

What have we learned about child maltreatment fatality prevention?

Vincent J. Palusci; P. Leigh Bishop

Author Note

Vincent J. Palusci ORCID: 0000-0001-8752-6475

Correspondence concerning this article should be addressed to Vincent J. Palusci, M.D., M.S., Frances L. Loeb Child Protection and Development Center, Bellevue Hospital Center, 462 First Avenue, Room GC-65, New York, NY 10016. Email: Vincent.Palusci@nyuangleone.org. Dr. Palusci conceived the research idea, designed the analyses; reviewed the references, analyzed and interpreted the references, drafted the paper, reviewed it critically for intellectual content, approved the final version, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Ms. Bishop reviewed and edited it critically for intellectual content, approved the final version, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



Abstract

The number of identified fatal child abuse cases in the U.S. has been steadily increasing, with neglect causing or contributing to most of these deaths. Focusing on articles since 2015, we searched PubMed, PsycInfo, CINAHL, Embase, Web of Science, and Scopus on the terms “child abuse,” “child neglect,” “child maltreatment,” “fatality” and “prevention” to find themes on what we have learned about risk factors, strategies, and the role of public policy for child maltreatment fatality prevention. Compared to child maltreatment in general, young child age, male gender, non-White race, special needs and disability, and behavioral issues are additional indicators more strongly associated with fatality. Most perpetrators are caregivers of their victims, and official statistics show that women are more often the perpetrators of infant abuse and neglect-related deaths. Parental mental illness, substance use, access to firearms, prior intimate partner violence, other violence in the home, and criminal history increase risk. Any parent or caretaker of any socioeconomic background may be capable of harming or killing a child; however, economic hardship often leads to parental stress, frustration, and an inability to provide basic needs. Policies addressing socioeconomic factors, poverty, housing instability, and access to healthcare can reduce the likelihood of child maltreatment and fatalities. Child death review, abusive head trauma prevention, home visiting and economic supports stand out as evidence-based strategies, while health-based interventions and changes in the child welfare investigation and prosecution systems show promise as tertiary preventive efforts.

Keywords: *abusive head trauma, fatality prevention, federal policy, investigation*

“Migrant accused of killing 2-month-old baby looked like loving dad in photo with tot, who was Queens’ baby New Year” (Andrews & O’Neill, 2025). Thus, another news report about a child maltreatment death catches public attention and ignites scrutiny of public systems. Fatal child abuse has emerged as an entity with growing recognition and understanding, with increasing attention on prevention efforts and services for families. However, the causes are multifactorial and range beyond agency responsibility to family stresses, developmental and intellectual disabilities, mental health issues and psychodynamics, and other violence. In fact, in the past century, with improvements in public health and in the prevention and treatment of disease, causes of death such as homicidal violence have eclipsed natural causes in children and have become more prominent.

In 1995, the U.S. Advisory Board on Child Abuse and Neglect identified several key issues: (1) a lack of knowledge over the scope and nature of child abuse and neglect fatalities; (2) the need for better investigation and prosecution and for major efforts to improve and train front-line professionals; (3) the encouraging emergence of child death review teams; and (4) the need for more aggressive efforts to protect children and facilitate community-based family services and primary prevention efforts to help families live safe and healthy lives (U.S. Advisory Board on Child Abuse and Neglect, 1995). In 2011, the U.S. Government Accountability Office published a report calling for a national systematic response to child maltreatment fatalities (U.S. Government Accountability Office, 2011), specifically recommending steps to further strengthen data quality, expand available information on child fatalities, improve information sharing, and estimate the costs and benefits of collecting national data on near fatalities. These and other efforts led to the more recent Commission to Eliminate Child Abuse and Neglect Fatalities (CECANF, 2016) which, among other things, prioritized identifying children and families most at risk for maltreatment by having states undertake a retrospective review of child abuse and neglect fatalities to identify family and systemic

circumstances that led to child maltreatment deaths. The Commission found that while they often attract the attention of the public and popular press, deaths of children from abuse and neglect continue unabated, undercounted and under investigated.

We searched PubMed, PsycInfo, CINAHL, Embase, Web of Science, and Scopus on terms “child abuse,” “child neglect,” “child maltreatment,” “fatality” and “prevention” to find themes on what we have learned about risk factors, strategies, and the role of public policy for child maltreatment fatality prevention from among the more than 1,100 articles published on this topic since 2015. Many of the studies reinforced or expanded our current understanding of this complex issue, and there are a number of important articles to consider for those who wish to reduce fatalities from child abuse and neglect.

Predictable Patterns and Child Maltreatment Fatality Epidemiology

The number of identified fatal child maltreatment (CM) cases in the U.S. has been steadily increasing (Figure 1). Estimates rose from 1,670 (2.25 per 100,000) in 2015 to 2,000 (2.73 per 100,000) in 2023 (US DHHS, 2025). Almost half (44%) of victims were under the age of 1 year and most (72.2%) were under the age of 4 (Figure 2). In 2023, the rate of fatalities for children under 1 year was 24.11/100,000 (US DHHS, 2025). While the highest risk is before 6 months of age, the highest risk for homicide on a single day is on the day of birth (74.0 per 100,000 person-years), at least 5.4 times higher than the rate at any other time period during life. While most children survive after abusive head trauma (AHT), it is the most common cause of death due to child abuse among infants and young children (Palusci et al., 2023). During 1999–2014, 90% of 2,247 CM deaths were from AHT, ranging from a high of 97% in 2001 to 81% in 2013 (Spies & Klevens, 2016). Fatal AHT rates ranged from 0.88 in 2009 to 0.43 per 100,000 children in 2014, and a number of risk factors were identified (Adachi et al., 2024). In reviews of child death review reports, Palusci and Covington (2014) and Palusci et al., (2023) noted

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the importance of neglect causing or contributing to a death. A substantially higher proportion of adolescent deaths were due to neglect or medical neglect. While deaths from physical injuries are more recognizable, neglect deaths are often missed because they may be misclassified as being from natural or accidental causes (Palusci et al., 2010).

Kim et al. (2024) found that child homicides occur in a predictable and non-random manner, but the characteristics and dynamics of these homicides are diverse. In a collection of 930 fatal child abuse cases drawn from public records, Richards (2000) noted several typologies which are useful in categorizing these deaths. The largest percentage (47%) were related to sudden, violent acts of physical maltreatment in the home, which included the killing of newborns by their mothers. Second most common were deaths that occurred because the child was in the “wrong place at the wrong time” (13%). These often involved random violence outside the home where the child was an unfortunate bystander or targeted as a witness to a crime. Next were deaths from “sustained abuse or neglect” over time (12%) where the maltreatment occurred over months or years; these deaths present the greatest opportunity for prevention. Then there were “deaths of despair” (10%) where there was significant psychological disturbances and fear for the child, often leading to “homicide/suicide.” “Bad decisions” by caretakers (5%), juvenile perpetrators (4%), and other situations rounded out the sample.

Similarly, Sidebotham and Fleming (2007) in serious case reviews in the U.K. identified the following categories:

- infanticide and covert homicide, particularly of infants and young children, typically perpetrated by the mother;
- severe physical assaults, skewed to younger children, often with prior history of abuse, and often the result of escalating violence and not intent;

- extreme neglect/deprivational abuse with an element of intent, often related to not wanting the child and often involving children with chronic illness or disability;
- deliberate/overt homicides, not typically perpetrated by the mother, which may have revenge or other motives, multiple victims, and/or involvement of mental health issues; and
- deaths related to but not directly caused by neglect/maltreatment, without intent, involving such features as sudden infant death syndrome, bed sharing, lack of supervision, and lack of prenatal or medical care.

Neglect encompasses a broad range of issues, including lack of medical care, supervision, nutrition, protection and/or a safe environment. Douglas and Lee (2020) noted that the U.S. National Child Abuse and Neglect Data System (NCANDS) data indicated that more children died from general neglect than from abuse or medical neglect. Children who experienced medical neglect died at the highest rate overall (6.82 per 1000 medical neglect victims), making it the most lethal, followed by physical abuse and general neglect. The total number of deaths is thought to be an undercount, with the actual number being two or three times larger than that reported in official statistics, since neglect is often missed (CECANF, 2016; Palusci et al., 2010). Schnitzer and colleagues (2016) concluded it is possible to improve upon the current child welfare-based system of counting fatal child maltreatment in the U.S. by linking death review team findings with vital statistics data. Potential sentinels for identifying fatal child maltreatment include physicians (Bates et al., 2023) and nurses (Ellilä et al., 2023) in addition to child welfare and law enforcement professionals, but evidence for their ability to do this has been lacking (Hart et al., 2024).

Potential Risk Factors Which Overlap With Other Forms of Child Maltreatment

Parental Factors

Most perpetrators are caregivers of their victims (Berg et al., 2024; Hunter et al., 2021; Presser et al., 2022; Stöckl et al., 2017). In 2022, nearly 80% of child fatalities involved parents acting alone, together, or with other individuals (US DHHS, 2023). While anyone can kill a child, numerous studies have identified parental risk factors for the occurrence of child maltreatment fatalities, and many overlap with risk factors for child maltreatment in general (Fortson et al., 2016). These factors include parental lack of education, substance abuse, domestic violence, mental health issues, and socioeconomic stress (Adachi et al., 2024; Batra et al., 2022; Horon & Driscoll, 2023; McCarroll et al., 2017; Olecká, 2022). However, it is important to realize that most parents with these risk factors do not kill their children and that it is often a combination of factors and their context that is more important.

Other factors, such as previous reports of maltreatment, a large number of children in the home, inadequate supervision, and exposure to violent environments have also been associated with increased fatality risk (Barrett et al., 2023; Shenoj et al., 2019; Horon et al., 2023; Miyamoto et al., 2017; Watson et al., 2024). Douglas and Lee (2019) noted that, contrary to popular belief, official statistics show that women are more often the perpetrators of abuse and neglect-related deaths, even though child welfare professionals largely attribute these deaths to men.

For example, infant homicides occurring on the day of birth are primarily perpetrated by young, unmarried mothers with lower education levels who do not seek prenatal care; these homicides often are associated with concealment of an unintended pregnancy and giving birth at a residence. After the first day of life, an infant homicide might occur within the context of young parental age, caregiver frustration, maternal mental illness, abuse, or

neglect. Depending on the context, the homicide might be perpetrated by the mother, the mother's male companion, or the biological father of the infant. Wilson and colleagues (2020) found that maternal characteristics associated with infant homicide included young age, being unmarried, having lower educational attainment, having a nonhospital birthing, Black race, and American Indian/Alaskan Native ethnicity.

Mental illness and substance use disorder are common issues, as are suicidal or other violent behavior (Powell et al., 2024; Dean et al., 2024; Nevriana et al., 2024). Commonly in these cases, the parents no longer want the child, often due to cultural reasons; cultural traditions and values might outweigh the human instinct to protect one's children. With rising use of opioids, more parents struggling with addiction may have impaired judgment, reduced capacity to provide care, or they may become violent toward their children when intoxicated (Barrett et al., 2023). Mental health issues, including depression, anxiety, and post-traumatic stress disorder (Pierce et al., 2017), are also linked to child maltreatment. Parents suffering from untreated mental health conditions may struggle with emotional regulation, leading to abusive or neglectful behavior. Parents who were abused as children are more likely to abuse their own children, a phenomenon known as the intergenerational transmission of abuse. Caregivers need to be aware of and use effective parenting practices, using nonphysical discipline, to promote healthy child development and prevent physical abuse-related homicides.

Violence in the home and parental criminal history stand out as important risk factors (Batra et al., 2024; Garstang et al., 2021). The proportion of young child deaths related to firearms is increasing, with the presence of guns in the home being more strongly related to deaths of older children (Berg et al., 2024; Michaels & Letson, 2021). Perpetrator history of suicidal behavior, rape of the intimate partner, a non-biological child of the perpetrator living in the home, and job stress increased the odds of child

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homicide (Lyons et al., 2021). Children exposed to intimate partner violence have an increased risk for being abused themselves, with perpetrators often targeting children as a means of exerting control over their partners. Although comprising only a small percentage of child deaths, perpetrators of homicide-suicides and filicide-suicides have prior patterns of risk to self, risk of violence to the intimate partner, anger, access to firearms, and prior criminal history (Theodorou et al., 2024). Emerging evidence suggests that by stemming the early development of familial violent behavior, one can also reduce many other types of violence (Fortson et al., 2016).

Socioeconomic and Societal Factors

Socioeconomic stress is another major risk factor. Parents can be stressed by having high-paying, high-pressure jobs as well as being unemployed. Hunter and colleagues (2021) found that all social determinants of health, including poverty, parental educational attainment, housing instability, food insecurity, and uninsurance, are associated with child maltreatment and can create a frustration level for parents that results in fatal maltreatment (Block, 2017). Farrell and colleagues' (2017) finding that higher county poverty concentration is associated with increased child abuse fatality suggests that children in families with low income or inadequate housing and health care have greater risk for fatal maltreatment (Farrell, 2017).

Pierce and colleagues (2017) found that psychosocial risk factors were present in 100% of CM fatalities. Lack of social support and isolation from extended family or community networks can exacerbate stress in parents and increase the risk of maltreatment (Farrell et al., 2017). Research indicates that caregivers who lack social support are more likely to resort to violent behavior due to frustration and stress (Fortson et al., 2016). Unsafe neighborhoods and poor housing conditions exacerbate the vulnerability of children, often leaving them without access to protective services or social supports. Societal neglect, when measured by child mortality rates, is considered by bodies such as UNICEF to

be indicative of how a nation meets the needs of its children. Pritchard and colleagues (2019) analyzed CM fatalities and child mortality rates and found the U.S. had the worst income inequality and the highest rate of fatalities. While the risk factors are likely very different in Canada, their recently published rate of CM fatality (0.55 per 100,000) is one-fifth the rate of the U.S., perhaps offering some hope that we can more successfully address this problem (Richmond et al., 2025).

Child Factors

Certain characteristics of the children themselves can increase the risk of fatal maltreatment. These include age, gender, race, ethnicity, special needs, disabilities, and behavioral issues. Infants and young children, particularly those under the age of one, are at highest risk of maltreatment fatalities (U.S. DHHS, 2025; Barrett et al., 2023; Horon & Driscoll, 2023; Watson et al., 2024). Infants are dependent on caregivers for all their needs, making them more vulnerable to neglect and physical abuse. Children with disabilities and special needs have heightened risk of maltreatment, including fatalities (Adachi et al., 2024). Parents of children with chronic medical conditions and disabilities often face additional stress and challenges, which can lead to physical neglect, medical neglect, or physical abuse (Garstang et al., 2021; Scurich, 2025). Medical neglect, including noncompliance with medical care and failure to provide medicines and vaccinations, caused 24% of the fatalities overall reported during child death reviews, with a rising proportion as children got older (Table 1). Children who exhibit behavioral problems or who are perceived as difficult to manage may be more likely to experience maltreatment in general (Palusci, 2023; Wilson et al., 2023). Samuel and colleagues (2023) found that children with disabilities who died as a result of abuse were more likely to have had autism spectrum disorder, a developmental disability, or other physical impairment, with physical abuse being the most prevalent type of abuse that resulted in death.

Effects of Prevention Strategies on Fatalities and Child Maltreatment Overall

Prevention and intervention strategies to reduce fatal child maltreatment range in their focus of change, from individuals, families, and relationships to the broader community and society. Strong community networks and societal support systems are essential in reducing child maltreatment fatalities. Community engagement programs such as Strong Communities® reduce child maltreatment by giving visibility to the problem of child abuse and broadly engaging community members and medical practices in programs to support new parents (Melton & McLeigh, 2020; Runyan, 2021). The Centers for Disease Control and Prevention has highlighted a public health approach with strengthening social norms around parenting, improving community awareness of child abuse signs, and enhancing social support systems, all of which contribute to lower fatality rates (Fortson et al., 2016; U.S. Centers for Disease Control and Prevention, 2024).

Effective prevention strategies have been identified at the primary, secondary, and tertiary levels. Primary prevention aims to reduce the incidence of maltreatment before it occurs for the population in general, while secondary prevention targets high-risk families to mitigate the severity of abuse before it leads to fatal outcomes. Tertiary prevention or risk reduction at the family or community level occurs after the fact but can decrease the risk for future CM deaths. All of these levels of prevention play a role in CM prevention in general, and some have been studied specifically for CM fatality. Prevention is explicitly not the responsibility of any single agency, profession, or program, but is framed as the responsibility of all to create a society less conducive to child maltreatment. In this paradigm, individual skill development, community and provider education, coalition building, organizational change, and policy innovations are all part of the prevention solution (American Professional Society on the Abuse of Children, 2010).

Abusive Head Trauma (AHT)

Roygardner and colleagues (2021) identified three lines of AHT prevention research that focused on: (1) strategies which teach parents how to respond to newborn crying and the dangers of shaking babies; (2) community and public health factors; and (3) professional education and practice. Most studies were observational, although a small number were more sophisticated, using prospective designs or randomized controlled trials. They highlighted the effectiveness of primary prevention education programs such as *Period of PURPLE Crying*® (Barr et al., 2018), and of raising earned income tax credits for families (Klevens et al., 2017). In addition, they demonstrated the effectiveness of professional education to improve practitioners' identification of families at increased risk for AHT and their intervention and treatment of infants after it had occurred (secondary and tertiary prevention). They also spotlighted the effect of diagnostic technology in secondary and tertiary prevention.

Neglect

Given its significance as a cause, efforts are beginning to focus on identifying a common context and understanding of fatal neglect reporting, through reviewing definitional issues regarding fatal neglect and comparing reporting practices across a number of review teams (Scott et al., 2020). A consistent context for identifying and reporting may improve the identification of both neglect-related deaths and their associated risk factors. This can inform prevention programs, policies, and procedures. One study identified key elements of neglect such as supervisor impairment or child welfare involvements as key indicators in sleep-related sudden unexpected infant death (Schnitzer et al., 2024). Medical neglect is particularly common and concerning for medically fragile children (Alwash & Palusci, 2022). Sanders (2022) suggested modifying the child fatality and critical incident review process to focus on systemic issues that allow these neglect tragedies to occur. The fatality and critical incident review process should focus on change at the systems level, be

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multidisciplinary and coordinate with other review processes, such as CPS internal case reviews, and include an accountability mechanism to ensure that public agencies are following through to change the conditions that result in child deaths. They should address root causes, take brain science into consideration, and examine protective factors that point to family strengths (Sanders, 2022).

Child Death Review (CDR)

Child death review is the systematic multidisciplinary discussion of factors contributing to, or causing a child's death (Batra et al., 2024; Palusci, 2024). These reviews have grown in number since the 1990s. The focus of most child death review has broadened from fatal child abuse and neglect alone to deaths from a variety of causes, including accidental and medical causes as well as homicides and suicides. The American Academy of Pediatrics offered recent guidance (Batra et al., 2024). It suggests that pediatricians are necessary members of teams because they provide medical expertise and context around a child's death and emphasizes that results from team meetings should inform public policy at all levels of government. Pediatricians should be supported in their efforts to be present at meetings, and they should use data from team meetings to help advocate for implementing prevention strategies (Batra et al., 2024). A recent supplement to the journal *Pediatrics* highlighted current thinking regarding the value of CDR in identification and community service provision after the death of a child (Collier et al., 2024; Warren et al., 2024). CDR teams are not consistent in their use of terms, which makes understanding deaths challenging (Douglas & Lee, 2020). The U.S. Health Resources and Services Administration has funded a National Center for Fatality Review and Prevention to provide support to teams, including a standardized data collection system that is used to study a variety of causes of death in addition to child maltreatment (Collier et al., 2024; Warren et al., 2024).

Home Visiting Programs

Evidence suggests that home visiting programs can reduce the risk of child maltreatment (Casey Family Programs, 2022). These programs provide expectant and new parents with education on child development, parenting skills, and access to social services. While home visiting may lead to more reports to CPS because of surveillance bias, fewer cases are confirmed (Doe et al., 2024; Goodman et al., 2021). A 15-year study of Nurse-Family Partnership found a 48% reduction in rates of substantiated reports of child abuse and neglect among low-income families (Casey Family Programs, 2022). For parents already involved with child welfare, participation in Healthy Families America reduced recurrence of maltreatment by one-third, as measured by substantiated reports of maltreatment and hospitalizations for abuse. These programs, while not specifically targeting fatality, have been shown to reduce child maltreatment and improve maternal outcomes, child development, school readiness, family economic self-sufficiency, and promote positive parenting practices. Sanders (2022) stressed the importance of making sure that every child under age 1 year who is reported to CPS is referred to and prioritized for a high-quality home visiting program.

Health-based Interventions

Medical factors can increase the risk for child abuse fatality, and strategies implemented in health care systems have the potential to prevent a broad range of injuries. Specific medical risk factors addressed depend on the context in which the study is conducted (e.g., emergency departments, inpatient units, or medical examiners offices) and other child, family, and community factors. These injuries increase the risk of death substantially (Yu et al., 2018). Traumatic brain injury (95%) and bruising (90%) are the most common injuries in fatalities, 64% have sentinel injuries in the form of prior unexplained bruising, and a male was caring

for the child at the time of the final event in 70% of cases. Prior patterns of serious injuries such as head trauma, abdominal trauma, poisoning, and malnutrition could allow earlier identification (Palusci et al., 2023). Schneiderman and colleagues (2021) found that infants in alleged maltreatment cases had a higher risk of death due to medical causes than non-maltreated infants. They suggested that targeted support services for parents and improved communication between the child protection system and the pediatric health care community is needed, especially when infants who may be medically fragile remain at home after an allegation of abuse or neglect.

If children were admitted to a hospital, a child maltreatment diagnosis was found to be associated with almost three times the risk for death. Kennedy and colleagues (2020) also found that, although infancy and decreased income were associated with increased risk for fatality when a child was hospitalized, more important factors were the types of injuries the child endured and whether the inpatient clinician had identified specific injuries indicating physical abuse. Lee and colleagues (2017) found that in the intensive care unit, children in the abuse group had younger age, higher injury scores, and worse neurologic outcome than those in the neglect group. Homicide rates were higher among infants born to mothers who were young, had multiple previous live births, were Black non-Hispanic, were born in the United States, had lower levels of education, lived in rural areas, had no prenatal care, and delivered outside of a hospital. Rates were also higher for infants who were part of a multiple-gestation pregnancy, were born preterm or low birthweight, or were admitted to a neonatal intensive care unit (Horon & Driscoll, 2023).

However, while promising, health-based interventions have not been specifically evaluated for their ability to prevent child maltreatment fatalities. The U.S. Preventive Services Task Force found limited and inconsistent evidence on the benefits

of primary care interventions, including linkage with home visitation programs for preventing child maltreatment, and found no evidence related to the harms of such interventions. They concluded that the evidence is insufficient to assess the balance of benefits and harms of primary care interventions to prevent child maltreatment (U.S. Preventive Services Task Force, 2018). They later also found that interventions focusing primarily on preventing child maltreatment in general did not demonstrate consistent benefit or that information was insufficient (Hart et al., 2024). The lack of a positive recommendation for health-based CM prevention seems more related to the lack of evidence rather than to the efficacy of the interventions (Viswanathan et al., 2024).

Despite this, there are several potential strategies aimed at preventing child maltreatment in health care while minimizing the risk of exposing families to known biases in reporting and diagnosis. Screening tools that identify families at high risk for maltreatment, such as the Safe Environment for Every Kid (SEEK) model, have shown promise. This program has been shown to be cost effective, with costs per case significantly less than the short-term costs of medical and mental health care (Lane et al., 2021). The American Academy of Pediatrics has elaborated on the pediatrician's multitiered role in supporting relational health—from assessing for maltreatment risks and protective factors, to facilitating targeted interventions addressing identified needs and building on strengths (Stirling, 2024). This includes obtaining a thorough social history; building on family resilience and protective factors; addressing parents' concerns while reinforcing effective parenting; guiding parents in providing effective, nonphysical discipline; watching for signs of maltreatment in children with disability; being alert to indicators of parental intimate partner violence, unhealthy substance use, and depression; and advocating for community programs and resources that provide effective prevention, intervention, and treatment of child maltreatment.

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Enhanced Child Protective Services Activities

Potential CPS practice improvements have been suggested, including the need to promote the involvement of managers, supervisors, and line staff in regular review and monitoring of child protection work to ensure timely, comprehensive investigations of maltreatment reports, appropriate safety and risk decisions, and provision of appropriate and adequate services (Barth, 2015). Douglas and Gushwa (2019) found that workers have gaps in their knowledge of risk factors for maltreatment-related deaths and that the majority of workers had received training, but it had little impact on worker knowledge. Workers who received training that focused on research-based risk factors had higher levels of knowledge than did other workers.

Other recommendations have been made to improve CPS response, although not usually specifically for fatality prevention. Providing therapy and support to families that have experienced maltreatment can reduce the likelihood of future abuse. Parenting programs have been found to effectively decrease hostile, aggressive, and coercive parenting and can lead to improved child behavior (Altafim, 2024). Barth and colleagues (2015) recommended other initiatives such as notification of CPS when additional children are born to a parent who has lost parental rights, laws protecting parents who wish to relinquish infants; and improved integration of data across birth records, child-welfare involvement, and fatalities. They also suggested that home visiting programs should be more comprehensive and more focused on the most at-risk families. Also needed are strategies, appropriate policies, and funding changes to extend the support for children with known risks. Promising new approaches look at cases by their service needs rather than by legal CM classifications. They focus on strengthening multidisciplinary approaches involving law enforcement, health care providers, and social services (Barth et al., 2015).

It is hoped that federal requirements for publication of case information by CPS can inform prevention efforts, but a lack of consensus exists in regard

to the kinds of information CPS should report online, how the information is organized, and the frequency of reporting (Mantell et al., 2021). Child homicide victims have a higher number of CPS investigations before their death than children who die from natural causes, with the potential of earlier identification for the 40-50% of children known to CPS at the time of death (Batra et al., 2022; Sheno et al., 2019; Segal et al., 2021; Vaithianathan et al., 2018).

Enhanced Criminal Investigation and Prosecution

Most child homicides are familial in nature and associated with investigational complexities such as lack of signs of violence at the crime scene (Sundwall et al., 2024). This can lead to different investigational approaches which can affect the accuracy of findings. Based on a qualitative analysis of medico-legal investigation reports collected from a medical examiner's office and a coroner's office, Posey and Neuilly (2017) examined several indicators of data completeness, quality, site organizational structure, and consistency and found stark differences, as well as issues regarding death diagnosis certainty and a general lack in consistency in report content and procedures performed post-mortem. An important number of deaths were from fatal starvation, which needs additional procedures to sort out (Yamada et al., 2021). From the pediatric clinician and medical examiner perspectives, the best way to elucidate the circumstances in which the child's death occurred is to ensure a consistent and comprehensive investigation with coordination and interagency collaboration. These investigations require the synthesis of exhaustive law enforcement and medical investigations.

Ensuring a comprehensive death investigation is central to determining the diagnosis and cause of death and also serves to limit any adverse effects on surviving siblings in the home (Palusci et al., 2019). Such an investigation requires a timely and complete autopsy, scene investigation, toxicologic testing and a thorough review of the clinical medical history prior to death. These investigations often present

difficulties for investigators in law enforcement and child welfare agencies. Few resources may be devoted to investigating and prosecuting child maltreatment fatalities, and law enforcement professionals and prosecutors need advanced training on the complex medical and legal issues that often accompany these fatality investigations, particularly those involving babies and toddlers. Any convictions that result are typically on reduced charges with little jail time. Lee and Douglas (2021) examined the charges brought against suspected perpetrators and found that the most frequently used charges were endangering the welfare of a child and murder. The former was related more to neglect deaths and the latter to physical abuse deaths.

Particularly challenging are fatalities involving abusive head trauma, opioid cases, and child torture. A recent technical report from the American Academy of Pediatrics highlights the medical complexities of abusive head trauma that need to be taken into account during investigation (Narang et al., 2025). Increased opioid use leads to increased child maltreatment and CPS involvement (Crowley et al., 2019). Currently, there is no medical or legal definition of child torture that is uniformly recognized by lawmakers in the U.S., although child torture is proscribed in many child abuse statutes. Criminal investigations, prosecution actions and outcomes, and sentencing vary tremendously, even from case to case or across jurisdictions, often because of lack of specially trained law enforcement. Deutsch and O'Brien (2024) reviewed investigative information, health sciences literature, and prosecutor self-report, and compared existing child torture statutes and case outcomes with a focus on perpetrator, victim, socio-environmental, and community influence on legal outcome. They found prosecutorial challenges in jurisdictions lacking child torture statutes and suggested that the medical community plays a critical role to support diagnosis of physical and emotional impacts to the child. To address the complexities in these cases, specialized investigation teams for deaths in children younger than 4 years should be the gold standard. We have started such a team in New York City.

Federal Efforts

The U.S. Department of Justice's Office of Victims of Crime began a demonstration initiative called *Child Safety Forward* to develop multidisciplinary strategies to prevent severe or near-death injuries as a result of child abuse or neglect (Templeman, 2019). Through a competitive grant process, they selected sites based on their ability to support a collaborative, community-based approach to reducing child maltreatment fatalities. The three core strategies applied by the technical assistance team were encouraging a learning culture that promotes psychological safety, being adaptive and agile in how support was provided, and being responsive to the specific needs and preferences of each site. This effort provides what has been sorely lacking in previous attempts to reduce child fatalities—the identification and evaluation of evidence-based practices. The final evaluation report concluded that there is more work ahead to create a 21st-century child and family well-being system (Social Current, 2023) that protects children's safety. *Child Safety Forward* provided promising pathways and glimpses of what is possible, but it was not enough to create a system that will keep all children and families safe and healthy. Learning from *Child Safety Forward* emphasized the importance of continuing to challenge systems from the inside, and they recommended further experimentation (Social Current, 2023).

Public Policy is Critical in Shaping Both Prevention and the Allocation of Resources

A number of federal statutes and state and local policies have the potential to affect CM fatality rates.

Comprehensive Addiction & Recovery Act (2016)

CARA amended the Child Abuse Prevention and Treatment Act (CAPTA) with the goals of improving detection and treatment of infants who are exposed to substances prenatally. CARA amended CAPTA to require states receiving funds to identify and

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report the number of infants with prenatal substance exposure, the number of those infants who receive a Plan of Safe Care, and the number of those infants referred to appropriate services (Children’s Bureau, 2017; CWIG, 2016).

Family First Prevention Services Act (2018)

FFPSA aimed to promote family preservation and reunification efforts, offering a comprehensive approach to child welfare that includes mental health and substance abuse treatment for parents, prioritizing prevention services, and reducing the need for foster care placements (CWIG, 2018). FFPSA provides funding for services that support family preservation, such as mental health counseling, substance abuse treatment, and parenting education. Receiving lesser attention are the provisions in the law addressing child abuse and neglect fatalities (Section 50732) that require states to document how they quantify child maltreatment deaths and their plans to implement a comprehensive prevention statewide plan (Covington & Levinson, 2019). States were to implement these provisions individually with the hope that they would utilize accurate data and cross system coordination to prevent children from falling through the cracks and identify the points where investments in upstream fatality prevention are needed. Evaluations of these programs are pending.

Safe Haven Laws

The purpose of “safe haven” laws is to ensure that infants who would have otherwise been abandoned by their parents are instead relinquished to persons who can provide the immediate care needed for their safety and well-being (CWIG, 2017). To that end, approximately 16 states and Puerto Rico require parents to relinquish their infants to a hospital, emergency medical services provider, or healthcare facility. In 27 states, fire stations are also designated as safe haven providers. Personnel at police stations or other law enforcement agencies may accept infants in 25 states. In five states, emergency medical personnel responding to 911 calls may accept an infant. In addition, five states allow churches to act

as safe havens, but the relinquishing parent must first determine that church personnel are present at the time the infant is left. During 1999-2008, more than 3,500 newborns were surrendered, most of whom would have otherwise died (CWIG, 2017).

Economic Support

Policies that focus on reducing parental stress, such as paid family leave, affordable childcare, and economic support for low-income families, can mitigate some of the social determinants that contribute to child maltreatment fatalities. Research suggests that policies that address the root causes of stress and hardship for families—such as poverty, housing instability, and unemployment—are crucial to preventing maltreatment fatalities (Dammann et al., 2024). Using microsimulation methods, Pac and colleagues (2023) estimated that a 11.3% to 19.7% reduction in CPS involvement would result from implementation of four recommendations from a recent National Academy of Sciences proposal to reduce child poverty: introduction of a child allowance for families, expansion of the earned income tax credit, increased funding of the Supplemental Nutrition Assistance Program, and an increase in the federal minimum wage. They found that the nontrivial improvements in child safety accruing from the policy packages should be considered in the calculus of policy implementation.

The American Academy of Pediatrics (Dammann et al., 2024) has recommended that access to job-protected paid leave should be inclusive of all types of employees and businesses of all sizes, including government employees, contractors, self-employed individuals, domestic agricultural workers, part-time employees, gig economy workers, and those with multiple employers, and should be provided equally for both parents, including non-birthing parents. It should be ensured that paid leave is meaningful in duration: at least 12 weeks to meet the broad set of individuals’ and families’ medical, safety, and caregiving needs. There needs to be support for the longer-term needs for families of children and adolescents, particularly those with medical complexity. This support should include flexible

work scheduling, remote work options, government-subsidized medical day care, home care services, and paid family caregiving.

Child Welfare System Reform

Sanders (2022) made a number of recommendations to improve the child welfare system to reduce CM fatalities. These include:

1. connecting families quickly to supportive services by handling screened-out hotline calls differently for infants and toddlers,
2. real-time information-sharing between child welfare and law enforcement, with the goal of better understanding the supports a family may need and improving caseworker safety,
3. requiring multi-disciplinary teaming on infant cases with professionals from other disciplines, such as a public health nurse or a psychologist, so that critical information is not missed,
4. engaging the primary care physician earlier and differently than we are doing today and expanding the community-based resources that can complement a physician's care, and
5. becoming more data-informed to identify family and systemic circumstances that led to the fatalities.

For children removed from unsafe environments, reforming the foster care system to provide stable, supportive placements is critical since improving the quality of foster care services and reducing turnover in foster placements can prevent fatalities by ensuring children remain in safe, supportive environments (Schneiderman et al., 2021). Targeted support services for parents and improved communication between the child protection system and the pediatric health care community are needed, especially when infants who may be medically fragile remain at home after an allegation of abuse or neglect.

Conclusions – What have we learned?

While there appear to be several promising focused strategies, child maltreatment fatalities are a complex, multifactorial problem that requires a multi-pronged approach to prevention (Douglas & Lee, 2020). But while they often attract the attention of the public and popular press, tragic and preventable deaths of children from maltreatment continue unabated, undercounted, and under investigated. The number of identified fatal child abuse cases in the U.S. has been steadily increasing since a “Call to Action” was issued by the U.S. Commission to Eliminate Child Abuse and Neglect Fatalities (Berger et al., 2015). Neglect has been found to cause or contribute to most of these deaths. There are a number of potential risk factors which overlap with risk factors for other forms of child maltreatment, and certain child and family characteristics further increase the risk. Compared to child maltreatment in general, young child age, male gender, non-White race, special needs and disability, and behavioral issues were more strongly associated with fatality. Most perpetrators are caregivers of their victims, and official statistics show that women are more often the perpetrators of infant abuse and neglect-related deaths. Mental illness and substance use increase risk, especially when there are available firearms, prior intimate partner violence, other violence in the home and parental criminal history, but any caretaker is capable of inflicting injury or death.

While some prevention strategies relevant for preventing child fatalities have been studied, most research has looked at the relationship of these strategies to child abuse and neglect overall, and not specifically to their relationship to child fatality. However, these have the potential to prevent a much greater number of injuries and near fatalities, given that these are much more common than fatal maltreatment. Economic hardship often leads to parental stress, frustration, and an inability to provide basic needs such as food, shelter, and medical care. On the community level, socioeconomic factors like poverty, housing instability, and limited access

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to healthcare contribute to a higher likelihood of child maltreatment and fatalities. Child death review, education for parents about infant crying and the dangers of shaking, home visits, and economic supports stand out as evidence-based strategies to reduce child maltreatment fatalities, while health-based interventions and changes in the child welfare investigation and prosecution systems have potential as tertiary preventive efforts. Contrary to calls for the elimination of CPS, a key component of preventing fatalities remains ensuring that CPS agencies respond effectively to reports of serious abuse or neglect (Commission, 2016). Furthermore, for all the cases that are not prevented, we need specialized teams that receive ongoing training for the complex medical and legal issues that make the cause and manner of death—particularly among the infant and toddler age group—so difficult to determine.

Block (2017) noted that finding a way to provide parenting education to folks who are increasingly worried about rent payments, food, finding a job, recovering from addictions, and other challenges is a daunting task. Addressing the social determinants of health are more than a health system's or individual physician's responsibility. Unless the United States begins to emphasize prevention and finds ways to create resiliency among both parents and children, our current situation will not change. Putnam-Hornstein and Font (2024) recently concluded that efforts to make fatalities a significant part of the conversation are often met with resistance. This opposition is founded on several inaccurate perceptions and a misguided belief that we can reduce stigma by keeping conversations about child safety behind closed doors. They state that some have argued that maltreatment fatalities are a “needle in the haystack,” far too random to learn from. But perhaps they are better understood as a canary in the coal mine—a sign of poor or deteriorating standards for identifying and responding to children at risk of serious harm. We know that children who die of maltreatment have risk factors that distinguish

them from children who do not. We also know that children who are reported to CPS have significantly elevated rates of inflicted fatal injuries, accidental injuries, and other types of death. Because of limitations of existing data, however, we often do not know whether the actions of the child welfare system, law enforcement, or other professionals that interacted with the family prior to the child's death were aberrant or practice as usual.

There is unlikely to be a single intervention that can prevent all forms of child homicides. Intervention initiatives must be tailored to target specific types. When specific patterns of CM fatalities are better understood, limited resources can be allocated for maximum benefit, and prevention strategies can be focused on areas identified as most in need. Home visits, economic supports, and access to medical care have growing evidence supporting their effectiveness. So do parent education programs focusing on gun safety and the dangers of shaking and corporal punishment. Perhaps our next steps will take into account Richard's (2000) typologies, focusing on deaths which are more preventable, such as those committed by families with “sustained” histories of serious maltreatment, who make “bad decisions,” have histories of other family violence, or who are seriously “psychologically disturbed” and need treatment. These seem more amenable to intervention than are deaths from “sudden attacks” or children in the “wrong place at the wrong time.” Continued investment in evidence-based prevention programs, better investigations, cross-sector collaboration, and societal commitment to supporting families is essential in moving toward a future where child maltreatment fatalities no longer occur. We need to amplify our “Call to Action” to reduce child abuse and neglect fatalities as a U.S. policy priority if we are to address our “nation's shame,” starting with timely data, public accountability, national leadership, and candid discussions about child safety and the best systems responses.

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Figure 1. U.S. Child Maltreatment Deaths in NCANDS

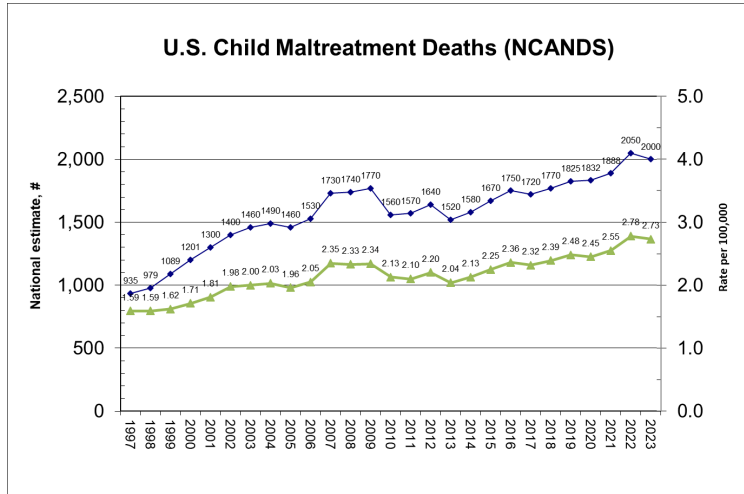


Figure 2. US Child Fatality by Age, 2023 (Exhibit 4-B, NCANDS 2025, p. 58).

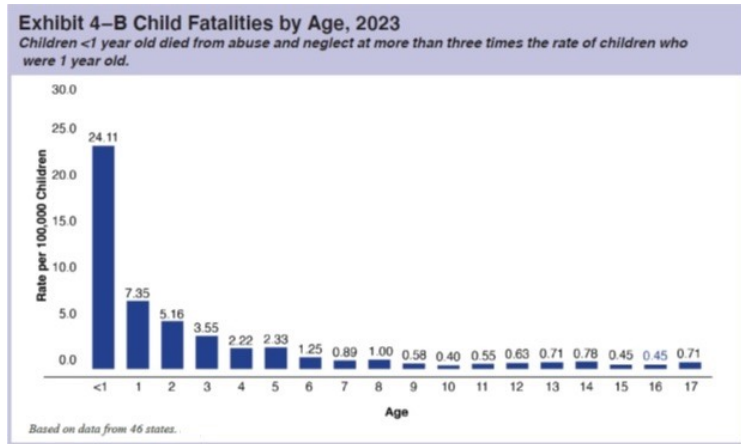


Table 1. Causes of fatal child maltreatment, by age group, in child death review reports

	0-4y*	5-10y**	11-17y**	Overall
TOTAL CASES	2,285	769	709	3,763
Neglect	48%	49%	68%	51%
Failure to protect	32%	25%	39%	33%
Failure to provide food	4%	1%	1%	3%
Failure to provide shelter	1%	4%	4%	3%
Medical neglect	14%	20%	33%	24%
Abuse	52%	51%	32%	49%
Abusive head trauma	30%	51%	34%	34%
Battering/beating	17%	30%	16%	20%
Burns/scald/other	5%	19%	38%	12%

Note Some cases had more than one type of neglect or abuse *Palusci & Covington, 2014; **Palusci, Schnitzer & Collier, 2023

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About the Authors



Vincent J. Palusci, MD, MS, FAAP, FAPSAC is Professor of Pediatrics and Forensic Medicine at NYU Grossman School of Medicine in New York City. He is Editor in Chief of Child Maltreatment and a member of the board of directors of APSAC-New York and Prevent Child Abuse-New York. He has edited books and written peer-reviewed articles on topics ranging from child maltreatment fatalities, child death review, to medical issues in child abuse and neglect and prevention. He was a board member of APSAC and Editor of the APSAC Advisor and APSAC Alert. Email: Vincent.Palusci@nyulangone.org



P. Leigh Bishop, JD is a Clinical Instructor in Forensic Medicine at NYU Grossman School of Medicine and Director of the Babies and Toddlers Task Force at the New York City Office of Chief Medical Examiner. In 2023, she was appointed by the Chief Medical Examiner to develop a first-of-its-kind task force to support public health and safety for babies and their families through investigations, multidisciplinary training and special initiatives. Ms. Bishop previously served as an Assistant District Attorney in Queens County, NY and was appointed by Judge Richard A. Brown to head the first-ever Child Fatality Unit of a district attorney's office in the United States, leading all homicide and serious assault investigations and prosecutions involving babies and toddlers in Queens County. Email: lbishop@ocme.nyc.gov

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