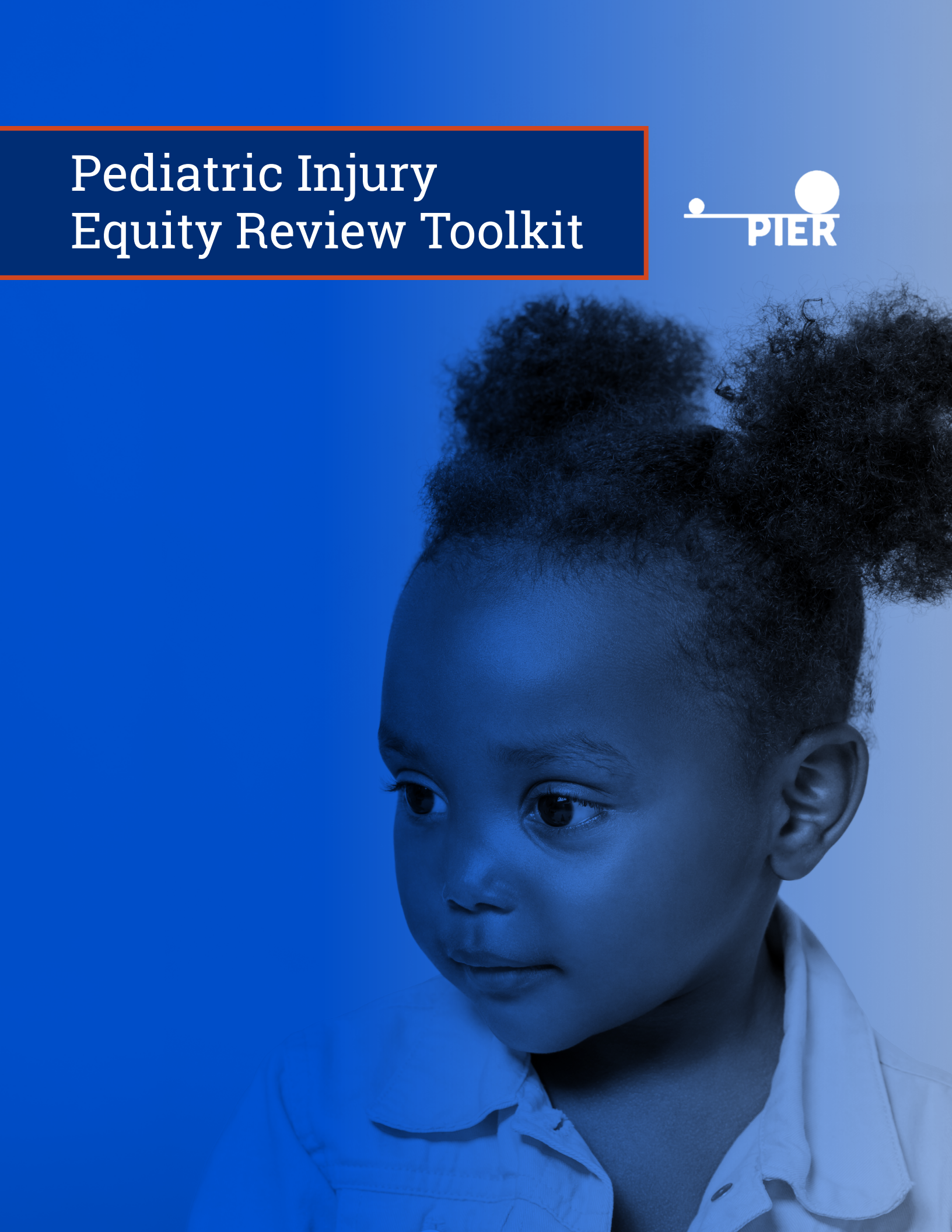
Pediatric Injury Equity Review Toolkit

PIER



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Glossary of Terms

Disparity: Measurable differences in health outcomes between groups

Downstream: Strategies that are focused on providing equitable access to care and services with the goal of reducing the negative impacts of disadvantage on health outcomes[1]

Health equity: State in which all people have a fair and just opportunity to attain their highest level of health[2]

Inequity: Disparity that is caused by unfairness or injustice

Injury: Bodily harm resulting from exposure to an external force or substance (mechanical, thermal, electrical, chemical, or radiant) or a submersion. Injuries can be caused by the intent to do harm (intentional) or without the intent to do harm (unintentional).[3]

Injury mechanism: The source of force or substance that causes an injury (fall, crash, substance exposure, drowning, etc.)

Intersectionality: A lens for observing the way social categorizations such as race, class, and gender interact within an inequitable societal context to lead to overlapping and interdependent systems of disadvantage[4,5]

Modifiable contributing factors: Behaviors, policies, environments, or other circumstances that can be changed to increase or decrease injury risk

Root cause: The core issue—the highest-level cause—that sets in motion the cause-and-effect reaction that ultimately leads to the problem(s)[6]

SMARTE goals: A framework for setting goals that includes the following characteristics:[7]
Specific: Concrete, detailed, and well defined
Measurable: Defined by a number or quantity to facilitate assessing when goal is achieved
Achievable: Feasible to put into action
Relevant: Considers constraints such as resources, personnel, cost, and time frame
Time-bound: A time frame to set boundaries around the goal
Equity-focused: Takes into account structural barriers, ensuring all individuals impacted have access to resources, opportunities, and fair outcomes

Social drivers of health: The social, economic, behavioral, and physical factors that have a substantial impact on our health and can be experienced where we work, live, and play[8]

Societal factors: Influences that affect equitable access to quality education, employment, housing, built environments, and other needs. These can include ableism, classism, racism, sexism, transphobia, homophobia, and xenophobia, as well as other forms of structural discrimination.

Structural discrimination: Upstream conditions, such as institutional policies that limit power, resources, and opportunities for the well-being of individuals or groups based on their social identities, which can include race, ethnicity, gender, sexual orientation, gender identity, ability, socioeconomic status, immigration status, limited English proficiency, and others[9]

Upstream: Fundamental social and economic structures that can be addressed through interventions and strategies to support people to achieve their full health potential[1]

Introduction

Injuries are a major cause of death and disability in children and young adults in many parts of the world, and the United States (U.S.) is no exception. Six of the top 10 causes of death in children and adolescents in the U.S. are injury related.[10] This includes firearm injuries, motor vehicle crashes, suffocation, drowning, drug overdoses, and fire/burns.

While progress had been made in reducing the incidence of many injuries in the U.S., that progress stagnated in the wake of the COVID-19 pandemic. For example, after a downward trend in drowning death rates over time, there has been an increase in the years post-pandemic, and a widening disparity for Black and American Indian/Alaska Native groups.[11] For each of the six leading injury-related causes of death among children and adolescents, there are substantial disparities based on race, geographic location, and socioeconomic status. In some cases, inequities exist across race, geography, and socioeconomic status, and these disparities are compounded. The motor vehicle crash (MVC) death rate in Black, non-Hispanic children in the most rural areas is about 12 times the MVC death rate of white, non-Hispanic children in the most urban areas.[12] Poverty worsens inequities, with lower socioeconomic status correlated with a higher likelihood of a fatal injury.[13]

The goal of the Pediatric Injury Equity Review (PIER) is two-fold:

- To support the identification of factors that contribute to inequities in pediatric injury outcomes
- To support the development and implementation of impactful interventions to address those identified factors

This toolkit describes a refined and updated process to achieve this goal and was designed to be sustainable and scalable. It was developed based on feedback from multidisciplinary partners and teams who had used or were familiar with the first phase of this work, MassPIER.[14] Although the PIER process is grounded in the Child Fatality Review model, its design allows adaptation beyond fatality review teams to any multidisciplinary team interested in reducing injuries, as well as other pressing public health issues.

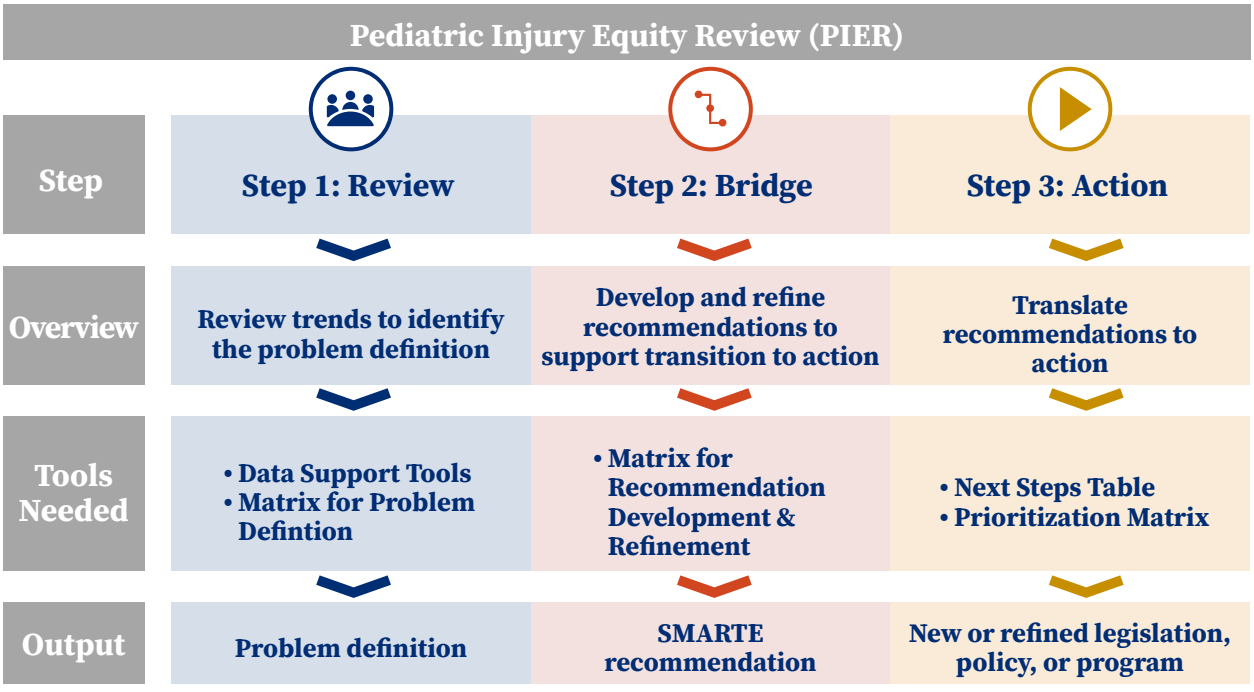
PIER Process

The PIER process consists of three core steps: Review, Bridge, and Action. Groups may implement the full process or select individual steps based on their needs, goals, and capacity. The full process is flexible enough to allow one team to address all three core steps or to divide steps among strategic partners. It may also involve partnerships with external collaborators, depending on group structure and available resources. This flexibility allows groups to adapt the PIER framework to their specific context while maintaining the integrity of the overall model.

The process benefits from the input of participants with diverse experiences, expertise, and disciplines. In addition, input from community members in the community of focus is important for each step of the process, including representatives of historically marginalized groups that have been disproportionately affected.

See Figure 1 for a visual of the overall process, followed by a detailed description of each of the three steps below.

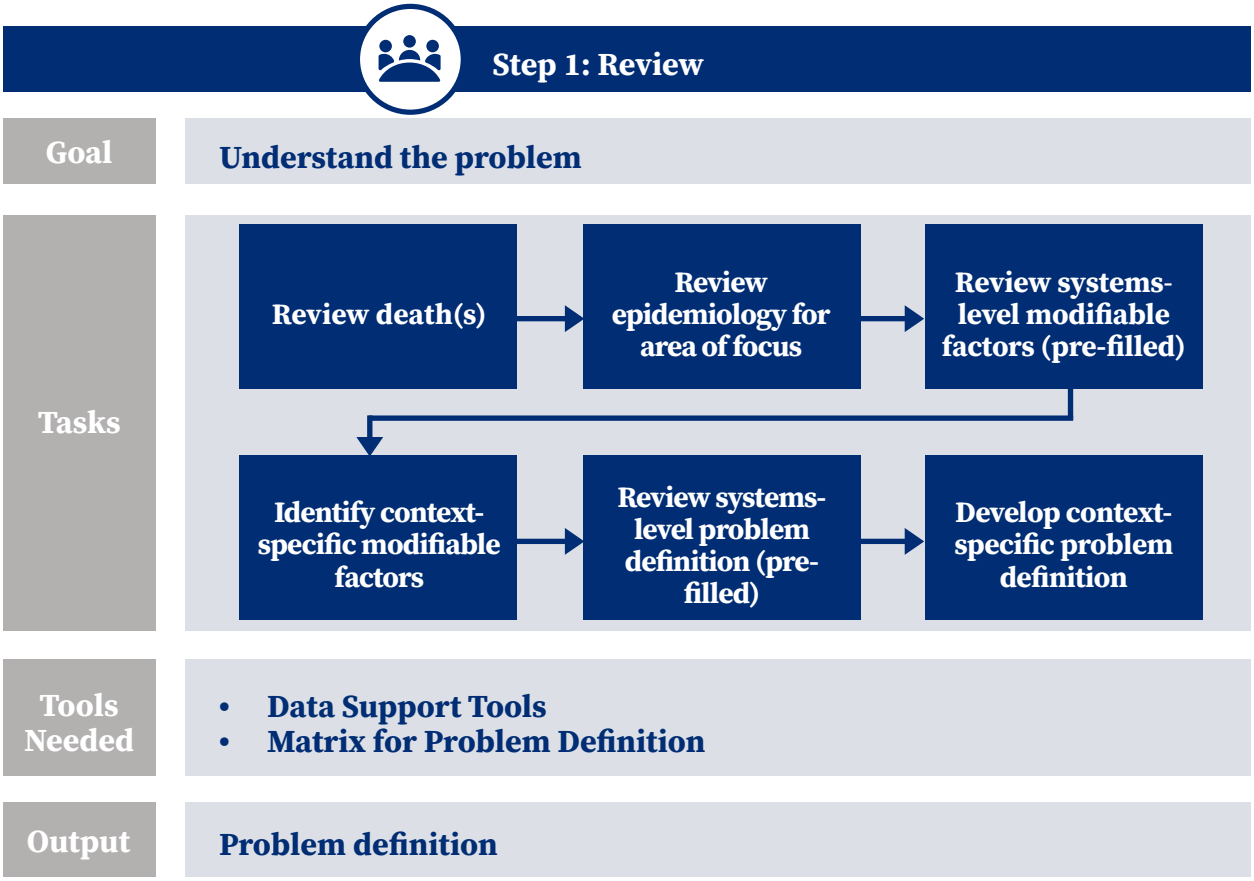
Figure 1: PIER Process Overview



STEP 1: REVIEW

Step 1 is the review step, with the goal of completely understanding the public health problem to be addressed. Figure 2 summarizes this step, and it is discussed below.

Figure 2: Review



The scope of the review may vary depending on the practice and goals of the team. It may begin with the review of individual deaths, which is common practice among most Child Fatality Review teams. The review of individual deaths can provide a plethora of rich data about case-level circumstances and contributors, which can be important. If possible, it is helpful to review similar cases in aggregate to help identify trends around a specific cause of death. Case-level review is followed by a review of fatal and nonfatal epidemiologic injury data at the relevant geographic level (county, city, state, or national), with a focus on inequities. These data can be accessed through publicly available sources and in partnership with state and county health departments or health information organizations. This toolkit includes a list of recommended data sources to support teams in conducting the epidemiologic review.

Teams then move forward with completing the PIER Matrix for Problem Definition (Figure 3) to synthesize findings and generate a problem definition. The Matrix for Problem Definition is an evidence-based tool, built using the foundation of the Injury Equity Framework for identifying observable and predictable factors that impact injury outcomes. It includes factors such as

natural and built environment, equipment and technology, education, and treatment and recovery, each of which is known to impact injury outcomes within the continuum of the pre-injury, injury, and post-injury phases as identified in the Haddon Matrix and adapted in the Injury Equity Framework.[15,16] It also includes a row labeled "Others" for any modifiable factors that may not fit into the aforementioned categories. Although policy and legislation are significant drivers of inequities in injury outcomes, they are not included as a separate category, as they typically intersect with, and are embedded within, the other factors represented in the matrix.

Figure 3: PIER Matrix for Problem Definition

Countermeasures	**Systems-Level Modifiable Contributing Factors**	**Context-Specific Modifiable Contributing Factors**	**Intersectional Identities Impacted** (i.e., ability, class, gender, immigrant status, race, sexual orientation, etc.)	**Systems-Level Problem Definition**	**Context-Specific Problem Definition**
Natural and Built Environment (i.e., infrastructure)	Pre-filled			Pre-filled	In our local/ regional/state context, *(state magnitude of problem & population most impacted)*; This is impacted by *(state contributing factors)*
Equipment & Technology (i.e., car seat, gun safe)					
Education					
Treatment & Recovery (post-event)					
Others					

The PIER Matrix for Problem Definition consists of several columns, some of which are pre-filled by the PIER team. The Matrix for Problem Definition displays these factors in a single location for the teams to review and facilitate a shared understanding of the multilevel contributors to disparities in injury outcomes.

Teams can select the matrix corresponding to the injury mechanism of focus, review and discuss the pre-filled sections, and then identify and document any additional modifiable factors relevant to their context. When multiple cases with the same injury mechanism are reviewed, modifiable factors may be summarized as aggregate factors. It is most effective to review the matrix one row at a time, allowing the group to discuss and provide input on each category of factors.

Teams then complete the identities column by identifying the populations disproportionately affected in their geographic area. The PIER team has pre-filled the systems-level problem

definition based on national data. In the next step, the underlying cause of disparities in outcomes for the injury mechanism are discussed, considering the systems-level modifiable factors and problem definition as well as modifiable factors identified during the review.

When developing the problem definition, keep in mind that it will form the basis of recommendations for solutions, so be specific and clear. **A well-defined problem definition is imperative and will provide the foundation for the entire process.** Key components to include are:

- Clearly state the magnitude of the specific problem
- Include the population(s) most impacted (stating the inequity)
- Include factors contributing to the problem

If multiple deaths of similar cause were reviewed together, an aggregate problem definition should be developed. An example aggregate problem definition is as follows:

In our local context, firearm injuries are a leading cause of death in children and disproportionately impact children who live in Southeast D.C. and children who identify as Black. This is impacted by societal factors such as dense poverty, built environment factors such as abandoned lots and lack of green spaces, and reduced access to timely, high-quality trauma care.

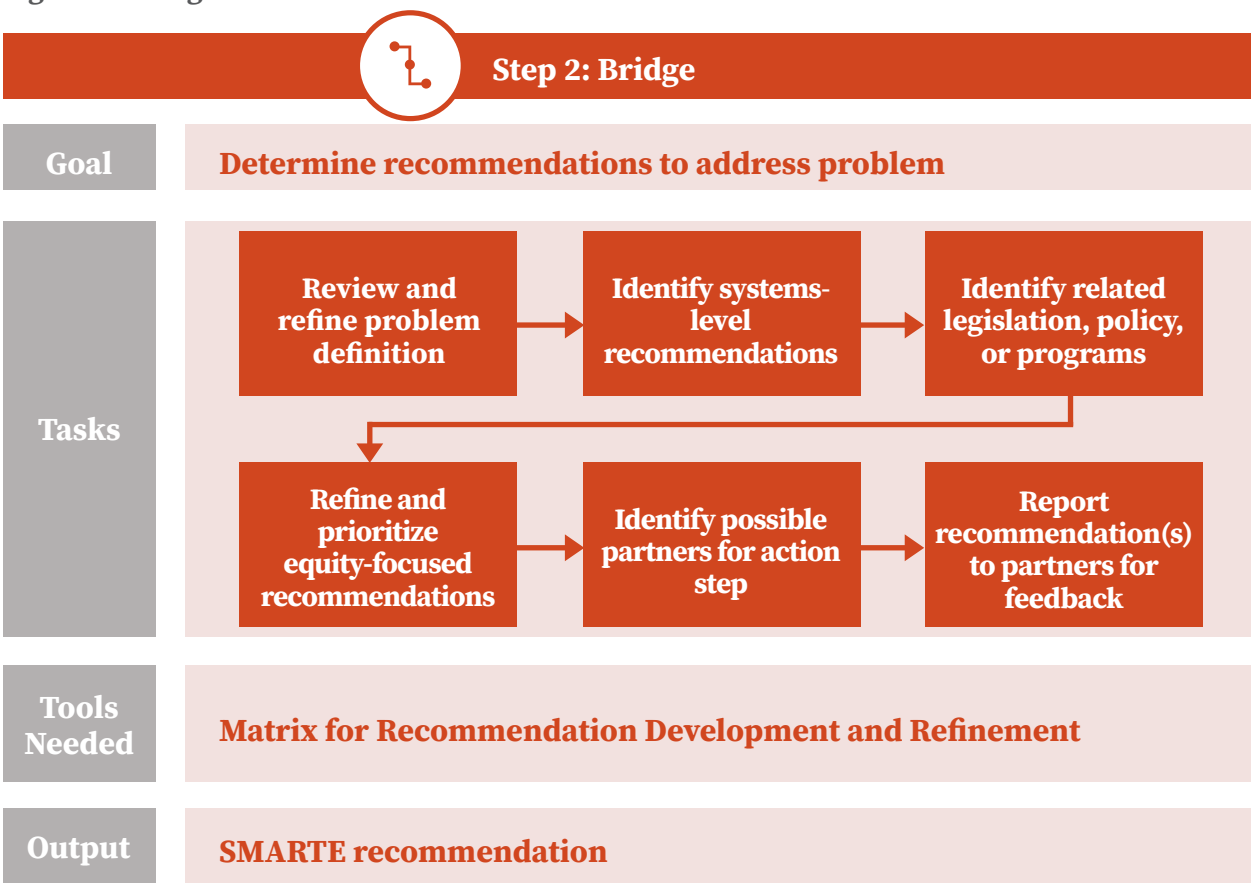
Through a literature review, the PIER team has identified modifiable contributing factors within each of the categories that affect injury outcomes and has created a library of Matrices for Problem Definition for the most prevalent injury mechanisms. This library is available to download on **the website**.

The matrix completed by team(s) in the review step serves as the foundation for the bridge step to systematically develop and refine recommendations for interventions that address the identified problems.

STEP 2: BRIDGE

In the bridge step, the problem definition is reviewed and refined as needed. If multiple problem definitions were developed, the group may compile and further refine them based on observed patterns and trends. Figure 4 summarizes the bridge step.

Figure 4: Bridge



The group then uses the PIER Matrix for Recommendation Development (Figure 5) to systematically develop population-level prevention strategies for the problems identified in the previous step.

Figure 5: PIER Matrix for Recommendation Development and Refinement

Systems-Level Problem Definition*	Context-Specific Problem Definition	Countermeasures**	Recommendations***				
			Initial Recommendation	Equity Impact	Associated Legislation, Policy, or Programming	Refined Recommendation	Possible Action Team Partner(s)
		Natural and Built Environment					
		Equipment & Technology					
		Education					
		Treatment & Recovery					
		Others					

***From PIER Matrix for Problem Definition**
****Consider modifiable factors when thinking of countermeasures in each category**
*****Type of recommendations to consider:**
1. New policy, program, or legislation
2. Change in existing policy, program, or legislation
3. Change in implementation

As illustrated in the PIER Matrix for Problem Definition, interventions generally fall into four categories—Natural and Built Environment, Equipment and Technology, Education, and Treatment and Recovery—with an additional "Other" category for interventions that do not fit within these domains. Interventions may take multiple forms, including new interventions, adaptations of existing interventions, or changes in how current interventions are implemented. They may also involve programs, policy, legislation, or advocacy.

At this stage, recommendations do not need to be fully refined or framed as SMARTE (Specific, Measurable, Achievable, Relevant, Time-bound, Equity-focused) goals. Recommendations should be documented as they emerge from team discussion to capture the full range of ideas generated by the group.

After recommendations are documented, teams assess their potential impact on the existing community disparities identified by assigning an equity score based on available evidence and expert judgment. PIER uses a simple, four-category equity scoring system:[17]

- Likely to promote equity ⊘
- Mixed impact on equity ⤮
- Likely to worsen inequities ⊗
- Unknown equity impact ⍰

Equity scoring reflects not only the recommendation itself, but also contextual factors, including how the recommendation may be implemented, the communities where it may be applied, and potential unintended consequences. Based on the initial equity score, the

recommendation is further refined to increase the likelihood that it is promoting equity. In the subsequent column of the matrix, teams identify any associated legislation, policy, or programming related to each recommendation. Considering these elements not only helps clarify which individuals, agencies, or organizations should be engaged in the action step based on their roles, authority, or implementation experience, but also can inform further refinement of the initial recommendations. For instance, similar programs already in place may be refined or expanded to meet the recommendation's goals, thereby avoiding the need to create a new program.

Recommendations are then refined based on associated legislation, policy, or programming to include sufficient detail to be actionable and maximize their potential to promote equity. At this stage, teams may apply SMARTE criteria to clarify and strengthen recommendations.

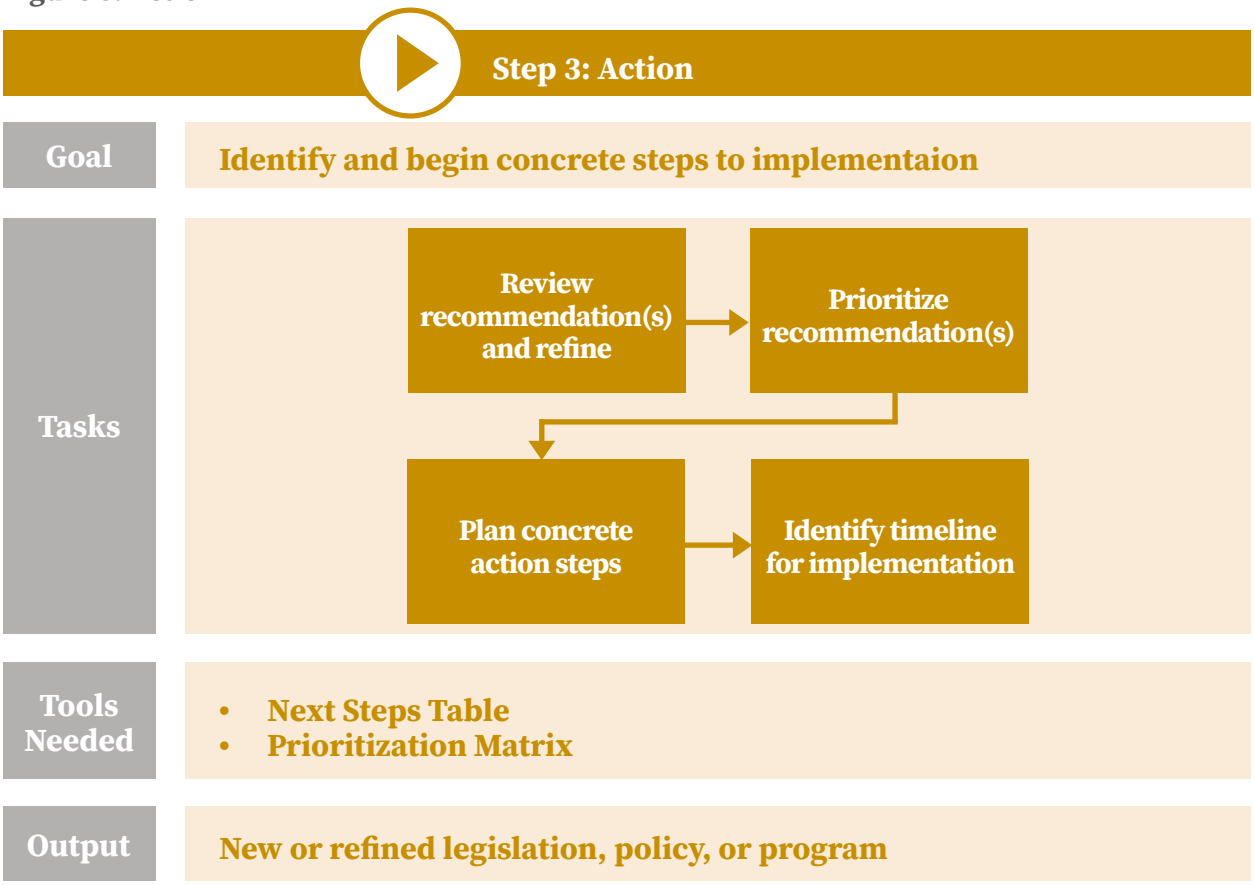
Finally, using all available information, teams identify the appropriate partners to include in the action step, ensuring that recommendations are advanced by those best positioned to implement them effectively.

If the review and bridge steps were completed by separate groups, to maintain continuity across groups, priority recommendations are shared with the group that completed the review step for initial feedback before being advanced to the action step.

STEP 3: ACTION

In the action step, recommendations are translated into actionable steps. Figure 6 displays the action step.

Figure 6: Action



The first task in the action step is to review and refine recommendations as needed. This is especially important if the group implementing the action step differs from the group that developed the recommendations, as the perspectives and experiences of the implementing group may inform additional refinement. Next, recommendations are prioritized using the PIER Prioritization Matrix (Figure 7). The Prioritization Matrix can be utilized to support decision making on the priority recommendation (which may be one or multiple). It helps to consider important variables such as potential for impact, evidence, political will, community acceptance, and resources and capacity.

Figure 7: PIER Prioritization Matrix

Recommendations	Impact	Evidence	Political Will	Community Acceptance	Resources & Capacity	Priority Score
Reccomendation 1						
Reccomendation 2						
Reccomendation 3						

-1, 0, or 1, representing low, neutral, or high

Working through this matrix allows teams to clearly document their discussions and apply a simple quantitative scoring approach to each variable, helping them reach concrete conclusions about which recommendation(s) should move forward. For scoring, teams may assign values of **–1, 0, or 1,** representing **low, neutral, or high** (respectively), for each factor. Scores are then summed for each recommendation, enabling teams to compare options and identify those best suited for implementation based on the overall score. If two or more recommendations yield the same total score, teams are encouraged to consider the potential unintended consequences of each option and proceed with the recommendation that has fewer or less severe unintended consequences.

The variables included in the table are listed below:

Impact: The extent to which the strategy is likely to be effective in preventing injuries and promoting equity. The Health Impact Pyramid,[18] included below, is a useful tool for visualizing which interventions are likely to have the greatest population-level impact and which require more individual effort. Strategies higher on the pyramid tend to rely more on individual behavior change and have a more limited population impact, while those lower on the pyramid generally increase population-level impact with less individual effort.

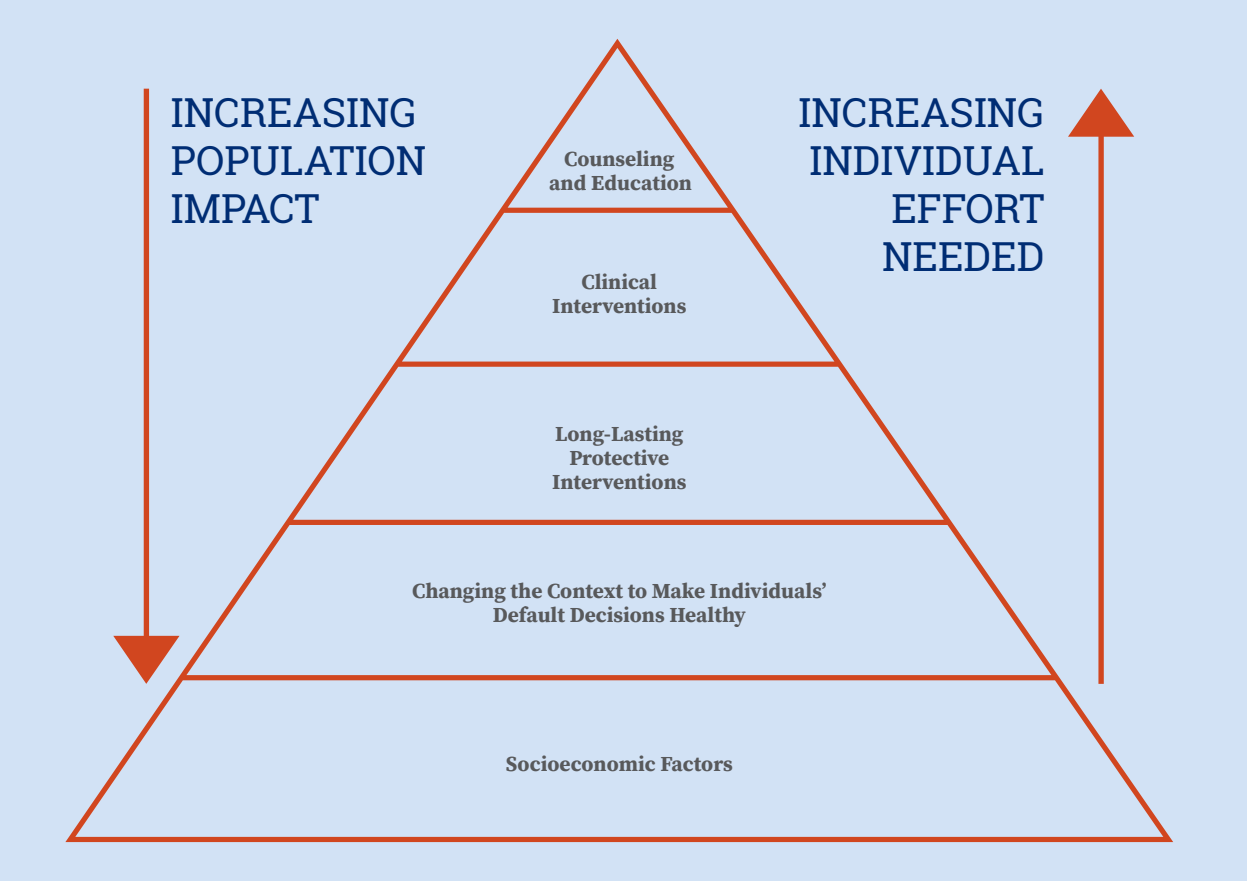
Evidence: The strength of the scientific evidence that the strategy works to prevent injuries and promote equity

Political Will: The extent to which your partners and the people in positions of leadership or influence may support this strategy

Community Acceptance: The extent to which the community of interest may support this strategy

Resources and Capacity: The extent to which the resources, funding, and know-how to implement and sustain the strategy are available/accessible

Figure 8: Health Impact Pyramid



2010 by Thomas Frieden of the Centers for Disease Control and Prevention, the Health Impact Pyramid

After priority recommendation(s) are identified, it is important to break the recommendation down into actionable steps by identifying the first action item, responsible parties, key partners to engage, and target dates for completion. The PIER Next Steps Table is utilized to support these steps. Priority recommendation(s) identified using the Prioritization Matrix are added to the first column. The next column is to identify the first action item needed for implementation. After identifying this first step, the next columns support the concrete decision making needed for action. This includes identifying the responsible party within the Action Team for executing the action step, key partner(s) that should be included in that action step or the overall recommendation, and the target date for completion. The Next Steps table should be used iteratively, understanding that after the first action step is completed, the next one which moves toward implementing the recommendation should be added to the Next Steps table, and the team should proceed until the recommendation is implemented.

Figure 9: PIER Next Steps Table

Priority Recommendation(s)*	First Action Item	Responsible Party	Key Partner(s) to Include	Target Date for Completion	Notes

***Use PIER Prioritization Matrix to consider important variables such as impact, evidence, political will, community acceptance, and resources and capacity.**

JOURNEY TO IMPACT

The PIER Process is designed to support the identification and implementation of interventions to improve outcomes and augment impact in injury control. However, it is important to remember that the journey to impact in a public health intervention can often take years. It is often tortuous, with seesawing incremental success. Very rarely is impact achieved without challenges. Partnerships are important, as are persistence and celebrating and embracing any incremental success.

Acknowledgments

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Appendices

Several tools that can be helpful for the PIER process are listed below. Additional tools and resources are available on the website.

PIER TOOLS

PIER Matrix for Problem Definition Template

Countermeasures	**Systems-Level Modifiable Contributing Factors**	**Context-Specific Modifiable Contributing Factors**	**Intersectional Identities Impacted** (i.e., ability, class, gender, immigrant status, race, sexual orientation, etc.)	**Systems-Level Problem Definition**	**Context-Specific Problem Definition**
Natural and Built Environment (i.e., infrastructure)	Pre-filled			Pre-filled	In our local/ regional/state context, *(state magnitude of problem & population most impacted)*; This is impacted by *(state contributing factors)*
Equipment & Technology (i.e., car seat, gun safe)					
Education					
Treatment & Recovery (post-event)					
Others					

PIER Matrix for Recommendation Development and Refinement Template

Systems-Level Problem Definition*	Context - Specific Problem Definition	Countermeasures**	Recommendations***				
			Initial Recommendation	Equity Impact	Associated Legislation, Policy, or Programming	Refined Recommendation	Possible Action Team Partner(s)
		Natural and Built Environment					
		Equipment & Technology					
		Education					
		Treatment & Recovery					
		Others					

***From PIER Matrix for Problem Definition**
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PIER Prioritization Matrix Template

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–1, 0, or 1, representing low, neutral, or high

PIER Next Steps Table Template

Priority Recommendation(s)*	First Action Item	Responsible Party	Key Partner(s) to Include	Target Date for Completion	Notes

***Use PIER Prioritization Matrix to consider important variables such as impact, evidence, political will, community acceptance, and resources and capacity.**

POTENTIAL DATA SOURCES

While this section focuses on national data sources, there are many state- and local-level sources, though availability and accessibility vary. Partnerships with state- and local-level departments of health and transportation can be helpful for accessing state- and local-level data.

National Sources

CDC WISQARS – an interactive, online collection of analysis tools for fatal, nonfatal, and cost of injury data.

- Fatal data are available at national and state levels
- Nonfatal data are only available at national level and are estimates
- Includes a dashboard for the **National Violent Death Reporting System (NVDRS)** which collects information about violent deaths including homicides, suicides, and deaths caused by law enforcement acting in the line of duty
- Includes a dashboard for the State Unintentional Drug Overdose Reporting System (**SUDORS**) on unintentional and undetermined intent drug overdose deaths
- The dashboards allow for visualizations such as charts and maps
- Data can be downloaded
- Help pages are available to explain how to use the various analysis tools

CDC WONDER – a set of online databases that utilize a rich adhoc query system for the analysis of public health data. Reports and other query systems are also available.

- Fatal injury data are included within the Multiple Cause of Death database
- Fatal injury data are available at national, state, and county levels
- Data can be downloaded

The National Fatality Review-Case Reporting System – a web-based standardized case reporting tool available to states, first created in 2005. The system allows local and state Child Death Review (CDR) and Fetal and Infant Mortality Review (FIMR) users to enter case data, summarize findings, review team recommendations, access and download data, and create standardized reports.

The Child Dynamic Analysis and Statistics Hub (Child DASH) – a data visualization website that summarizes information from child death review (CDR) cases that are entered into the Pediatric National Fatality Review-Case Reporting System (NFR-CRS) from participating states. Only state CDR programs and select National Center partners have access to Child DASH. The NFR-CRS is managed by the National Center for Fatality Review and Prevention (National Center) and collects standardized data focused on cause-specific deaths and individual and environmental risk and protective factors. Learn more about the NFR-CRS at **https://ncfrp.org/data/nfr-crs/**.

National Trauma Data Bank® (NTDB®) – a database that is an aggregation of U.S. trauma registry data, which since 2017 has been part of the Trauma Quality Programs (TQP). They put out a national-level pediatric summary report annually. Additionally, Trauma Quality Programs research data may be used for informational and research purposes with approval from the ACS Committee on Trauma (COT) by submitting an **online form**. The TQP PUF costs $1000 per

admission year of data requested. However as the TQP PUF is a program deliverable for trauma centers that participate in the Trauma Quality Improvement Program (TQIP), representatives from participating trauma centers are not required to pay this fee.

Specific Injury Sources

Traffic Crashes
National Highway Traffic Safety Administration (NHTSA) Fatality and Injury Reporting System Tool (FIRST) – an online query tool that allows users to construct customized queries from the Fatality Analysis Reporting System (FARS) and from the Crash Report Sampling System (CRSS). The system allows exploration of motor vehicle crashes (MVC) and resulting fatal and nonfatal injuries to drivers, occupants, pedestrians, and cyclists at the national, state, county, and city level, but it is not as user-friendly as some systems.

Poisoning
America's Poison Centers (APC) National Poison Data System (NPDS) – the data warehouse for the nation's 55 Poison Centers, which prioritize exposure management, accurate data collection and coding, and respond to the continuing need for poison-related public and professional education. It collects data on exposure to pharmaceutical and nonpharmaceutical exposures for all all ages. In addition to an annual report that summarizes exposure data based on calls to poison centers nationally, the APC also supports an **online dashboard** that allows exploration of exposures at the national and state levels. The APC does accept data requests; however, depending on the request, there may be cost implications.

Product-Related Injuries
Consumer Product Safety Commission (CPSC) National Electronic Injury Surveillance System (NEISS) – a database and **online query tool** that provides national-level data on consumer product-related injuries occurring in the U.S. based on a nationally representative probability sample of hospitals in the U.S. and its territories.

Fire-Related Incidents
U.S. Fire Administration (USFA) National Emergency Response Information System (NERIS) – USFA makes available an online dashboard that provides a snapshot of fire losses by state using data from NFIRS. Additionally, FEMA provides an online dashboard of the National Fire Incident Reporting System State, Territory and Local Fire Department Reporting Summary. Annual NFIRS Public Data Release (PDR) files are available at **Annual NFIRS Public Data;** however, the page notes the datasets are for researchers and fire data analysts.

Drowning Incidents
CPSC Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries and Reported Drownings – the CPSC Directorate for Epidemiology releases an annual national-level report on fatal and nonfatal drownings associated with pool or spa submersions. The most recent report can be found **here**.

The Drowning Report is an **online dashboard** supported by Total Aquatic Programming, LLC. and National Drowning Prevention Alliance (NDPA) that provides real-time data on drowning at the national and state levels. However, because it is based on media reporting, there is a risk that biased coverage could affect its content.

Firearm-Related Incidents

Institute for Firearm Injury Prevention – a large database of publicly available data on firearm variables in the U.S. maintained by the Institute for Firearm Injury Prevention. This database was originally established by the National Institutes of Health-funded Firearm Safety Among Children and Teens Consortium, which was led by the University of Michigan. Data on 200,000 variables from over over 100 studies are available in the **online database**.

The Center for Gun Violence Solutions – The Center for Gun Violence Solutions at the Johns Hopkins Bloomberg School of Public Health addresses gun violence as a public health emergency and utilizes objective, nonpartisan research to develop solutions which inform, fuel, and propel advocacy to measurably lower gun violence. State-by-state gun violence data are available on their **website**.

Everytown for Gun Safety – provides data through the **EveryStat tool** and **Gun Law Navigator**.

GUIDANCE FOR IDENTIFYING ACTION STEP MEMBERS

1. Leverage Existing Prevention Partners

- Agencies and Organizations: Identify agencies and organizations already involved in prevention work within your communities; preferably entities with a proven track record of successfully implementing prevention recommendations.
- Workgroups and Coalitions: Engage existing workgroups and coalitions focusing on community prevention efforts. Consider groups such as:
  - **Children's Safety Network**
  - **Injury Free Coalition for Kids**
  - **National Drowning Prevention Alliance (and partners)**
  - **Prevent Child Abuse America**
  - **Safe Kids Worldwide**
  - **Safe States Alliance**
- Organizations such as these have extensive networks and resources that can be leveraged to support the PIER process. They can provide valuable insights, support, and opportunities for collaboration to help implement prevention recommendations effectively.

2. Identify Key Roles Needed and Responsibilities

- Team Leader/Chairperson: Responsible for overall meeting coordination and leadership.
- Subject Matter Experts (SMEs): Teams should seek individuals with expertise in implementing prevention recommendations related to pediatric injury and death.
- Project Manager (likely state coordinator where applicable): Ensures that the project stays on track and within scope.
- Partner Representatives: Members who represent the interests of key partners.
- Community Activists/Implementers: Engage individuals who are passionate about improving outcomes in their communities and skilled in grassroots efforts to implement prevention recommendations in their communities.

- Families with Lived Experiences: Seek out families who have experienced similar tragedies and have started grassroots efforts or foundations to prevent future deaths. Their insights and dedication can be invaluable.
- First Responder Supervisory Positions: Include fire chiefs, fire marshals, police chiefs, and other supervisory roles from first responder agencies. Their experience and leadership can be crucial in implementing prevention recommendations effectively.

3. Criteria for Selection

- Experience: Focus on individuals with experience in prevention work and the successful implementation of recommendations.
- Availability and Commitment: Ensure prospective team members have the time and willingness to commit to serving on the action team.
- Collaborative Skills: Select team players who work well in collaborative environments.
- Diverse Perspectives: The action team should include diverse members from various disciplines.

4. Engage Partners

Involve key partners in the selection process to ensure their interests are represented and to gain their support.

5. Use a Structured Approach

- Develop a standardized process for identifying and selecting team members. This can include:
  - Standing members based on position/organization (e.g., safe kids coordinator, state Child Death Review coordinator)
  - Nomination Process: Allow partners to nominate potential team members.
  - Interviews: State Child Death Review Coordinator can conduct brief virtual or telephone interviews to confirm interest and assess the suitability of candidates.
  - Selection Criteria: Use predefined criteria to evaluate and select candidates.

HOW TO PROMOTE SYSTEMS FOCUS

Systems thinking helps shift teams from linear problem solving to a more holistic approach. The PIER process and tools can support a systems focus. Here are other key strategies to foster this mindset.

1. Understanding the Bigger Picture and Root Causes

- What patterns or trends are emerging across multiple deaths in the reviews?
- How do social determinants (e.g., poverty, housing, education, employment, health care access) contribute to child deaths in our community?
- What are the cumulative impacts of social determinants that contributed to child deaths over time?
- What upstream factors (e.g., policies, services, family support systems) could have prevented this death?
- How do various systems (health care, child welfare, criminal justice, education) interact in ways that impact child safety and well-being?
- Review population-level data. Are there specific populations disproportionately affected? If so, what systemic factors might be contributing?
- What barriers exist that prevent families from accessing needed support before a crisis occurs? What might minimize these barriers?

2. Examining Existing Programming, Policy, Service Gaps and Unintended Consequences

- Are current interventions, policies, and protocols sufficient to prevent similar deaths in the future?
- Are there missed opportunities for early intervention that could have changed the outcome?
- Are there policies or practices that may unintentionally increase risks for children?
- What are the different effects of the current interventions among various populations across different social and economic contexts?
- Are there groups or settings that may be negatively impacted by current programs or policies? Are there policies or practices that worsen inequities?
- Are the current policies and programs addressing the priority of the underserved population?
- Have past interventions led to improvements, or have they created new challenges?

3. Improving Data Sharing and Collaboration

- What data do we have, and what additional data could help us better understand systemic risk factors?
- How can we improve cross-sector collaboration to share insights and develop coordinated prevention strategies?
- What mechanisms are in place for accountability and follow-up after identifying system-level issues?
- How well do agencies collaborate to ensure child safety and well-being? Where are the gaps?
- How can we incorporate diverse perspectives, such as health care, social services, education, urban planning, and policymaking, to identify root causes and share solutions?
- How can we engage community voices (parents, caregivers, youth, advocacy groups) to help identify root causes and shape solutions?

MANAGING COMPETING PRIORITIES

Teams and organizations working to improve the safety and well-being of children and families are often faced with multiple agency-level priorities and limited resources. Whether managing agency-level priorities or multiple prevention strategies, deciding where to focus efforts can be challenging. A structured approach such as the one outlined below can help teams focus on the most critical areas, ensuring resources are used efficiently and effectively.

1. Prioritize Statutory Requirements

Not all public health-focused groups operate under applicable legislation or regulations, but for programs that do, compliance with those requirements is a primary concern.

- **Compliance:** Ensure all activities comply with relevant laws and regulations and work to address statutory charges.
- **Documentation:** Keep thorough records of compliance to ensure accountability and transparency.

2. Focus on Funders' Requirements

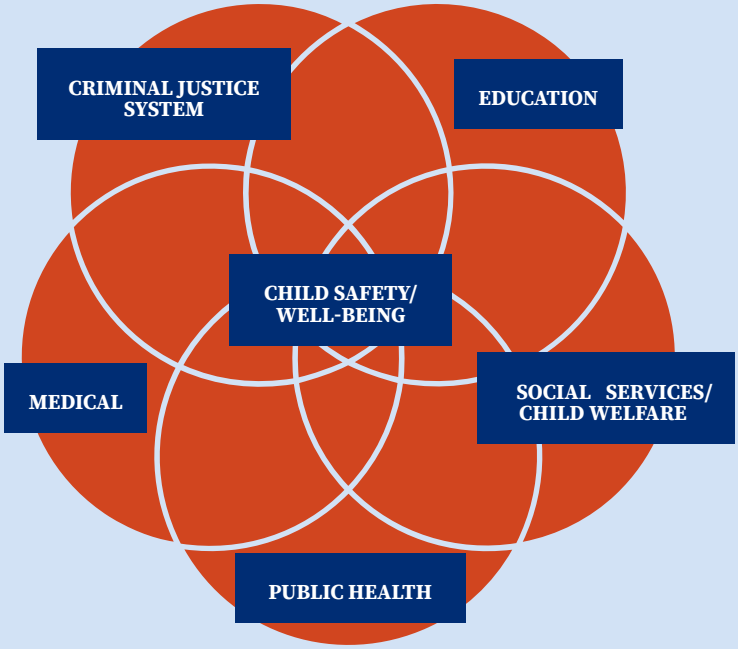
Understanding and aligning with funders' expectations (if applicable), and establishing and maintaining clear team charters, is crucial for securing support and ensuring all team members are on the same page.

- **Alignment With Funders:** Teams should align their goals with funders' expectations, including specific reporting formats, timelines, and outcome measures. This ensures continued support and funding.
- **Alignment With agency/organization of employment:** Team members should align goals with the expectations, guidelines, and priorities set forth by their respective organizations. A helpful strategy is for teams to identify where their organizational priorities intersect with child safety/well-being as the primary focus area, as well as areas where misalignment might cause problems.

Organizational Priorities Diagram

ORGANIZATIONAL ALIGNMENT

Team members must align goals with the expectations, guidelines, and priorities set forth by their respective organizations. A helpful strategy is for teams to identify where their organizational priorities intersect with child safety/well-being as the primary focus area.



- **Team Charters:** Develop and regularly update team charters to clearly define roles, responsibilities, objectives, and overall scope.

3. Plan for Effective Facilitation

Effective facilitation ensures that meetings are productive, focused, and engaging, helping to manage competing priorities efficiently.

- **Preparation:** Plan regularly scheduled meetings with clear objectives focused on prevention. Distribute necessary information in advance to ensure meaningful contributions. Strongly encourage team members to bring relevant documentation to the meeting.
- **Agenda Management:** Create structured agendas with specific times for each topic, including case reviews, prevention strategies, and breaks. Understand that there will likely be times when flexibility is necessary.
- **Engagement:** Use interactive techniques to keep members engaged.

4. Use Data-Driven Approaches

Using data to drive decisions ensures that resources are allocated to the most impactful areas, helping to prioritize effectively.

- **Data Collection:** Utilize tools like the National Fatality Review Case Reporting System (NFR-CRS) to collect comprehensive data on child deaths.
- **Analysis:** Analyze data to identify trends, risk factors, and areas for intervention. Use this analysis to prioritize and allocate resources effectively.

5. Evaluate Recommendations Using the Prioritization Matrix

Using the Prioritization Matrix can help teams evaluate and identify prevention activities that are most likely to succeed, ensuring strategic use of resources.

- **Evaluation:** Use the Prioritization Matrix to assess potential prevention activities based on effectiveness, ease of implementation, cost, sustainability, community acceptance, political reality, and unintended consequences.
- **Prioritization:** Prioritize prevention activities that score highest across these criteria to ensure the most impactful and feasible interventions.

6. Refer to the Socio-Ecological Model

Applying the socio-ecological model will help teams understand the interplay among the factors influencing child deaths, leading to comprehensive interventions across all levels of influence demonstrated in the model.

- **Holistic Approach:** Apply the socio-ecological model to understand the interplay between individual, relationship, community, and societal factors in child deaths.
- **Intervention Levels:** Develop interventions that address multiple levels of influence, from individual behaviors to broader systemic actions and/or policies.

7. Consider Resource Allocation

To manage competing priorities effectively, it is essential to focus resource allocation on developing and implementing prevention recommendations with the most significant implications for systemic change and ensuring continual training is provided to team members.

- **Case Prioritization:** Focus on cases with the highest potential for prevention impact at a systems level. Use data to identify trends and prioritize resources accordingly.
- **Training:** Provide ongoing training for team members to stay updated on best practices and new research.

8. Document and Follow-Up

Maintaining thorough documentation and consistent follow-up helps manage priorities by ensuring accountability and tracking progress.

- **Recordkeeping:** Maintain detailed records of meetings and decisions. Use these records and the Next Steps Table to track progress and follow-up on action items.
- **Feedback Loops:** Implement feedback mechanisms to continually improve the review process and address emerging issues.

9. Provide Team Support and Self-Care Opportunities

Supporting team well-being is essential for managing priorities effectively. A healthy team can better handle the demands of their work.

- **Mental Health:** Create and foster a team culture where recognizing and prioritizing mental health needs is normalized.
- **Debriefing:** Include time for debriefing after particularly challenging cases to support team well-being.

HOW TO BUILD AND SUSTAIN PARTNERSHIPS

Ten Tips for Productive Partnerships

Advancing impactful injury prevention solutions requires strong partnerships with broad coalitions to implement, evaluate, enhance, and sustain systems interventions. We offer these 10 tips for building partnerships:

1. **Think broadly.** Be creative and open when considering whom to invite to the table as possible partners. Who wouldn't want to work on a program whose goal is to keep children safe?

2. **Aspire boldly.** Be audacious and bold when developing the goals for your program. Is even one injury-related death of a child acceptable?

3. **Plan strategically.** Be clear and strategic in your partnership's goals. Fuzzy goals are not conducive to effective partnerships; everyone must share a clear vision, and tasks and deliverables must be clearly defined and assigned.

4. **Define specifically.** Be exacting and precise in your work; this goes beyond writing SMARTE objectives for your program. Careful attention to detail and accuracy is critical in any community program in which content is at the core. Ensure your messages and strategies are consistent with best-practice recommendations.

5. **Act respectfully.** Be respectful with and considerate of your partners. It is likely that you will have differences of opinion over the course of your partnership. Focus on your common goal rather than on any differences.

6. **Meet judiciously.** Be careful with and respectful of your partners' time. No one has time to waste, and nothing erodes partners' enthusiasm more than unnecessary or unproductive meetings.

7. **Communicate frequently.** Be timely and frequent with partner communication. Share meeting minutes to keep partners informed. Use technology to share important information with partners between or instead of meetings to keep everyone engaged and informed of partnership tasks, accomplishments, and needs.

8. **Share generously.** Be authentic and generous in acknowledging partners' contributions to the overall project.

9. **Assess periodically.** Be sure to assess and evaluate the partnership and your program regularly. Nothing stays the same, and without careful monitoring, the partnership may go astray.

10. **Celebrate frequently.** Be quick to acknowledge and celebrate even small successes. Make certain all partners' efforts are noted.

Stakeholder Engagement Plan		
Prevention Goal and Objectives:		**Partners and Stakeholders:**
Primary Responsible Partner: *(agency or person leading the effort/carrying the recommendation)*	**Role/Deliverable:** *(what is this person/group responsible for? e.g., setting agenda & taking notes, drafting policy, sharing data)*	**Notes:** *(task list and current status)*
Partner: *(agency or person participating in effort)*	**Role/Deliverable:** *(what is this person/group responsible for?)*	**Notes:** *(task list and current status)*
Partner: *(agency or person participating in effort)*	**Role/Deliverable:** *(what is this person/group responsible for?)*	**Notes:** *(task list and current status)*

Collaboration Multiplier. The Prevention Institute: Available at: **https://www.preventioninstitute.org/tools/collaboration-multiplier**

Community Tool Box. The University of Kansas. Available at: https://ctb.ku.edu/en
Health Care and Public Health Partnerships: How to Create Cross-Sector Relationships that Succeed. American Hospital Association. Available at: **https://www.aha.org/system/files/media/file/2020/06/AHA-Crosswalk-Presentation.pdf**

INformed. State States Resource & Training Hub. Safe States Alliance. Available at: **https://resources.safestates.org/**

NACCHO Resource Hub. National Association of County & City Health Officials. Available at: **https://www.naccho.org/resource-hub**

Guide to Data. National Center for Fatality Review & Prevention. Available at: **https://ncfrp.org/wp-content/uploads/Population-Based-Data-Guidance.pdf**

POTENTIAL PARTNERS FOR ADVANCING INJURY PREVENTION INITIATIVES

Health Care Organizations

- Pediatricians and Family Medicine Practices
- Hospitals and Trauma Centers

Law Enforcement and Public Safety

- Police Departments
- Emergency Medical Services (EMS)
- Fire Departments

Social Services and Government Agencies

- State and Local Health Departments
- Child Protective Services (CPS)
- Departments of Education
- Medicaid and State Insurance Programs
- Office of the Medical Examiner or Coroner

Early Childhood and Family Support Organizations

- Home Visiting Programs (e.g., Nurse-Family Partnership, Healthy Families America)
- Family Resource Centers
- Maternal and Child Health (MCH) Programs

Community-Based Organizations

- Safe Kids Coalitions
- Injury Free Coalition for Kids
- Faith-Based and Cultural Organizations
- Violence Prevention Groups
- Housing Authorities and Environmental Health Org9FAR9LAGFK

Academic and Research Institutions

- Schools of Public Health and Medicine
- University Extension Programs

Technology and Data Partners

- State Health Information Exchanges (HIEs)
- Injury Surveillance Systems (e.g., NEISS, NVDRS)