# Uncovering earlier opportunities to keep children safe: A data-driven prevention approach to reviewing and responding to child maltreatment fatalities

> "If we as a nation do nothing different to prevent child abuse and neglect fatalities, somewhere between 1,500 and 3,000 U.S. children will die from maltreatment in 2016, 2017, and beyond. We need to dramatically redesign our approach to eliminate child abuse and neglect fatalities."
>
> - Dr. David Sanders, Chair, Commission to Eliminate Child Abuse and Neglect Fatalities[1]

*This technical guide outlines a data-driven approach for jurisdictions to design and implement strategies to better prevent child abuse and neglect fatalities and near-fatalities. It provides guidance for how agencies can improve upon existing fatality review processes by systematically reviewing all maltreatment fatalities to uncover weak points in the jurisdiction's preventative ecosystem and identify opportunities for earlier intervention.*

## Introduction

This guide will be of particular use to child protection agencies interested in identifying earlier intervention points to support high-risk families. This includes uncovering handoffs and decision points where their systems might 'drop' at-risk families, and partnering across family- and child-serving public agencies to build the entire system's preventive capacity. The approach draws upon the field of public health and tiers and targets interventions based on population-level risk factors. It is also aligned with the federal Family First Prevention Services Act, which calls on child welfare agencies to better track fatalities and near-fatalities and proactively identify cross-sector partners that can play a role in preventing future incidents.[2] The guide draws upon practices that have been developed and implemented in several child protection agencies nationwide, including Rhode Island, Texas, and Florida.

The approach described in this guide seeks to help jurisdictions address three questions related to keeping children safe from serious injury or death due to maltreatment:

- How effectively did we identify at-risk families prior to these critical incidents, either through a child protection response or other public agency program?
- Among families who were known to be at-risk, how can those families be more consistently referred to and enrolled in appropriate prevention services?
- Among families enrolled in services, where could we intervene earlier or improve service effectiveness?

[1] "Within Our Reach: A National Strategy to Eliminate Child Abuse and Neglect Fatalities," Commission to Eliminate Child Abuse and Neglect Fatalities, 2016, https://www.acf.hhs.gov/sites/default/files/documents/cb/cecanf_final_report.pdf

[2] "Title VII—Family First Prevention Services Act H.R. 1892," https://www.childrensdefense.org/wp-content/uploads/2018/08/ffpsa-pages-from-law-language.pdf

## Why we need a better approach for preventing maltreatment fatalities

Child protection agencies are charged with keeping children safe, including and especially from maltreatment that results in serious injury or death. When allegations of abuse or neglect are reported to a state's child abuse hotline, we count on child protective services to assess that child's risk of future harm and take steps to keep them safe.

However, according to national research, as many as half of all maltreatment fatality victims die without ever having previously come to the attention of the child protection agency.[3] Improving internal child protection practices is therefore not enough. A holistic strategy for reducing maltreatment fatalities and near-fatalities requires better identifying and protecting children who may not come to the attention of the child protection agency. This requires coordinating with other public agencies who have opportunities to engage those families.

In 2016, an estimated 1,750 children died due to abuse or neglect in the United States.[4] African-American families experience child maltreatment fatalities at particularly high rates: in 2019 African American children died due to abuse or neglect at 2.3 times the rate of White children, and 2.7 times the rate of Hispanic children.[5] Every fatality and near-fatality is tragic for the families involved. They also exact an immense toll on communities and the public agencies responsible for protecting children. These impacts complicate the process of learning from these incidents and underline the absolute necessity of doing so.

Many jurisdictions review child fatalities and near-fatalities only in the immediate aftermath of crises or idiosyncratically after some number of critical incidents have occurred, often with a focus only on children actively (or previously) involved with the child welfare system. Case-level reviews are an important tool, but their narrow focus can prevent agencies from identifying broader patterns that reveal opportunities for systems change, such as racial disparities at specific points in the system, or a preventative service that is too often failing to engage at-risk families. It is also rare for fatality reviews to lead to systematic reforms: a survey conducted by National Center for Fatality Review and Prevention Research found that only 10% of recommendations emerging from fatality reviews are ever implemented.[6]

## Steps to generate, implement, and track strategies to prevent maltreatment fatalities and near-fatalities

The steps below outline a data-driven approach for jurisdictions to design and put in place strategies to better prevent child abuse and neglect fatalities and near-fatalities:

1. Compile list of fatalities and near-fatalities due to maltreatment during review period
2. Populate the list of critical incidents with demographic and case information
3. Determine if the child or family interacted with the child welfare agency before the incident

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[3] "Within Our Reach," https://www.acf.hhs.gov/sites/default/files/documents/cb/cecanf_final_report.pdf
[4] "Child Abuse and Neglect Fatalities 2019: Statistics and Interventions" (Children's Bureau, March 2021), https://www.childwelfare.gov/pubPDFs/fatality.pdf
[5] "Child Maltreatment 2019" (Children's Bureau, 2021), https://www.acf.hhs.gov/sites/default/files/documents/cb/cm2019.pdf
[6] "Child Maltreatment Fatality Case Reviews: Improving Effectiveness to Improve Systems and Prevent Deaths" (The National Center for Fatality Review and Prevention), https://www.ncfrp.org/wp-content/uploads/Presentations/CovingtonChildMaltreatment.pdf

4. Determine if the child or family interacted with other services before the incident
5. Analyze fatalities and near-fatalities by extent of previous involvement with the entire system, and other key factors including race, geography, age, and gender
6. Identify weak points in the system and potential improvement strategies
7. Select a subset of improvement strategies to prioritize
8. Regularly monitor implementation, track results, and adjust strategies as needed

While the technical aspects of each step may vary significantly across child welfare systems, the fundamentals of the process are broadly applicable.

1. *Compile list of fatalities and near-fatalities due to maltreatment during review period*
   The process begins by identifying all fatalities and near-fatalities due to maltreatment during the period of review. If possible, it is useful to look across three or more years of incidents to uncover trends over time.

   Many child welfare agencies have standing critical incident review committees that may maintain such a list, making this step simpler. Child welfare agencies are also often legally required to disclose all fatalities and near-fatalities due to maltreatment. Public disclosures are a useful record and can serve as an agreed-upon 'master list' of all critical incidents. When compiling this list, one complicating factor may be the definition of a near-fatality. In some states a near-fatality occurs when a child experiences a serious or critical medical condition as determined by a treating physician and noted in the child's medical chart. Other jurisdictions may use different definitions, such as admittance to an intensive care unit. These definitions sometimes change from year to year within jurisdictions. When conducting this analysis, it is important to use the same definition consistently across all years and cases.

2. *Populate the list of critical incidents with demographic and case information*
   After compiling a list of all fatalities and near-fatalities due to maltreatment, the agency should pull child and family demographics and general case information from the agency's case management system. This information should include:
   - Child age at time of incident
   - Primary caretaker age at time of incident
   - Child gender
   - Geographic data on where the child lived, such as census block or zip code
   - Family race/ethnicity
   - Cause of incident, such as:
     - Neglect – Unsafe sleep
     - Neglect – Medical
     - Neglect – Injury
     - Neglect – Ingestion of substance
     - Abuse – Injury

   Deciding appropriate categories for the cause of incident requires some thought. Categories used in child welfare information systems might be too narrow or too broad to be helpful categories for the purpose of this analysis. For example, categorizing an incident as "Neglect" is unlikely to provide meaningful information about the underlying cause, so it may be helpful to create subcategories. Agencies should look closely at the incidents and choose categories that will allow them to identify patterns and policy responses.

3. *Determine if the child or family interacted with the child welfare agency before the incident*
Using the child welfare agency's case management data, determine whether the families involved in the fatalities and near-fatalities had previously been involved with the child protection agency. For example, a jurisdiction might answer the following questions about each family involved in a maltreatment-related fatality or near-fatality:
    - Had the family ever been involved with the child protection agency? Family should be defined broadly and include siblings of the victim and both parents or active caregivers.
    - On what date was the case last active with the agency?
    - What was the nature of the last interaction the family had with the agency (e.g., hotline report, investigation, open case, etc.)?
    - What was the number of previous hotline calls associated with the family (including screen-outs)?
    - Had there been a hotline call when the mother was pregnant?
    - Was the case open for child welfare services for another child when the mother was pregnant with the victim of the fatality/near-fatality?
    - Did either parent have childhood involvement with the child welfare system as a victim?

    After collecting this information, an agency should classify each case by the extent of the family's most recent involvement prior to the fatality or near fatality. This could include the following categories of previous interaction:
    A. No previous involvement
    B. Screened-out child protection hotline call
    C. Subject of unfounded child protective services investigation
    D. Currently subject of active child protective services investigation at the time of the incident
    E. Case receiving ongoing child welfare services at time of incident
    F. Case previously received for child welfare services but closed at the time of the incident

4. *Determine if the child or family interacted with other services before the incident*
To identify system-wide opportunities for prevention, the agency should determine whether families who suffered a fatality or near-fatality had been referred to or engaged with other services prior to the incident. The agency should first identify a list of potential services or contacts and then match the list of fatalities and near fatalities to referral and enrollment data from each program.

    The purpose of this step is to pinpoint places in the jurisdiction's prevention ecosystem or within the child welfare system where at-risk children appear to be 'falling through the cracks'. For example, the agency might discover that a home-visiting program receives many referrals for at-risk families, but often does not successfully engage them in services. This may suggest that the program needs to improve its engagement strategies, or that an alternative service with better connections in the community might be a more appropriate referral for those families.

    The agency should think expansively about possible opportunities for support before the incident and connect with other government agencies and private or non-profit service-

providers. Potential child-serving services to explore for prior involvement could include: hospital-based developmental screening, hospital medical care, primary care provision including well-visits and immunizations, WIC, early intervention, family finding, early childhood family home visiting, Head Start/Early Head Start, family resource centers, and child welfare contracted prevention programs. This process need not be limited to services aimed at the child themselves. For instance, an agency could incorporate data from programs treating parental substance use.

For each service or potential contact before the incident, the agency should gather the following information:

- Was the family ever referred to or did they seek to enroll in the service, and if yes, when?
- Did the family engage in the program? If not, why not?
- For how long was the family engaged in the service or program?
- When was the last contact with the service before the incident?
- When did services or contact end, and why?

When the number of cases being examined is small, it is often faster to manually conduct these matches instead of building complex algorithms or reports.

5. *Analyze fatalities and near-fatalities by extent of previous involvement with the entire system, and other key factors including race, geography, age, and gender*
After gathering data on demographics, previous child welfare involvement, and previous engagement with other services, the next step is to undertake a series of analyses that look for commonalities across fatalities and near-fatalities to uncover patterns that reflect systemic challenges or opportunities for improvement.

A *tree analysis* segments families who have suffered critical incidents by the nature and extent of their involvement with the child wellbeing system at large prior to the fatality or near-fatality (see Figure 1). This analysis can help agencies understand where in the system at-risk families are 'falling through the cracks'. Are families not being identified as at-risk? Are they being identified appropriately, but not receiving the proper referrals? Are they receiving appropriate referrals, but then not being outreached effectively? Are preventative services closing cases too early given what is known about the family? Have families been previously involved with the child welfare agency, but left without appropriate supports when their cases close, etc.?

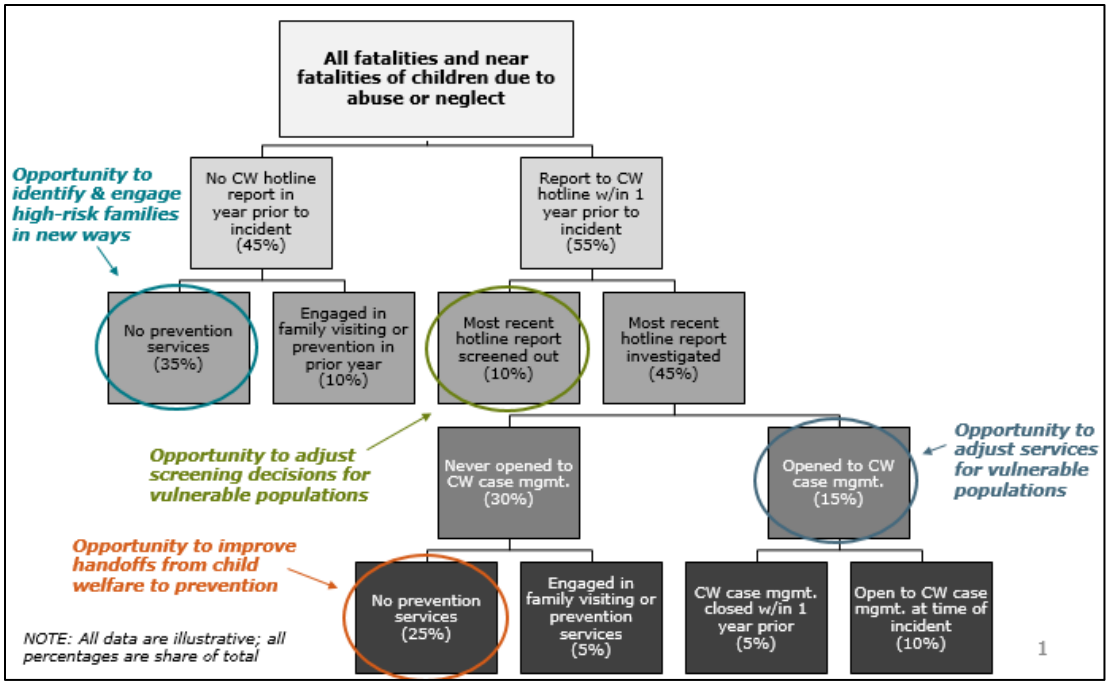


*Figure 1. Tree analysis of prior involvement with child wellbeing system*

Another possible approach involves grouping fatalities and near-fatalities by age and incident type to identify whether children at different ages are more vulnerable to certain kinds of maltreatment fatalities (see Figure 2). This analysis can enable an agency to focus its work on a specific subset of the at-risk population.

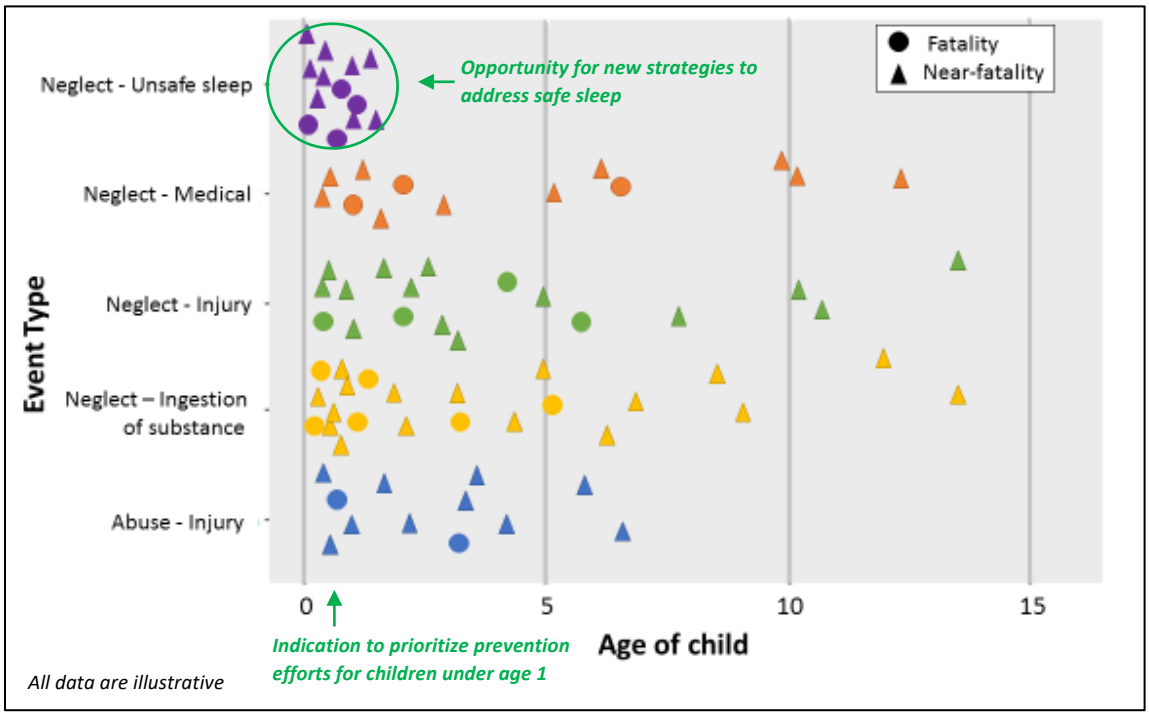


*Figure 2. Analysis by age of child and incident type*

Other analyses could be powerful in revealing patterns. Creating timelines for each case that are centered around the time of the incident can reveal patterns in how soon before an incident families tend to receive services and from whom. In all analyses, agencies should look carefully at trends by race, age, and geography to uncover potential gaps in which families are identified as needing support, which families are referred to services, and which families are successfully engaged in services.

6. *Identify weak points in the system and potential improvement strategies*
   After conducting the above analyses with jurisdiction-specific data, agencies should next identify weak points between birth and critical incidents: where are opportunities to identify or provide support to at-risk families too often being missed? These points can be targeted with strategies to improve performance and avert future fatalities and near-fatalities.

   For example, analysis might indicate a large share of families that suffered critical incidents had previously been the subject of an unfounded child protection investigation with no subsequent prevention services. In response to this finding, the agency might introduce a new process to refer high-risk families with young children to early childhood home visiting programs at the close of an unfounded investigation.

   An analysis might also reveal important insights about the causes of racial disparities. For example, an agency might find that Black families in a certain geographic region are often referred to a home visiting service but not successfully engaged before a critical incident. This may suggest a need to improve outreach and engagement strategies for Black families in that region through staff training, or re-contracting with an organization that has better links with the Black community.

   Crucially, targeted strategies need not be limited to the child welfare agency. For instance, if many critical incidents are due to unsafe sleep, the public health agency may need investigate ways to improve safe sleep education that occurs in birthing hospitals.

   Data analysis is a critical first step and should be used to generate hypotheses about potential improvement strategies that might have high impact. After forming these hypotheses, seeking input from service providers, frontline workers, and families can be valuable to gather rich information on the problems, opportunities, and feasibility of different improvement strategies.

7. *Select a subset of improvement strategies to prioritize*
   Often, it can be useful to pick 2-4 initial priorities. These might include some priorities that are easier to implement and where positive results might be expected in a short time frame, and some priorities that involve larger efforts and longer time frames.

   An ‘impact-effort’ matrix can be a powerful tool to identify reforms to prioritize (see Figure 3). After coming up with a list of challenges and/or a list of possible solutions, agencies will want to prioritize action steps. For each item, agencies can discuss how feasible it would be to tackle and estimate how much impact implementing a solution would have on outcomes (for instance, distributing to schools a flyer with information about prevention programs may be low effort and expected to have low impact). Agencies then map each item on the

impact-to-effort matrix based on the assessment of each. Once all the items are organized on the matrix, agencies can prioritize which topics to tackle.

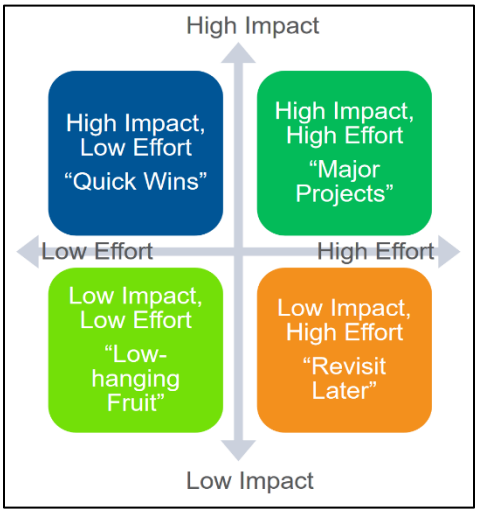


*Figure 3. Impact-effort matrix (Peak Academy Denver)*

It can also be helpful to crosswalk the list of potential strategies with recommendations that other system stakeholders have produced, and with national research and recommendations, to identify overlaps and uncover potential gaps.

8. *Regularly monitor implementation, track results, and adjust strategies as needed*
One reason that traditional child fatality reviews rarely lead to permanent improvements is the lack of persistent leadership attention. Agency leaders should convene their staff and other stakeholders at high-frequency intervals to review implementation progress and outcomes data, swiftly troubleshoot barriers when they emerge, and adjust strategies in real-time if results do not improve. In these meetings, it can be powerful to review dashboards that focus on outcomes and the delivery of any new solutions that have been put in place to better keep children safe.

## Conditions required for this approach

In addition to a commitment to learning from such tragedies, three conditions must be true for a jurisdiction to be positioned to replicate the approach described above.

First, the agency must be able to apply a consistent definition of what constitutes a child abuse or neglect fatality or near-fatality across the time period in which cases are being analyzed. Otherwise, one might mistake an increase in the number of maltreatment fatalities as the result of new problems rather than an artifact of changes in the threshold of cases that require review.

Second, a jurisdiction must have the ability to match child- and family-specific data across at least two – and ideally more - public agencies in order to uncover where and when it might have been possible to intervene earlier with additional supports. For example, sharing data between the child protection agency and public health agency is often important since home visiting and Early Intervention services are often provided through the public health agency. Sharing data often requires establishing the legal basis for agencies to share and match data with each other, a

consistent unique identifier for families and/or demographic information that can be used to link cases across systems, and the technical expertise to access, match, analyze, and secure data in appropriate ways.

Third, there must be enough cases for meaningful patterns to emerge. In small jurisdictions this might require looking at child fatalities across multiple years, because child fatalities are a rare event so the number of fatalities can fluctuate from year to year for random reasons. When the annual rate of critical incidents is less than ~50 per year, jurisdictions should group data across multiple years. Examining near-fatalities in addition to fatalities is also useful, as maltreatment-related serious injuries reflect valuable opportunities to learn about potential opportunities for preventative interventions.[7]

### Case studies reflecting this approach: Cuyahoga County, Florida, and Rhode Island

*Cuyahoga County, Ohio:* Cuyahoga County collaborated with researchers at Case Western University to identify opportunities to better keep children safe following concerns in 2018 about high rates of fatalities due to child abuse and neglect. Unlike many similar reviews that examine only cases where abuse or neglect has been indicated, the team expanded their analysis to include all non-natural fatalities of children. They noticed that nearly two-thirds of children that died of unintentional injuries also had suspected histories of abuse, neglect, or domestic violence. Their work focused on interactions that families had with services before a fatality to identify possible early warning signs that were missed. The reviews highlighted that families often had interacted with medical services before fatalities occurred, indicating that there may be ways to better support families and young children facing adversity through improved collaboration across medical providers and social services. They identified opportunities for expanded information sharing, mechanisms for systematic child abuse detection and identification, more streamlined referral pathways, and more intensive protocols for case follow-up.[8]

*Florida*: Florida gathers real-time data on child fatalities due to abuse or neglect and publishes findings on a public-facing website. Following a maltreatment fatality, dedicated Child Fatality Specialists collect information on each case. This information includes the family's prior involvement with child protection services or investigators and the cause of death. Data from 2019-2020 suggested that children who suffer sleep-related fatalities often have no contact with the Department for Children and Families (DCF) before the incident, but in a substantial portion of cases the family had contact with DCF before the birth of the child.[9] This finding informed two areas for practice improvement. First, prenatal care providers, pediatricians, hospital staff, and trusted faith and community organizations who interact with families would be key in educating families about the importance of safe sleep practices. Second, DCF investigators could

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[7] The 2016 Commission to Eliminate Child Abuse and Neglect Fatalities found that "statistically, the [children who suffer from life-threatening injuries from abuse or neglect and children who die from abuse or neglect] are almost identical in age, family risk factors (including high prevalence of domestic violence and substance abuse), and relationships between perpetrators and victims. What often differentiates a life-threatening injury from a fatality is simply the difference in medical care received and the timing of that medical care." https://www.acf.hhs.gov/sites/default/files/documents/cb/cecanf_final_report.pdf

[8] "Addressing and Preventing Child Abuse in Cuyahoga County: Toward a Coordinated Approach," (Schubert Center for Child Studies at Case Western Reserve University, April 2021), http://bc.cuyahogacounty.us/pdf_bc/en-US/CPT-Addressing-Preventing.pdf

[9] "Child Fatality Prevention - Safe Sleep Data," Florida Department of Children and Families, 2019, https://www.myflfamilies.com/childfatality/articles/SafeSleep.shtml

communicate safe sleep practices to at-risk parents. A working group ran focus groups with frontline staff to identify promising approaches and areas for improvement. They recommended providing investigators and supervisors with additional training and guidance around proactively asking parents about pregnancies and having conversations with pregnant parents about safe sleep practices during investigations.[10]

*Rhode Island*: Rhode Island's Department of Health and Department of Children, Youth, and Families have formed an innovative collaboration based on a data-driven approach to keeping kids safe. Launched in 2017, this work includes matching child welfare, family visiting, and Medicaid data to identify when children interacted with the state before an incident of maltreatment, partnering with university researchers to study factors that predict child maltreatment, and selecting interventions that reflect that analysis. Following analysis of maltreatment fatalities and near-fatalities during 2015-2017, the state implemented four priority strategies to strengthen prevention and protect children: 1) developing additional tiers for the Newborn Developmental Screening to identify families at birth, who are facing adversity, for outreach by the state's family home visiting services, 2) strengthening engagement with pregnant moms reported to child protective services, 3) introducing clear referral criteria and processes to help investigators refer to appropriate prevention services (including those administered by other public agencies), and 4) monitoring agency progress in making those warm handoffs successful. The group has regularly met to monitor the implementation and impact of these four strategies and to review fatality data in real-time.[11]

*For more information on strategies to improve outcomes for children and families, please visit our website at https://govlab.hks.harvard.edu/children-and-families.*

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[10] "Child Fatality Prevention - Fatalities Reported by Year," Florida Department of Children and Families, 2019, https://www.myflfamilies.com/childfatality/
[11] Madeleine List, "Plans Presented to Protect Well-Being of Children in R.I.," *Providence Journal*, August 20, 2018, https://tinyurl.com/f2eyhe3x