Demystifying Data: Gathering and Using Local Risk and Protective Factor Data for Prevention

Pacific Southwest (HHS Region 9)

PTTC Prevention Technology Transfer Center Network

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Data are vital for defining your community's problems or needs (e.g., opioid misuse, underage drinking). Data can tell us how big the problem is, how it has changed over time, and how our community's rates compare to national rates. This often involves quantitative data—numbers, percentages and rates, but also qualitative data. We also need data on existing resources and readiness that can be tapped into to address the problems or needs. Data also help us determine if there are specific populations who are disproportionately impacted by the problems or needs. Data help guide our decision making and action planning. And importantly, ongoing data collection and monitoring help us track our progress over time.

The purpose of this guidance document is to provide a general overview on gathering and using risk and protective factor data to guide prevention efforts. Risk and protective factors help determine why a community may be experiencing a particular problem or need. Protective factors are characteristics at the biological, psychological, family, community or cultural level that precede and are associated with a lower likelihood of negative outcomes such as substance use and mental health issues. Risk factors are characteristics associated with a higher likelihood of negative outcomes.

Some risk and protective factors that can be used to guide prevention efforts are substance-specific. Examples include easy access to alcohol for youth, or low perceived risk of harm from using marijuana. Some risk and protective factors may be associated with both substance use and mental health issues. Examples of such shared factors include neighborhood cohesion, feeling cared about by teachers and other school staff, and cultural identity.

The socio-ecological model[1] can be used to categorize risk and protective factors at the individual, family, peer, school and community levels.

- *Individual.* Individual factors are specific to the individual—these can include age, education, income, health, and psychosocial problems.
- *Relationships.* Includes family, peers, teachers—those people who individuals have close relationships with; they contribute to an individual's range of experience.
- *Community settings.* Includes the settings in which social relationships occur, such as schools, youth-serving agencies, workplaces, neighborhoods, or places of worship.
- *Societal.* Includes factors such as social and cultural norms, and systems that contributed to inequality.

Gathering Data

Assessment

Assessment is the systematic gathering, review and use of information in order to develop a deeper understanding of a population or of an issue. Assessment allows you to describe a population, both needs and strengths, identify existing resources that can be used to address the needs, identify existing strengths that can be leveraged, and identify both internal and external influences affecting the population. Goals of assessment include: create a common understanding of community issues, create an information base for decision making, and foster community involvement and support.[2] The process involves describing the current state of the community, determining the desired state of the community, and deciding which resources and strategies are needed to achieve desired change.

Type	Purpose	Examples of what to assess
Needs Assessment	Identify and define the issue or need. Describe the demographic make-up of the community. Determine who is directly and indirectly impacted by the issue or need.	Number or percentage of people impacted Degree to which the problem is worsening or improving Social and economic costs of the problem Comparison to other populations
Resource Assessment	Identify and describe existing infrastructure (networks, systems and organizations), policies and programs.	Monitoring and surveillance systems, funding, research technical assistance Ordinances, restrictions, and regulations Coalitions, awareness campaigns, youth-based programs, worksite programs
Readiness Assessment	Assess community awareness and knowledge of the need, and will to address it.	Buy-in from key community stakeholders Community climate and norms

Risk and Protective Factors

Prevention efforts will ideally focus on a comprehensive mix of risk and protective factors--different types of factors and factors at different socio-ecological levels. Risk and protective factors are not evenly or equitably distributed; some youth experience a greater number of risk factors while simultaneously experiencing fewer protective factors. Further, risk and protective factors can have a cumulative effect on the development, or reduced development, of behavioral health issues. Importantly, protective factors can buffer the impact of risk factors.[3] Due to the overall number of references, please note that references cited for the shared factors column in the table below are located in an annotated bibliography produced separately but posted with this document on the Pacific Southwest PTTC's website.

Level	Substance-specific factors	Shared factors^
Individual	Self-efficacy[4] Resiliency[4] Perceived risk of harm from substance use[4, 5, 6, 7] Early initiative of use[4, 5, 7] Rebelliousness[4] Perceived benefits of use (e.g., relieve stress, eases social situations)[5, 7, 8]	Employment status[29-30, 53, 63, 84] Health issues[4, 6, 8, 18, 37-38, 45, 53, 55, 66, 73] Housing instability[38, 41, 45] Poverty[6, 30, 38, 41, 45, 50, 53, 55, 76-77] Psychosocial factors (e.g., aggression, rebelliousness, high stress, insecure attachment, social competence, positive identity)[10, 15, 20-22, 32, 37-38, 41, 45, 51, 53, 60, 70, 77, 81-82] Religiosity/spirituality[6, 12-13, 25, 30, 33, 51, 56-57, 76, 81, 83]
Relationship	Perceived disapproval of substance use (e.g., parental disapproval, peer disapproval, partner/spouse disapproval)[4, 5, 6, 7, 8, 9, 10] Easy social access to substances in the home, or through friends and family[4, 5, 6. 7, 8, 10] Household substance use[4, 5, 8] Family management problems (e.g., monitoring, unclear expectations) [4]	Adverse Childhood Experiences or ACEs (e.g., physical abuse, sexual abuse, domestic abuse, parental incarceration, divorced parents)[1-2, 12, 20-21, 26, 30, 37-38, 41, 43, 45-46, 53, 55, 71, 74, 78-79] Grief/loss of loved one[2, 6, 18, 29-30, 45, 53, 55] Family conflict/disruption[2, 12, 21, 30, 37-38, 41, 45, 53, 71-72, 77] Parental encouragement, support and bonding[30, 62] Positive involvement with other adults[7, 22, 30, 45, 61, 80] Abusive or unsupportive partner/ spouse[37-38, 74] Feeling cared about by others (e.g., friends, teachers and school staff)[6, 25] Bullying or peer rejection[25, 32, 41, 45] Social connectivity[6, 10, 12, 18, 22, 41, 45, 53, 58, 71, 81]
Community Settings	Pricing and promotion of substances in the community (e.g., advertising, happy hour specials) [4, 7,	Community stress and violence[2, 4, 26, 30, 37, 41, 45, 53, 71, 81]

Level	Substance-specific factors	Shared factors^
	Easy access to substances through dealers or adult providers [5, 6, 7, 8, 10]	Academic engagement and achievement[13, 21, 25, 41-43, 45, 48, 53, 61-62, 71, 81, 76-77] School transitions[24-25, 39, 53] School climate[13, 41, 54, 61-62] Workplace climate[16] Participation in pro-social community activities[6, 31, 41, 44, 81] Neighborhood and community cohesion[37, 41, 77, 81]
Societal	Social norms related to substance use (e.g., "rite of passage", perception that everyone uses) [5, 6, 7, 8] Stigma associated with substance use[11, 12]	Cultural identity[12, 17, 35, 72, 83] Prejudice and perceived discrimination[12, 45] Positive norms related to health and well-being[42]

Gathering Existing Data

Secondary or existing data are data that have already been collected by someone else. This may include censuses, surveys, and organizational or administrative records. Gathering existing data can save time and resources. However, obtaining existing data may require a data use agreement. Also, it's important to understand how and why the data were originally collected as well as the strengths and limitations of the data source.

National Data Sources

The Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health (NSDUH) includes substance-specific data on perceived risk and early initiation of use. Data are available by demographic and by state. Sub-state reports are also available.

The Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBS) includes data on risk and protective factors like mental health, bullying and safety. Data are available by demographic and by state. Data are available for some Pacific Jurisdictions, though these data are not consistently collected and may be outdated.

The Centers for Disease Control and Prevention's Behavior Risk Factor Surveillance System (BRFSS) includes data on risk and protective factors for adults like health status, access to healthcare, and housing. Additional modules can be added (for a fee) on things like Adverse Childhood Experiences and social support. Data are available by demographic for states and territories (including Guam).

The Centers for Disease Control and Prevention's National Youth Tobacco Survey (NYTS) includes data on tobacco-related beliefs and attitudes, and exposure to pro- and anti-tobacco influences. Data are available by demographic and by state.

The Centers for Disease Control and Prevention's Global Tobacco Surveillance System Data (GTSSData) includes data on access and availability, tobacco-related education in the schools, and exposure to pro- and anti-tobacco influences. Data are available for some Pacific Jurisdictions, though the most recent year available varies by Jurisdiction.

The National Institute on Drug Abuse-funded Monitoring the Future survey conducted by the University of Michigan includes substance-specific data on perceived risk, perceived disapproval, and availability.

The Annie E. Casey Foundation's Kids Count Data Center includes data on measures of family and community environment, family structure, economic well-being, abuse/neglect, and absenteeism. Data are available by demographic, and for some indicators can be sorted by county, city, or district.

The Child & Adolescent Health Measurement Initiative's Data Resource Center for Child & Adolescent Health includes data on emotional and mental health, pro-social activities, neighborhood safety and support, ACEs and family resilience. Data are available by demographic and by state.

The United States Census Bureau's American Community Survey includes estimates on demographics, housing, poverty and employment at the community-level.

Pacific Jurisdiction, State and Tribal Data Sources in the Pacific Southwest

The following list of resources is by no means exhaustive. Some Pacific Jurisdictions, States and Tribes have, or have had, Epidemiological Outcomes Workgroups that were tasked with gathering and compiling data on substance use, related consequences, and relevant risk and protective factors. The Pacific Southwest PTTC may be able to connect you with existing workgroups to learn more.

Arizona

Arizona Youth Survey

2019 Arizona State Health Assessment

California

California School Climate, Health, and Learning Surveys

California Health Interview Survey

Guam

Guam State Epidemiological Profile: 2015 Update

Hawaii

Hawaii Health Reports & Data

2017 Hawai'i State Epidemiological Profile 2011-2015: Selected Youth and Adult Drug Indicators

Nevada

Nevada Youth Risk Behavior Survey:

Nevada's Statewide Epidemiology Workgroup (SEW)

Local Data Sources

Reach out to local public health agencies and local healthcare systems to inquire about community health needs assessment data.

Contact schools to inquire about data on free and reduced price lunch, absenteeism, bullying, and participation in pro-social activities.

Connect with social service agencies for data on child abuse, neglect, and homelessness.

Partner with youth-serving organizations that may have data on participation in pro-social activities, positive peer interactions, and access to supportive adults.

Collecting Primary Data

Primary or new data are data unique to you and your research; data collected first-hand through new surveys, interviews, and observations. Once you've gathering existing data and identified local gaps in data on risk and protective factors, consider creating a data collection plan. Data collection tips include:

- *Leverage partners.* For example, if you are planning to conduct a youth survey, leverage other community partners (e.g., Boys & Girls Club, Big Brothers Big Sisters) who may also need to address data gaps.
- *One-stop shop.* When approaching community partners like schools, law enforcement, or public health to ask for any relevant data they may be able to share, consider simultaneously interviewing them about their resources and readiness.
- *Consider the best order of operations.* Findings from a local community survey could be share with community leaders in conjunction with key informant interviews. Focus groups could be conducted with youth to help inform development of survey questions and response options.

Data collection methods include, but are not limited to: surveys, focus groups, listening sessions, interviews, scans, and polls. Each method has advantages and disadvantages.

Surveys

Surveys can be helpful when information for planning does not exist, when a large geographic area needs to be covered, when there is a need for consistency in items, and when existing data are not culturally relevant or appropriate. Modes of administration include phone surveys, mailed surveys, school-based surveys, web surveys, and door-to-door surveys. When

developing a survey, consider mirroring questions and response options from national surveys for comparison purposes.

When developing surveys, avoid technical terms and jargon, vague questions, complex questions, double-barreled questions, biased or leading questions, and questions that contain a double-negative. Do include reference frames (e.g., during the past 30 days, before the age of 18, in the community in which you live), all possible response options, mutually exclusive response options, balanced response scales (e.g., strongly agree, agree, disagree, strongly disagree), and an "I don't know" option when appropriate.

Phone surveys

While phone surveys can allow you to cover a large geographic area, they pose a number of challenges. You may miss homes without phones or with unlisted numbers. Data charges may apply to cell phones. Phone surveys generally have high non-response rates. They are difficult for sensitive topics, and it can be challenging to build a rapport with respondents.

Mailed surveys

Mailed surveys are also helpful for covering a large geographic area, and can be useful for covering sensitive topics. However, it can be difficult to obtain mailing addresses for the specific audience you are hoping to reach (e.g., young adults, parents with young children). Mailed surveys can be expensive, as they often require an introductory letter or postcard, a survey, a reminder postcard and incentive. They can have a high non-response rate. Having a respected community leader address the introductory letter or postcard may help increase the response rate.

School-based surveys

School-based surveys are ideal for reaching a large number of students, and typically have a high response rate in K-12 schools. It may be challenging to obtain buy-in from school officials. It's important to obtain both parental consent and youth asset for participation. Using a passive parental consent process in which a parent has to contact the school to opt their child out often yields a higher response rate. An active consent process that requires a parent to opt their child into participation generally yields a lower response rate. If the survey will be administered by school staff, clear instructions should be provided. Web-based school surveys can pose additional challenges if students are told that all activity on school-issued devices can be tracked--students may feel less confident that their responses will be anonymous.

Web/online surveys

Online surveys tend to be easy to develop and low- to no-cost. They are easy to disseminate via emails, websites, and social media. However, without knowing how many people the link may have been shared with, it's impossible to determine the response rate.

Door-to-door surveys

In communities that may not have the necessary infrastructure for mailed, phone or web surveys. This approach can help with community building, provides an opportunity to read questions to participants with limited literacy, and the ability to use visual aids or cue cards. Challenges include the time and costs necessary to hire and train individuals to conduct the surveys.

Focus Groups and Listening Sessions

Focus groups and listening sessions are interactive, facilitated group discussions. Responses from one participant can spur ideas from other participants who have either similar or opposing ideas or beliefs. These processes allow facilitators to probe for greater detail from respondents. Focus groups and listening sessions may not be ideal for sensitive topics, and it is important to establish ground rules relating to respect for others' opinions and agreeing not to share responses with people outside the group. These processes require a facilitator adept at ensuring all have an opportunity to answer questions, and that no one person dominates the conversation.

Focus groups

Focus groups typically involve 6-10 participants and last one to two hours. Five to six carefully developed, open-ended questions that move from general to more specific are recommended. It can be helpful to use a warm-up question to get people comfortable and talking.

Listening sessions

Unlike focus groups, listening sessions can be done with somewhat larger groups. One approach that can be used is a world cafe model that involves small groups rotating from table to table. Each table has a host who facilitates discussion around one single question. As each new group moves to a table, the host briefly summarizes the responses gathered already. Listening sessions can provide an opportunity for networking and community building.

Interviews

Conducting interviews with individuals provides an opportunity for relationship building, and allows interviewers to probe for additional detail. Through interviews you can obtain in-depth answers and have open-ended discussions. Further, community members may be more candid in an interview than they might be in a group setting. Three common types of interviews are key informant interviews, one-on-one community conversations, and intercept interviews. Interviews tend to be inexpensive to conduct. Challenges include selecting diverse representation, scheduling, and generalizing findings to the broader community.

Key informant interviews

Key informant interviews provide an opportunity to gather information from community experts and leaders who may be less likely to respond to a survey or participate in a focus group. Key informants include individuals who can represent an entire sector, or leaders who are well respected within their community. As such, fewer interviews may be needed to yield the data needed to determine community resources and readiness.

One-on-one community conversations

Unlike key informant interviews, one-on-one community conversations are intended to reach a more diverse array of community members. For example, within the school sector, you may strive to have conversations with teachers, counselors, coaches, janitors and school bus drivers. Each bring a unique perspective. When conducting one-on-one conversations, work to ensure a diverse sample to include multiple sectors, multiple cultural groups, and community members from across the geographic area being served. In order to obtain a large sample size, one approach is to recruit coalition members or volunteers to each conduct three to five

interviews or conversations. Consider having interviewers conduct conversations with people outside of their own sector and social circle to increase relationship building in the community.

Intercept interviews

Intercept interviews are very brief interviews often conducted at busy locations or at events. These interviews should be kept to only a few questions. The goal is to reach a large number of people; recruiting multiple volunteers to help can help reach that goal. Interviewers can record responses on tablets or other mobile devices, or clipboards. Intercept interviews can be helpful for things like determining community support for a policy, or evaluating the extent to which community members have heard or seen your prevention messaging. A challenge is getting diverse representation; selecting multiple sites and/or events can help increase diversity of respondents.

Observations

Another form of data collection involves observing the settings, environments and messaging that community members are exposed to. Observations can be recorded using check-lists, notes and photos. Gathering observations can be free or low-cost, and relatively easy.

Community or campus scans

Community scans and campus scans can be used to measure the extent to which community members or students are exposed to alcohol, tobacco and marijuana promotion. Scans can be conducted in retail shops to observe pricing, promotion, and where products like tobacco are located in relationship to other products geared towards youth. Scans also provide an opportunity to assess community assets like parks, public art, and welcoming signage. Another type of scan involves simply driving around the community to observe neighborhood conditions, access to stores and services, and the extent to which community members are out and engaging with each other.

Media scans

Scans of both traditional and social media can be conducted to observe things like pricing and promotion, photos and videos, comments, opinion pieces, and prevention messaging. Given the vast amount of content out there, it helps to have a very finite research question (e.g., the number of positive comments shared in relation to prevention messaging on Facebook during the month of April).

Photovoice

Photovoice is a method that can be used to document community conditions through photos. Participants can include community members of all ages. Photos can be used to capture risk factors such as alcohol, marijuana and tobacco promotion and poor neighborhood conditions, as well as protective factors like community assets and welcoming signage. Photos can be readily shared in public buildings, or in a gallery at community events. Some communities have mapped the locations where each photo was taken.

Polls

A poll is a type of a survey that can be used to gather input from groups of all sizes, both online and in-person. Like scans and Photovoice, polls can be more interactive and engaging that other data collection methods.

Live polling with clickers or polling apps

Live polling can be done during presentations to survey participants. Whether through the use of audience response clickers or live polling apps, participants can respond to questions anonymously and see the aggregate results appear in real-time on the screen. One way in which these can be used to assess risk and protective factors is to poll peer groups about norms (e.g., "Do you think it's okay for members of your team to binge drink every weekend?")

Interactive polling at events

Polling can also be used to engage community members at events such as fairs, school conferences, or other large gatherings. This methods works best for gathering input on one or two questions. For questions with few response options (e.g., yes/no, top priority) participants can respond by placing dot stickers on large sticky sheets or place different types of beans in jars. For open-ended questions, provide sticky notes or large sheets of paper and ample markers allowing participants to write out their responses.

Data Collection Plan Template

Developing a data collection plan can help determine timing and sequencing. When conducting key informant interviews to assess resources and readiness, consider asking about any existing data on substance use, consequences, and risk and protective factors they may have and would be willing to share. Survey findings could be used to inform focus group questions in order to dig deeper into why community members may have responded in certain way. Conversely, focus groups could be used to determine relevant survey response options. Consider also sharing findings from surveys, one-on-one conversations, polls, focus groups and listening sessions with community leaders when you conduct key informant interviews.

The following template can be used to plan data collection efforts. Document each method that will be used, which risk and protective factors will be captured, when data will be collected, who will be responsible for the data collection, and any resources needed (e.g., mailing lists, incentives, polling software). Below the template is a sample data collection plan.

Data Collection Method	Risk and Protective Factors to Include	Timeline	Person(s) Responsible	Resources Needed

Data Collection Method	Risk and Protective Factors to Include	Timeline	Person(s) Responsible	Resources Needed
Youth survey	Reasons for substance use, parental and peer norms, social support, Adverse Childhood Experiences	Spring	School administration, local evaluator	Parent consent forms, instructions for school staff, Survey Monkey account
Parent intercept interview	Monitoring behaviors, communication with kids about substance use	Summer	Coalition members	Tablets, permission from event managers
One-on-one community conversations	Community assets/ strengths, support for prevention efforts	Fall	Coalition members	Incentives, training for coalition members
Community scan	Alcohol promotion/ signage	Winter	Youth group members	Cell phone cameras

Determining Sample Size

If you are hoping to obtain a representative sample when conducting a survey, there are tools that can help you determine how many people you need to take your survey. There are three

key pieces of information you'll need to know: the size of your target population, the confidence level you hope to have, and the margin of error you are comfortable with.

- *Population size.* This is the total number of people your sample will represent (e.g., total number of adults in your workplace, total number of first-year students at your college, total number of high school students in your county.)
- *Confidence level.* The probability that your sample accurately reflects the attitudes, beliefs and perceptions of your population. A 95% confidence interval is often used. This means you can be 95% certain that your findings are a true reflection of your population.
- *Margin of error.* This is the measure of the amount of sampling error you can expect from your results--the larger the margin of error, the less confident you can be that your findings are representative. A 95% confidence interval with a 5% margin of error would mean that your survey data will be within 5 percentage points of the real population's attitudes, beliefs and perceptions 95% of the time.

SurveyMonkey sample size calculator

Qualtrics sample size calculator

Data Quantity and Quality

It's often not feasible for communities to address all data gaps. At some point, you need to move forward with prioritizing risk and protective factors to address with prevention strategies using the data you have available. How much data are enough? It's important to consider both the quantity of data you have, but also the quality of the data.

When thinking about quantity, ensure you have adequate data on needs (risk and protective factors), resources, and readiness. Also consider the extent to which available risk and protective factor data include both substance specific factors and more upstream risk and protective factors. Further, include risk and protective factors from each of the socio-ecological levels.

When thinking about quality, consider things like who the data represent (and who the data do not represent), how the data were collected, how current the data are, how the data were collected, and strengths and limitations of the data source.

Data Quality Assessment Tool

The template below could be used to assess the quality of the risk and protective factor data gathered from existing sources or collected through primary data collection methods. Add a new row for each risk and protective factor. Timeframe can include information about how frequently the data are collected (e.g., quarterly, annually, every three years) as well as the most recent month/year of data available. Geographic area can include each level for the data are available (e.g., county, city, zip code, Tribal Nation, Pacific Jurisdiction). Strengths of a particular data source may include things like: large sample size, collected annually, available by demographic group. Limitations might include things like: lack of current data, low response rates, and data that are not representative of all populations in your community. Below the template is a sample data quality assessment tool.

Risk or Protective Factor	Data Source	Timeframe	Geographic Area	Strengths	Limitations

Risk or Protective Factor	Data Source	Timeframe	Geographic Area	Strengths	Limitations
Perceived risk of harm from alcohol	Pacific Southwest Youth Survey	2018; collected every three years	County	Large sample size	Not available at city-level
Youth living in poverty	American Community Survey	5-year estimates available annually	Zip code	Local level data; national comparisons	N/A
Participation in pro-social activities	Youth-serving org attendance records	Request twice per year	City	Local level data	Not all orgs track and share data regularly

Using Data

Once you've gathered existing data, collected primary data, and assessed the quality of the data, it's time to prioritize which risk and protective factors your community will address with prevention strategies. Key considerations include who to involve, what process to use, which prioritization criteria to apply, and the number of prioritized risk and protective factors that are feasible to address given available time and resources.

Prioritization

As your data collection efforts should include multiple stakeholders, so should your prioritization process. Some will bring expertise about the various data sources, some will bring expertise

related to resources and readiness, and some will bring expertise about what will have the greatest impact for high-priority populations. But not everyone is excited about diving into loads of data, so there are way to divide up the work based on interested and appetite. It's important to think about who is best poised to help at each stage, and to be transparent about where the ultimate decision-making lies.

Prioritization Criteria

There are a number of different data dimensions or criteria that could be used to prioritize risk and protective factors, using quantitative and qualitative data gathered as part of the assessment process. It's important to determine which criteria you will use before starting the prioritization process, and to clearly define those criteria for everyone involved in the process. Factors to consider are the relative importance of each criterion to community partners, and the quantity and quality of data you have for each criterion.

- *Magnitude.* How meaningful is the size of this issue in your community? It can be measured by considering the following questions: What percent of the community is impacted? Is the rate or percent high or low compared to other risk and protective factors in your community?
- *Trends.* If data are available for multiple points in time, has the rate or percent changed over time?
- *Comparisons.* Is the rate or percent high or low compared to the state or national average?
- *Severity.* Is information available about the economic or social toll associated with the factor?
- *Strength of association.* To what extent is a particular risk or protective factor associated with the behavior or interest (e.g. past 30 day use). If you have raw survey data you can look at those associations. If you don't, research literature can be used to search for findings related to the strength of associations for some risk and protective factors.
- *Cultural considerations.* What is meaningful and appropriate for the populations in your service area? Is the particular risk or protective factor relevant for all cultural groups?
- *Readiness/political will.* How much do community members and leaders care about the problem, and how willing are they to take action?
- *Capacity.* What level of resources do you have available to address this issue (e.g., staff, time, skills, experience, expertise, T/TA, technology, fiscal resources)?
- *Changeability.* How easy would it be to change the value of the factor over the course of the grant?

Prioritization Processes

Scoring can be done by individuals, groups, or a combination. In some communities For instance, a smaller data workgroup could pare down a longer list of risk and protective factors, and then bring the remaining risk and protective factors to a larger group to further prioritize. It's important if using this approach to explain rationale for items that were eliminated (e.g., no room to move the needle, improving trend). You might also consider a multi-step approach, such as first prioritizing based on quantitative dimensions like magnitude and trends over time, and then doing a second round of prioritization using more qualitative criteria like political will. It's important to stress to partners that all risk and protective factors may be of interest and concern,

but the prioritization process is to really weigh one factor in relation to others--which are relatively most important to address.

There are ways to make the prioritization process more interactive and engaging. One approach is to hang sticky sheets in a room with one risk or protective factor written on each sheet along with relevant data. Community partners are then given dot stickers to place on the sheets as a manner of voting. You can also weight scores by having different colored dots worth more points. Another approach is to host a data party featuring a gallery walk of posters showing data on risk and protective factors, or a world cafe style event where community partners rotate from table to table, and each table host shares a data dashboard. Data placemats could also be created using something like the matrix shown on the next page--if you are able to host a prioritization meeting over a meal. Another option is to have community partners first prioritize a larger set of risk and protective factors via an online survey, and then bring the group together to further discuss and narrow down the top factors chosen via the survey. Whatever approach you use, it's helpful to organize and format your indicators and data in a user friendly way that allows for comparisons using a prioritization matrix.

Prioritization Matrix

Using a matrix similar to the template provided below, add columns for all criteria being used to prioritize. Enter each risk and protective factor on a separate row in the first column, adding rows as needed. In the first column, enter your local data for each factor. Note that this could be a percentage, a rate, or a number. As available, at any comparison data in the next column. For trends, as data are available, you could: add the actually trend data, indicate trends using increasing/flat/decreasing, or simple use arrows (e.g., ▲, ►, ▼). In the next column, add any qualitative data gathered about the resources and readiness to address each factor. For changeability, consider things like how much room there is to "move the needle" and how feasible it is to change the value of a factor over your planned implementation period. There will likely be instances in which you have some data gaps, such as lack of a national rate for comparisons or lack of trend data. A sample prioritization matrix can be found below the template.

Risk or Protective Factor	Local Rate	National Rate	Trend	Resources and Readiness	Changeability

Risk or Protective Factor	Local Rate	National Rate	Trend	Resources and Readiness	Changeability
Easy retail access to alcohol	3%	7%	▼	Law enforcement routinely do compliance checks	Little room to "move the needle"
Exposure to alcohol promotion	95%		▲	Increased brewery-sponsored events; businesses resistant	Low political will to change
Perceived low or no risk of harm	60%	72%	▲	Schools are on board to implement curricula	Room for improvement
Low positive identity	75%	66%	▲	Strong focus of a local mentoring program	Room for improvement
High ACE score	14%	12%		Some community interest in trauma-informed training	Change may be longer-term
Not feeling safe in neighborhood	9%	5%	►	Strong political will to address, but lack of sufficient resources	Ongoing efforts have not been effective

How many risk and protective factors should you prioritize to address with prevention efforts? It's important to at least have two to three factors for each priority outcome (e.g., alcohol use, suicidal ideation). Importantly, some factors may be shared with more than one outcome (e.g., social support can be a protective factor for multiple substances as well as for mental health issues). Overall, consider prioritizing a total of five to eight risk and protective factors to address at any given time. Too few and you're less likely to be able to move the needle. Too many and your time and resources get stretched thin.

Data-driven Strategy Selection

Three important elements when searching for prevention strategies are conceptual fit, practical fit, and evidence of effectiveness. Data gathered through a local assessment of needs, resources and readiness can help determine conceptual fit and practical fit.[13] Conceptual fit is the degree to which a program or practice is a good match for the prioritized risk and protective factor. For example, compliance checks are a good conceptual fit for the risk factor of retail access to alcohol among youth; conversely, a school-based curriculum on alcohol harms would not be a good conceptual fit. Data on resources and readiness can help determine practical fit—

the extent to which a program or practice is a good match for your specific community. Evidence of effectiveness, proof that a program or practice can address the need, should be shown for the prioritized risk and protective factor (e.g., easy retail access) and not just the outcome of interest (e.g., past 30 day alcohol use).

For a comprehensive prevention plan, it helps to have more than one prevention strategy to address each prioritized risk and protective factor. For example, addressing retail access to alcohol among youth could entail a combination of raising awareness of the legal consequences of selling to or serving minors, compliance checks, Responsible Beverage Server Training, and recognition programs for retailers passing compliance checks, and steeper penalties for non-compliant retailers. As such, keeping the number prioritized risk and protective factors to a reasonable amount is even more paramount.

Evaluation

Lastly, gathering and/or collecting data on risk and protective factors is as important in your evaluation as it is in your assessment. That's why it's so important to prioritize risk and protective factors that can be tracked over time to monitor progress. A carefully conduced needs assessment sets you up for a great evaluation plan.

A logic model[14] can serve as roadmap for your evaluation and keep you on task to monitor progress. It's a helpful tool for sharing your prevention strategies and anticipated outcomes with community partners. Logic models can also help make assumptions explicit in regards to the change you expect to occur as a result of local prevention efforts. A logic model will show the short-term outcomes expected as a result of implementing each prevention strategy, and the expected change in prioritized risk and protective factors resulting from those short-term outcomes.

A key component of evaluation planning is determining how evaluation results will be shared. Take into consideration each stakeholder group or audience, which evaluation findings they would be most interested in, and how they would like to receive the information. Approaches described in the section on prioritization processes in this guidance document could also be used to share evaluation findings—including data parties and data placements. While some stakeholders groups may want a comprehensive report, many audiences will prefer brief summaries of key findings related to increases in protective factors and decreases in risk factors.

The following data visualization resources can help engage audiences when disseminating evaluation results:

- Data Viz Project. Browse visualization methods by type and function.
- Evergreen Data. Data visualization tips can be found in Stephanie Evergreen's blog.
- BetterEvaluation. Methods and processes for describing evaluation results.

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^Citations for shared factors are documented in a separate annotated bibliography located here.

Pacific Southwest (HHS Region 9)

PTTC Prevention Technology Transfer Center Network

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