

4-25-18

Professor Vandervort

HB 5659, HB 5796
SB 874, SB 880

Mr. Chairman and Distinguished Members of the Committee:

Thank you for providing me the opportunity to speak to you about the package of bills before you today. I want to begin by noting I am testifying on my own behalf as a researcher who has studied the effects of mandatory reporting, not on behalf of my employer or any other group or person. In the wake of a tragic disaster like the Larry Nasser case, there is a strong desire to *something* to address the situation. But it is important not that we do *something* but that we do the right things. In my view, the bills before the Committee today are not the right thing because I am concerned about the unintended consequences.

History—most recently the somewhat similar case of Jerry Sandusky case at Penn State—teaches us that acting in the immediate aftermath of such a debacle is not necessarily the wisest approach. In the wake of the Sandusky case, many states rushed to change their child maltreatment reporting laws to increase the number of mandated reporters. Many of those changes were similar to the proposals contained in this package of bills.

As part of the written testimony that I submitted today, you have a study that Dr. Vincent Palusci, Dr. Jessica Lewis and I did in the wake of the Sandusky changes to examine the impact of changes in mandated reporting laws. This is one of a series of studies that Dr. Palusci and I have done in an effort to understand how changes in mandated reporting laws impact the identification of actual cases of child maltreatment. For the study you received, we drew our sample from NCANDS data (a federal child protection database) to compare the year 2000 (before Sandusky) with the year 2010 (after Sandusky). In our sample counties in the year 2000 there were 726,000 reports of which 244,000 were substantiated; we compared this with a sample from 2010 of 940,000 reports of which 227,000 were substantiated. We looked at

universal mandated reporting as well as mandates that members of the clergy report. The results were mixed.

In counties in which universal reporting was implemented, total and confirmed rates both increased, but only medical neglect cases saw significant increases. In the two states that changed the law to mandate reports by clergy, there was an increase in aggregate reports, but a decrease in overall confirmation, including significant decreases in the identification physical and sexual abuse cases as well as neglect cases.

What we concluded is that the relationship between changes in mandated reporting statutes and the identification of more cases of child maltreatment is complicated and most likely depends on a host of factors beyond just a mandate to report. In short, expanding the circle of mandated reporters does not necessarily mean more maltreated children will be identified. It almost certainly means increased inefficiency in identifying those new cases.

What widening the mandate will likely mean is more reports into a system that is already overburdened. Unless the expanded mandate is accompanied by a substantial increase in the resources necessary to meet that expanded demand, we can expect poor results. Many scholars believe that at least some children are actually harmed by expanding mandated reporting laws because more low risk cases must be investigated and resources are diverted from high-risk cases.

Under Michigan's current law, any person *may* report if they are concerned about a child's safety or welfare. Mandating that more of the do so will not necessarily make children safer.

In addition to these concerns, I am troubled by the increase in the penalties that these bills would impose on mandated reporters who fail to report. I fear that increasing the penalties for failure to report will have unintended negative consequences. It risks driving good people out of child-helping professions and away from volunteering. Larry Nasser and Jerry Sandusky are evil men who used their positions to exploit and hurt children. They are where they should be, but they are outliers. The vast majority of people who enter child-helping professions or who volunteer are good people with only the best of intentions. When that is not the case, we currently have laws in place to address them.

We know that professionals who are currently mandated to report child maltreatment often do not do so. We believe there are a variety of reasons for this, some of which are well-intentioned. These include: 1) fear that contacting the authorities may make the situation worse for the child and the family; 2) a lack of understanding they have a duty to report; 3) a lack of understanding about when the duty to report is triggered; 4) fear of being wrong; and 5) fear of civil liability. Increasing fear of not reporting might counteract this, but reducing fear of reporting and lack of understanding is another method that may identify more victims of child abuse.

If I may be so bold, I would suggest that rather than vote out these mandatory reporting bills, you step back and take a careful, considered look at the entire system in Michigan for preventing and responding to cases of child abuse (both by those legally responsible for the child's care and by those who are not). I urge you to carefully consider what changes in the current system make the most sense given the resources that are available or that may be made available. Doing so, in my view, will better serve Michigan's children.

Thank you.



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Does changing mandated reporting laws improve child maltreatment reporting in large U.S. counties?

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ABSTRACT

The effects of changes in mandated child maltreatment reporting laws have not been systematically evaluated. To better understand the effects of these changes, the objectives of the present study are: (1) to assess the relationships between report rates and state universal and clergy reporting laws in 2010; (2) to compare the changes in total, confirmed, and maltreatment type report rates and with changes in reporting laws from 2000 to 2010, and (3) to examine whether there is any relationship with report rates and the nature of the mandated reporting law change. We used county-level data from the U.S. National Child Abuse and Neglect Data System for the years 2000 and 2010 to evaluate changes in reporting rates for total reports, confirmed reports, and confirmed maltreatment types while controlling for concurrent changes in child and community variables. We found that trends in 2010 for increased total and confirmed reports were similar to 2000 for counties with universal and/or clergy reporting requirements, which significantly contributed to report rates even after controlling for child and community factors. Universal reporting was associated with higher report rates for physical and sexual abuse, and clergy reporting requirements were associated with more sexual abuse, medical neglect and psychological maltreatment confirmed reports. However, while counties in states that changed their clergy reporting laws had higher increases in total reports, they had fewer confirmed physical and sexual abuse, neglect, and psychological maltreatment reports. More pronounced changes were noted in a state that made more pronounced changes in its clergy reporting laws. Policymakers should consider whether changing requirements for mandated reporting meaningfully improves child maltreatment identification.

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1. Introduction

Child maltreatment (CM) reporting laws and policies play an important role in the identification of CM. Controversies have resulted in the consideration of changes in mandated reporting laws in the U.S. that include extending requirements to all adults, known as 'universal' reporting (Eldred & Gifford, 2016; Mathews & Bross, 2008; Melton, 2005; Steen & Duran, 2014). In addition, because of highly publicized reports of adults in positions of authority sexually exploiting youth under their care, there have been calls for mandated reporting by additional categories of professionals such as the clergy or athletic coaches (John Jay College Research Team, 2011; Giardino, Sacks, & Terry, 2012; Wurtele, 2012). This has spurred governmental authorities to implement changes in mandated reporting laws in the United States with a goal of better identifying additional cases of serious physical and sexual abuse (Freeh, Sporkin, & Sullivan, LLP, 2012).

There has been a presumption that such changes in reporting policies or statutes will result in better identification and response to CM,

such as for child sexual abuse by clergy, but the effects of these changes have not been systematically evaluated (Eldred & Gifford, 2016). When the association of universal reporting laws with total and confirmed CM reports was evaluated in a study using data from the year 2000, there were higher report rates in large counties with universal reporting, but most of the additional confirmed reports were for neglect and not for confirmed physical or sexual abuse (Palusci & Vandervort, 2014). In an additional study evaluating the effects of laws requiring clergy to report, counties with clergy reporting laws actually had significantly decreased confirmed physical abuse report rates, and none of the other CM rates were significantly affected (Vandervort & Palusci, 2014). Between 2000 and 2010, some states have changed their reporting laws, and it is unclear whether the nature or timing of those changes affected their CM report rates (Child Welfare Information Gateway, 2010).

With this in mind, it is unclear whether changing state mandated reporter laws will result in more total reports, more confirmed reports, or more reports of specific types of CM when differences in child, family and other community factors are taken into account. To better understand these relationships, it is important that research address the relationships between report rates and universal and clergy reporting laws to examine whether there is any relationship with CM reports and mandated reporting law changes.

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1.1. Mandated reporting

U.S. child protection laws require the reporting of physical, sexual, and psychological abuse as well as physical, medical, and psychological neglect (Child Abuse Prevention and Treatment Act, 1974). There has been an expansion of the professions that must report concerns that a child has been abused or neglected, with some states' reporting statutes now containing a long list of professionals who must report suspected cases of maltreatment to child protection agencies. For example, some states now include those who work in youth-serving organizations, such as coaches, as mandated reporters. Other states require all adults to report suspected child maltreatment ("universal reporting"). Still others may exempt certain professionals such as attorneys and the clergy from all reporting or provide exemptions for certain circumstances such as attorney–client or clergy–penitent privilege (National Center for Prosecution of Child Abuse, 2012).

1.2. Mandating clergy to report

Despite the fact that clergy and other child-helping professionals all have an ethical duty to protect the safety and well-being of children, many state child maltreatment reporting laws address the responsibility of members of the clergy separately from other groups of professionals. Although doctors, social workers, and teachers are typically subject to blanket mandates, clergymen are usually covered by more nuanced legal requirements. First, in states with universal mandatory reporting, if members of the clergy are not explicitly exempted, they are presumably required to report in the same way that all other adult persons in the state are mandated to report. Second, a number of states seem to require clergymen to report suspicions of child maltreatment, but they also circumscribe that requirement, sometimes to the extent that the duty to report is, as a practical matter, eliminated. Maine law, for instance, requires that members of the clergy report suspected child abuse or neglect "except for information received during confidential communications" (Maine Revised Statutes, 2012). Similarly, Michigan's statute mandates that a member of the clergy must report suspected child maltreatment (Michigan Compiled Laws Annotated, 2013a), but a separate provision of the state's child protection law provides that legal privileges of communication between a member of the clergy and a parishioner are eliminated except for those communications "made to a member of the clergy in his or her professional character in a confession or similarly confidential communication" (Michigan Compiled Laws Annotated, 2013b). Applying these statutes, the Michigan Court of Appeals has ruled that a minister had no duty to report when a member of the church came to him to seek advice after she had discovered that her husband was sexually abusing their daughter because the woman who approached the clergyman thought the communication was confidential (People v. Prominski, 2013). Thus, if mandated at all, clergymen may be 'always' mandated to report suspected CM, or they may be 'sometimes' mandated to report with a duty which is much narrower in scope than that imposed on other professional groups (Vandervort, 2012).

1.3. Child and family characteristics and CM reports

An analysis of CM reports noted report rates in 2010 were not higher in states with universal reporting (McElroy, 2012), but this analysis did not take child and community factors into account. Child gender, race, ethnicity, middle school attendance, poverty, and community crime rate have been found to modify these associations, sometimes with greater effect than reporting requirements (Palusci & Vandervort, 2014). Thus, it is important to take these into account in any analysis of the effects of changes in state laws if the full effects of their implementation on the reporting and identification of CM are to be understood. Several child and family characteristics have been linked to CM reporting, confirmation, and CM type in other studies. For example,

the rate of sexual abuse was much higher among girls than boys in the Fourth National Incidence Study of Child Abuse and Neglect (NIS-4), and this gender difference accounted for higher rates of total abuse among girls (Sedlak et al., 2010). NIS-4 also found strong and pervasive race differences in the incidence of maltreatment, with the rates of maltreatment for black children significantly higher than those for white and Hispanic children. Latino, Asian/Pacific Islander, and multiracial children were found to have greater risk for being reported, and Native Americans had lower risk for physical abuse reports (Dakil, Cox, Lin, & Flores, 2011).

Other factors can also significantly modify the effects of reporting laws. Children in low socioeconomic-status households had significantly higher rates of maltreatment in all categories and across both definitional standards in NIS-4. They experienced some type of maltreatment at more than 5 times the rate of other children, were more than 3 times as likely to be abused, and were 7 times as likely to be neglected (Sedlak et al., 2010). Children with confirmed disabilities had significantly lower rates of physical abuse and moderate harm from maltreatment, but they had significantly higher rates of emotional neglect and serious injury under the NIS Harm Standard. In another study, white race, inadequate housing, and receiving public assistance were associated with significantly increased risk of CM recurrence among young children (Palusci, 2011), and increased reporting has also been linked with poor school attendance, substance abuse, and family structure. In addition, many measures of social capital such as religiosity, family social support, and support within the neighborhood have been found to be associated with CM reporting (Runyan et al., 1998). Degree of religious involvement, for example, has been associated with increased physical abuse potential (and possibly reports), but Mahoney, Pargament, Tarakeshwar, and Swank found that, while certain religious practices were associated with higher rates of corporal punishment, greater parental religiosity was related to more positive parenting and better child adjustment (Mahoney, Pargament, Tarakeshwar, & Swank, 2001; Rodriguez & Henderson, 2010).

1.4. Factors at the community level linked with CM reports

Factors at the community level such as population size, housing availability, unemployment, education, crime, and religiosity have been linked with CM reports to varying degrees. An association between neglect in early childhood and subsequent externalizing behavior has been found, which may be related in part to families' residence in dangerous neighborhoods (Yonas et al., 2010). In addition to crime, a number of socio-economic characteristics of neighborhoods have been shown to correlate with child maltreatment rates as measured by official reports to child protective service agencies (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007). Freisthler, Merritt, and LaScala (2006) have noted that neighborhood impoverishment, housing stress/vacant housing, unemployment, child care burden, and alcohol availability may contribute to child abuse and neglect, supporting the necessity of developing a more thorough understanding of how neighborhood characteristics exert their influence on varying types of child maltreatment. Higher rates of poverty and higher density of alcohol outlets in urban areas have also been associated with higher rates of CM reports (Freisthler, Bruce, & Needell, 2007). Increasing social capital through programs such as Early Head Start and other preschool activities in the community has been found to decrease CM reports (Green et al., 2014; Klein, 2011; Zolotor & Runyan, 2006), and an analysis exploring the effects of state policies found that those that resulted in continuity of child health care and a lack of waitlists for subsidized child care were correlated with decreased CM rates (Klevens, Barnett, Florence, & Moore, 2015).

With this in mind, it is unclear whether changing state mandated reporter laws will result in more total reports, more confirmed reports, or more reports of specific types of CM when differences in child, family and other community factors are taken into account over time. To better

understand these relationships, the objectives of the present study are: (1) to assess the relationships between report rates and state universal and clergy reporting laws in 2010, (2) to compare the changes in total, confirmed, and CM type report rates with changes in reporting laws from 2000 to 2010, and (3) to examine whether there is any relationship with reporting rates and the nature of the mandated reporting law change.

2. Methods

We reviewed statutes that mandate universal and clergy reporting in states with available county-level information in the National Child Abuse and Neglect Data System (NCANDS) for the years 2000 and 2010. Total report rates, confirmed report rates, and CM type-specific report rates were calculated for years 2000 and 2010, and changes were compared with changes in state reporting requirements as independent variables. Rates were then analyzed using linear regression models controlling for child, family and community demographic factors using information from publically available sources, including U.S. Census and other county-level data.

2.1. Dataset preparation

The National Child Abuse and Neglect Data System (NCANDS) collects data from U.S. states and territories and has offered large annual samples of CM reports since 1990. State CPS agencies voluntarily submit expanded case-level information about child, family and service characteristics for what is now called the Child File (National Data Archive on Child Abuse and Neglect, 2002). Although precise definitions vary from state to state, CM type categorizations in NCANDS are based on federal guidelines for evidence of one or more instances of physical abuse, sexual abuse, psychological maltreatment, neglect and medical neglect (U.S. Department of Health and Human Services, Administration for Children, Youth, and Families, 2002). When state agencies find credible evidence that abuse or neglect has occurred, the report is labeled 'substantiated' or 'indicated' based on state law and is considered a CPS-confirmed report. More recent years also contain 'alternative response victims,' which are also considered confirmed reports, although the investigation and confirmation process is different (U.S. Department of Health and Human Services, Administration for Children, Youth, and Families, 2002; U.S. Department of Health and Human Services, Administration for Children, Youth, and Families, 2011).

NCANDS public use datafiles for the years 2000 and 2010 were obtained for this study from the National Data Archive on Child Abuse and Neglect at Cornell University (National Data Archive on Child Abuse and Neglect, 2002, 2011). The SAS statistical software package, version 9.1 (SAS Institute Inc., Cary, NC) was used for data management and analysis. Duplicative reports occurring on the same day were deleted using a 'roll up' procedure provided with the dataset. Variable fields were assessed to determine whether they were missing, categorical, or continuous in nature. Records were sorted by state and county in the dataset and were compared with published information to ensure that the dataset was complete.

2.2. Study sample

The sample for CM reports used for this study was derived from the NCANDS datasets for two years (2000 and 2010). NCANDS records have been used successfully in other analyses of CM, and these study years were chosen to enable comparison using more complete community data. Confirmed reports were identified as those which were labeled as 'substantiated,' 'indicated,' or 'alternative response-victim' in the dataset. The NCANDS dataset includes county identifiers only for those counties where 1000 or more reports were made, and not all U.S. states submitted data for the years 2000 and 2010. Report data available from U.S. counties in 2010 was matched to available counties in 2000. This

resulted in 192 counties in 17 states with 940,976 total and 227,387 confirmed reports in 2010 matched to 726,111 total and 244,406 confirmed reports from those same counties in 2000. The U.S. states with usable county-level data available for our analyses were Delaware, Florida, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Missouri, Nebraska, North Carolina, Oklahoma, Pennsylvania, Rhode Island, Texas, Utah, and Washington. No county information was available for the two most populous U.S. states (NY and CA) because these states did not have available data in NCANDS in both years. CM types were identified among confirmed reports, and these CM types were assessed in additional separate analyses. Each confirmed report could have up to four CM types from among five possible types: physical abuse (PA), sexual abuse (SA), neglect (NE), medical neglect (MN), and psychological maltreatment (PM).

2.3. CM reporting laws and additional data sources

One of us (FEV) reviewed applicable state statutes in the study states regarding mandatory reporting requirements. Each state law was examined using state statutory codes as well as session laws to determine whether, in the years 2000 and 2010, the applicable statutes specifically identified whether there were "universal" reporting requirements and whether clergy members were required to report suspected abuse or neglect 'always,' 'sometimes,' or 'never' based on the reporting laws and any exclusions in other statutes based on clergy-penitent relationship. Any change in the category of these laws was noted and used as the independent variable for analysis (Table 1).

While information is not available in national datasets about all of the numerous risk and social capital factors associated with CM reporting, there are several data sources with U.S. county-level information regarding demographic characteristics measuring similar, if not identical, attributes (Table 2). From the 2000 U.S. Decennial Census (U.S. Department of Commerce, U.S. Census Bureau, 2007a, 2007b), the county's total and child populations less than 18 years of age, child gender, race, ethnicity, unemployment, marriage percentage, education levels, school attendance, housing, poverty, disability, and use of English as a language were available. For 2010, similar data were obtained (U.S. Census Bureau, 2011–2013a, 2011–2013b; U.S. Department of Labor, Bureau of Labor Statistics, 2014). From the Association of Religion Data Archives (2002, 2012), data were available from surveys of all religious congregations in each county, including total membership and number of congregations for all recognized organized religions. The U.S. FBI Uniform Crime Reports (US Department of Justice, 2001; National Archive of Criminal Justice Data, 2010) provided information on the total number of index crimes, as well as aggravated assaults, rapes, and murders. Index crimes are the eight crimes the FBI combines to produce its annual crime index, which includes willful homicide, forcible rape, robbery, burglary, aggravated assault, larceny over \$50, motor vehicle theft, and arson.

2.4. Data analysis

Using the NCANDS Child Files, the rates of total, confirmed CPS reports and CM types were calculated by county in order to compare variables across counties of varying population size. Report rates were calculated per 1000 children, and county-level variables were calculated per 1000 children, 1000 total population or 100,000 total population as appropriate. Community demographic rates and other variables were linked by county with CM reports in a single dataset. Total reports, confirmed reports, and subtypes for the year 2010 were compared to data from 2000, and stratified by change in state universal or clergy reporting law requirement (yes/no) in bivariate comparisons. Cross-sectional ecological design was used for multiple variable comparisons with county as the unit of analysis, comparing counties with universal reporting laws to those without, counties with clergy reporting requirements to those without, and counties with changes in reporting laws to

Table 1
State clergy child maltreatment report statutes, 2000 and 2010.

State	Statutory citation	Universal reporting laws?	In 2000 were clergy mandated reporters?	In 2010 were clergy mandated reporters?	Change from 2000 to 2010 for clergy?
Delaware (DE)	DE Code Ann Title 16 § 903	Yes	Sometimes	Sometimes	No
Florida (FL)	FL Stats Ann § 39.201	Yes	Yes	Yes	No
Kansas (KS)	KS Stat Ann § 38-2223	No	No	No	No
Kentucky (KY)	KY Rev. Stat Ann § 620.030	Yes	No	Yes	Yes
Louisiana (LA)	LA Child Code An Art 603(13)(c)	No	Sometimes	Sometimes	No
Maine (ME)	22 MRSA § 4011-A(1)(a)(27)	No	Sometimes	Sometimes	No
Massachusetts (MA)	MA Gen Laws ch 119 § 21(iv) (definition); Mass Gen Laws ch 119 § 51A(j) (responsibilities)	No	No	Sometimes	Yes
Minnesota (MN)	MN Stat § 626.556(a)(2); §595.02 (exception for confession or similar communication)	No	Sometimes	Sometimes	No
Missouri (MO)	MO Rev. Stat § 210.115 (general reporting law); Mo Rev. Stat § 352.400(2) (specific duty re clergy)	No	Sometimes	Sometimes	No
Nebraska (NE)	NE Rev. Stat § 28-711	Yes	Yes	Yes	No
North Carolina (NC)	NC Gen Stat § 7B-301	Yes	Yes	Yes	No
Oklahoma (OK)	10 A OK St § 1-2-101 (current)	Yes	Yes	Yes	No
Pennsylvania (PA)	23 P.A.C.S. § 6311	No	Sometimes	Sometimes	No
Rhode Island (RI)	RI Gen Laws § 40-11-3 (general reporting duty); RI Gen Laws § 40-11-3.1 (child death); RI Gen Laws § 40-11-6 (reporting by physician)	Yes	Yes	Yes	No
Texas (TX)	TX Fam Code Ann § 261.101	Yes	Yes	Yes	No
Utah (UT)	UT Code Ann § 62A-4a-403 (general reporting duty); UT Code Ann § 62A-4a-404 (reporting presence of alcohol, FASD or FAS at birth)	Yes	Sometimes	Sometimes	No
Washington (WA)	WA Rev. Code Ann § 26.44.030	No	No	No	No

those with no changes. Changes in rates and covariates were also calculated and compared using t-tests and regression models with rates stratified by the nature of the change in reporting law.

Strength of association was assessed using Student t-tests, and changes in a single county over time were compared using paired t-

tests. Linear regression models with reporting requirement (yes/no) as an independent variable were used for multivariable analysis to estimate the contribution to the report rate in question as the dependent variable. Full models and reduced models were reported, using a backwards elimination approach with covariates removed one by one until only the significant variables were left for reduced models. Alpha was set to 0.05 for all analyses.

Table 2
Variables by type and source.

Maltreatment reports (NCANDS, 2000, 2010):
Total reports
Confirmed reports (substantiated, indicated and alternative-response-victim)
Physical abuse
Sexual abuse
Neglect
Medical neglect
Psychological maltreatment
Child characteristics (U.S. Census, 2000, 2010):
Population: total and child, age < 18 years
Gender: children < 18 years, male (%)
Race: children < 18 years White, Black, Asian, American Indian, Pacific Islander (%)
Race: children < 18 years with two or more races (%)
Ethnicity: children < 18 years Hispanic (%)
Marriage: children < 18 years in married families (%)
Disability: children ages 5–15 years with no disability (%)
Isolation: children with linguistic isolation (%)
Education: children attending school (%), by age (3–4y, 5–9y, 10–14 years, 15–17 years)
Poverty: children in families at or below 100% federal poverty level
Community characteristics (U.S. Census, 2000, 2010):
Education: Adults ages 18–24 years without high school completion (%)
Housing: Occupied housing units (%)
Employment: Unemployment Rate (%) (Bureau of Labor Statistics, 2000, 2010)
Religiosity: Number of congregations per 100,000 children (Association of Religion Data Archives, 2000, 2010)
Crime: (FBI Crime Statistics, 2000, 2010, rate per 100,000 total population):
Index crimes
Murders
Rapes
Aggravated assaults
State child maltreatment reporting statutes: Universal reporting (yes/no), clergy mandated reporting (yes/sometimes/no)

2.5. Human subjects protections

Several steps have been taken in the dataset preparation, distribution, and use to protect the privacy of children and families. In NCANDS, steps were taken before distribution to remove or mask names, low frequency race/ethnicity, and dates of birth and CM report. In addition, all geography and encrypted IDs were masked for fatalities. County was identified only in counties with more than 1000 report-child pairs in each study year. Files were transmitted using secure servers and were stored on secure computers. Other files used in our analyses contained publically-available summary data based on county with no individual identifying information. Because of these protections, the New York University human subjects committee deemed this research to be exempt from further review.

3. Results

3.1. Relationships between reporting rates and reporting laws in 2010

Our review of state statutes found that there were no changes in universal reporting laws in the 17 study states during the study period, and therefore we could only compare states with universal reporting to those without it using our cross-sectional analysis. Two of the study states did change their clergy reporting laws (Table 1). These two states had 23 counties with report information; one state (11 counties available) changed from no requirement to 'sometimes,' and another state with 12 counties available changed from no requirement to full reporting. The remaining 15 states with 169 counties available did not have changes noted. Six had full reporting, seven had 'sometimes'

reporting, and two had no reporting requirement through 2010. In bivariate comparison, total and confirmed report rates were higher in counties in states with universal reporting laws in 2010, and confirmed report rates for medical neglect increased significantly (Table 3). No significant relationships were noted for other CM types. For clergy reporting laws, total and confirmed report rates for counties in states with no clergy reporting laws were not significantly different in bivariate comparisons from those in counties with required reporting at least some of the time, but there were higher rates of confirmed sexual abuse, medical neglect and psychological maltreatment.

Reduced regression models for 2010 showed that universal reporting laws contributed significantly to increased total and confirmed reporting rates even after controlling for child and community factors (Table 4). Similar effects were seen for physical abuse, neglect, and medical neglect report rates. For comparison, counties in states with at least some clergy reporting requirements had increased physical abuse and neglect. Significant co-variables making contributions to the rates in these analyses were often race/ethnicity, linguistic isolation, attending school, unemployment, marriage, numbers of religious congregations, and proportion of occupied housing. Overall, child and community factors varied in direction and were often greatly overshadowed in magnitude by an effect of universal or clergy reporting laws on report rates.

3.2. Changes from 2000 to 2010 in child, family, and community factors

Study counties in 2010 had significantly higher total CM report rates but lower confirmed report rates overall and for CM types in comparison to 2000 (Table 5). Significant demographic changes included greater total and child populations, which included fewer males and White children in 2010. Decreased school attendance for age <14 years, high school completion, and marriage were noted, but there were increases in congregation, poverty, unemployment, and linguistic isolation rates. All categories of crime decreased for the study counties. When these changes were stratified by universal or clergy reporting law status in 2010, there were significantly increased total report rates in counties with universal reporting, but no significant differences based on clergy reporting (Table 6). While all rates decreased, the decreases by CM type were significantly less for neglect, medical neglect and psychological maltreatment, but not sexual or physical abuse. In reduced regression models, a universal reporting law had no significant association with changes in any of the report rates studied (Table 7). Clergy reporting requirements in 2010 significantly contributed to changes in confirmed report rates during 2000 to 2010 as well as to increases in rates for sexual abuse, medical neglect, and psychological maltreatment. Significant co-variables included child male gender, race/ethnicity, unemployment, not completing high school, and rape. In the 23 counties where any change in clergy reporting law was made, there were significantly greater increases in total report rates

Table 4
Significant factor contributions in reduced regression models for report rates, 2010.

Report rate	Universal reporting law (yes/no)	Clergy reporting law (any/no)
1. Total reports	Universal reporting = 31.3 ($r^2 = 0.6270$) Other factors: Total population (+), Child population (–), White (0.579), Poor (2.10), Linguistic Isolation (–2.30), Congregations (–11.6), Occupied Housing (–1.77), Rape (30.5)	Any Clergy reporting = NS
2. Total confirmed reports	Universal reporting = 13.6 ($r^2 = 0.5581$) Other factors: White (0.242), Linguistic Isolation (–0.222), Married (–0.031), Unemployment (0.547), Occupied Housing (–0.319), Rape (14.9)	Any Clergy reporting = 9.48 ($r^2 = 0.3858$) Other factors: Hispanic (0.129), Linguistic isolation (–0.398), Unemployment (0.889), Occupied Housing (–0.506), Murder (–46.9), Rape (1.90)
2a. Confirmed physical abuse reports	Universal reporting = 0.467 ($r^2 = 0.3463$) Other factors: >1 race (–0.085), Hispanic (0.337), School 15–17 years (–0.091), Linguistic Isolation (–0.0788), Rape (2.30)	Any Clergy reporting = 1.09 ($r^2 = 0.3301$) Other factors: Hispanic (0.039), School 15–17 years (–0.93), Linguistic Isolation (–0.082), Congregations (2.67), Rape (1.90)
2b. Confirmed neglect reports	Universal reporting = 9.78 ($r^2 = 0.5381$) Other factors: Hispanic (0.0703), School 3–4 years (0.241), School 5–9 years (–1.37), School 10–14 years (1.33), Married (0.261), Congregations (5.55), Occupied Housing (–0.199)	Any Clergy reporting = 7.10 ($r^2 = 0.2854$) Other factors: Hispanic (0.165), Linguistic isolation (–0.371), Congregations (2.67), Occupied Housing (–0.218)
2c. Confirmed medical neglect reports	Universal reporting = 0.246 ($r^2 = 0.3811$) Other factors: Hispanic (0.0703), School 3–4 years (0.241), School 5–9 years (–1.37), School 10–14 years (1.33), Married (0.261), Congregations (5.55), Occupied housing (–0.199)	Any Clergy reporting = NS
2d. Confirmed sexual abuse reports	Universal reporting = NS	Any Clergy reporting = NS
2e. Confirmed psychological maltreatment reports	Universal reporting = NS	Any Clergy reporting = NS

Rates are per 1000 children. $p < 0.05$ for listed factors except where NS = not significant ($p > 0.05$).

Table 3
Bivariate comparison of report rates, by report laws, 2010.

	Universal reporting (# counties)		Clergy reporting (# counties)		
	Yes (137)	No (55) ^a	Yes (82)	Sometimes (86)	No (24) ^b
Total report rate	71.8	43.8***	58.8	67.4	67.9
Confirmed reports					
Total rate	16.2	11.0**	13.1	16.6	13.4
Physical abuse	1.55	1.61	1.57	1.67	1.25*
Neglect	10.1	7.90	9.91	8.48	11.4
Medical neglect	0.249	0.033***	0.261	0.165	0.011***
Sexual abuse	0.879	0.748	0.902	0.837	0.654*
Psychological maltreatment	0.382	0.407	0.147	0.708	0.079***

Rates are per 1000 children.

^a Difference significant (no v. yes): * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

^b Difference significant (no v. yes/sometimes): * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 5
Comparison of reports, child and community factors, by year (192 counties).

	2000	2010	Difference ^a
Total reports, rate	41.19	53.38	12.19*
Total confirmed reports, rate	13.86	12.90	−0.97*
Physical abuse reports, rate	5.60	1.60	−4.00*
Neglect reports, rate	12.63	7.62	−5.00*
Medical neglect reports, rate	0.53	0.17	−0.36*
Sexual abuse reports, rate	1.93	0.78	−1.15*
Psychological maltreatment reports, rate	1.55	0.46	−1.10*
Total population	67,580,456	77,184,727	9,604,271*
Population younger than 18 years	17,628,093	18,731,774	1,103,681*
Child factors:			
Male gender, %	51.22	51.11	−0.11*
Race			
White, %	68.83	64.35	−4.48*
Black, %	17.23	17.23	0.00
American Indian/Alaskan Native, %	0.78	0.87	0.09
Asian, %	2.61	3.85	1.24*
Hawaiian Native/Pacific Islander, %	0.12	0.17	0.05*
More than 1 race, %	3.61	5.41	1.80*
Hispanic ethnicity, %	17.74	27.36	9.62*
In School, by Age:			
3–4 years, %	49.60	47.82	−1.78*
5–9 years, %	95.70	95.60	−0.10
10–14 years, %	98.89	98.44	−0.45*
15–17 years, %	94.03	96.31	2.28*
No disability, 5–15 years, %	94.03	94.67	0.63
Poverty, %	17.23	21.74	4.51*
Linguistic isolation, %	4.87	10.44	5.57*
Community factors:			
Married, %	62.26	49.21	−13.05*
No high school completion by age 18–24 years, %	27.30	17.24	−10.06*
Unemployment, %	3.98	9.48	5.50*
Congregations, rate	0.72	0.93	0.21*
Housing units occupied, %	91.0	89.0	−2.0*
Index crimes, rate	197.3	41.4	−155.9*
Murders, rate	0.24	0.06	−0.18
Aggravated assaults, rate	15.50	3.11	−12.39
Rapes, rate	1.46	0.31	−1.15*

Rates are per 1000 children unless otherwise noted.

* Difference 2010 from 2000: paired *t*-test: $p < 0.05$.

but also significantly greater decreases in physical abuse, sexual abuse, neglect and psychological maltreatment report rates (Table 8).

3.3. Reporting rates and the nature of the mandated reporting law change.

Only two states had changes in their clergy reporting laws between 2000 and 2010: one changed from 'no' to 'sometimes' and another changed from 'no' to 'yes'. Differences were noted based on the nature of any change in that changes in report rates were more pronounced

Table 7
Significant factor contributions in reduced regression models for changes in report rates, 2000 to 2010.

Report rate	Universal reporting law (yes/no)	Clergy reporting law (any/no)
1. Total reports	NS	Any clergy reporting = NS
2. Total confirmed reports	NS	Any clergy reporting = 10.97 ($r^2 = 0.3824$) Other factors: White (0.398), Black (0.538), Hispanic (0.439), In School 15–17 years (0.808), Poor (−0.455), Parent Unemployment (−1.33), Rape (15.4) Any clergy reporting = NS
2a. Confirmed physical abuse reports	NS	Any clergy reporting = NS
2b. Confirmed neglect reports	NS	Any clergy reporting = NS
2c. Confirmed medical neglect reports	NS	Any clergy reporting = 2.76 ($r^2 = 0.4117$) Other factors: Child Male (0.435), Native Hawaiian/Pacific Islander (1.31), More than 1 Race (0.133), No Parent High School (−0.019)
2d. Confirmed sexual abuse reports	NS	Any clergy reporting = 1.57 ($r^2 = 0.1644$) Other factors: Male (0.618), Unemployment (−0.155)
2e. Confirmed psychological maltreatment reports	NS	Any clergy reporting = 10.8 ($r^2 = 0.5269$) Other factors: Child Male (0.851)

Rates are per 1000 children. Factors are significant at $p < 0.05$ except where NS not significant ($p > 0.05$).

for the 12 counties in the state that changed its statute to fully required reporting as compared to the other 11 counties. When differences in their report rates were assessed for changes from the year 2000 to the year 2010, there were greater increases in total report rates (13.93 v. 12.81) for counties that changed from 'no' to 'yes', but decreased changes in confirmed report rates (−0.07 v. 1.55) (Table 8). Neither of these changes was statistically significant, but there were significantly decreased rates for physical and sexual abuse, neglect and psychological maltreatment confirmation. These two states did not report medical neglect separately, precluding further analysis of this CM type, and the small number of counties making a clergy reporting law change precluded adequate statistical power for comparisons using regression models.

4. Discussion

We were able to confirm that many of the relationships found for the year 2000 in our analysis of universal and clergy reporting laws and report rates continued in the year 2010. The changes noted in report rates

Table 6
Comparison of changes in report rates from 2000 to 2010, by report laws.

Report rate	Universal reporting (# counties)		Clergy reporting (# counties)	
	Universal (137)	Not universal ^a (55)	Yes/sometimes (168)	No ^b (24)
Total report rate	12.6	−2.80*	8.62	1.43
Total confirmed reports	−3.51	−2.46	−3.17	−3.79
Physical abuse reports	−4.79	−4.52	−4.83	−2.88
Neglect reports	−8.58	−7.22	−8.49	−3.77*
Medical neglect reports	−0.547	−0.633	−0.480	−3.42*
Sexual abuse reports	−1.42	−1.46	−1.46	−1.13
Psychological maltreatment reports	−1.11	−2.09	−1.13	−11.74*

Rates are per 1000 children.

^a Difference significant (no v. yes): paired *t*-test: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.^b Difference significant (no v. yes/sometimes): paired *t*-test: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 8

Report rates and types, by change in clergy reporting law, 2000–2010.

	Year	Any change in clergy reporting law (# counties)			Change made in clergy reporting law (# counties)	
		Overall (192)	No (169)	Yes (23)	No → Sometimes (11)	No → Yes (12)
Total reports	2000	55.65	53.95	68.05	52.57	82.24
	2010	63.81	61.41	81.45	65.38	96.18
	Difference	8.17 ^a	7.45 ^a	13.40	12.81	13.93
Total confirmed reports	2000	17.89	16.92	24.95	28.56	21.63
	2010	14.68	13.19	25.65	30.12	21.56
	Difference	−3.21 ^a	−3.74 ^a	0.71 ^b	1.55	−0.07
Confirmed physical abuse reports	2000	6.29	4.65	18.31	13.95	22.31
	2010	0.58	1.50	2.12	2.71	1.57
	Difference	−4.71 ^a	−3.15 ^a	−16.19 ^{a,b}	−11.23 ^a	−20.73 ^{a,c}
Confirmed neglect reports	2000	17.65	13.25	50.04	41.71	57.68
	2010	9.46	7.84	21.31	23.38	19.42
	Difference	−8.19 ^a	−5.40 ^a	−28.73 ^{a,b}	−18.32 ^a	−38.26 ^{a,c}
Confirmed sexual abuse reports	2000	2.28	1.97	4.55	3.24	5.75
	2010	0.841	0.853	0.764	0.765	0.763
	Difference	−1.43 ^a	−1.11 ^a	−3.79 ^{a,b}	−2.48 ^a	−4.99 ^{a,c}
Confirmed medical neglect reports	2000	0.783	0.783	NR	NR	NR
	2010	0.258	0.227	NR	NR	NR
	Difference	−0.559 ^a	−0.556 ^a	NR	NR	NR
Confirmed psychological maltreatment	2000	1.72	1.74	1.58	0.210	2.84
	2010	0.409	0.460	0.049	0.016	0.079
	Difference	−1.36 ^a	−1.28 ^a	−1.53 ^a	−0.194	−2.76 ^{a,c}

Rates are per 1000 children; NR = no reports/not available.

^a Difference 2010 from 2000: paired-*t* *p* < 0.05.^b Difference 'Yes' from 'No': *p* < 0.05.^c Difference 'Yes' from 'No-Sometimes': *p* < 0.05.

were related to reporting law status in several ways, and the results of a 'natural experiment' with changes in two states' clergy reporting requirements begins to shed light on the effects on child maltreatment reporting when reporting laws are changed.

4.1. Relationships between county report rates and universal reporting laws in 2010

Total and confirmed report rates were higher in counties with universal reporting requirements in 2010, but among CM types, only medical neglect report rates significantly increased. This is comparable to the year 2000 when only confirmed report rates were significantly higher in bivariate comparisons (Palusci & Vandervort, 2014). Rates for physical and sexual abuse were lower and rates for neglect and psychological maltreatment were higher, but none of these differences reached statistical significance. When examined in regression models including child and community factors, states with universal reporting requirements had significantly higher total report rates in reduced models in 2000. This expanded in 2010 to include significant and substantial contributions by universal reporting to total, confirmed, physical abuse, neglect and medical neglect rates. As in 2000, race/ethnicity and community factors such as religious congregations, occupied housing, marriage, unemployment, and linguistic isolation were important co-variables in the year 2010 analysis.

4.2. Comparison of changes in report rates with changes in clergy reporting laws

Similar to the year 2000 findings, report rates were associated with clergy reporting requirements in 2010 (Vandervort & Palusci, 2014). Our study design then gave us the opportunity to assess whether there were effects associated with changes from the year 2000 to the year 2010 in the two states that changed their laws. There were important changes in the demographic makeup of the U.S. population over the ten years from 2000 to 2010, and the child, family and community characteristics in our sample reflected the country's growing racial and ethnic diversity and, with the economic recession, increasing poverty, unemployment, and unoccupied housing. We can only speculate

about the effects of these intercensal changes on the economy, employment and social norms, which could have had marked effects on reporting that we were unable to account for in our models. Counties in states that changed clergy reporting laws did not increase confirmation rates for CM types, and rates of all CM types uniformly decreased, although decreases were greater in counties in states with any change in their clergy reporting statute. These changes were more pronounced for sexual abuse and neglect, which are more consistently reported in NCANDS since medical neglect and psychological maltreatment have not been separately defined in all states (Child Welfare Information Gateway, 2012).

4.3. Report rates and the nature of the clergy reporting law change

We found that, while counties in two states that changed their clergy reporting requirements had significantly more reports per population in aggregate, there were actually fewer confirmed reports and significant decreases in physical and sexual abuse and neglect victim identification. Some of these effects were sizable, and the decreases extended to psychological maltreatment in bivariate analyses. In multivariate models, changes in clergy reporting requirements rose to prominence in reduced models with significant contributions from population size and other significant family and child characteristics. While it seems logical that counties in states with more sweeping statute changes would have had greater changes in report rates, it is difficult to know whether it was the actual nature of the legal change made or the unique characteristics of the state itself which more greatly impacted the change. Only one state in each category changed their laws, and we did not analyze the effects of when the specific change in statute occurred during the ten-year period, how successfully it was publicized, or whether it was enforced within particular counties, all of which could modify our results. Furthermore, the specific exclusions from full mandated reporting for clergy are contained in often multiple provisions of state law, making further refinement problematic for understanding the exact nature and effect of any change. The imposition of a new clergy reporting requirement actually made significant contributions to physical and sexual abuse confirmation, although these effects were sometimes less than changing child, family and community factors. This suggests that

the main impact of changing clergy reporting statutes may only extend to when a report is made and not to the agency policies and procedures concerning case investigation and confirmation.

4.4. Comparison with other studies

It is difficult to compare these results to other studies because there are few reports on the effects of changing reporting laws. In two earlier studies using state-level NCANDS data from larger numbers of states, universal reporting was not found to be significantly associated with total or confirmed report rates in models not including child or community factors (McElroy, 2012; Steen & Duran, 2014). These and other factors have been extensively studied and linked to CM reports, confirmed reports, and actual cases across varying communities, and they likely modify any association between report rates and reporting laws (Millett, Lanier, & Drake, 2011). CM rates have been linked to crime rates, and both CM and crime declined in our data. Economic recession, housing problems, and receiving public assistance have been linked to CM recurrence and increased pediatric hospital admissions for physical abuse, and it is unclear why these CM declines occurred in a time with increased poverty, parental separation, unemployment, and household crowding in our data (Palusci, 2011; Wood et al., 2012). Poverty and unemployment had some significant effects in our reduced models, but similar characteristics such as problems with English language and high school graduation had less effect. Despite these potential inconsistencies, our results do confirm the associations of reporting laws with report rates in both 2000 and 2010 despite the economic changes that occurred during the ten-year, intercensal period.

While increased availability of early child care and early childhood education has been linked with fewer CM reports (Klein, 2011; Klevens et al., 2015; Li, Godinet, & Arnsberger, 2011), we did not find an effect when we looked at the proportion of young children in school. Child disability, long thought to be associated with increased risk of CM (Turner, Vanderminden, Finkelhor, Hamby, & Shattuck, 2011) did not have significant association with reports in our study when analyzed at the population level. Religious beliefs and church attendance have been associated with parenting discipline practices and corporal punishment (Mahoney et al., 2001; Rodriguez & Henderson, 2010; Runyan et al., 1998), yet no consistent effect of a community's number of congregations was seen in our study. These findings may be partially explained by the fact that, while social capital factors impact CM on the individual level, their effects may not be as important as previously thought on the community level or may be additive with other factors in the child or community economy (Saluja, Kotch, & Lee, 2003; Zolotor & Runyan, 2006). To explain differences between total report rates and confirmed reports, there are likely other system factors beyond reporting laws (such as CPS practices) which affect case determination since both populations (confirmed and unconfirmed cases) have similar risk profiles (Hussey et al., 2005). Furthermore, when changes in reporting laws occurred, any associated changes in report rates may have actually reflected changes in other social conditions which, while not independently measured, resulted in the reporting law change.

4.5. Limitations and further study

This research is preliminary and hypothesis-generating as cross-sectional ecological comparisons cannot be used to infer causation. We cannot know definitively from this research whether changing state law or policy will result in changes in reporting or confirmation rates, but there do appear to be differences in 2010 compared to the year 2000 associated with reporting laws. We do not know when changes in law were actually implemented, and these changes may be more related to the changing societal values in a state which lead to the change in law or statute. In addition, nine of the states had a differential response system in place; while we included differential response

victims as confirmed reports, this alternative procedure could have affected our results. We also did not assess data available in NCANDS regarding rates for other reporter types or whether any changes in other reporter mandates affected our results for universal and clergy reporting.

While NCANDS is a large dataset covering many U.S. states, there are several limitations for its use in secondary analysis. Year 2000 data was used given the availability of decennial census data for comparison, but NCANDS had more limited data in 2000 than in 2010, resulting in a smaller number of counties and states available for analysis in both years. New York and California could not be included, and county-level data were available only for counties having 1000 or more reports, potentially biasing the results toward being more predictive for more populous counties and states. Thus counties with extremely low numbers of reports despite adequate population size could be excluded. This could also bias the results toward more urban counties since we did not assess urbanicity in our analyses. The sample included 192 counties with total populations of 67,580,456 in 2000 and 77,184,727 in 2010, with 17,628,093 and 18,731,774 children younger than 18 years old, respectively, representing a sizable proportion of the U.S. population but differing in several ways from the U.S. population as a whole (Palusci & Vandervort, 2014). Not having states such as California and New York could also bias the results, given that a recent study from New York did find that the relationship between unemployment and CM is different in large, metropolitan areas (Raissian, 2015). Furthermore, for our analyses of the nature of the change in state law associated with changes in child maltreatment reports, only two states had identified changes, severely limiting statistical power and generalizability.

We acknowledge that this study uses child, family and community demographic variables operating at different levels within the ecological model, and we did not use a nested design or hierarchical analytic models. Religiosity, for example, operates on both individual and community levels, but we were only able to include a community level measure. This is a limitation of the data available and our analyses, limiting any interpretation of the magnitude of the individual factors and their interaction with each other and with other levels in regression models. There are many potentially significant interactions among these variables, mostly within demographic categories such as race, population size and poverty. For example, as the percentage of one race increases in a particular county, the percentage of another race or races must therefore decrease. Communities with more unemployment can have more people living below the poverty level and without adequate housing, and interactions are possible and likely occur across types of reported crimes. Some of the variance for county effects in our models is explained by the reporting law, which is statewide, and hierarchical linear models could have been used but would have had decreased statistical power because of the additional layer of counties within states. Furthermore, our models did not reflect interaction effects, but the results with the reduced models did have a relatively small number of variables, thereby decreasing potential interactions. There are also likely several factors working within communities to affect CM reporting rates in addition to those measured in our study, and we may not have been able to capture the "micro-social environments" contributing to CM using these county-level data (Vinson & Baldry, 1999).

While there are exhaustive efforts to assure NCANDS data can be combined across states, different states use different definitions and policies for what is entered into the dataset. Some states, for example, do not report neglect or medical neglect *per se*, and others expand what can be reported for physical and educational neglect (Kelly, Barr, & Weatherby, 2006). Some states specifically exclude corporal punishment in some forms from reporting, and there are wide state-to-state variations (Mathews & Kenny, 2008). Within states, statutes may not necessarily reflect their actual procedural implementation, and variations across counties in a state likely exist that can bias our results (Cross & Casanueva, 2009). Additional prospective studies of what happens both within and among larger numbers of states over time and

with differential response will be required to determine the true impact of changing mandated reporting laws on the identification and response to child maltreatment. More longitudinal research is needed to evaluate the effects of mandatory reporting laws, including effects on child well-being and access to services (Eldred & Gifford, 2016).

5. Conclusions

Using retrospective analyses, we were able to find that CM report laws were significantly associated with report rates in large U.S. counties in selected states in the year 2010, and these associations were similar to those found for the year 2000. States with universal reporting laws and/or clergy reporting requirements continued to have significantly increased total and confirmed report rates even after controlling for child and community factors. There were also different effects found for CM types. In addition, states that changed their reporting laws for clergy between 2000 and 2010 had significantly higher increases in rates of total reports, but with decreases in rates of physical and sexual abuse, neglect and psychological maltreatment reports in bivariate comparisons. More pronounced changes were noted in a state that made more pronounced changes in its clergy reporting requirements.

The policy implications of our study are important. While new mandates for reporting suspected abuse and neglect have been touted as increasing identification of child victims, this study suggests that additional reports may be made but more maltreated children will not necessarily be found. This may place increased burdens on already overburdened child welfare systems with unintended consequences. In addition, any changes to mandated reporting laws, even if effective at increasing the numbers of identified children, may only address a small proportion of the numerous problems facing children and their families. While the results of this study cannot address the issue of whether it is better to increase total CM reports regardless of their accuracy, policymakers who are considering changing universal or clergy reporting statutes need to consider this information and whether it is important to generate more total reports overall or more confirmed reports to achieve better identification of maltreated children.

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