STRATEGY BRIEF

SAFESTRONGSUPPORTIVE

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How is safety science being applied to critical incident reviews?

The death of a child is devastating to families and communities.[1] When the fatality is related to abuse or neglect, the public, media, and policymakers understandably put pressure on child protection agencies to react quickly, assign responsibility, and craft a plan for corrective action. This can result in the firing of staff, the imposition of new policies and practices, a sudden redirecting of resources, and even the resignation of the child welfare leader.

Rarely, however, do punitive-based reactions within a child welfare system result in keeping children more safe. While intended to signal accountability, these responses instead may render child welfare systems *less* able to retain or impose evidence-based system improvements. Such responses therefore often do little to reduce the estimated more than 2,000 child fatalities that occur annually in the U.S. due to child abuse or neglect.

As a result, **the very systems tasked with protecting children often undermine their own effectiveness in the wake of tragedy.** Hasty responses limit what a child welfare system will learn from the tragedy. In an effort to ensure that safety practices are deliberate and rooted in data and research, momentum has built for applying safety science principles to child welfare, particularly in the context of critical incident reviews (CIRs).

What are critical incident reviews?
Critical incident reviews (CIRs) look at any incident that has the potential to create an unsafe situation and, when studied, can promote learning to prevent further incidents by providing valuable insight regarding systemic flaws. Ideally, a CIR is a supportive, transparent, and multi-disciplinary process to review the circumstances surrounding a tragic incident, such as a child maltreatment fatality or near fatality, with the goal of **addressing systemic barriers, strengthening case practice, and identifying lessons learned to improve child safety**.

A better way to address critical incidents

Grounded in both systems thinking and psychological safety, a **safety science** framework[2] can enhance accountability of child protection agencies, using similar methods employed by other complex organizational environments requiring high levels of safety, such as aviation and health care systems.

In partnership with various stakeholders including child welfare leaders, policymakers, academics, and practitioners, Casey Family Programs launched in 2018 a national effort to improve child safety and prevent maltreatment fatalities. Child welfare agencies from 20 jurisdictions participated in the Tennessee Safety Culture Summit about the application of safety science in child welfare. These efforts culminated in 11 jurisdictions and Casey Family Programs forming the National Partnership for Child Safety (NPCS), a quality-improvement collaborative focused on applying safety science in child welfare, specifically to prevent future fatalities and improve child safety through innovations in child protection. The NPCS continues to grow (38 jurisdictions in 2025), with members participating in quality improvement activities related to safety science, including applying a standardized platform for CIRs and sharing data.

Safe Systems Improvement Tool

The most widely used tool for child welfare CIRs, the Safe Systems Improvement Tool (SSIT) offers a structured framework to identify systemic factors across four key domains: 1) family circumstances; 2) caseworker role; 3) collaboration across system partners (child welfare, law enforcement, court systems); and 4) systemic environmental factors. The tool addresses service gaps, policy limitations, and professional decision-making challenges within each domain. By standardizing data collection and analysis, the SSIT helps child protection agencies strengthen system safety, reduce preventable harm, and drive evidence-based policy reforms.

The Tennessee Department of Children's Services initially developed the tool in 2015, and NPCS subsequently created its own version of the Safe Systems Improvement Tool that incorporates the input from additional jurisdictions.

Some jurisdictions may focus only on child fatalities due to limited capacity, while others might choose to review other critical incidents harmful to children to test the flexibility of the process. Expanding the scope of review not only reveals more areas for study, but also provides more meaningful data to identify opportunities for improved child safety.

The safety science field is valuable when applied to critical incident and child fatality reviews because it is evidence-based, systems-focused, and promotes learning and change through an approach that:

- Transitions from individual blame to overall systemic accountability.
- Applies systemic methods of learning and investigation.
- Addresses complex systemic issues rather than focusing on the application of quick, simplistic fixes such as firing staff.

A safety science approach goes hand in hand with the development of a **safety culture**. To foster learning and nurture change over time, a safety culture must be cultivated throughout the entire agency and with external partners, including those with lived experience in the child welfare system. To effectively achieve a safety culture, agencies must collect targeted data to better understand barriers to child safety, from which recommendations for system improvement can be developed. The safety science approach leads to instructive, retrospective learning when applied to CIRs, but also includes a prospective component focused on mindful organizing and other team-based, proactive strategies to prevent future harm.

This strategy brief shares lessons learned from five NPCS member jurisdictions: **Los Angeles County**, **Maryland**, **New York City**, **Oregon**, and **Vermont**. Their experiences illustrate how safety science serves children and families well by cultivating a safety culture among child welfare professionals.

Lean on the evidence

Safety science offers an evidence-base to drive system reforms that advance child safety and family strengths. By applying the principles of safety science, CIRs are an effective tool to identify system improvement opportunities and illuminate the gap between what families need and what families receive from the child welfare system.

Develop assessment tools

As a complement to the SSIT, NPCS recommends use of the Systems Assessment Tool (SAT).[3] Together, these tools assess, organize, and rate information gathered when exploring systemic barriers to child and family safety and well-being. By reaching beyond "human error" to identify the complex and various contributing factors related to a critical incident, the tools produce data that inform improvement strategies. In the context of a CIR, the tools record and explore the "system's story" of the critical incident, and communicate and advocate for a quality-improvement strategy.[4] While jurisdictions are encouraged to tailor their approach based on their individual operations, assessment tools should include four core elements:[5]

- **Quality improvement.** Allows for the identification of systemic improvement opportunities that set quality-improvement actions into motion.
- **Outcomes measurement.** Ability to translate ratings into data that can be analyzed at an individual or aggregate level.
- **Communication.** Turns complex relationships among systems into a common language that facilitates cross-sector discussion.
- **Culture carrier.** Reinforces a safety culture that focuses on systems, not individuals.

Share data

One goal of the NPCS is to facilitate confidential data sharing between member jurisdictions, which results in a more comprehensive understanding of factors contributing to critical incidents across various communities. When each jurisdiction looks at its own data in isolation, the information is limited and therefore less illuminating. Having a national approach to data collection allows for a more informed identification of trends and patterns, and enhances the visibility of areas for child safety improvements.

Disaggregating data shared privately across jurisdictions brings about a better understanding of racial and ethnic disparities that occur at different decision points along the child welfare continuum. That information can identify larger issues, such as implicit bias, and then drive policy reforms that advance racial justice.

Sharing critical incident data across systems within a single jurisdiction also is important as local data can track trends and identify potential systems-level improvements. While confidentiality protections related to data sharing are necessary to support open dialogue and systems learning, jurisdictions also need to be transparent in sharing the steps and processes taken that are reflected in the data.

In 2024, a **Vermont** legislator introduced a bill with a provision that sought to ensure that staff could participate in CIRs confidentially so as to foster a culture of open and honest reflection without fear of reprisal. Importantly, the proposed statute would not have imposed restrictions on sharing lessons learned from CIRs, thereby striking a balance between transparency and the need to protect individual caseworkers. The bill did not receive a committee hearing.

Similar statutory protections exist in other jurisdictions, however. **Maryland** and **Oregon** have laws that protect the confidentiality of caseworkers involved in child welfare critical incidents, while still supporting transparency through public reporting. The Maryland statute requires confidentiality of child abuse and neglect records, but in cases of child fatalities or serious injuries allows for limited disclosures such as timelines, services provided, and investigative outcomes. The statute strictly prohibits release of caseworker identities or internal deliberations. The Oregon law authorizes CIR teams to publish findings, but mandates redaction of any confidential information, including staff names and personnel details, in final reports posted online.

Map the issues

System improvement opportunities can be visually represented on a map to facilitate multi-disciplinary conversation about the factors that led to how and why decisions were made and how those decisions, plans, and actions may have influenced the trajectory of a critical incident. While mapping allows for expanded examination of an incident, it does not identify cause, blame, or make value statements about the work. Rather, it explores rationales for decisions made, demands and pressures on the staff, system interactions, and variability or drift in case practice.

Staff not directly involved with the family at the center of a critical incident typically do the systems mapping. The maps work from the premise that every decision made was thought to be the best possible in the given situation, and that those decisions were made in the context of existing system flaws and vulnerabilities. Mapping highlights those obstacles that impact the safety and well-being of children and families, allowing for a constructive examination of how the system could be better designed to support child safety and family strengths, and prevent critical incidents.

Conduct staff debriefings

A key component of CIRs is a one-on-one debrief with staff who worked directly with the family prior to the critical incident. Sometimes called “human factors debriefings,” they serve as facilitated opportunities for staff involved in the incident to share, process, and learn in a blameless environment. In the debrief, staff can share their experience working with the family and describe complex individual and agency factors that affected decision-making. In this way, staff involved in the critical incident are given a voice in the review process and also in generating recommendations for system reforms.

Take a systems-focused perspective

A focus on individuals, absent a critical examination of how the system as a whole promotes child safety, will not prevent future harm. Eliminating shame and blame in CIRs does not excuse or minimize accountability for tragic events. Instead, it sheds light on system challenges that inhibit child safety. The **Los Angeles County** Department of Children and Family Services (DCFS) imparts lessons learned from critical incidents to social work staff, who then may apply the information to conduct more thorough child safety assessments. This promotes a self-reflective work environment with ongoing learning opportunities that aim to enhance case practice, while considering the impact of system barriers. Moreover, this allows DCFS to explore day-to-day practice strategies that can enhance critical thinking and support child safety and well-being assessments. Several divisions throughout the agency participate in this effort.

Ensure psychological safety throughout the agency

A culture of fear undermines and inhibits the potential for learning. To implement a safety science approach successfully, child welfare leaders must create an environment that promotes psychological safety for staff by eliminating fear of punitive actions, making concerted efforts to support them, and allowing their voices to be heard in every review process. A lack of trust can bury information critical to achieving child safety and therefore inhibit learning and efforts to improve the system. Safety culture helps staff feel comfortable sharing information and letting issues surface by being transparent, collaborative, and self-reflective.

> “As we have adopted a culture of psychological safety throughout our department, staff have developed a greater sense of trust and empowerment. They are more open and able to identify opportunities for improvement – both internally and systemically. Rather than feeling fearful for their jobs, staff feel safe to speak up about gaps in services and contribute to solutions. This shift is a critical outcome of psychological safety and leads to more meaningful recommendations for improved practices.”
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> —Diane Iglesias, Senior Deputy Director, Los Angeles County Department of Children and Family Services

The **New York City** Administration for Children's Services (ACS) recognizes that, in a complex and high-stress environment, case practice can be imperfect, and child protection teams may encounter a variety of challenges on any one case. ACS operates from a presumption that case practice decisions are well-intentioned and often made within a context of system obstacles or knowledge gaps, and that responses focusing on **individual discipline is appropriate only when willful misconduct is clear**. The goal of the reviews is to surface obstacles as learning opportunities, understand the rationale behind decisions, and provide insight into what could have been done differently. Ultimately, the CIR process has helped promote a safety culture across the organization, launching a safety culture campaign, and shifting both the culture and the language used to describe case practice. The CIRs are a continuous process of learning, creating a mechanism for ongoing system refinement, with each review surfacing new areas for improvement.

Safety culture cannot be decreed. It must be accepted, embraced, and modeled by all levels of leadership. Leadership sets the tone and charts a path for general acceptance of safety science principles throughout a child protection agency[6] and must be consistent, sincere, and committed to not targeting individuals when a tragedy happens.

> "Safety culture means that after critical incidents we no longer ask, 'Who is responsible for this failure?' but instead, 'What factors led to this outcome, and how do we need to change our systems so that we can better protect children in the future?'"
>
> —David Hansell, Former Commissioner, New York City Administration for Children's Services

Collaborate with external partners

The CIR process should reflect that child welfare is a complex system with many external partners. Reviews therefore must include multi-disciplinary perspectives, data sharing, and a collaborative examination of various points in the child welfare system — not just within a child protection agency — where support and safety could be enhanced. When all partners collaborate, information becomes easier to access. Each partner is able to bring a different lens to identifying system flaws, including communication barriers between sectors. For example, medical and legal jargon can be difficult for child protection agency staff to interpret. A CIR that identifies that confusion as an underlying reason behind a decision can lead to a systemwide commitment to use language understandable to all.

Turn insight into impact

The jurisdictions profiled in this brief applied safety science principles to CIRs and found greater success engaging staff, identifying system flaws to be addressed, and implementing system improvements. Their recommendations and outcomes to date include:

- **Proactive and timely responses to safety concerns within a family**, including immediate, real-time safety considerations for other members of a household where the critical incident occurred. Information should be fresh, accessible, and not excessively academic.
- **Changes in case practice** may involve hiring specialists to educate staff on issues such as working with families exposed to domestic violence or struggling with mental health issues.
- **Creation of a feedback loop** to share findings and continue discussion. In New York City, the CIR team reports back to the local office involved in the review with timely recommendations that can lead to more discussion.
- **Streamlined policy requirements** to reduce extensive or burdensome documentation requirements that may overwhelm staff and keep them from other case practice responsibilities. New York City ACS removed 15 unnecessary policies and streamlined remaining ones to be more efficient and saw increased productivity as a result.

- **Public service announcements and safety campaigns** to engage and educate the public about specific steps to take to prevent child fatalities, such as promoting sleep safety for infants and prevention measures for child drownings.
- **Collaborating with system partners** to improve communication. In Los Angeles County, DCFS worked with the health care system to educate physicians about using plain language to avoid misinterpretations. As part of this initiative, doctors make themselves more available to DCFS staff, who are invited to call them if they need more clarification.
- **Action plans published in periodic reports** with reform recommendations and timelines for implementation. New York City ACS publishes an annual report pursuant to a local law.
- **Data system modifications**, such as the data system created in New York City to track recommendations and the steps necessary to accomplish them.

Looking ahead

States taking advantage of the Family First Prevention Services Act are required to provide a description of the steps being taken to collect information about child maltreatment fatalities and implement a plan to prevent them, such as these plans from North Dakota and Maryland. The National Center for Fatality Review and Prevention developed a guide to help states develop a child maltreatment fatality review process, including an outline for a prevention plan (Appendix E, page 53 of the guide). In many states, this requirement has catalyzed the development or enhancement of CIRs to better understand and respond to fatalities or serious harm involving children in the child welfare system.

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[1] Content for this brief was developed based on interviews with: Michael Cull, Associate Professor and Associate Director, and Tiffany Lindsey, Clinical Instructor and Policy Analyst, Center for Innovation in Population Health, University of Kentucky, Dec. 11, 2020; Noel Hengelbrok and Scott Modell, Collaborative Safety, LLC, Dec. 4, 2020; Diane Iglesias, Senior Deputy Director, and Cynthia Wong-Blye, Division Chief, Risk Management Division, Los Angeles County Department of Children and Family Services, Jan. 26, 2021; Andrew White, Deputy Commissioner, Division of Policy, Planning, and Measurement, Ancil Payne, Assistant Commissioner to the Office of Quality Improvement, and Ellen Howard-Cooper, Associate Commissioner to the Office of Quality Improvement, New York City Administration for Children's Services, Feb. 12, 2021.

[2] Cull, M., Rzepnicki, T.L., O'Day, K., & Epstein, R.A. (2013). Applying Principles from Safety Science to Improve Child Protection. *Child Welfare, 92*(2), 179-196.

[3] Developed by Collaborative Safety, LLC.

[4] Cull, M., Lindsey, T., & Epstein, R.A. (2019). Safe Systems Improvement Tool: National Partnership for Child Safety Version. Chicago: Praed Foundation.

[5] Cull, M. & Lindsey, T. (2020). Safe Systems Improvement Tool (SSIT) User Tip Sheet. Chicago: Praed Foundation.

[6] Deaver, A.H., Cudney, P., Gillespie, C., Morton, S., & Strolin-Goltzman, J. (2020). Culture of Safety: Using Policy to Address Traumatic Stress Among the Child Welfare Workforce. *Families in Society: The Journal of Contemporary Social Services 101*(4), 428-443.

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