity (Carlova, 1989).

Despite their fears and misgivings surrounding reporting suspected child maltreatment, medical personnel must be compelled to report. This is a matter of significant concern, and policymakers have a responsibility to determine ways in which reporting becomes more frequent. Many of the studies performed in the last several decades have attempted to make policy recommendations based on their discoveries.

2.4.d Suggested Policies to Improve Report Rates From Medical Personnel

Given the strong correlations reported between child abuse education levels and increased physician report rates, it is not surprising that many child abuse researchers advocate greatly increasing child abuse education requirements for pediatric and family practice residents, as well as dental students (Alexander, 1990; Dubowitz, 1990; Krugman, 1990; Kassebaum et al., 1991; Posnick, 1990). Despite their calls for changes in medical and dental school curricula, little has been done to improve the current requirements.

There are legitimate concerns associated with relying solely on increased education to elicit changes in practices among groups of professionals. Numerous studies analyzing the outcomes of health education campaigns fail to indicate significant changes in behavior (Farquhar et al., 1990; COMMIT Research Group, 1995), although other studies do provide evidence that increased education elicits positive changes in behavior (Rocella, 2000; Pierce et al., 2000). Due to these conflicting conclusions surrounding health education, it is understandable that policy makers are hesitant to solely rely on increased child maltreatment education to improve reporting practices among medical personnel.

Despite the skepticism surrounding the success of educational initiatives, there is some evidence that increasing child maltreatment identification education among physicians can yield positive results. Currently, New York is the only state that requires physicians to complete child abuse and neglect training prior to licensure. This shift in policy has been shown to increase report rates among this group, and they report greater confidence in their abilities to adequately identify cases of child abuse and neglect, as

well as their ability to follow through with a report to CPS (Reiniger et al., 1995; Khan et al., 2005). Despite this encouraging evidence, other states have been slow to follow.

Other suggestions for increasing report rates include improving the relationship between medical providers and CPS, specifically to increase providers' confidence in CPS professionals' ability to intervene and provide care to child victims and their families. Another recommendation includes improving physicians' interactions with the legal system (Flaherty and Sege, 2005). While both of these recommendations are admirable goals, they are difficult to execute in reality. Both would require considerable manpower and time to adequately educate those involved (i.e., CPS personnel, medical professionals, and legal personnel).

Because little has been done to effectively improve report rates among mandatory reporters, specifically medical personnel, it is necessary to explore alternative avenues for improvement.

2.4.e Mandatory Report Legislation and its Contribution to Reporting Behaviors

Much of the focus of studies regarding mandatory child abuse and neglect reporting has been on the various players involved in the process, and on their individual capacities to identify child maltreatment and effectively report it. The information generated from these reports has been invaluable, but few changes in policy have resulted since their publication. It is difficult to rapidly change behaviors based on education, alone. Changes in legislation, however, have the potential to quickly affect the ways in which professionals behave, particularly when their livelihoods depend on it.

More emphasis could be placed on the actual mandatory reporting laws, themselves, in order to better empower reporters to comply with their mandates. While much emphasis has been placed on medical professionals' ability to identify cases of child abuse and neglect, few have studied their capacity to comply with mandatory reporting laws based on their knowledge of the laws, themselves. There is evidence that the majority of physicians is aware of the laws and intends to comply, but very little research has questioned how the laws, themselves, affect individual report behaviors (Gunn et al., 2005).

In order to better understand this potential relationship, it is useful to look at the particular portions of the laws that are both consistent throughout the U.S., but also involve some autonomous variations, which could play a role in differing rates of report among the states. These particular variables include the ways in which a state specifically defines child abuse and neglect, the extent of knowledge required to activate a report of suspected abuse or neglect, and the penalties imposed by each state for failure to report a suspected case of abuse or neglect.

The first area in which state mandatory report legislation varies is in the specific designations for what constitutes child abuse and neglect. All states clearly outline physical abuse, sexual abuse, and neglect in their legislation, and most include emotional abuse to some degree. As clinical and psychological research has expanded our understanding of what constitutes child abuse or neglect, states have, for the most part, responded by expanding their reporting legislation to meet new criteria for abuse. One area in which progress has languished, however, is emotional abuse. Although 48 of the 50 states include verbiage that at least mentions emotional abuse, very few specifically

outline what types of signs and symptoms equate with emotional abuse, making diagnosis difficult, at best (Child Welfare Information Gateway, 2005). It is possible that medical professionals who suspect emotional abuse may feel more confident in their abilities to report if specific diagnostic guidelines are included in mandatory report legislation. Thus, those states with more explicit terminology addressing emotional abuse may induce greater rates of report among medical professionals.

A study done by Levi et al. indicated that the use of "reasonable suspicion" (or some variation) within a state's extent of knowledge clause resulted in a wide range of interpretations among pediatric residents (2006). A previous report published by Levi also examined how pediatricians determined threshold levels of suspicions of abuse (2005). For instance, some may indicate that a report is necessary if he or she is even 1% convinced that abuse has occurred, while others may feel it necessary to be 99% certain of maltreatment. Thus, individuals derive significantly different meanings from the "reasonable suspicion" clauses states employ within their mandatory report laws.

This research is useful, but what has not been examined is whether specific alterations in the phrasing of extent of knowledge (e.g., use of "know or suspect abuse", "reasonable cause to believe abuse has occurred", "reasonable suspicion that abuse occurred", etc.) play a role in how individuals choose to respond to their suspicions. It is possible that the use of "know" may hinder a reporter in reporting his or her suspicions.

Finally, variations in penalties imposed by states on those who knowingly fail to report suspected cases of child maltreatment could potentially affect report rates among those required to report. There is some evidence that professionals do comply with the mandatory report laws because they fear criminal sanctions (Flaherty et al., 2004). It

would follow, then, that states who employ harsher consequences for failure to report may elicit higher rates of report from their mandated reporters, based on their desire to avoid incarceration or other penalties. Thus, this study seeks to analyze the aforementioned legal variables and how they may affect report rates, specifically among medical professionals, within the U.S.

2.5 Summary

It is clear that child abuse and neglect is a public health problem of significant proportion. Children who experience maltreatment have a significantly greater risk for developing long-term physical and mental health problems, which also affects their ability to perform academically and socially. These deficits further reduce their ability to thrive throughout adulthood and increase their chances of perpetrating future incidents of violence.

Current efforts to better identify victims of abuse and neglect include legislation mandating the reporting of suspicion of child abuse and neglect. These laws exist to increase the likelihood that child victims will be identified, and further protected from any future incidents of abuse. Those mandated to report, mostly professionals who interact with children regularly, have a tremendous responsibility to appropriately respond when they sense maltreatment has occurred. Unfortunately, research indicates that mandated reporters as a whole fail to report every instance of suspected maltreatment, contributing to the perpetuation of child victimization. This is of particular concern in the case of medical professionals, who have a unique opportunity to intervene and prevent future, and possibly more severe, instances of abuse.

While numerous studies indicate that supplemental education on identification of child abuse and neglect could increase medical professionals' ability and willingness to comply with the mandated reporting laws, little advancement has been made in this area. As a result, other avenues should be considered for improving report behaviors among this group. Variations in state mandatory reporting laws could play a role in reporting practices of those identified as mandatory reporters. In particular, the ways in which states define what constitutes emotional abuse, as well as the wording of the standard of knowledge requirements, may play a role in how a professional understands his or her responsibility to report. Additionally, state penalties for failure to report may influence reporters' decisions to act on their suspicions. The following analysis will look at the previously described variables to determine whether any has an effect on medical personnel's reporting behaviors.

CHAPTER III

METHODS AND PROCEDURES

3.1 Study Purpose

The purpose of this study was to determine whether three discrete variables identified within state mandatory child abuse and neglect reporting legislation (i.e., definition of emotional abuse, terminology describing the standard of knowledge required to make a report, and severity of penalty imposed on those who knowingly fail to report suspected cases of abuse and neglect) has an effect on suspected child abuse and neglect report rates among medical personnel.

3.2 Data Source

The data used in this study were obtained from the Child Maltreatment 2006 report, an annual report produced from data collected by the National Child Abuse and Neglect Data System (NCANDS) (U.S. H.H.S., 2008). NCANDS is a federally funded program of the U.S. Health and Human Services (HHS) Administration on Children, Youth and Families. NCANDS was established in 1988 in response to an amendment to the Child Abuse Prevention and Treatment Act (CAPTA), requiring the Secretary of HHS to establish a national data collection and analysis program which would make available state child abuse and neglect reporting data (42 U.S.C. 5101 et seq.; 42 U.S.C. 5116 et seq., Public law 100-294 passed April 25, 1988). All 50 states, the District of Columbia (D.C.), and the Commonwealth of Puerto Rico voluntarily submit case-level

data collected through state child protective services (CPS) to NCANDS. States must submit data regarding number of overall reported accusations of child abuse and neglect to NCANDS. This data is then analyzed by the Children's Bureau of the ACYF and compiled in an annual publication, *Child Maltreatment*. The annual *Child Maltreatment* report then provides all referrals made to CPS, prior to screening. The referrals are either classified as screened-in or screened-out. Screened-in referrals are then identified as reports, which are broken down by type of reporter (i.e., professional mandatory reporter, non-professional reporters, family, etc.) and are further identified as either substantiated or unsubstantiated in nature. *Child Maltreatment* reports are available for the years 1990 through 2006. *Child Maltreatment 2006*, which was published in 2008, is the most recent publicly available NCANDS data report at the time of publication of this paper, and thus was used for the analyses of this study.

3.3 Study Measures

This study was designed to determine whether differences in three identified variables within state mandatory report laws had an effect on report rates elicited from medical personnel. The dependent variable throughout this paper is the number of reports of child abuse and neglect elicited from medical personnel in each state. Specifically, the number of reports made by medical personnel in a state during 2006, divided by the state's population of children, and then multiplied by 1,000, which yielded a child population adjusted rate of report among medical personnel in each state. This rate was calculated in order to appropriately compare medical personnel child maltreatment report data across all the states and territories, taking child population into

consideration, thereby normalizing the data for comparison. All further analyses were completed using these child population adjusted report rates. Child population for each state was obtained from the 2006 U.S. Census data to match the data presented in *Child Maltreatment 2006*.

The federal government provides a framework for how states should construct their mandatory report legislation. For this reason, states have similar mandatory report laws. However, the states are given autonomy to interpret the federal mandates to best serve each state's respective needs. Thus, independent variables were selected by identifying discrete differences among the state's mandatory reporting laws. Three specific independent variables were identified: the scope of definition applied to emotional abuse, the extent or standard of knowledge a mandatory reporter must have regarding a case of suspected abuse or neglect prior to making a report to CPS, and the severity of penalty applied to mandatory reporters who knowingly fail to report incidents of child abuse or neglect.

Most states identify four areas of child abuse and neglect within their mandatory report laws: physical abuse, emotional abuse, neglect, and sexual abuse (Child Welfare Information Gateway, 2005). Emotional abuse is an area in which state definitions vary significantly. There are two dominant trends in the ways in which states define emotional abuse. The first is ambiguous and merely includes mental or emotional injury as a form of maltreatment that equates with child abuse. The second, however, more explicitly details what constitutes emotional abuse and includes diagnostic measures that could help medical personnel to determine whether a child has suffered emotional abuse. These diagnostic measures include specific disease states like depression and anxiety, as

well as additional determinants, such as withdrawal from society, aggressive or disruptive behavior, or developmental delays (Child Welfare Information Gateway, 2005). Appendix B summarizes the scope of the definitions of emotional abuse states employ within their mandatory report legislation.

A second variable selected was the standard of knowledge required of a mandatory reporter in order to necessitate a report of child abuse or neglect. Physicians fail to report suspected cases of abuse, in part, because they feel insecure in their certainty that maltreatment has occurred. It could be useful to assess whether terminology utilized in state mandatory report laws contributes to their hesitance to report their suspicions. Each state employs terminology that specifies how certain a mandatory reporter must be in his or her suspicion of abuse prior to making a report to CPS. Typically, mandatory report laws use one of two types of phrases to guide reporters. The first indicates that a reporter must either “know or suspect” that abuse has occurred, or “know or have reason to believe” that a child is experiencing maltreatment. The remaining states use broader terminology to guide reporters and state that a reporter should have “reason to believe” or “reasonable suspicion” that a child is being abused or neglected (Child Welfare Information Gateway, 2005). While there is seemingly little difference between the two methods of guidance, it is possible that the use of the word “know” in the first scenario could inhibit an already hesitant mandatory reporter from expressing his or her suspicions of abuse. Appendix C summarizes the standard of knowledge requirements specified by states within their mandatory report legislation.

Finally, the severity of penalty imposed on mandatory reporters who knowingly fail to report child abuse and neglect was selected as the third and final independent

variable. While all states and territories unanimously identify failure to report suspected child abuse and neglect as a misdemeanor, the extent to which a perpetrator is punished varies from state to state. Misdemeanor penalties ranged from 0 to 12 months of jail time, as well as monetary fines, ranging from $350 to $5,000. Because fines varied significantly across the states, maximum jail time was utilized to determine whether a state's penalty was considered harsh or lenient (Child Welfare Information Gateway, 2007). Appendix D summarizes the penalty each state enforces on those who knowingly fail to report child maltreatment.

3.4 Delimitations

This study focused on medical personnel and their report behaviors as they relate to specific variables in state mandatory report laws. Medical personnel are vital players in the early intervention of child abuse and neglect, thus they were the focus of this report.

Each variable analyzed in this study (scope of definition, extent of knowledge, and penalty for failure to report) is a component that states have the power to legislate independent from federal mandates. Thus, these variables can be assessed for correlations between differences in report rates among states.

3.5 Statistical Analysis

Data was analyzed using Microsoft Excel and SigmaStat 3.5 statistical software (Systat Software Inc., San Jose, CA). In order to determine whether any of the variables had an affect on the rate at which medical personnel report suspected cases of child abuse

and neglect, states' report submissions obtained from medical personnel (herein referred to as states report submissions, or states submissions) were dichotomized as either high or low report, based on whether the child population adjusted report rate among medical personnel fell above or below the U.S. average report rate for medical personnel.

Similarly, states report submissions were dichotomized with regard to each variable tested. To determine whether the way a state defined emotional abuse affected medical personnel report rates, the states submissions were categorized as either explicit or vague, based on how the state defined emotional abuse within its mandatory report law. Explicit definitions included specific diagnostic cues, which could serve to assist medical personnel in identifying cases of emotional abuse. These cues included diagnoses like anxiety or depression, as well as specific behavioral symptoms, such as developmental delays, withdrawal, or aggressive behavior toward self or others. Vague definitions included little to no explanation of what constituted emotional abuse, using ambiguous terminology that usually only mentioned abuse incurred as the result of mental or emotional injury.

Likewise, state report data was categorized based on the standard of knowledge utilized by a given state mandatory report law. Report submissions were labeled either "know (+)" or "know (-)", which was determined by whether or not a state employed the word "know" in its standard of knowledge description. "Know (+)" states were deemed restrictive in their terminology, while "know (-)" states were determined to have a broader interpretation of the standard of knowledge required to require a report of suspected abuse or neglect.

The final variable tested was the severity of penalty imposed by states on medical professionals who knowingly fail to report suspected child abuse and neglect. States report submissions were divided into two categories: those reported by states with more severe penalties and those reported by states with more lenient penalties. Because most states employed a potential jail time of either less than or greater than six months, but no more than one year, states were divided into two categories: severe and lenient. Severe penalties were defined as those including up to one year of potential jail time for failure to report child maltreatment. Lenient penalties were those that provided a maximum jail sentence of six months. Although monetary fines were employed as a penalty for failure to report in most states, jail time was determined to be a more detrimental consequence. Jail time would result in loss or suspension of employment, as well as absence from home life, which when compared with monetary fines would, was deemed significantly more severe. Additionally, fines varied greatly among states and did not correlate with jail times, thus fines were not considered when analyzing the penalty variable.

Chi-square tests for independence were performed for each variable. Because three independent tests were performed on a singular data set, Bonferonni's adjustment was used to control for any significant outcomes due solely to chance. In addition, odds ratios were calculated if chi-square analyses were significant. Similarly, the phi-coefficient was reported given a significant chi-square result, and served to describe the strength of correlation between the independent and dependent variables.

CHAPTER IV

RESULTS

4.1 Descriptive Statistics

Of the 50 states and territories, only Alaska and Maryland failed to submit suspected cases of abuse by mandatory reporter classification. The remaining 48 states, District of Columbia (D.C.) and Commonwealth of Puerto Rico submitted child maltreatment report data categorized by mandatory reporter group. Figure 1 summarizes the percentage of reports submitted by the top four mandatory reporter groups (educational personnel, law enforcement and legal personnel, social services personnel, and medical personnel) for each state or territory. Similar to previous studies, of the four primary mandatory reporter groups, medical personnel contributed the smallest percentage of suspected child abuse and neglect reports nationwide.

To conduct analyses on each independent variable, the total number of reports made by medical personnel in each state or territory was converted into a report rate by dividing the number of reports by the child population in each state, and then multiplied by 1,000. This figured yielded the suspected child abuse and neglect report rate per 1,000 children, which was employed for each analysis. Table 1 contains the actual number of reports submitted by medical personnel, state child population, and the resulting medical personnel report rate per 1,000 children.

The national average number of reports of child maltreatment made by medical personnel was determined to be 2.16 per 1,000 children. Based on this figure, states were

then dichotomized as either high or low report, depending on whether a state's report rate was above or below the national average. 24 states or territories were deemed low report, while 26 fell above the national average and were deemed high report. Table 2 summarizes the dichotomized states and their ranks (1= low report, 2= high report). Figure 2 is a map illustrating the distribution of low and high report states. There were no clearly identifiable geographic trends associated with the distribution of low and high report rates within states.

4.2 Definition of Emotional Abuse

A Yates corrected chi-square test for independence was calculated to determine whether the definition a state employs in its mandatory report legislation has an association with medical personnel suspected child abuse and neglect report rates. There was no significant association between a state's definitional scope of emotional abuse and the rate of report among medical personnel within that state (χ^2=0; p>0.05). Thus, no odds ratio was calculated for this variable. Appendix B lists the definitions of emotional abuse employed by each state, along with the state's rank (1 = ambiguous definition, 2 = explicit definition).

4.3 Standard of Knowledge

Yates corrected chi-square analysis also was employed to assess any relationship between the standard of knowledge states require mandatory reporters to have prior to reporting suspicions of abuse or neglect and the rates of report elicited from medical personnel. Similar to the definition of emotional abuse, the standard of knowledge

variable was not significantly associated with the rate of child maltreatment reporting among medical personnel (χ^2=2.02; p>0.05). Again, no odds ratio was calculated for this variable. Appendix C lists the standard of knowledge clauses utilized by each state, as well as the rank applied to the states' submissions (1 = "know (+)", 2 = "know (-)").

4.4 Severity of Penalty Imposed for Failure to Report

Yates corrected chi-square test of independence was utilized to determine whether any association existed between the severity of penalties states enforce against those who knowingly fail to report child maltreatment and the report rate of child maltreatment among medical personnel. In this case, the chi-square analysis yielded a significant association (χ^2=4.78, p<0.05), indicating that the contents of the 2x2 contingency table were not homogeneously distributed, or that the differences among the four quadrants of the table were not due solely to chance. However, when the Bonferonni adjusted p-value was calculated, the chi-square became insignificant (p>0.05). Because the severity of penalty indicated a trend toward significance, odds ratios were calculated. The odds ratio was determined to be significant (O.R.=5.0, 95% C.I.=1.165-21.465). Based on this calculation, the odds of a state being classified as high report is five times greater when severe penalties are imposed as when severe penalties are not imposed. Additionally, a phi-coefficient of 0.352 was calculated, indicating that slightly more than 12% of the variance in reporting is associated with the imposition of severe penalties for failure to report. Appendix D lists the penalties imposed by each state for failure to report, as well as the states' submission rank (1 = lenient penalty, 2 = severe penalty). Table 7

illustrates the 2x2 contingency tables utilized for each of the independent variables. Table 8 summarizes the results obtained from chi-square analyses and odds ratios.

CHAPTER V

DISCUSSION AND CONCLUSION

5.1 Discussion

Child abuse and neglect is a significant issue affecting the U.S. Although legislators responded to early reports describing the problem of child maltreatment, their efforts have proven insufficient in the face of this challenging issue. Child abuse and neglect continues to burden the U.S., and although report rates of suspected maltreatment have increased since the creation of CAPTA, it is known that victimized children continue to go unreported and without intervention. Despite requirements put forth through state mandatory report laws, professionals identified as mandatory reporters persist in their failure to report each case of child maltreatment they witness. This is of particular concern with respect to medical personnel, who play a significant role in the prevention of future incidents of maltreatment, often by identifying early signs of abuse.

The child abuse literature suggests that a lack of education in identifying signs of child abuse significantly contributes to medical personnel's hesitance to report each case of maltreatment they encounter. Although numerous studies have recommended increased access to child abuse identification training and continued education for medical personnel, particularly physicians, little has been done to address such recommendations. The policy changes previously recommended are worthy of serious consideration; however, it is helpful to assess other areas of impact that may improve the frequency with which medical personnel report child abuse and neglect. One of the most

basic areas to investigate is the mandatory report legislation, which guides medical personnel in their charge to report child maltreatment. Indeed, these laws play an active role in how a mandatory reporter interprets his or her responsibility to report and in stipulating the repercussions that likely influence an individual's willingness to report. It is, therefore, useful to analyze certain aspects of the state mandatory child abuse and neglect reporting laws to ascertain how they may help or hinder medical personnel's ability or willingness to comply, which is what this study sought to accomplish.

5.1.a Definitional Scope of Emotional Abuse

The definitions utilized by various states to elucidate the signs and symptoms of what constitutes abuse or neglect has the potential to influence reporters by either clearly or ambiguously describing states of disease. While most states employ relatively standardized definitions for physical abuse, neglect and sexual abuse, emotional abuse definitions vary among the states and territories. States employ two predominant methods to describe emotional abuse. In the first case, states merely list emotional abuse as an identified form of child abuse, involving little to no description of the condition. The second technique involves a more specific identification of the disease state, including diagnostic determinants (i.e., anxiety, depression, developmental delays) or specific behaviors (aggression, habitual truancy, etc.). The results in this study did not indicate a significant link between the extent to which a state specifies emotional abuse and the report rate among medical personnel. It is not surprising that the small differences in the definitional scope of emotional abuse employed by states failed to induce any changes in child maltreatment reporting behavior among medical personnel.

The literature clearly indicates that medical personnel, in particular physicians, express a lack of confidence in their ability to identify child abuse and neglect, in part, because they receive insufficient training in this area (Flaherty et al., 2004; Alvarez et al., 2004; Theodore and Runyan, 2006). It is possible, then, to assume that merely listing diagnostic indicators for emotional abuse may be insufficient to invoke confidence among those who are mandated to report. If the reporter does not feel confident in his or her ability to appropriately identify the included diagnostic guidelines, the use of, or failure to use those diagnostic cues will be of little concern. This highlights the need for greater emphasis on education and training specifically targeted at improving medical personnel's ability to identify and confidently report child maltreatment.

Although there is no conclusive evidence to prove that additional child maltreatment education will significantly increase report rates among medical personnel, the data obtained from a survey of New York physicians who underwent mandatory child abuse training prior to their licensure suggests that additional education can increase the likelihood that a physician will follow through with a report of suspected child maltreatment (Reiniger et al., 1995).

Studies have shown that an increased level of education in child maltreatment contributes significantly to the likelihood that an individual will report to CPS (Flaherty et al., 2000; Khan et al., 2005). Further studies substantiate this by recommending additional child abuse and neglect identification and treatment training, especially for medical students and residents (Alvarez et al., 2004; Theodore and Runyan, 2006). Additionally, the American Association of Pediatrics (AAP) made strides in 2008 when they created a Certificate of Special Qualification in Child Abuse Pediatrics, which they

hoped would increase the number of physicians expertly trained in identifying and treating child maltreatment. The AAP also intended their creation of this certification to spur other licensing agencies to require additional education in the area of child maltreatment as a prerequisite for licensure (Bailey, 2008). If medical personnel had more extensive education in identification of child abuse and neglect, they could likely respond more confidently to the reporting requirements expected of them by state mandatory reporting legislation.

5.1.b Standard of Knowledge Terminology

The standard of knowledge required prior to making a report of suspected child maltreatment is a significant source of concern for those who are mandated reporters. Studies have shown that the terminology utilized in state mandatory report legislation intended to guide reporters as to when a report should be made is too ambiguous to adequately motivate an individual to report his or her suspicions (Levi and Loeben, 2005). In fact, when a group of pediatric residents was surveyed, the results indicated little overlap in their understanding of how much certainty each needed to initiate a report of child abuse. There was a large range of interpretation, with one individual indicating that he needed only 1% certainty of maltreatment to induce a report, while another resident indicated that he must be 99% certain that a child was being abused before he would report to CPS (Levi et al., 2006).

The results obtained from the aforementioned studies may explain why no significant differences were noted between states that employed what were deemed restrictive or broad standard of knowledge requirements, with regard to child abuse report

rates among medical personnel. Restrictive states were those who used the word “know” within their extent of knowledge clause (e.g., “know or suspect abuse”, “know or have reason to believe abuse has occurred”). The remaining states employed a broader standard of knowledge regulation and typically required reporters to “have reason to believe” or “have reason to suspect” that a child was being abused.

This study assumed that the use of the word “know” could inhibit reporting by implying that medical personnel must possess a greater degree of certainty regarding abuse compared with those states that only required some reason to believe or suspect that maltreatment had occurred. While restrictive standard of knowledge terminology still specifies that an individual must “know or suspect” a case of maltreatment, such wording could deter already hesitant reporters from following through with a report based on suspicions that were real, but lacking irrefutable evidence.

The results obtained from this report indicate that there is no significant association between medical personnel child abuse report rates and the standard of knowledge terminology utilized in state mandatory reporting legislation. Based on the studies described earlier, this is not entirely surprising. The uncertainty attached to “reasonable suspicion” is significant, indicating that significant changes in standard of knowledge terminology would likely have to be made in order to have any effect on the frequency with which medical personnel report suspicions of child maltreatment.

5.1.c Severity of Penalty Imposed for Failure to Report

Of the three variables analyzed in this study, only the severity of penalty imposed on those who knowingly fail to report child abuse and neglect had any significant

association with the rate at which medical personnel report cases of maltreatment to CPS. Although the Bonferonni adjusted p-value indicated that there was no statistically significant association, the unadjusted chi-square test indicated significance, as did the odds ratio calculation. Deterrence Theory would support these results. Deterrence Theory is based on utilitarianism, postulating that a threat of legally imposed deprivation (i.e., imprisonment, fines, etc.) will motivate individuals to avoid committing acts that may result in such consequences (Geerkey and Gove, 1975). Criminologists have challenged Deterrence Theory repeatedly in the last several decades, but studies have continued to analyze how individuals are motivated to behave within the confines of the law. Other publications have shown that it is not merely the severity of the consequence or cost associated with a certain illicit behavior, but the perceived severity of the penalty employed that drives an individual to avoid punishment (Grasmick and Bryjak, 1980). This subtle perception is important when contemplating what motivates physicians to report.

It is well established that medical personnel report suspected child abuse and neglect, in part, because they are aware of the mandatory report legislation and the penalties associated with failure to report (Flaherty et al., 2004). What is unclear, however, is the perceived severity of the penalties that are currently in place. If a medical professional perceives imprisonment as being particularly severe, then Deterrence Theory would suggest that longer periods of potential imprisonment would serve as a stronger motivator for compliance with the mandatory report law. If, however, medical personnel perceive that they are unlikely to be prosecuted for failure to report child maltreatment, imprisonment may have less severe perceived implications.

It is possible that medical personnel experience little fear of imprisonment, as one study indicated that within one unspecified state, no physician had ever been convicted or punished for failure to report, even though legal sanctions were provided within the state's mandatory report legislation (Gunn et al., 2005). If this is true and medical personnel are not significantly motivated by fears of imprisonment, it may be more effective to implement penalties that are perceived as more severe by those who are targeted by the mandatory report legislation. This topic will be discussed further in the Recommendations section.

While Deterrence Theory and the fear of imprisonment may not explain entirely the reasons medical personnel comply with mandatory reporting legislation, this study indicates that, at a minimum, the fear of an increase in possible jail time has some positive effect on child maltreatment report rates among medical personnel.

5.2 Study Limitations

One of the difficulties associated with child abuse and neglect research lies in determining adequate incidence and prevalence figures. This difficulty exists for a number of reasons, in part because of the sensitive nature of the subject. Child abuse and neglect is not only socially stigmatized, making self-report a rare occurrence, but it also is illegal, which nearly obliterates the likelihood that perpetrators admit involvement in past cases. Thus, the majority of data in existence is derived from relatively small, cross-sectional studies in which reports are obtained via CPS data (Hussey et al., 2006). This then misses a large proportion of the actual number of instances of child abuse and neglect. Indeed, a 1995 Gallup Poll indicated prevalence estimates of physical and

sexual abuse that were four to five times greater than those collected in the National Incidence Study-3 (NIS-3) (Gallup, 1995; Sedlak and Broadhurst, 1996). Although the 1995 Gallup Poll is somewhat dated at this time, the author could find no more recent studies to better estimate prevalence of child abuse. The data collected from the 1995 poll, however, continues to support the concept that the true prevalence of child maltreatment is significantly greater than the cases reported to CPS each year. Thus, the data set utilized in this study solely represents those cases that were actually reported to CPS agencies, which is a significant underestimation of the true burden of child maltreatment.

Similarly, states fail to indicate the specific types of reporters from which they derive their reports, making individual analysis impossible. Thus, the only conclusions that can be drawn from this data are based on groups of professionals, requiring the researcher to apply results to a heterogeneous group of individuals, making generalization difficult. Additionally, much of the literature surrounding failure to report among medical personnel is based solely on the report behaviors of physicians, which excludes the remaining types of mandatory reporters who fall under the classification of “medical personnel”. This study has had to make assumptions based on studies done on physicians and apply those findings to medical personnel as a group.

5.3 Recommendations

It is recommended that states consider increasing the severity of the punishments they impose on those who knowingly fail to report cases of child abuse and neglect. In particular, report rates among medical personnel may increase in response to

implementation of longer jail sentences for failure to report. Indeed, other studies have indicated that fear of sanctions for failure to comply with mandates can motivate those for whom the policy is intended, particularly if that individual perceives the consequences they may incur for failure to comply are particularly severe (Grasmick and Bryjak, 1980). While the results in this study imply that longer jail sentences positively affect the frequency with which medical personnel report child maltreatment, it may be more effective to tailor sanctions more specifically to those for whom they are intended. For example, medical licensing entities could play a more significant role in motivating medical professionals to comply with mandatory reporting legislation.

If one accepts the idea that individuals are more motivated by punishments they perceive as being particularly severe, it would follow that a significant sanction to enforce upon medical professionals would be loss or suspension of licensure. Currently, there are no specific sanctions cited by medical licensing boards for imposition on medical professionals who fail to report child abuse. State licensing boards, however, can revoke licensure for any felony or gross misdemeanor, although their doing so is discretionary and based on individual cases (FSMB, 2006). State medical licensing boards could positively impact the report rates among medical personnel by publicly acknowledging their support of mandatory reporting legislation and by emphasizing that failure to report is a serious offense, worthy of significant action. Thus, it is recommended that licensing boards adopt specific penalties on their licensees for knowingly failing to comply with mandatory reporting legislation. Loss or suspension of license, coupled with a required refresher course on child abuse identification could

significantly increase the likelihood that medical personnel comply with mandatory report legislation.

With regard to standard of knowledge terminology, it is recommended that legislative bodies come together and determine a more explicit definition of “reasonable suspicion” to better guide medical personnel, as well as other mandatory reporters, in their understanding of when to report child abuse and neglect. This recommendation merely echoes the literature, which clearly indicates that the current terminology employed by state mandatory report legislation is too vague and allows for a tremendous range of interpretation. In particular, new terminology should include some description of what level of certainty must be obtained prior to making a report. It also may be useful to emphasize that reporters are protected from civil and criminal liability by the mandatory reporting legislation regardless of the reporter’s level of certainty, provided they report suspected abuse in good faith, meaning that the report is made solely in the interest of protecting the child without any malicious intent.

Finally, this study recommends not only increasing child abuse and neglect identification and treatment education among medical personnel, but further advocates that educational prerequisites be attached to professional licensing requirements. Currently, licensing boards have no specific child abuse and neglect training requirements for licensure. Although the majority of medical schools provide education in family and domestic violence, physicians receive limited education on child maltreatment identification while in medical school, and there are no specific credit hour requirements nor curriculum content standards (AAMC, 2008). While accredited medical postgraduate programs in emergency medicine, pediatrics, and family medicine

must expose residents to child abuse treatment and identification in the clinic. There is no minimum contact experience duration specified by the accreditation boards (ACGME, 2007a, 2007b, 2007c). Based on this information, it would be beneficial for licensing and accreditation agencies to place greater emphasis on the importance of child maltreatment education and to require periodic continuing medical education requirements for child abuse and neglect identification.

The AAP, through its creation of the Certificate of Special Qualification in Child Abuse Pediatrics, took steps toward emphasizing the need for greater education in the area of child maltreatment. Perhaps through its leadership, accreditation and licensing boards will raise the standards for professional education in child maltreatment, which could help create a more confident medical work force that has the potential to more adequately identify and prevent child abuse and neglect.

5.4 Areas for Further Study

This study is by no means exhaustive and would benefit from additional analysis on child maltreatment reporting. It would be beneficial to assess how the independent variables tested in this study affect the other categories of mandatory reporters (educational personnel, legal and law enforcement personnel, and social services personnel) to determine whether those individuals behave similarly to medical personnel. Research in this area could help determine whether the law, as it exists, should be altered to more specifically address the types of professionals who are targeted.

It would be interesting to assess what specific types of penalties are most effective in motivating non-medical reporters to comply with mandatory reporting legislation.

Perhaps imprisonment and fines are suitable for other types of mandatory reporters, while medical personnel may benefit from more tailored penalties. Alternatively, educational, legal, law enforcement, and social services professionals also may experience greater motivation based on more applicable penalties, like loss or suspension of license (in the case of social workers), or disbarment for lawyers and judges. It would be interesting to more closely analyze these individuals in addition to medical personnel.

Although this study did not address screened-in and screened-out reports of child abuse and neglect, it would be interesting to do so. Not every report of child maltreatment that is submitted to CPS actually receives an investigation. Currently, CPS reports of child maltreatment are categorized as either screened-in or screened-out. Screened-in reports are those which are determined to be deserving of an investigation, while screened-out reports are those which do not have sufficient evidence to require an official CPS investigation (U.S. H.H.S., 2008). States define what serves as "sufficient evidence", thus differences exist in whether reports are deemed investigation-worthy. It would be worthwhile to assess these differences among the states to determine whether standardization of such determinants could reduce future incidents of child abuse by increasing identification of child victims.

With respect to the recommendations given in this study, it would be useful to determine what role penalties actually play in medical personnel reporting practices. The author could find no source of archived data of medical personnel who are charged and convicted for failure to report child maltreatment. Minimal information is available regarding specific cases that receive media attention, but it is unclear whether medical personnel are even aware of specific cases of their colleagues receiving punishment for

knowingly failing to report suspicions of abuse or neglect. As a result, it may be possible that medical personnel do not fear the potential repercussions associated with failure to report, because conviction for failure to report is so infrequent. Thus, identifying the frequency with which medical personnel, or any other type of mandatory reporter, are charged and penalized for failure to report would assist in determining whether the laws as they stand sufficiently motivate reporters to contact CPS when they encounter potential child victims.

5.5 Conclusion

Child abuse and neglect should be a continuing issue of concern for the United States. Too many harmed children are left unnoticed, and their victimization goes unreported by those who frequently have the best opportunity to intervene. Mandatory report legislation has come a long way in improving the likelihood that child victims will be identified and assisted, but it is evident that the current policies are insufficient and need improvement.

The majority of medical personnel intend to comply with mandatory reporting legislation, but it is undeniable that they persist in underreporting child abuse and neglect (Flaherty and Sege, 2005). Research has shown clearly that increased exposure to child maltreatment education is essential to improving medical professionals' ability to confidently identify and report abuse. Increased understanding of child abuse, as well as a better understanding of the reasoning behind mandated reporting, could significantly improve an individual's willingness to comply with mandatory reporting legislation. In addition, standardization and clarification of the extent to which one must be certain that

abuse has occurred could drastically improve understanding among medical personnel as to when they should report. Both increased education and elucidation of standard of knowledge requirements could improve reporters' self-perceived ability to identify and report child maltreatment. Finally, the penalties imposed for failure to comply with mandatory report legislation should be carefully considered, as this component of the legislation may motivate medical personnel to report suspected child maltreatment more frequently. While state-imposed sanctions, such as fines and imprisonment, appear to contribute to medical personnel's reporting behavior, it may be more effective for licensing entities to impose their own consequences to those individuals whose licensure is dependent upon maintaining good standing with agency policies, in this case, reporting mandates.

Mandatory reporting of child abuse and neglect certainly is not a panacea for child maltreatment; however, it provides professionals who regularly interact with children an outlet to intervene in situations with the potential to become dangerous. It is important to recognize that although mandatory reporting is not an adequate primary prevention tool, it has the potential to greatly reduce future instances and prevent escalation of the severity of child abuse and neglect. Thus, mandatory reporting is a topic worthy of further assessment by the public health community and those who work to protect children.

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Table 1. Summary of Reports by Source

State	Educational Personnel		Legal/Law Enforcement Personnel		Social Services Personnel		Medical Personnel	
	Reports	% of Total	Reports	% of Total	Reports	% of Total	Reports	% of Total
Alabama	2,839	15.2	3,972	21.3	1,972	10.6	1,679	9.0
Arizona	7,156	21.2	5,876	17.4	2,167	6.4	4,173	12.4
Arkansas	3,552	13.9	2,664	10.4	2,019	7.9	1,859	7.3
California	40,875	18.1	33,739	14.9	14,692	6.5	15,376	6.8
Colorado	5,782	18.7	7,059	22.8	2,050	6.6	3,162	10.2
Connecticut	6,637	23.3	6,204	21.8	2,126	7.5	2,947	10.3
Delaware	1,093	18.9	1,615	27.9	246	4.3	519	9.0
D.C.	911	17.9	790	15.6	1,327	26.1	241	4.7
Florida	21,240	14.0	37,904	25.0	14,860	9.8	11,685	7.7
Georgia	15,001	24.9	10,192	16.9	5,016	8.3	5,580	9.3
Hawaii	340	14.9	531	23.2	253	11.1	502	22.0
Idaho	1,177	17.7	1,406	21.1	242	3.6	664	10.0
Illinois	12,972	19.5	13,029	19.6	8,661	13.0	8,595	12.9
Indiana	8,118	18.4	8,491	19.3	2,814	6.4	4,817	10.9
Iowa	3,449	13.8	4,111	16.4	3,832	15.3	1,634	6.5
Kansas	3,394	22.4	1,575	10.4	2,283	15.1	1,049	6.9
Kentucky	3,675	7.6	3,777	7.8	1,496	3.1	1,327	2.7
Louisiana	4,237	16.6	3,453	13.5	2,180	18.5	2,741	10.7
Maine	942	15.8	810	13.6	755	12.7	572	9.6
Massachusetts	4,139	10.6	7,802	20.0	2,094	5.4	3,809	9.8
Michigan	11,547	16.5	10,144	14.5	8,728	12.5	8,040	11.5
Minnesota	4,404	22.2	5,232	26.4	2,198	11.1	1,728	8.7
Mississippi	3,090	18.3	2,292	13.6	488	2.9	1,925	11.4
Missouri	6,993	14.7	6,135	12.9	5,812	12.2	3,345	7.0
Montana	1,055	12.1	1,515	17.3	1,520	17.4	511	5.8
Nebraska	1,715	13.1	2,730	20.8	1,216	9.3	1,156	8.8
Nevada	3,191	21.3	3,320	22.2	1,222	8.2	1,512	10.1
New Hampshire	1,229	18.5	1,189	17.9	482	7.3	773	11.6
New Jersey	7,207	25.6	4,614	16.4	1,784	6.3	3,858	13.7
New Mexico	2,982	18.0	2,617	15.8	933	5.6	1,317	8.0
New York	28,310	18.8	17,374	11.5	28,774	19.1	9,781	6.5
North Carolina	2,297	3.4	2,940	4.4	2,630	3.9	1,766	2.6
North Dakota	148	3.9	237	6.3	93	2.5	68	1.8
Ohio	9,733	13.3	13,340	18.2	12,570	17.2	3,561	4.9
Oklahoma	4,051	11.0	4,494	12.3	6,205	16.9	3,073	8.4
Oregon	710	2.8	2,886	11.3	1,177	4.6	991	3.9
Pennsylvania	5,775	25.0	1,691	7.3	2,783	12.1	3,152	13.7
Puerto Rico	2,090	15.1	1,732	12.6	528	3.8	978	7.1
Rhode Island	1,901	22.5	1,188	14.1	1,074	12.7	1,127	13.4
South Carolina	3,390	20.3	2,879	17.2	1,685	10.1	2,159	12.9
South Dakota	712	18.2	999	25.6	110	2.8	278	7.1
Tennessee	9,054	14.6	9,225	14.9	9,956	16.1	5,222	8.4
Texas	30,117	18.1	23,287	14.0	8,007	4.8	20,595	12.4
Utah	2,052	10.2	5,897	29.2	2,254	11.2	1,083	5.4
Vermont	519	22.4	396	17.1	206	8.9	214	9.2
Virginia	6,671	22.9	5,094	17.3	1,708	5.9	2,234	7.7
Washington	6,295	17.6	4,451	12.5	6,696	18.8	3,071	8.6
West Virginia	3,096	13.3	1,478	6.4	3,197	13.8	1,194	5.1
Wisconsin	4,786	16.5	5,303	18.3	4,653	16.0	1,716	5.9
Wyoming	459	18.8	518	21.3	206	8.5	132	5.4

*Adapted from *Child Maltreatment 2006* (U.S. H.H.S., 2008)

Table 2. Summary of medical personnel reports, state child populations, report rate, and high report verses low report states

State	Reports	Child Population	Report Rate	Rank
Alabama	1679	1,114,301	1.51	1
Arizona	4173	1,628,198	2.56	2
Arkansas	1859	691,186	2.69	2
California	15376	9,532,614	1.61	1
Colorado	3162	1,169,301	2.70	2
Connecticut	2947	818,286	3.60	2
Delaware	519	203,366	2.55	1
D.C.	241	114,881	2.10	2
Florida	11685	4,021,555	2.91	2
Georgia	5580	2,455,020	2.27	2
Hawaii	502	298,081	1.68	1
Idaho	664	394,280	1.68	1
Illinois	8595	3,215,244	2.67	2
Indiana	4817	1,577,629	3.05	2
Iowa	1634	710,194	2.30	2
Kansas	1049	695,837	1.51	1
Kentucky	1327	999,531	1.33	1
Louisiana	2741	1,090,001	2.51	2
Maine	572	280,994	2.04	1
Massachusetts	3809	1,448,884	2.63	2
Michigan	8040	2,478,356	3.24	2
Minnesota	1728	1,257,264	1.37	1
Mississippi	1925	759,405	2.53	2
Missouri	3345	1,416,592	2.36	2
Montana	511	217,848	2.35	2
Nebraska	1156	445,033	2.60	2
Nevada	1512	634,520	2.38	2
New Hampshire	773	297,625	2.60	2
New Jersey	3858	2,089,338	1.85	1
New Mexico	1317	508,930	2.59	2
New York	9781	4,514,342	2.17	2
North Carolina	1766	2,155,387	0.82	1
North Dakota	68	144,934	0.47	1
Ohio	3561	2,770,035	1.29	1
Oklahoma	3073	894,034	3.44	2
Oregon	991	856,259	1.16	1

Pennsylvania	3152	2,904,873	1.09	1
Puerto Rico	978	1,018,651	0.96	1
Rhode Island	1127	237,451	4.75	2
South Carolina	2159	1,039,653	2.08	1
South Dakota	278	194,681	1.43	1
Tennessee	5222	1,442,593	3.62	2
Texas	20595	6,493,965	3.17	2
Utah	1083	791,198	1.37	1
Vermont	214	133,389	1.60	1
Virginia	2234	1,806,847	1.24	1
Washington	3071	1,526,267	2.01	1
West Virginia	1194	389,071	3.07	2
Wisconsin	1716	1,312,530	1.31	1
Wyoming	132	121,794	1.08	1

* Adapted from *Child Maltreatment 2006* and 2006 U.S. Census Report (U.S. H.H.S., 2008; U.S. Census Bureau, 2008)

Table 3. 2x2 contingency tables for chi-square analysis

Variable	Antecedent	Outcomes	
		High Report	Low Report
Definitional Scope of Emotional Abuse	Explicit Definition	13	11
	Vague Definition	15	11
		High Report	Low Report
Standard of Knowledge Requirement	"Know" (+)	5	10
	"Know" (-)	21	14
		High Report	Low Report
Severity of Penalty for Failure to Report	Severe Penalty	13	20
	Lenient Penalty	13	4

Table 4. Summary of chi-square and odds ratio result

Variable	Yates chi-square	*p-value*	Bonferonni adjusted *p-value*	O.R.	95% C.I.
Definitional Scope of Emotional Abuse	0	1	3	N/A	N/A
Standard of Knowledge Requirement	2.02	0.155	0.465	N/A	N/A
Severity of Penalty for Failure to Report	4.78	0.029	0.087	5	1.165-21.465

Figure 1. Reports by Source

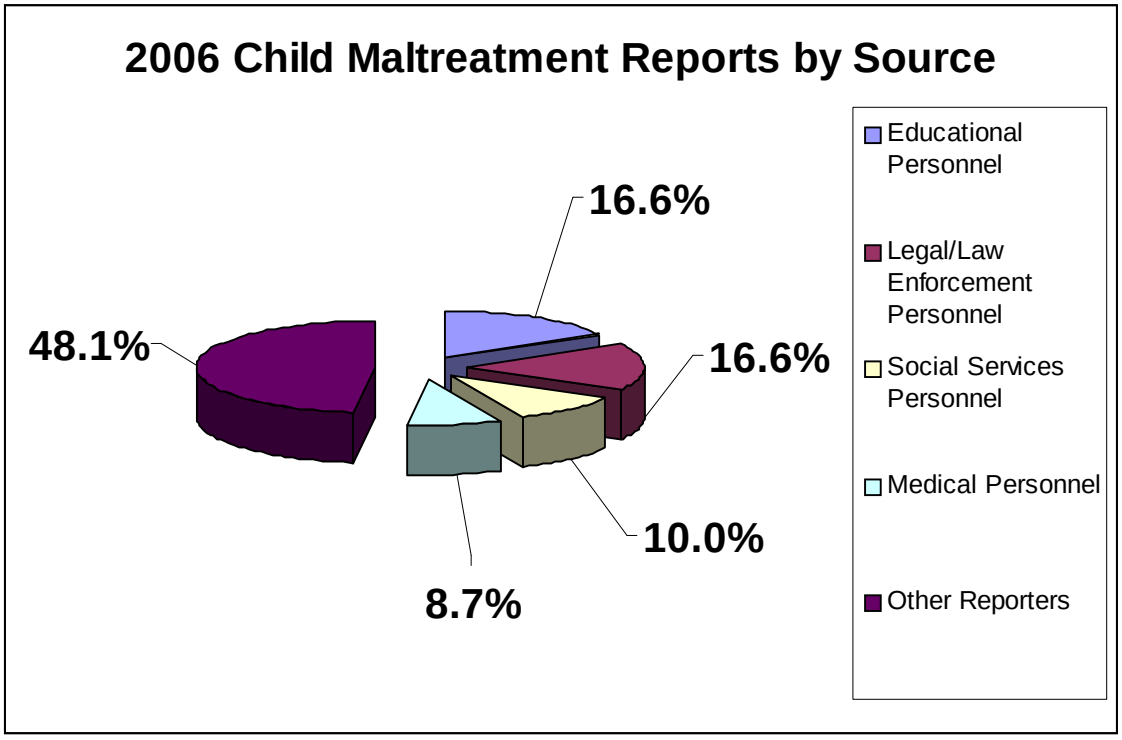
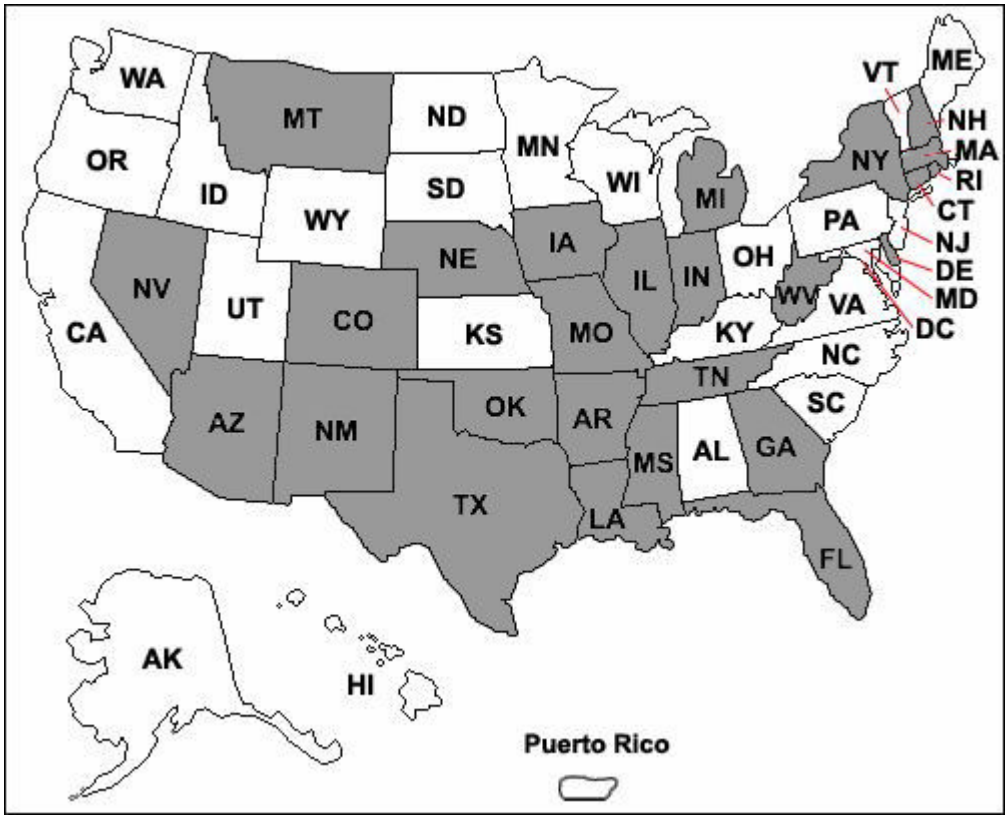


Figure 2. Distribution Map of High and Low Report States



* Low Report states are white, and high report states are shaded gray. Alaska and Maryland did not report data and are not considered in the distribution. The District of Columbia was considered high report.

APPENDIX A

OPERATIONAL DEFINITIONS

a. **Child**: A person younger than 18 years of age.

b. **Child Maltreatment**: An act or failure to act by a parent, caregiver, or other person as defined under state law that results in physical abuse, neglect, medical neglect, sexual abuse, emotional abuse, or an act or failure to act which presents an imminent risk of serious harm to a child (U.S. H.H.S., 2008).

c. **Child Protective Services (CPS):** An official agency of a state having the responsibility for child protective services and activities (U.S. H.H.S., 2008).

d. **Definitional Scope of Emotional Abuse**: The extent to which a state defined emotional abuse in its mandatory report law. Those who included diagnostic guidelines, signs, and symptoms of emotional abuse were deemed explicit, while the remainder were categorized as ambiguous in nature.

e. **Educational Personnel**: Employees of a public or private educational institution or program; includes teachers, teacher assistants, administrators, and others directly associated with the delivery of educational services (U.S. H.H.S., 2008).

f. **Emotional Abuse**: Type of maltreatment that refers to acts or omissions, other than physical abuse or sexual abuse that caused, or could have caused, conduct, cognitive, affective, or other mental disorders and includes emotional neglect, psychological abuse, and mental injury. Frequently occurs as verbal abuse or excessive demands on a child's performance (U.S. H.H.S., 2008).

g. **Legal, Law Enforcement, or Criminal Justice Personnel**: People employed by a local, state, tribal, or Federal justice agency. This includes law enforcement, courts, district attorney's office, probation or other community corrections agency, and correctional facilities (U.S. H.H.S., 2008).

h. **Medical Personnel**: Professionals who provide patient care and are employed by a medical facility. This includes physicians, physician assistants, nurses, emergency medical technicians, dentists, chiropractors, coroners, and dental assistants and technicians (U.S. H.H.S., 2008).

i. **Neglect or Deprivation of Necessities**: A type of maltreatment that refers to the failure by the caregiver to provide needed, age-appropriate care although financially able to do so or offered financial or other means to do so (U.S. H.H.S., 2008).

j. **Physical Abuse**: Type of maltreatment that refers to physical acts that caused or could have caused physical injury to a child (U.S. H.H.S., 2008).

k. **Report Rate**: Number of reported allegations of child abuse and neglect, divided by the total population of individuals under age 18, multiplied by 1,000.

l. **Sexual Abuse**: A type of maltreatment that refers to the involvement of the child in sexual activity to provide sexual gratification or financial benefit to the perpetrator, including contacts for sexual purposes, molestation, statutory rape, prostitution, pornography, exposure, incest, or other sexually exploitative activities (U.S. H.H.S., 2008).

m. **Severity of Penalty for Failure to Report**: In this study, the difference between states imposing a maximum of 6 months jail time for knowingly fail to report child maltreatment, versus states who apply a maximum of 1 year in jail for the same violation. The latter penalty imposition was considered severe, while the former was deemed lenient.

n. **Standard of Knowledge Terminology**: A phrase included in a state's mandatory reporting legislation which serves to guide mandatory reporters as to what level of certainty he or she must have regarding a suspected case of child maltreatment prior to making a report to CPS.

APPENDIX B

DEFINITIONS OF EMOTIONAL ABUSE, BY STATE

* Rank 1 = ambiguous definition; Rank 2 = explicit definition.

State	Definition of Emotional Abuse	Rank
Alabama	Abuse includes nonaccidental mental injury.	1
Arizona	Abuse means the infliction of or allowing another person to cause serious emotional damage to the child, as evidenced by severe anxiety, depression, withdrawal, or untoward aggressive behavior, and such emotional damage is diagnosed by a medical doctor or psychologist, and the damage has been caused by the acts or omisions of an individual having care, custody, and control of a child.	2
Arkansas	Abuse means acts or omissions that result in injury to a juvenile's intellectual, emotional, or psychological development, as evidenced by observable and substantial impairment of the juvenile's ability to function within the juvenile's normal range of performance and behavior.	2
California	Serious emotional damage is evidenced by states of being or behavior including, but not limited to, severe anxiety, depression, withdrawal, or untoward aggressive behavior toward self or others.	2
Colorado	Abuse or child abuse or neglect means any case in which a child is subjected to emotional abuse. Emotional abuse means an identifiable and substantial impairment or a substantial risk of impairment of the child's intellectual or psychological functioning or development.	2
Connecticut	Abuse includes emotional maltreatment.	1
Delware	Abuse includes emotional abuse.	1
D.C.	Mental injury means harm to a child's psychological or intellectual functioning that may be exhibited by severe anxiety, depression, withdrawal, outwardly aggressive behavior, or a combination of those behaviors, and that may be demonstrated by a change in behavior, emotional response, or cognition.	2
Florida	Mental injury means an injury to the intellectual or psychological capacity of a child as evidenced by a discernible and substantial impairment in the ability to function within the normal range of performance and behavior.	2
Georgia	This issue is not addressed in the statues.	1
Hawaii	Child abuse or neglect includes the acts of omissions that have resulted in injury to the psychological capacity of a child as is evidenced by an observable and substantial impairment in the child's ability to function.	2
Idaho	Mental injury means a substantial impairment in the intellectual or psychological ability of a child to function within a normal range of performance and/or behavior, for short or long terms.	2
Illinois	Abused child includes impairment or substantial risk of impairment to the child's emotional health.	1
Indiana	A child is a child in need of services if the child's mental health is seriously endangered by the act or omission of the child's parent, guardian, or custodian.	1

Iowa	Child abuse or abuse means any mental injury to a child's intellectual or psychological capacity as evidenced by an observable and substantial impairment in the child's ability to function within the child's normal range of performance and behavior as the result of the acts or omissions of a person responsible for the are of the child, if the impairment is diagnosed and confirmed by a licensed physician or qualified mental health professional.	2
Kansas	Physical, mental, or emotional abuse means the infliction of physical, mental, or emotional harm or the causing of a deterioration of a child and ma include, but shall not be limited to, maltreatment or exploiting a child to the extent that the child's health or emotional well-being is endangered.	1
Kentucky	Emotional injury means an injury to the mental or psychological capacity or emotional stability of a child as evidenced by a substantial and observable impairment in the child's ability to funciton within a normal range of performance and behavior with due regard to his or her age, development, culture, and environment, as testified to by a qualified mental health professional.	1
Louisiana	Abuse includes any act that seriously endangers the mental or emotional health of the child or inflicts mental injury.	1
Maine	Abuse or neglect includes a threat to a child's health or welfare by mental or emotional injyry or impairment by a person responsible for the child. Serious harm includes serious mental or emotional ijury or impairment that now or in the future is likely to be evidenced by serious mental, behavioral, or personality disorder, including severe anxiety, depression, withdrawal, untoward aggressive behavior, seriously delayed development, or similar dysfunctional behavior.	2
Massachusetts	Injured, abused, or neglected child means a child under age 18 who is suffering emotional injury resulting from abuse inflicted upon him that causes harm or substantial risk of harm to the child's health or welfare.	1
Michigan	Child abuse includes mental injury.	1
Minnesota	Emotional maltreatment means the consistent, deliberate infliction of mental harm on a child by a person responsible for the child's care, that has an observable, sustained, and adverse effect on the child's physical, mental, or emotional development. Mental injury means an injury to the psychological or emotional stability of a child as evidenced by an observable or substantial impairment in the child's ability to function within a normal range of performance and behavior with due regard to the child's culture. Neglect includes emotional harm from a pattern of behavior that contributes to emotional funcitoning of the child that may be demonstrated by a substantial and observable effect in the child's behavior, emotional response, or cognition that is not within the normal range for the child's age and stage of development, with due regard to the child's culture.	2
Mississippi	Abused child includes emotional abuse or mental injury.	1
Missouri	Abuse includes emotional abuse inflicted on a child by those responsible for the child's care, custody, and control.	1
Montana	Psychological abuse or neglect means severe maltreatment through acts or omissions that are injurious to the child's emotional, intellectual, or psychological capacity to function, including acts of violence against another person residing in the child's home.	2
Nebraska	Child abuse or neglect means knowingly, intentionally, or negligently causing or permitting a minor child to be placed in a situation that endangers his or her mental health.	1

Nevada	Mental injury means an injury to the intellectual or psychological capacity or the emotional condition of a child as evidenced by an observable and substantial impairment of his or her ability to function within his or her normal range of performance or behavior.	2
New Hampshire	Abused child means any child who has been psychologically injured so that the child exhibits symptoms of emotional problems generally recognized to result from consistent mistreatment or neglect.	1
New Jersey	Abused child or abused or neglected child means a child under age 18 years who is in an institution, and: has been placed there inappropriately for a continued period of time with the knowledge that the placement has resulted or may continue to result in harm to the child's mental or physical well-being. or who has been willfully isolated from ordinary social contact under circumstances that indicate emotional or social deprivation.	1
New Mexico	Abused child means a child who has suffered emotional or psychological abuse inflicted or caused by the child's parent, guardian, or custodian.	1
New York	Impairment of emotional health and impairment of mental or emotional condition includes a state of substantially diminished psychological or intellectual functioning in relation to, but not limited to, such factors as failure to thrive, control of aggressive or self-destructive impulses, ability to think and reason, acting out, or misbehavior, including incorrigibility, ungovernability, or habitual truancy; provided, however, that such impairment must be clearly attributable to the unwillingness or inability of the respondent to exercise a minimum degree of care toward the child.	2
North Carolina	Abused juvenile means any child less than age 18 whose parent, guardian, custodian, or caretaker creates or allows to be created serious emotional damage to the child. Serious emotional damage is evidenced by a child's severe anxiety, depression, withdrawal, or aggressive behavior toward himself or others.	2
North Dakota	Harm means negative changes in a child's health that occur when a person responsible for the child's welfare inflicts or allows to be inflicted upon the child a mental injury.	1
Ohio	Mental injury means any behavioral, cognitive, emotional, or mental disorder in a child caused by an act or omission that is described in sym. 2919.22 and is committed by a parent or other person that is responsible for the child's care.	1
Oklahoma	Harm or threatened harm to a child's health or safety includes, but is not limted to, mental injury.	1
Oregon	Abuse means any mental injury to a child that shall include only observable and substantial impairment of the child's mental or psychological ability to funciton caused by cruelty to the child, with due regard to the culture of the child.	1
Pennsylvania	Child abuse includes an act or failure to act by a perpetrator that causes nonaccidental serious mental injury to a child under 18. Serious mental ijury means a psychological condition, as diagnosed by a physician or licensed psychologist, including the refusal of appropriate treatment, that: Renders a child chronically and severely anxious, agitated, depressed, socially withdrawn, psychotic, or in reasonable fear that the child's life or safety is threatened, or Seriously interferes with a child's ability to accomplish age-appropriate development and social tasks.	2

Puerto Rico	Mental or emotional harm means the impairment of the intellectual or emtional capacity of a minor, given what is considered normal for his or her age or cultural environment. Moreover, emotional harm is deemed to exist when there is evidence that the minor recurrently manifests or exhibits behaviors such as fear, feelings of abandonment or hopelessness, frustration and failure, anxiety, insecurity, withdrawal, regressive behavior, or aggressive behavior towards himself or herself or towards others, or any similar behavior.	2
Rhode Island	Mental injury includes a state of substantially diminished psychological or intellectual functioning in relation to, but not limited to, such factors as failure to thrive, ability to think or reason, control of aggressive or self-destructive impulses, acting-out or misbehavior, including incorrigibility, ungovernability, or habitual truancy. The injury must be clearly attributable to the unwillingness or inability of the parent or other person resonsbile for the child's welfare to exercise a minimum degree of care toward the child.	2
South Carolina	Mental injury means an injury to the intellectual or psychological capcity of a child as evidenced by a discernible and substantial impairment of the child's abilty to function when the existence of that impairment is suppored by the opinion of a mental health professional or medical professional.	1
South Dakota	Abused or neglected child means a child who has sustained emotional harm or mental injury as indicated by an injury to the child's intellectual or psychological capacity, evidenced by an observable and substantial impairment in the child's ability to function within the child's normal range of performance and behavior, with due regard to the child's culture.	2
Tennessee	Mental injury means an injury to the intellectual or psychoogical capcity of a child as evidenced by a discernible and substantial impairment in the child's ability to funciton within the child's normal range of performance and behavior, with due regard to the child's culture.	2
Texas	Abuse includes the following acts or omissions by a person: Mental or emotional injury to a child that results in an observable and material impairment in the child's growth, development, or psychological functioning. Causing or permitting the child to be in a situation in which the child sustain a mental or emotional injury that results in an observable and material impairment in the child's growth, development, or psychological functioning.	2
Utah	Harm or threatened harm means damage or threatened damageto the emotional health and welfare of a child through neglect or abuse.	1
Vermont	Harm can occur by emotional maltreatment. Emotional maltreatment means a pattern of malicious behavior, that results in imapired psychological growth and development.	1
Virginia	Abused or neglected child means any child less than age 18 whose parents or other person responsible for his or her care creates or inflicts, threatens to create or linfliect, or allows to be created or inflicted upon such child a mental injury, or creates a substantial risk of impairment of mental functions.	1
Washington	This issue is not addressed in the statues.	1
West Virginia	Child abuse and neglect or child abuse or neglect includes mental or emitonal injury of a child by a parent, guardian, or custodian who is responsible for the child's welfare, under circumstances that harm or threaten the health and welfare of the child. Imminent danger to the physical well-being of the child includes substantial emotiona linjury inflicted by a parent, guardian, or custodian.	1

Wisconsin	Abuse means emotional damage for which the child's parent, guardian, or legal custodian has neglected, refused, or been unable for reasons other than poverty to obtain the necessary treatment or to take steps to ameliorate the symptoms. Emotional damage means harm to a child's psychological or intellectual functioning. Emotional damage shall be evidenced by one or more of the following characteristics exhibited to s severe degree: anxiety, depression, withdrawal, outward aggressive behavior, or a substantial and obeservable change in behavior, emotional response, or cognition that is not within the normal range for the child's age and stage of development.	2
Wyoming	Abuse means inflicting or causing mental injury or harm to the mental health or welfare of the child. Mental injury means an injury to the psychological capacity or emotional stability of a child as evidenced by an observable or substantial impairment in his or her ability to funciton within a normal range of performance and behavior with due regard to his or her future.	2

* Created using information from Child Welfare Information Gateway, 2005

APPENDIX C

STANDARD OF KNOWLEDGE TERMINOLOGY, BY STATE

* Rank 1 = know (+), Rank 2 = know (-)

State	*Standard of Knowledge Terminology*	*Rank*
Alabama	All mandated reporters are required to immediately make an oral report when they **know or suspect** that a child is a victim of child abuse or neglect.	1
Arizona	Any mandated reporter who **reasonably believes** that a minor is the victim of abuse or neglect shall report immediately to a peace officer or child protective services.	2
Arkansas	A mandated reporter who has **reasonable cause to suspect** a child has been maltreated shall report immediately to the child abuse hotline.	2
California	A mandated reporter who **knows or reasonably suspects** that a child has been a victim of abuse or neglect shall make an initial report immediately by telephone and prepare and send, fax, or electronically transmit a follow-up written report within 36 hours.	1
Colorado	A mandated report who has **reasonable cause to suspect** that a child has been abused shall report immediately to the department or a law enforcement agency.	2
Connecticut	A mandated reporter who has **reasonable cause to suspect** that a child has been abused or neglected shall make an oral report, by telephone or in person, not later than 12 hours after the reporter has cause to suspect.	2
Delware	Any report required by the reporting laws shall be made to the Division of Child Protective Services.	1
D.C.	A mandated reporter who **knows or has reasonable cause to suspect** abuse or neglect of a child shall immediately report to Child Protective Services or the Police Department.	1
Florida	Each report of **known or suspected** child abuse or neglect by a parent or other person responsible for a child's care shall be made immediately to the department's central abuse hotline.	1
Georgia	A mandated reporter who has **reasonable cause to believe** that a child has been abused shall make an oral report as soon as possible to the child welfare agency.	2
Hawaii	A mandated reporter who has **reason to believe** that child abuse or neglect has occurred shall immediately report the matter orally to the department or the police department.	2

Idaho	A mandated reporter who has **reason to believe** that a child has been abused, neglected, or abandoned shall report within 24 hours to a law enforcement agency or the department.	2
Illinois	A mandated reporter who has **reasonable cause to believe** a child may be abused or neglected shall report: Immediately by telephone to the central register or department, or in writing to the department within 48 hours.	2
Indiana	A mandated reporter who has **reason to believe** that a child is a victim of abuse or neglect shall immediately make an oral report to the department or a local law enforcement agency.	2
Iowa	Each report made by a mandated reporter shall be made both orally and in writing.	2
Kansas	A mandated reporter who has **reason to suspect** that a child has been injured due to abuse or neglect shall make an oral report, followed by a written report, if requested.	2
Kentucky	Any person who **knows or has reasonable cause to believe** that a child is abused or neglected shall immediately make an oral or written report to the Cabinet, a law enforcement agency, or a county attorney.	1
Louisiana	Reports of abuse where the abuser is believed to be a caretaker shall be made immediately to the local child protection unit. Reports of abuse where the abuser is believed to be someone other than a caretaker shall be made immeidately to a law enforcement agency.	2
Maine	A mandated report who **knows or has reasonable cause to suspect** that a child has been abused or neglected shall immediately report to the department.	1
Massachusetts	A mandated reporter who has **reasonable cause to believe** that a child is suffering from abuse or neglect shall immediately make an oral report to the department, to be followed by a written report within 48 hours.	2
Michigan	A mandated reporter who has **reasonable cause to suspect** child abuse or neglect shall immediately make an oral report to the department, to be followed by a written report within 72 hours.	2
Minnesota	A mandated reporter who **knows or has reason to believe** that a child is being abused or neglected shall immediately make an oral report to the local welfare agency, police department, or county sheriff.	1
Mississippi	A mandated reporter who has **reasonable cause to suspect** that a child is abused or neglected shall immediately make an oral report to the department, to be followed as soon as possible by a written report.	2
Missouri	When a mandated reporter has **reasonable cause to suspect** that a child has been or may be subjected to abuse or neglect, that person shall immediately cause an oral report to be made to the division of family services.	2

Montana	When a mandated reporter **knows or has reasonable cause to suspect** that a child is abused or neglected, he or she shall promptly make a report to the department.	1
Nebraska	When a mandated reporter has **reasonable cause to believe** that a child has been subjected to abuse or neglect, he or she shall report to the proper law enforcement agency or the department on the toll-free number.	2
Nevada	A mandated reporter who has **reasonable cause to believe** that a child has been abused or neglected shall report as soon as practicable, but not later than 24 hours after a person knows, to an agency that provides child welfare services or a law enforcement agency.	2
New Hampshire	An oral report shall be made immeidately to the department by telephone or otherwise followed within 48 hours by a written report, if so requested.	2
New Jersey	Any person who has **reasonable cause to believe** that a child has been subjected to abuse or neglect shall report the same to the Divisio of Youth and Family Services by telephone or otherwise.	2
New Mexico	A mandated reporter who has **reasonable suspicion** that a child is abused or neglected shall report the matter immediately to: A local law enforcement agency, the department, or the traibal law enforcement or social services agency for an Indian child.	2
New York	Mnadated reporters shall immediately make an oral or electronic report to the statewide central register when they have **reasonable cause to suspect** that a child has been abused or neglected by a person responsible for that child's care.	2
North Carolina	A mandated reporter who has **cause to believe** that a child is abused, neglected, or dependent shall report the case to the department.	2
North Dakota	All mandated reporters shall immediately report cases of **known or suspected** abuse to the department.	1
Ohio	A mandated reporter who **knows or suspects** that a child has suffered or faces a threat of suffering abuse or neglect shall immediately make a report to the county pbulic children services agency or a peace officer in the county in which the child resides or the abuse or neglect occurred.	1
Oklahoma	A mandated reporter who has **reason to believe** that a child is a victim of abuse shall report the matter promptly to the department.	2
Oregon	A person making a report shall report orally to: The local office of the department of human services or a designee of the department, or a law enforcement agency in the county where the person is located.	2
Pennsylvania	A mandated reporter who has **reasonable cause to believe** that a child is an abused or neglected child shall make a report to the department.	2

Puerto Rico	Any person who has **knowledge or suspects** that a child may be a victim of abuse or neglect must report to the hotline for cases, the department, or the police.	1
Rhode Island	Any person who has **reasonable cause to know or suspect** that a child has been abused, neglected, or sexually abused shall report the information within 24 hours to the department.	1
South Carolina	A mandated reporter shall report to the department or a law enforcement agency when the reporter has **reason to believe** that a child's health has been adversely affected by abuse or neglect.	2
South Dakota	Reports required from mandated reporters shall be made immediately by telephone or otherwise to the State's attorney, the department, or a law enforcement agency.	2
Tennessee	Any person who **knows of harm to a child that reasonably appears** to have been caused by abuse or neglect, or that a child has been sexually abused, shall report such knowledge to a judge, the department, the sheriff, or the chief law enforcement official.	1
Texas	Any person who has **cause to believe** that a child has been abused or neglected shall immediately make a report.	2
Utah	When a mandated reporter has **reason to believe** that a child has been subjected to abuse or neglect, he or she shall immediately notify a peace officer, a law enforcement agency, or the division.	2
Vermont	A mandated reporter who has **reasonable cause to believe** that a child has been abused or neglected shall report within 24 hours.	2
Virginia	A mandated reporter who has **reason to suspect** that a child has been abused or neglected shall report the matter immediately to the local department or the toll-free hotline.	2
Washington	When any mandated reporter has **reasonable cause to believe** that a child has suffered abuse or neglect, he or she shall make a report to the law enforcement agency or to the department.	2
West Virginia	When a mandated reporter has **reasonable cause to suspect** that a child is abused or neglected, he or she shall report to the department immediately, an not more than 48 hours after suspecting abuse or neglect.	2
Wisconsin	Any mandated reporter who has **reasonable cause to suspect** that a child has been abused or neglected shall report immediately by telephone or personally to the county department, sheriff, or police department.	2
Wyoming	Any person who **knows or has reasonable cause to believe** that a child has been abused or neglected shall immediately report it to the child protective agency or local law enforcement agency.	1

* Created using information from Child Welfare Information Gateway, 2005

APPENDIX D

SEVERITY OF PENALTY FOR FAILURE TO REPORT, BY STATE

* Rank 1 = lenient penalty, Rank 2 = severe penalty

State	*Penalty Enforced for Failure to Report*	*Rank*
Alabama	< 6 months in prison and/or < $500 fine	1
Arizona	< 1 year in jail and/or < $2,500 fine	2
Arkansas	< 30 days in jail and/or < $100	1
California	< 6 months in jail and/or $1,000 fine	1
Colorado	< 6 months in jail and/or < $750 fine	1
Connecticut	Educational and training program and < $500 fine	1
Delware	< 15 days in jail and/or <$1,000 fine	1
D.C.	< 90 days in jail and/or <$300 fine	1
Florida	< 1 year in jail and/or <$1,000 fine	2
Georgia	< 1 year in jail and/or < $1,000 fine	2
Hawaii	< 6 months in jail and/or < $1,000 fine	1
Idaho	< 3 months in jail and/or > $100 fine	1
Illinois	< 1 year in jail and/or < $2,500 fine	2
Indiana	< 180 days in jail and/or <$1,000 fine	1
Iowa	< 30 days in jail and/or < $500 fine	1
Kansas	< 6 months in jail	1
Kentucky	< 90 days in jail	1
Louisiana	< 6 months in jail and or < $500 fine	1
Maine	no reported penalty	1
Massachusetts	< 30 months in jail and/or < $1,000 fine	2
Michigan	< 93 days in jail and/or < $500 fine	1
Minnesota	< 1 year in jail and/or , $3,000 fine	2
Mississippi	< 1 year in jail and/or < $5,000 fine	2
Missouri	< 1 year in jail and/or < $1,000 fine	2
Montana	< 6 months in jail and/or < $500 fine	1
Nebraska	< 3 months in jail and/or < $500 fine	1
Nevada	< 6 months in jail and/or < $1,000 fine	1
New Hampshire	< 1 year and/or < $2,000 fine	2

New Jersey	no reported penalty	1
New Mexico	< 1 year in jail	2
New York	< 1 year in jail and/or < $1,000 fine	2
North Carolina	no reported penalty	1
North Dakota	< 30 days in jail and/or < $2,000 fine	1
Ohio	< 30 days in jail and/or < $250 fine	1
Oklahoma	< 1 year in jail	2
Oregon	< $780 fine	1
Pennsylvania	< 1 year in jail	2
Puerto Rico	no reported penalty	1
Rhode Island	< 1 year in jail and/or < $500 fine	2
South Carolina	< 6 months in jail and/or < $500 fine	1
South Dakota	< 1 year in jail and/or < $2,000 fine	2
Tennessee	< 1 year in jail and/or < $2,500 fine	2
Texas	< 180 days in jail and/or <$2,000 fine	1
Utah	< 6 months in jail and/or $1,000 fine	1
Vermont	< $500 fine	1
Virginia	< $500 fine	1
Washington	< 1 year in jail and/or < $5,000 fine	2
West Virginia	< 10 days in jail and/or < $100 fine	1
Wisconsin	< 6 months in jail and/or < $1,000 fine	1
Wyoming	no reported penalty	1

* Created using information from Child Welfare Information Gateway, 2007