Evaluating shared risk and protective factors (SRPFs) requires us to use our basic evaluation skills as well as develop new ways of determining the impact of our efforts. Of course, evaluation is critical and necessary, as it can illuminate the value of SRPF approaches by illustrating how they can positively impact a variety of health and social issues. Further, the complexity brought by SRPFs is an opportunity that brings an invigorating challenge to our work. Luckily, evaluators in the Colorado and Utah state health departments (SHDs) have engaged this challenge and gained useful insights that can guide others seeking to plan and implement evaluations of SRPFs work.

**SHARED RISK AND PROTECTIVE FACTORS (SRPF)**

Many injury and violence-related issues are complex, interconnected, and often share the same root causes, such as poverty, inequity, and historical trauma. Understanding the overlapping or shared causes of injuries and violence can help public health professionals better address injuries and violence in all its forms.

A variety of factors can increase or decrease the likelihood of injury and violence. **Risk factors** make it more likely that people will experience injuries and violence. Examples of risk factors include rigid social norms about what is “masculine” and “feminine,” a lack of education and job opportunities, and family conflict. **Protective factors** can increase resilience when encountering risk factors and make it less likely that people will experience injuries and violence. Examples of protective factors include connections to caring adults or access to mental health and substance abuse services.
RECOMMENDED STEPS FOR EVALUATING SHARED RISK AND PROTECTIVE FACTOR APPROACHES

1. Identify the risk and/or protective factors you are interested in tracking across your injury and violence prevention work.

   In Utah, the process of identifying which risk and protective factors to track involved a systematic process that included engaging key partners, balancing what they wanted to track with what data was available, and using a ranking process to narrow the number of indicators down to those that are most relevant to their work. See the Utah case study.

   In Colorado, a team of evaluators from within the SHD have developed the Colorado Shared Risk and Protective Factor Dashboard, an interactive dashboard that tracks specific indicators and publicly available data sources so that violence and injury prevention initiatives across the state can measure SRPFs. See the Colorado case study.

   Deciding on the factors you are interested in measuring helps define what success will look like and lets programs know what types of strategies they should prioritize.

2. Use multiple indicators to measure each factor.

   When possible, multiple indicators should be used to measure the factors indicating shared risk or protection. In Colorado, one SRPF project uses a total of eight indicators to measure the concept of connectedness.

   Indicators for connectedness include things like prosocial involvement (e.g. voluntary behavior intended to benefit someone else, such as sharing, donating, and volunteering); commitment to school; family management skills; and neighborhood attachment.

3. Develop shared definitions for indicators.

   In Utah, they found that when working across different agencies and issues, the language varied even when describing the same idea. As an evaluator working in the Utah injury prevention program explained, “in suicide prevention we talk about ‘connectedness,’ but in substance abuse we say ‘bonding,’ so even at that level just make sure everyone is using similar language.”
CONSIDERATIONS WHEN EVALUATING SHARED RISK AND PROTECTIVE FACTORS APPROACHES

Evaluating SRPFs is not always a simple and straightforward process. Challenges faced by the Colorado and Utah SHDs in their efforts to evaluate SRPF approaches and how they have adapted to meet them are discussed below.

Evaluation Indicators as Threats to Identity: Taking a shared risk and protective factors approach requires rethinking what types of work we should be doing and evaluating. For example, an intimate partner violence program may not be used to measuring something like economic security as an indicator of their program’s success, and it may be difficult to shift what is valued as success for them personally, professionally, or for their funders. Staff working to develop indicators in Colorado and Utah explained that it can be threatening when an evaluation shifts its focus to measuring risk or protective factors that underlie many types of negative health outcomes instead of using indicators more traditionally linked to a particular issue, this type of change can be seen as a loss of programmatic identity.

For example, prosocial involvement in school has been shown to be protective against bullying perpetration and victimization. A SRPF approach asserts that prosocial involvement in schools will have an impact on multiple outcomes, including not just bullying, but also suicide and substance abuse. If we are measuring suicide and substance abuse is it still a bullying program? Will organizations

4. Define how indicators are contributing to assessment of each factor.

In both Utah and Colorado, their evaluation design experience showed how important it is to establish the connection between an indicator and its ability to measure the impact of a risk or protective factor. This step is necessary to ensure the overall evaluation findings capture the information needed to demonstrate an effect. Explicitly making connections between indicators and the factors they measure will help all stakeholders understand what is being measured and why it is needed to determine program progress.

5. Determine the data sources that can give you information about each indicator.

Sometimes our commonly used public health surveys – i.e., the Behavior Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance System (YRBSS) – will have the data you need. However, in other cases, you will have to seek out data sources you don’t typically use, identify other partners that may have access to data, or even directly collect your own data. In Utah, for instance, the Violence and Injury Prevention Program (VIPP) wanted to understand more about social norms surrounding violence. Due to a lack of existing data, health department staff organized and conducted a series of seven focus groups with community members to gather this information.
who identify as working on bullying prevention still feel ownership of the work? Having an awareness that the way we measure success could pose a threat to programmatic or personal identity for some organizations or colleagues is important, and it can help understand why some partners may have resistance to a SRPF approach to evaluation.

**Connecting Indicators to Evidence:** Utah SHD evaluators noted that they found it difficult to find evidence that various indicators for specific SRPFs were related to their outcomes of interest. Standard public health practice encourages using evidence-based information; however, this may be difficult when using SRPF approaches as the evidence is simply not yet available on the existence or strength of associations between specific indicators for shared risk and protective factors and the wide array of injury and violence outcomes SHDs seek to address. Further, when there is not evidence for a link between a particular risk or protective factor and a health outcome, some may not have complete buy-in to a SRPF approach.

Resources such as CDC’s [Connecting the Dots](https://www.cdc.gov/violenceprevention/violencepreventionprograms/evaluation/risk-protection-strategies.html) document and Veto Violence’s [EvaluAction](https://www.vetoviolence.org/evaluaction) can be useful. A resource that may be especially helpful is the “Shared Risk and Protective Factor Measurement Toolkit” which has been developed in the CDC’s Core State Violence and Injury Prevention Program (SVIPP); it identifies which indicators are supported by evidence as well as where evidence is lacking. New research is helping to grow this list of indicators, and injury and violence prevention practitioners should look for opportunities, such as working with [Injury Control Research Centers](https://www.cdc.gov/violenceprevention/index.html), to inform research agendas and ensure that researchers continually seek connections between risk and protective factors and a variety of injury and violence outcomes.

While evidence is still being developed, injury and violence prevention practitioners and their partners should lead their own evaluations of SRPF approaches and regularly test potential connections between specific SRPFs and public health outcomes of interest. Given their extensive knowledge of specific interventions and the experiential and contextual evidence they bring to the table, practitioner-led evaluations of SRPF approaches can provide valuable insights that add significantly to the evidence base for these efforts.
Defining Factors to Appropriately Represent Your Efforts: Defining risk or protective factors and indicators to show their impact can bring up difficult questions. In Colorado, evaluators in the SHD wrestled with defining resilience at the individual, community, and societal levels of the social-ecological model. A review of the literature revealed that economic security, good behavioral health, and connectedness to other people, systems, and communities may lead to community resilience. However, given this knowledge, the evaluators wondered whether resilience should be its own separate protective factor or if instead it should be measured by compiling indicators already being measured for other protective factors. A final answer to this question is still being worked out in the ongoing dialogue between practice-based knowledge and emerging research evidence. Like in Colorado’s experience, evaluators seeking to evaluate SRPFs approaches will engage in continual reflection, testing, and adaptation as they produce understandings of the results of this work.

Closing Considerations: Understanding the potential challenges involved in evaluation of SRPFs can help others embarking on evaluation activities know what to expect. Though evaluation processes for SRPFs are not fully established, lessons learned from the efforts in the Utah and Colorado SHDs can help avoid pitfalls likely to hinder the process. Additionally, the stepwise process presented in this case study can help guide evaluation planning, and shows the unique considerations involved in evaluating SRPFs.

It is exciting to have the opportunity to contribute to the body of knowledge around how best to evaluate SRPFs, an endeavor that has many interesting questions still left to explore. In both Utah and Colorado, as some questions come closer to finding workable answers, additional uncertainties arise. Evaluators are wrestling with questions such as, “What else are we doing that we can measure to show the value of our work?” and, “How do we tie our work to outcome data in the period of a five-year grant?”

Evaluation involves assigning value and deciding what is important. For SRPFs, identifying the activities that are best for achieving our public health goals is an endeavor worthy of careful consideration. Through evaluation we can gather evidence to enhance and legitimize the assertion that multiple public health outcomes can be improved by addressing shared risk or protective factors. To do this, evaluators looking at the impact of SRPF approaches should seek to fill in missing evidence around what is or is not effective for injury and violence prevention. As information about impacts is collected, the case for doing SRPFs work is stronger and can lead to more resources to support the work.