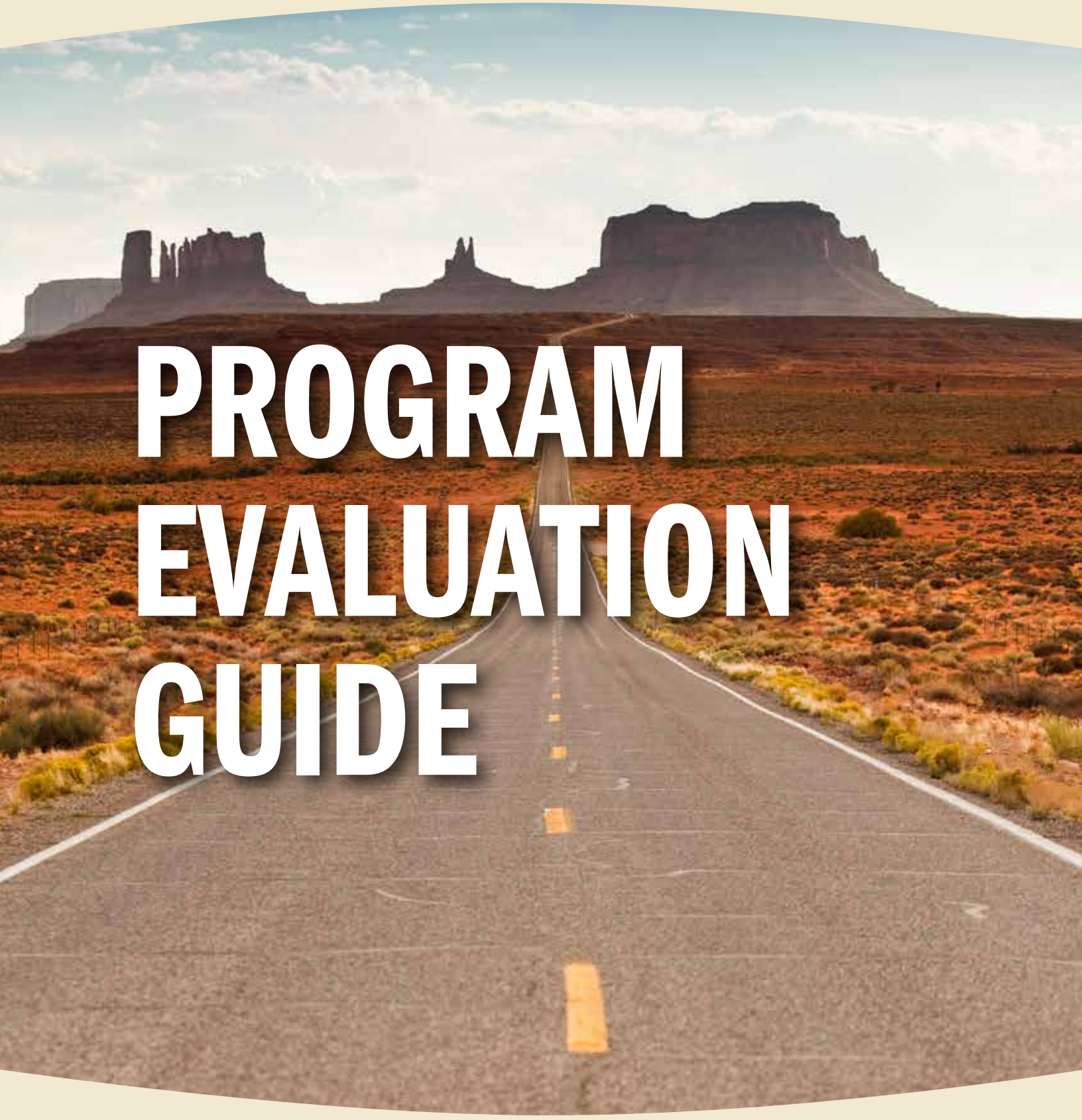
Tribal Motor Vehicle Injury Prevention



PROGRAM EVALUATION GUIDE

TRIBAL MOTOR VEHICLE INJURY PREVENTION

PROGRAM EVALUATION GUIDE

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DEVELOPED FOR:

National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

DEVELOPED BY:

Albuquerque Area Southwest Tribal Epidemiology Center
Albuquerque Area Indian Heath Board, Inc.

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HOW TO USE THIS GUIDE

WHY WAS THIS GUIDE DEVELOPED?

This guide was developed to share best practices for evaluating Tribal Motor Vehicle Injury Prevention (also called Tribal Traffic Safety) Programs. It is a companion document to the **Tribal Motor Vehicle Injury Prevention (TMVIP) Best Practices Guide 2016**, which focuses on evidence-based strategies to reduce the burden associated with motor vehicle crashes in American Indian and Alaska Native communities. These strategies include increasing seat belt use, increasing child safety seat use, and decreasing alcohol-impaired driving. This guide aims to assist Tribes and Tribal Organizations that are implementing these proven strategies with key methods for evaluating their programs. Specific examples are provided throughout the guide that pertain directly to Tribal Traffic Safety Programs. At the same time, the evaluation principles and framework throughout the guide are universal, and may also be useful for evaluating other public health programs in Indian Country.

HOW TO NAVIGATE THROUGH THIS GUIDE

This guide was developed to be an easy-to-use electronic document. Several **hyperlinks**—words highlighted in color and underlined that can be clicked on—are included throughout the document. Clicking on these hyperlinks will take you to a variety of external resources (e.g., websites, PDF documents, or other resources) for more in-depth information about a specific topic, method, or technique.

There is also a list of resources at the end of this guide that can be used to help strengthen knowledge and skills in program evaluation.

WHAT IS PROGRAM EVALUATION?

Definition: Program evaluation is the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development.

Tribal Traffic Safety Programs are invaluable in American Indian/Alaska Native communities to protect all generations from the harms of motor vehicle crash injuries, which continue to be a leading cause of mortality across the lifespan. But how do we know if these programs are working? And even if they are, how can we improve them to make them even better for tribal communities? Good program evaluation can help us answer these questions, and provides results that can be used to make our programs the best programs possible!

WHY DO PROGRAM EVALUATION?

Most Tribal Traffic Safety Programs aim to change behavior in one or more populations of focus. At the same time, they also strive to create an environment that reinforces sustained adoption of these changes, with the intention that changes in environments and behaviors will prevent injuries. Through evaluation, programs can track these changes and, with careful evaluation designs, assess the effectiveness and impact of a particular intervention, strategy, and/or activity for producing these changes.

Program evaluation enables programs to:

- Create the best possible programs
- Identify what is working well
- Learn from mistakes
- Modify program strategies and activities as needed
- Monitor progress toward program goals
- Assess the success of the program in achieving its short-term, intermediate, and long-term outcomes

The ultimate purpose of program evaluation is to monitor progress toward your program's goals and use the information to improve your programs. The evaluation results can be used to demonstrate the effectiveness of your program, identify ways to improve your program, modify program elements, demonstrate accountability, and justify investment of resources.

MORE REASONS TO PRIORITIZE PROGRAM EVALUATION

- ✔ To demonstrate that resources are being well spent and that the program is effective
- ✔ To compare outcomes with those of previous years
- ✔ To compare actual outcomes with intended outcomes
- ✔ To justify the need for additional resources and support
- ✔ To support annual and long-range planning
- ✔ To focus attention on issues important to your program
- ✔ To promote your program
- ✔ To retain or increase resource investment
- ✔ To provide direction for program staff
- ✔ To identify training and technical assistance needs
- ✔ To find opportunities for continuous quality improvement

WHO SHOULD DO PROGRAM EVALUATION?

Program evaluation is an essential component of all Tribal Traffic Safety Programs. There are several options that should be considered when determining **who will lead evaluation** activities in your program.

Internal/External Evaluators: Traditionally, program evaluation was led by an external individual who was not affiliated with your program. The rationale for this approach was to ensure that the evaluator would be objective and not introduce bias into your evaluation results. However, over the past decade there have been new movements in program evaluation, such as empowerment evaluation, which provides communities with the tools and knowledge that allow them to monitor and evaluate their own performance. Neither approach is right or wrong, but you should know if your funding source has specific requirements that determine who can evaluate your program.

Team Approach: Good evaluation requires a combination of skills that are rarely found in one person. A preferred approach is to build an evaluation team that includes internal program staff, external partners, and possibly consultants or contractors with evaluation expertise.

An initial step in the formation of an evaluation team is to decide who will be responsible for planning and implementing evaluation activities. **One or two persons can be selected as the lead evaluator (or co-leaders) to coordinate program evaluation efforts.** Leader(s) should be responsible for overseeing evaluation activities, including planning and budgeting for evaluation, developing program objectives, addressing data collection needs, reporting findings, and working with consultants. Although the leader(s) should have the skills necessary to competently coordinate evaluation activities, he or she can also look elsewhere for technical expertise to design and implement specific tasks.

CHARACTERISTICS OF A GOOD EVALUATOR

- ✔ Has experience in the type of evaluation needed
- ✔ Can do both quantitative and qualitative data collection and analysis
- ✔ Is aware of existing data sources
- ✔ Works successfully with a wide variety of partners
- ✔ Incorporates evaluation into all program activities
- ✔ Listens to your needs and ideas
- ✔ Educates program personnel in designing and conducting the evaluation
- ✔ Honors important cultural considerations for your program/community
- ✔ Keeps all data confidential (consider using a MOA or data sharing agreement)
- ✔ Gives staff and partners a full report of findings
- ✔ Agrees that the Tribal Traffic Safety Program has sole ownership of the evaluation data
- ✔ Maintains neutrality and understands that the ultimate purpose of program evaluation is to make our programs the best programs possible

If you plan to include an external evaluator as part of your evaluation team, important factors to consider include their level of professional training, experience, and ability to meet your needs. Overall, it is important to find an evaluator whose approach to evaluation best fits your program's needs and goals. Be sure to check all references carefully before you enter into a contract with any evaluator. Also consider executing a Memorandum of Agreement (MOA) or data sharing agreement that outlines how the confidentiality of your data will be protected. Some places to find experienced evaluators include health departments, universities, non-profit organizations, and Tribal Epidemiology Centers.

TIP

TRIBAL EPIDEMIOLOGY CENTERS

There are 12 Tribal Epidemiology Centers (TECs) across the country. TECs provide training and technical assistance to tribes and urban Indian organizations in a variety of program evaluation related activities, including:

TRIBAL EPIDEMIOLOGY CENTERS

- Developing evaluation plans
- Designing survey instruments
- Gathering existing data
- Collecting new data
- Analyzing data
- Interpreting results
- Developing reports

TECs can be a valuable partner in your program evaluation activities. If you are not familiar with the TEC in your area, you can learn more at **www.tribalepicenters.org**.

WHEN SHOULD I EVALUATE?

Program evaluation should occur before, during, and after your program. Plans for evaluation should be a part of planning for the implementation of the program. The evaluation program helps establish a baseline from which changes in participants or the impact on the community can be tracked. Evaluation during program implementation can help you make immediate changes/adjustments in the program as it is progressing. This helps staff find the strengths and weaknesses in the program while it is still going on and is helpful for program improvement. Evaluation after the completion of a program is valuable to sum up what has occurred, assess the extent to which you have achieved your target outcomes, identify successes and lessons learned, and reflect on the value of the program.

BEFORE

- **Conduct needs assessment**
- **Establish baselines and targets**
- **Create evaluation plan that aligns with your program goals, objectives, and outcomes**

DURING

- Process evaluation
- Monitor if program activities are being implemented as intended
- Assess progress toward short-term outcomes
- Make immediate adjustments as the program is progressing
- Improve quality continuously

AFTER

- **Assess achievement of outcomes**
- **Compare actual results to targets and standards**
- **Identify successes and lessons learned**

HOW TO EVALUATE YOUR TRIBAL TRAFFIC SAFETY PROGRAM

The remainder of this guide is designed to help you answer this final question: "*How do I evaluate my Tribal Traffic Safety Program?*" The **framework** described below is a practical, non-prescriptive tool that summarizes the important elements of program evaluation. It was developed by the Centers for Disease Control and Prevention (CDC), and offers a way to understand and improve your program evaluation using methods that are useful, feasible, proper, and accurate. The framework contains two related dimensions: 1) steps in evaluation practice, and 2) standards for good evaluation.

A FRAMEWORK FOR PROGRAM EVALUATION

The six connected steps of the framework are actions that should be a part of any evaluation:

1. **Engage partners**
2. **Describe the program**
3. **Focus the evaluation design**
4. **Gather credible evidence**
5. **Justify conclusions**
6. **Ensure use of findings and share lessons learned**

These steps are meant to be adaptable, not rigid. They are intended to serve as starting points around which Tribal Traffic Safety Programs can tailor an evaluation to best meet their needs. Sensitivity to each program's unique context (e.g. culture, history, capacity, and organizational climate) is essential for impactful evaluation.

The second part of the framework is a basic set of standards to assess the quality of evaluation activities. There are 30 specific standards, organized into the following four groups:

- **Utility:** Who needs the evaluation results? Will the evaluation provide relevant information in a timely manner for them?
- **Feasibility:** Are the planned evaluation activities realistic given the time, resources, and expertise at hand?
- **Propriety:** Does the evaluation protect the rights of individuals and the welfare of those involved? Does it engage those most directly affected by the program, such as participants or the surrounding community?
- **Accuracy:** Will the evaluation produce findings that are valid and reliable, given the needs of those who will use the results?

Each of these steps and standards will be explored in detail throughout the remainder of this guide.

STEP 1: ENGAGING PARTNERS

Partners are people or organizations that are invested in the program or that are interested in the results of the evaluation or what will be done with results of the evaluation.

Key partners for evaluations of public health programs typically fall into three major groups:

- **Those involved in program operations,** i.e., program management, staff, and partnering programs
- **Those served or affected by the program**, i.e., tribal members
- **Those who are intended users of the evaluation findings,** i.e., tribal leaders, program partners, funding agencies, and other persons in a position to make decisions about the program

WHY INVOLVE PARTNERS IN EVALUATION?

Evaluation cannot be done in isolation. Almost everything done in programs to improve community health and wellness involves partnerships. Therefore, program evaluation must consider the different values and interests held by the partners. Partners must be part of the evaluation to ensure that their unique perspectives are understood. When partners are not appropriately involved, evaluation findings are likely to be ignored, criticized, or resisted. However, if they are part of the process, people are likely to feel a good deal of ownership for the evaluation process and results. That's why this evaluation cycle begins by engaging partners.

GIVE PRIORITY TO PARTNERS WHO:

- Can increase the credibility of your efforts or your evaluation.
- Are responsible for day-to-day implementation of the activities that are part of the program.
- Will advocate for or authorize changes to the program that the evaluation may recommend.
- Will support or authorize the continuation or expansion of the program.

TYPES OF PARTNERS IN TRIBAL TRAFFIC SAFETY PROGRAMS

Although each Tribal Traffic Safety Program is unique, some common partners may include, but are not limited to:

- Tribal leaders
- Schools
- Head Start
- Day Care Centers
- Law Enforcement
- I/T/U Health Facilities
- Environmental Health
- Community Members
- Bureau of Indian Affairs
- Indian Health Service
- Emergency Medical Services
- State and Government
- Women Infants and Children (WIC) Program
- Community Health Representatives (CHR)
- Transportation Department

TIPS FOR ENGAGING PARTNERS

✔ Include a diverse group of partners.

✔ Identify key areas for partner input.

✔ Create a plan for partner engagement.

✔ Involve partners at the beginning, middle, and end of your program evaluation activities.

✔ Include partners at various levels based on their preferences, interests, and expertise:

- **Direct involvement** in designing and conducting the evaluation
- **Advisory role** providing feedback and guidance on program evaluation activities and reports through routine communication

✔ Keep partners informed regarding the progress of the evaluation through periodic meetings, reports and other preferred means of communication.

✔ Partners are more likely to support the evaluation and act on results and recommendations if they are involved in the evaluation process.

STEP 2: DESCRIBING THE PROGRAM

This step centers upon developing a comprehensive description of your Tribal Traffic Safety Program that outlines all of its key components and intended outcomes. Completing this step will help you focus your evaluation on the most central and important questions. This step can either follow the partner engagement step or precede it. It is important to note that in this step you are describing the program and not the evaluation. You can use a tool called a **logic model** for this purpose (see page 19), but a program description can be developed without using this or any tool. Either way, a comprehensive program description includes the following components:

- **Need.** What is the big public health problem you aim to address with your program?
- **Focus.** Which individual groups, programs, departments, or organizations need to change or take action to ensure progress on the public health problem?
- **Outcomes.** How and in what way do these groups, programs, departments, or organizations need to change? What action specifically do they need to take?
- **Activities.** What will your program and its staff do to move these groups, programs, departments, or organizations to change/take action?
- **Outputs.** What tangible capacities or products will be produced by your program's activities?
- **Resources/Inputs.** What is needed from the larger environment in order for the activities to be successful?

Each of these components will be further described in the remainder of this section.

NEED FOR PROGRAM

The need is the public health or other problem addressed by the program. For most Tribal Traffic Safety Programs the public health problem is motor vehicle crash injuries and deaths. You might define the need, in terms of its consequences for your tribe or community, the size of the problem overall, the size of the problem in various segments of the population (e.g., children and adolescents), and/or significant changes or trends in the rate of motor vehicle crash injuries. For example, the need for a particular Tribal Traffic Safety Program might be to reduce the high rate of motor vehicle crash injuries to American Indian children due to insufficient child passenger safety restraint use (i.e., use of weight, height, and age appropriate car seats, booster seats, and seat belts among children).

FOCUS

Focus on the various audiences the program needs to engage in order to make progress on the public health problem. For Tribal Traffic Safety Programs this might include tribal members (e.g., parents of infants, children, adolescents, adults, elders, or the whole community), as well as key programs or departments (e.g., law enforcement, Community Health Representatives, tribal leadership, etc.). Reducing motor vehicle crash injuries will require not only individual-level actions by tribal members (e.g., using seat belts, car seats, and booster seats), but also community, system, and environmental level actions such as improvements to roads, increased signage, enforcement of laws, distribution of child safety seats, community education, etc.

OUTCOMES

Outcomes are the changes in someone or something (other than the program and its staff) that you hope will result from your program's activities. For Tribal Traffic Safety Programs, the ultimate outcome is often ambitious and long-term, such as reducing motor vehicle crashes with injuries or decreasing motor vehicle-related fatalities. A strong program description provides details not only on the intended long-term outcomes, but also on the short-term and intermediate outcomes that precede it.

SAMPLE SHORT-TERM, INTERMEDIATE-TERM, AND LONG-TERM OUTCOMES FOR TRIBAL TRAFFIC SAFETY PROGRAMS

OUTCOME TYPE	DEFINITION	EXAMPLES
Short-Term	The initial expected changes in your population(s) of focus after implementing certain activities or interventions (e.g., changes in knowledge, skills, and attitudes).	• Increased tribal member skills in installing car seats • Increased knowledge about safe driving and the harms of distracted and alcohol-impaired driving • Enhanced collaboration/communication among program partners (e.g., Tribal Traffic Safety Program, law enforcement, CHR program, and schools)
Intermediate-Term	The interim results that provide a sense of progress toward reaching the long-term objectives (e.g., changes in behavior, practices, actions, and policy) Intermediate outcomes specify what individuals do with the short-term outcomes.	• Increased use of seat belts among tribal members • Increased use of car seats and booster seats for children • Increased citations for speeding, impaired driving, and failure to use seat belts • Primary seat belt law passed and implemented in the tribal community
Long-Term	Long-term outcomes are those that result from the achievement of your short- and intermediate-term outcomes. Typically, but not always, these mirror the goal statement, and are achieved only after the program has been in place for some time.	• Decreased motor vehicle crash-related mortality • Fewer motor vehicle crashes that result in injury • Improved quality of life • Increased life expectancy

ACTIVITIES

Activities are the actions taken by the program and its staff to achieve the desired outcomes in the groups of focus. Typical program activities might include outreach, training, education, service delivery, collaborations and partnerships, and health communication. Most Tribal Traffic Safety Programs will engage in numerous activities to achieve their desired outcomes, such as those highlighted in the text box below.

SAMPLE ACTIVITIES OF TRIBAL TRAFFIC SAFETY PROGRAMS

- ✔ Conduct car seat installations
- ✔ Conduct community education/ presentations
- ✔ Conduct observational seat belt checks
- ✔ Provide classroom education in high schools about the hazards of distracted driving
- ✔ Review existing tribal laws and policies that relate to traffic safety
- ✔ Recruit partners to participate in a community traffic safety coalition
- ✔ Implement a community scan for road and signage improvement needs
- ✔ Identify training opportunities for program staff
- ✔ Coordinate safe driving courses
- ✔ Gather existing data on motor vehicle crashes and injuries in the community
- ✔ Advertise program events
- ✔ Recruit participants
- ✔ Implement sobriety checkpoints
- ✔ Create and disseminate small media (e.g., posters, digital stories, brochures, fact sheets, radio PSAs, etc.)
- ✔ Conduct surveys
- ✔ Share information on evidence-based traffic safety policy interventions.

SAMPLE OUTPUTS FOR TRIBAL TRAFFIC SAFETY PROGRAMS

Outputs are the direct products of activities, usually some sort of tangible deliverable. Outputs can be viewed as activities redefined in tangible or countable terms. For example, the number of:

- ✔ Consultations with partners or other partners around evidence-based traffic safety policies
- ✔ Seat belt, DUI, and speeding checks conducted
- ✔ Car seats checked
- ✔ Coalition meetings conducted
- ✔ Community presentations conducted and participants reached
- ✔ Car seats installed
- ✔ Outreach events/health fairs conducted
- ✔ Tribal members participating in safe driving course
- ✔ Memoranda of Agreement executed among partners
- ✔ Programs/departments represented on coalition
- ✔ Staff trained as child passenger safety technicians
- ✔ Materials developed and disseminated

RESOURCES/INPUTS

These are the people, money, infrastructure, and other resources needed—usually from outside the program—to implement program activities effectively. It is important to include inputs in the program description because accountability for resources to funders and partners is often a focus of evaluation. Just as important, the list of inputs is a reminder of the type and level of resources on which the program is dependent. If intended outcomes are not being achieved, look to the resources/inputs list for one reason why program activities could not be implemented as intended.

Examples of Resources/Input for Tribal Traffic Safety Programs

- Funding
- Program staff
- Partners (e.g., police, tribal leaders, schools, CHRs, etc.)
- Infrastructure
- Materials & equipment
- Data

LOGIC MODEL

Once the components of the program description have been identified (i.e., need, focus, outcomes, activities, outputs, resources/inputs), a visual depiction might help to summarize the relationship among the components of your Tribal Traffic Safety Program. The logic model requires no new thinking about the program; rather, it converts the raw material in the program description into a picture of the program. This visual tool can help with both strategic planning and program evaluation.

In other words, logic models are graphic depictions of the relationship between a program's activities and its intended outcomes. Two words in this definition bear emphasizing:

- **Relationship:** Logic models convey not only the activities that make up the program, but also how they relate to each other, as well as their relationship with your outputs and outcomes.
- **Intended:** Logic models depict intended outcomes of a program's activities. As the starting point for evaluation and planning, the model serves as an "outcomes road map" that shows the underlying logic behind the program, i.e., why it should work.

LOGIC MODEL COMPONENTS

Logic models come in many different shapes and sizes. At a minimum, they should include the following components from your program description:

- **Inputs:** Resources that go into the program and on which it is dependent to execute its activities
- **Activities:** Actual events or actions done by the program and its staf
- **Outputs:** Direct products of program activities, often measured in countable terms (e.g., the number of education sessions held, number of car seats installed, etc.)
- **Outcomes:** The changes that result from the program's activities and outputs, often in a sequence expressed as short-term, intermediate-term, and long-term outcomes

SAMPLE LOGIC MODEL FOR TRIBAL TRAFFIC SAFETY PROGRAMS					
INPUTS	**ACTIVITIES**	**OUTPUTS**	**OUTCOMES**		
			Short-Term	**Intermediate**	**Long-Term**
• Program Staff • Partners (police, school, WIC, CHR, transportation) • Grant funding • Data (State Vital Records, EMT logs, IHS	• Car seat clinics • Safe driving classes • Media campaign • Seat belt observation • Car seat observation • Policy development	• Number of car seats inspected & installed • Number of classes conducted • Number of class participants • Number of community members reached through media campaign • Number of observations completed • Number of policies drafted	• Increased number of vehicles with appropriate car seats • Increased knowledge about safe driving practices • Increased community awareness about traffic safety • Improved surveillance of seat belt and car seat use • Enhanced tribal traffic safety policies	• Increased use of car seats • Increased use of seat belts • Increased enforcement of seat belt and car seat use	• Decrease in motor vehicle crashes • Decrease in motor vehicle crash-related injuries and death • Increased life expectancy and quality of life for AI/AN people

STEP 3: FOCUSING THE EVALUATION DESIGN

After completing Steps 1 and 2, you and your partners should have a clear understanding of your Tribal Traffic Safety Program and are ready to focus the evaluation. This includes determining the most important evaluation questions and the appropriate design for the evaluation. Rather than waiting to conduct evaluation when the program ends and asking, *"Did the program work?"*, the framework outlined here views evaluation as an ongoing activity over the life of a program that asks, *"Is the program working?"*

EVALUATION TYPES

There are several types of evaluations. Some of the most common types include: formative, summative, process, outcome, and impact. In this guide, we will focus on two complementary evaluation types that all Tribal Traffic Safety Programs should conduct: **process and outcome**.

PROCESS EVALUATION

Process evaluation assesses whether or not a program is operating as intended and identifies opportunities to strengthen it. In process evaluation, you examine whether the planned activities are taking place, who is conducting the activities, who is reached through the activities, and whether sufficient inputs have been allocated or mobilized. You will also examine whether program activities have resulted in certain outputs. Remember, outputs are the direct products of the program activities which provide evidence that the activities were accomplished.

Process evaluation should be conducted throughout the life of your program. The results of your process evaluation will strengthen your ability to report on your program accomplishments and can be used to improve future activities.

PROCESS EVALUATION

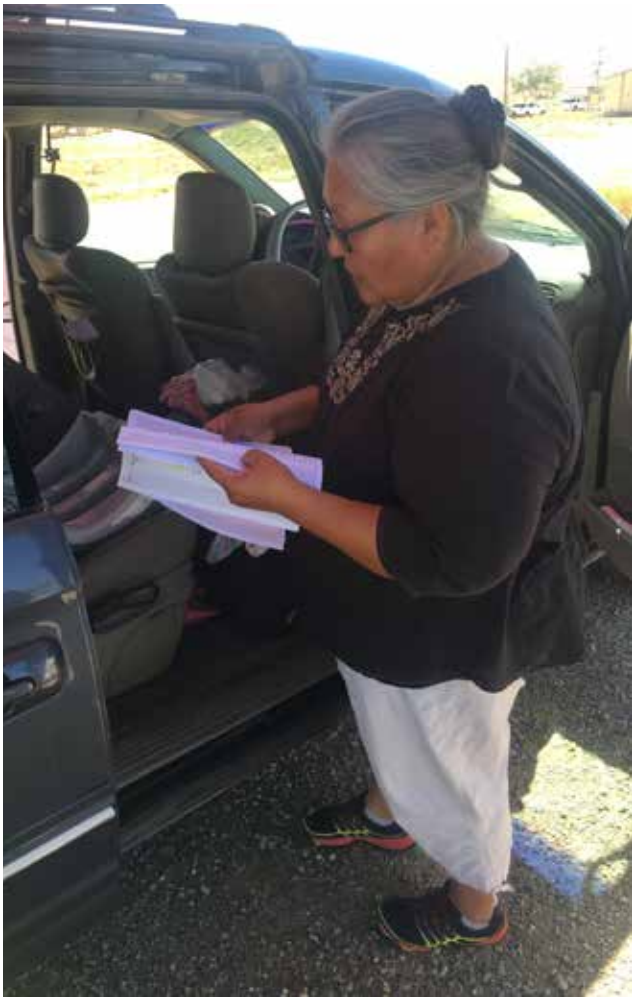
Process evaluation helps you to track program information related to who, what, when, where, and how? Such as:

- What has your program done?
- When did your program activities take place?
- Where did your program activities take place?
- Who received services?
- How much or for how long did they receive these services?
- What are the barriers/facilitators to implementating your program activities?

OUTCOME EVALUATION

Outcome evaluation measures the degree to which your Tribal Traffic Safety Program is being effective in meeting it's objectives. Outcome evaluation measures a program's results and helps determine whether a program or strategy produced the changes it intended to achieve. In other words, the main goal of outcome evaluation is to determine whether or not the program contributed to beneficial effects on your specific population. Outcome evaluation assesses the short-term, intermediate-term, and long-term effects of your program, and might include things such as:

- Changes in people's attitudes and beliefs
- Changes in risk or protective behaviors
- Changes in the environment, including policies, enforcement of laws, roads and signage, and programs/departments
- Changes in morbidity and mortality



PROCESS AND OUTCOME EVALUATION GO TOGETHER!

It is important to note the usefulness of conducting process evaluation while you are also implementing outcome evaluation. For example, if the outcome evaluation shows that your Tribal Traffic Safety Program did not produce the expected results, it may be due to program implementation issues. These potential issues will be much easier to identify if you have been measuring them through process evaluation activities. Likewise, if your process evaluation demonstrates that your program is only reaching one subgroup of your population of focus (e.g., females), you would be less likely to expect change for other subgroups (e.g., males) in the community during outcome evaluation. Therefore, process and outcome evaluation are complementary, and it is recommended that all Tribal Traffic Safety Programs conduct both simultaneously!

DEVELOPING EVALUATION QUESTIONS

At this point, it is important to develop evaluation questions to focus and guide your program evaluation activities. Your evaluation questions should reflect the basic question of whether or not your program worked as intended.

Many different questions can be selected to guide your program evaluation. Most can fit into four main categories:

QUESTION CATEGORIES	POSSIBLE QUESTIONS
PLANNING AND IMPLEMENTATION: How well was your Tribal Traffic Safety Program planned, and how well was that plan put into practice?	• Were your program's activities put into place as originally intended? • How many events were conducted? • Who participated? • Was there diversity among participants? • Why do participants enter and leave your program? • Do those most in need of help receive services? • Are community members satisfied with your program?
ASSESSING ATTAINMENT OF OBJECTIVES: How well has the Tribal Traffic Safety Program met its stated objectives?	• How many people participated? • Were activities being implemented according to your planned timelines? • Did program activities yield your expected outputs?
IMPACT ON PARTICIPANTS: How much and what kind of a difference has the Tribal Traffic Safety Program made for its population of focus?	• How has behavior changed as a result of participation in the program? • What new knowledge or skills have been obtained by participants?
IMPACT ON THE COMMUNITY: How much and what kind of a difference has the Tribal Traffic Safety Program made in the community as a whole?	• What new policies resulted from the program? • Were there any changes in infrastructure or the environment? • What new resources or infrastructure has been created by the program?

TIP

PRIORITIZED EVALUATION QUESTIONS

- Are important to your program and partners.
- Address important program needs.
- Can be answered with available resources, including funds and staff capacity.
- Reflect program goals and objectives.
- Are realistic and can be answered within the available timeframe.
- Provide information to make program improvements.

SAMPLE EVALUATION QUESTIONS FOR TRIBAL TRAFFIC SAFETY PROGRAMS

- Did the program follow the basic plan for implementation?
- What services were provided through the program (e.g., outreach, education, car seat installations/distribution, seat belt checks, coalition building, policy development, new signage, safe driving classes, DUI checks, etc.)?
- What was the quality of the services provided through the program?
- How much did the community participate in the program?
- What are the characteristics of the individuals who participated in the program?
- What is the participants' satisfaction with the program?
- Who still needs to be recruited to participate?
- What are staff members' perceptions of the program?
- What are the planning products of the programs (e.g., logic models, strategic plan, etc.)?
- What materials were developed through the program (e.g., video, brochures, curriculum, etc.)?
- How many program materials have been distributed?
- What were the barriers to participation in the program?
- What were the barriers to the implementation of the program?
- What resources are still needed to implement the program as planned?
- How much progress did the program make toward short-term, intermediate-term and long-term outcomes?
- What changes occurred among individuals that participated in the program?
- What community-level/system-level changes occurred as a result of the program?
- What educational opportunities were used to discuss evidence-based policy options around traffic safety with partners and policymakers?

STEP 4: GATHERING CREDIBLE EVIDENCE

Now that you have created your evaluation questions, your next task is to gather the evidence to answer them. Your evaluation should strive to collect information that will convey a well-rounded picture of your Tribal Traffic Safety Program. Therefore, you should plan to gather multiple types of evidence to evaluate your program.

THE TWO MOST IMPORTANT STEPS TO GATHERING CREDIBLE EVIDENCE ARE TO:

1. Select meaningful indicators (sometimes called performance measures).
2. Select appropriate data collection methods and sources to track your indicators.

Indicators are specific, observable, and measurable characteristics or changes that show the progress a program is making toward achieving a specified outcome. In other words, your indicators are the specific item(s) that you will measure to answer your evaluation questions (e.g., attendance, events conducted, meetings convened, people trained, new materials developed, changes observed, etc.). Indicators reflect aspects of the program that are meaningful for monitoring. They can be related to your process or outcome evaluation. Some examples of indicators that can be defined and tracked by your Tribal Traffic Safety Program are highlighted in the table below.

SAMPLE INDICATORS FOR TRIBAL TRAFFIC SAFETY PROGRAM

Process Indicators	Outcome Indicators
Attendance/participation	Changes in participant behavior
Participant characteristics (age, sex, job title, etc.)	Changes in knowledge, attitudes, and beliefs
Number of events/activities conducted	Changes in policies
Number of meetings held	Changes in health status
Number of data use agreements established	Changes in enforcement of laws (seat belt warnings/citations, child safety seat warnings/citations, DUI arrests)
Number of assessments/observations conducted	Changes in quality of life
Number of materials developed & distributed	Changes in services or practices
Number of staff trained	Changes in road conditions
Number of classes held	Changes in traffic signage

TIP

KEEP THE FOLLOWING TIPS IN MIND WHEN SELECTING YOUR INDICATORS:

- Indicators should be developed for activities (process indicators) and for outcomes (outcome indicators).
- There can be more than one indicator for each activity or outcome.
- The indicator must be clear and specific in terms of what it will measure.
- Indicators should meaningfully address your evaluation questions.
- Indicators should align with your program goals and objectives.
- Select a mix of indicators at the **individual-level** (e.g., change in participant knowledge), **community-level** (e.g., number of car seats distributed throughout community), and **systems/environmental levels** (e.g., change in policies, availability of safe driving classes, roads improvements/signage, enforcement of seat belt, car seat, speeding, and impaired driving).

Another helpful tip for selecting indicators is to look at the **SMART objectives** you have established for your program. If your program objectives were written to be specific, measurable, action-oriented, realistic, and time-bound (so-called "SMART" objectives), they will likely include indicators as well.

SMART OBJECTIVES

Have you ever wondered why so many grants require you to include SMART objectives?

S = Specific

M = Measurable

A = Action-oriented (achievable)

R = Realistic

T = Timebound

Not only do SMART objectives provide details of your program plan, they also lay the foundation for your program evaluation by:

- indicating specific approaches that will be implemented.
- identifying key indicators or performance measures.
- establishing baselines and targets for your indicators.
- outlining timeframes for completion of key program components.

SELECTING DATA COLLECTION METHODS AND SOURCES

Now that you have determined the activities and outcomes that you want to measure and the indicators that you will use to measure progress on them, you need to select data collection methods and sources for your indicators. A key decision is whether there are existing data sources—**secondary data**—that can be gathered to measure your indicators or whether you need to collect new data—**primary data**. Most likely you will use both!

SECONDARY DATA SOURCES

Secondary data are data that have already been collected by someone else. Depending on your evaluation questions and indicators, some secondary data sources might be appropriate. For example, existing data sources that might be particularly useful for Tribal Traffic Safety Programs include:

Local:

- EMT/EMS logs
- Police logs, reports, records
- IHS/Tribal/Urban Indian Health facility electronic health records
- Tribal Departments of Transportation
- Community surveys and needs assessments
- Maps

State:

- Vital records/statistics (mortality, death certificates)
- Hospital discharge data (motor vehicle crashes that resulted in hospitalization)
- Emergency department data (motor vehicle crashes that resulted in an ED visit)
- State Departments of Transportation/State Highway Safety Offices

National:

- **NHTSA's Fatality Analysis Reporting System (FARS)**, data regarding fatal injuries suffered in motor vehicle traffic crashes
- **CDC's Web-based Injury Statistics Query and Reporting System (WISQARS)**, an interactive, online database that provides fatal and nonfatal injury data
- **CDC's Behavioral Risk Factor Surveillance System (BRFSS)**, a national survey of health-related risk behaviors among adults, including seat belt use and drinking and driving data
- **CDC's Youth Risk Behavior Surveillance System (YRBSS)**, a national survey of health-related risk behaviors among adolescents, including seat belt use, texting and driving, and drinking and driving data
- **Inventory of National Injury Data System**, a comprehensive list of 45 different federal data systems operated by 16 different agencies and 3 private injury registry systems that provide nationwide injury-related data
- **CDC's Pregnancy Risk Assessment Monitoring System (PRAMS)**, a system that collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy

TIP

Reach out to your Tribal Epidemiology Center or State Department of Health for technical support in accessing secondary data that may be helpful to evaluate your Tribal Traffic Safety Program.

TRIBAL EPIDEMIOLOGY CENTERS

PRIMARY DATA SOURCES

Primary data are data that are collected by your evaluation team to answer your evaluation questions. Primary data can be quantitative or qualitative. It is important that data are collected in an ethical manner. Please see Propriety Standards on Page 50 for additional information.

- **Quantitative data** are data that can either be counted or compared on a numeric scale. These data are used to measure a problem or address the questions of "what?" or "how many?".
- **Qualitative data** are data concerned with descriptions, which can be observed but cannot be computed. Qualitative data describes qualities or characteristics. It is collected using questionnaires, interviews, or observation, and frequently appears in narrative (words) form. Data collected include transcripts of interviews and focus groups and field notes from observation of certain program activities.

Primary data collection methods for program evaluation typically fall into several broad categories. Among the most common that are used to evaluate Tribal Traffic Safety Programs include:

- Surveys
- Key Informant Interviews
- Focus Groups
- Observation
- Document Review

The remainder of this section will provide definitions of each primary data collection type and tips for how you can incorporate them into the evaluation of your Tribal Traffic Safety Program.

1. SURVEYS

A **survey** is a way of collecting information to understand the views of the community or group in which you are interested. Survey instruments or questionnaires ask questions in a standardized format that allows consistency and the ability to aggregate (combine) responses. Most survey questions are quantitative and closed-ended, requiring participants to select an answer from a given list. However, surveys may also include some open-ended (qualitative) questions that allow participants to provide an answer in their own words. Some common types of surveys used in program evaluation include:

- **Pre-Post Test –** A survey instrument given to participants before and after a training, an intervention, or a particular period of time to assess changes in participant knowledge, attitudes, beliefs, and/or intentions. The same survey is administered at two different time points, and the changes are evaluated to determine impact.
- **Satisfaction Survey –** A satisfaction survey is typically administered only after an event, training, or intervention to assess participant satisfaction with program services and activities.

WHO SHOULD I SURVEY?

Deciding who you will survey (your sample) depends on the purpose of the survey. If you are trying to evaluate the impact of your project on people who have participated in your activities, you should administer the survey to those individuals who have participated in one or more of your program activities. Similarly, if you are trying to determine the impact of your project on specific groups of people, such as youth, parents, adults, women, etc., you may want to just survey people in the community with those characteristics. If you are trying to understand the impact of your program on the entire community, you should administer the survey to a much broader group of participants, including those who did not participate in project specific activities. This could be a **random sample** of community members, where everyone in your community has an equal chance of being selected to participate. Random samples are often drawn from existing lists of community members (e.g., voter registration, tribal enrollment/census, mailing lists, IHS/Tribal/Urban Indian Health facility users, etc.), or community maps (i.e., random selection of homes throughout the community). Other options include: **1) census**, where all community members are selected to participate; **2) convenience sample,** where survey participants that are easy to reach are selected (e.g., surveying participants gathered at an event, at the post office, in the clinic, etc.); and/or **3) volunteers**, where individuals self-select to participate.

SAMPLE TYPE	PROS	CONS
Census or Random Sample	• More representative of the whole community	• More expensive/resource intensive • More time consuming
Convenience Sample or Volunteers	• Quicker • Less expensive/resource intensive	• Usually not representative of the whole community • Results cannot be generalized

10 BEST PRACTICES FOR CREATING EFFECTIVE SURVEYS

1. **Keep your survey short.** In most cases, people are doing you a favor by taking your survey. What better way to respect their time than by not taking up too much of it? You'll be rewarded with a higher completion rate as well as more thoughtful responses for the questions you end up including.

2. **Keep your questions clear and simple.** Be specific and concrete in developing your questions and be sure to avoid technical words or jargon that are commonly used among your Tribal Traffic Safety Program staff and colleagues, but might not be well known to your community members.

3. **Ask only questions that will help you meet your goal.** Every question you include should have a well-defined purpose and a strong reason for being there. Remove any questions that appear to duplicate one another or will not provide information that is helpful to your evaluation.

4. **Place the more personal questions to the end.** Structure your survey like a conversation. Would you start an exchange by asking someone how old they are? Probably not. Instead, you'd engage in small talk first, and gradually move on to more personal topics. Similarly, keep your early set of questions light and straightforward and then slowly move towards more personal questions (often taking the form of **demographic questions**).

5. **Focus on using closed-ended questions.** What do we mean by closed-ended questions? We're talking about questions that use pre-populated answer choices for the respondent to choose from—like **multiple choice** or **checkbox questions**. These questions are easier for respondents to answer and provide you with quantitative data to use in your analysis. **Open-ended questions** (qualitative) ask the respondent for feedback in their own words. Since open-ended questions can take much longer to answer, try to only include 1-2 of them at the end of your survey.

6. **Consider including a survey incentive.** If you're keen on getting a lot of responses, an **incentive** in some form can prove helpful. Potential incentives range from entering respondents into a drawing to giving respondents a gift card if they answer all of your questions.

7. **Don't ask leading questions.** In other words, try not to put your own opinion into the question. Doing so can influence the responses in a way that doesn't reflect participants' true experiences. For example, a leading question might ask: *You are satisfied with our trainings, aren't you?*

   The right question to ask in this context would be:

   How satisfied are you with our training?

   - ☐ Very Satisfied
   - ☐ Somewhat Satisfied
   - ☐ Neither Satisfied nor Dissatisfied
   - ☐ Somewhat Dissatisfied
   - ☐ Very Dissatisfied

8. **Keep your answer choices balanced.** Using answer choices that lean a certain way can result in respondents providing inauthentic feedback. Let's revisit the prior example. Here's how a set of unbalanced answer choices (that lean towards being too positive) can look for that question:

   - ☐ Very Satisfied
   - ☐ Somewhat Satisfied
   - ☐ Neither Satisfied nor Dissatisfied

   And here is how they would look once balanced:

   - ☐ Very Satisfied
   - ☐ Somewhat Satisfied
   - ☐ Neither Satisfied nor Dissatisfied
   - ☐ Somewhat Dissatisfied
   - ☐ Very Dissatisfied

9. **Stay away from asking double-barreled questions.** Double-barreled questions ask for feedback on two separate things within a single question.

   Here's an example: *"How would you rate the quality of our training and brochures?"*

   How would the respondent answer this question? Would they address the quality of the training? The quality of the brochures that you developed? Maybe they'd skip the question out of confusion. Also, how would you interpret their answer? Were they responding about the training, the brochures, or both? You can fix a double-barreled question by either choosing one thing to ask or by breaking the question up into two separate questions.

10. **Preview and pilot test your survey before you use it.** Imagine using your survey only to realize that you forgot to add a question. Or that you didn't include a few essential answer choices for one of the questions you asked. In either case, you'll probably end up being frustrated and get results that fall short of what you need. To prevent any mishaps in your survey design, preview your survey and share it with others so they can catch any mistakes you might not find on your own. Even better, pilot test your survey instruments with a small group of participants similar to the group of focus to assess its clarity, comprehensibility, and cultural appropriateness.

When developing a new survey, always look for existing questions or instruments that have been previously tested and can be adapted or used as-is!

2. KEY INFORMANT INTERVIEWS

Key informant interviews are a qualitative data collection method that, like open-ended questions in a survey, allow you to obtain an individual's response in their own words. Interviews differ from surveys in that they elicit more detailed qualitative data and allow you to interact with the person to better understand their response. Interviews may be conducted in-person or over the phone. Interviewing is useful when you want more in-depth information about a person's knowledge, attitudes/beliefs, or behaviors. Key informant interviews can be useful for Tribal Traffic Safety Programs looking to gather in-depth information from a select number and type of individuals, such as tribal leaders, program administrators, law enforcement, partnering agencies, etc.

3. FOCUS GROUPS

Like interviews, **focus groups** allows you to collect qualitative data. However, unlike interviews, in which data are collected by one-on-one interactions, focus groups provide data about a particular topic through small group discussions. Focus groups are an excellent method for obtaining opinions about programs and services. They produce information from many people in a short period of time, so they can be an effective method when information is needed quickly. A facilitator guides the group based on a predetermined set of topics. The facilitator creates an environment that encourages participants to share their perceptions and points of view. Focus groups typically are conducted with participants who share common traits (e.g., gender, adolescents, parents, people who have participated in your project activities, people who have not participated in your project activities).

TIP

TIPS FOR CONDUCTING KEY INFORMANT INTERVIEWS AND FOCUS GROUPS

- Develop a guide with key themes or questions that you would like to explore in each interview or focus group. This will be used by the facilitator or interviewer, not shared with the participants.
- Keep the guide to no more than 10 key themes or questions.
- List subthemes or probes under each theme or question. You can use these probes if the topics you want to cover do not emerge on their own during the interview or focus group.
- Audio record each session (with permission from participants) to make sure that you capture everything that was said.
- Take notes even if you are recording so that you have a backup.
- Aim to keep interviews to no more than one hour in length, and focus groups under 1.5 hours.
- Have at least two people assist with the focus group if possible—one to moderate the session and the other to take notes and handle logistics.

4. OBSERVATION

Observation is a way of gathering data by watching behavior and events and noting physical characteristics in their natural setting. Observation allows you to gather information about a program as the program's activities occur. It can collect quantitative data, qualitative data, or a mix of both. Examples could be observing services being provided, training sessions, meetings, community member behaviors (e.g., seat belt/car seat use), the environment (e.g., traffic patterns), etc. It is best for observation to be done in an unobtrusive manner to ensure that you will witness what really takes place. Some types of observation that are useful for evaluating Tribal Traffic Safety Programs include:

a. **Seat belt/car seat checks** These observational activities use a formal protocol to find out how many people in your community are using seat belts or car seats.

b. **Windshield/walking survey** Windshield surveys are systematic observations made from a moving vehicle. Walking surveys are systematic observations made on foot. Either can help you better understand specific conditions that your Tribal Traffic Safety Program might be trying to impact such as traffic patterns, road conditions, signage, road safety, and infrastructure needs.

Prior to conducting an observation, always develop a checklist of what you plan to observe so if you become distracted, you won't forget what to look for!

5. DOCUMENT REVIEW

Document review might also be helpful when evaluating your Tribal Traffic Safety Program. You can review meeting minutes, sign-in sheets, progress reports, medical records, logs, maps, laws, and policies to learn more about the activities of your program and its reach and impact.

To ensure that you have plenty of documents to review, be sure to collect data at each of your Tribal Traffic Safety Program activities and events, including **sign-in sheets, meeting minutes, satisfaction surveys**, etc. It's also a good idea to **debrief** with your staff shortly after each major activity to discuss what worked well and what needs improvement for the future. Try using the **plus/delta technique**, an easy-to-use feedback tool.

TIPS FOR DOCUMENT REVIEW OF POLICIES/LAWS

Rather than just evaluating whether or not specific laws and policies exist in your community, it is helpful to review the specific elements of these laws and policies to determine their alignment with proven, evidence-based practices. The list below shows some examples of criteria that can be used to evaluatie laws and policies.

DOCUMENTING LAWS FOR IMPAIRED DRIVING

- ☐ Is there a law? Is it a Tribal law, or does it defer to state law?
- ☐ How is the term "impaired" defined (that is, alcohol, drugs, prescription medication)?
- ☐ Does the law describe how "impairment" must be measured, and if so, are those measurements different from state laws and best practices?
- ☐ What are the consequences for first-time offenders? To what degree do those consequences differ from state laws and best practices?
- ☐ What are the consequences for repeat offenders? To what degree do those consequences differ from state laws and best practices?
- ☐ Does the law include a "child endangerment" clause if children are in the vehicle at the time of arrest?
- ☐ Does the law include "court diversion" or alternate sentencing options, and if so, who manages those programs?
- ☐ Does the law stipulate how funds generated from fines or court fees are used (that is, do those funds support on-going traffic safety efforts)?

DOCUMENTING LAWS FOR SEAT BELT AND CHILD SAFETY SEAT USE

- ☐ Is there a law? Is it a Tribal law, or does it defer to state law?
- ☐ Is the law a primary or secondary enforcement law?
- ☐ Who is covered by the seat belt law (i.e., front seat and rear seat occupants, or front-seat only)?
- ☐ What is covered by the child safety seat law (i.e., ages, location of seat, and/or types of seats)?
- ☐ What are the fines or other penalties for not using a restraint and how do they compare to those at the state level and best practices? Do the fines differ for non-use of a child safety seat versus improper use of a child safety seat?
- ☐ Does the law describe increased consequences for repeat offenders?
- ☐ Does the law include a "court diversion" program and if so, who manages the court diversion program?
- ☐ Does the law stipulate how funds generated from citations or court fees are used (that is, do those funds support on-going traffic safety efforts)?

PROS & CONS OF DATA COLLECTION/SOURCE TYPES

DATA COLLECTION/ SOURCE TYPE	PROS	CONS
Surveys *Standardized questionnaires that ask predetermined questions*	• Easy to do with a large number of people • Easy to conduct analysis • Easy to repeat at a later time (pre-post) • Allows control over the content that is being measured • Can be highly accurate • Allows for comparisons with other/larger populations when survey items come from existing instruments	• Little opportunity to explore issues in depth • Low response rates are common • Time-consuming if you need a large number of participants • Relatively high cost • Relatively slow to design, implement, and analyze • Accuracy depends on who and how many people participate
Key Informant Interviews *Structured or unstructured one-on-one directed conversations with key individuals or leaders in a community*	• Possible to explore issues in depth • Personalized approach • Low cost (assuming relatively few) • Allows respondents define what is important and in their own words • Can clarify responses through probes • May lead you to other data sources and other key informants	• Interviewer's presence and characteristics might bias results • Small sample; not generalizable • Can be time consuming to set up interviews with busy informants • Might be difficult to analyze and summarize findings due to large volume of transcripts and diverse perspectives
Focus Groups *Structured interviews with small groups of like individuals using standardized questions, follow-up questions, and exploration of other topics that arise to better understand participants*	• Less expensive • Rapid data collection • Faster than one-on-one interviews • Can clarify participant responses through probing (follow-up questions) • Often generate new/fresh ideas • Allow respondents define what is important and in their own words	• Requires a skilled facilitator to keep conversation flowing and everyone involved • Can be time consuming to assemble groups • Less control over process than key informant interviews • Difficult to collect sensitive information • Limited generalizability • Might be difficult to analyze and summarize findings

DATA COLLECTION/ SOURCE TYPE	PROS	CONS
Observations *Watching behaviors or events or noting physical characteristics*	• Natural setting • Does not rely on people's willingness or ability to provide information • Allows you to directly see what people do rather than relying on what people say they did	• Observer might bias behavior of participants • Difficult to generalize observations to the larger populations • Does not increase your understanding of why people behave as they do
Document Review *Reviewing documents, records, or archives held by your project or partnering agencies*	• Low cost • Relatively quick • Often allows for historical comparisons or trends	• Might be difficult to access • Might not be current or updated • Data are limited to what has already been collected • Might not answer your specific evaluation questions
Gathering Secondary Data	• Less expensive • Less time consuming • Might be immediately available for use	• Data are limited to what has already been collected • Might not answer your specific evaluation questions • Data sharing limitations • Data might not be tribe-specific

SELECT SOURCES OF EVIDENCE FOR TRIBAL TRAFFIC SAFETY PROGRAM EVALUATION

Who might you survey or interview?

- Program participants (or nonparticipants)
- Staff, program managers, administrators
- General public
- Partner agency staff
- Tribal leaders

What might you observe?

- Coalition meetings
- Educational events/trainings
- Car seat checks/installations
- Seat belt use
- Signage
- Road conditions
- Traffic patterns

Which documents might you analyze?

- Meeting minutes
- Sign-in sheets
- Event and activity logs
- Previous evaluation reports
- Road maps
- Photographs
- News articles
- Medical records or other files
- Law enforcement logs
- Tribal policies and protocols
- Progress reports

USING MIXED METHODS APPROACHES FOR PROGRAM EVALUATION

A mixed methods approach combines at least one qualitative and one quantitative data source or collection method for program evaluation.

Selecting multiple data sources provides an opportunity to include different perspectives regarding the program and might enhance your evaluation's credibility. Sometimes a single method is not sufficient to accurately measure an activity or outcome because the thing being measured is complex. Using multiple methods helps increase the accuracy of the measurement and the certainty of your conclusions when the various methods yield similar results. Combining methods maximizes the strengths and minimizes the limitations of each method, which will provide you and your partners increased confidence in the overall findings.

STEP 5: JUSTIFYING CONCLUSIONS

This step includes:

- Analyzing the evidence gathered in step 4
- Making claims about your Tribal Traffic Safety Program based on the analysis
- Justifying claims by comparing the evidence against standards selected by your program
- Making recommendations for continuing, expanding, modifying, or terminating the program

ANALYZYING EVIDENCE

Data analysis is the process of evaluating data using analytical and statistical tools to discover useful information and aid in decision making. There are several **data analysis methods**, most of which can be categorized as quantitative or qualitative data analysis.

QUANTITATIVE DATA ANALYSIS: KEY STEPS

Enter the data into a database and check for errors. If you are using secondary data such as BRFSS or PRAMS, the data have already been checked, entered, and tabulated by those conducting the survey. Select the computer program you will use and determine who will enter and analyze the data, and determine who will enter, check, tabulate, and analyze the data.

Tabulate the data to provide information (such as a number or percentage) for each indicator. Some basic calculations include determining:

- The total number of participants, trainings, activities, etc.
- The number of participants achieving the desired outcome
- The percentage of participants achieving the desired outcome
- The percent increase (or decrease) observed
- The average (mean) score
- The number of times a certain value appears (frequency)
- The difference between the highest score and lowest score observed (range)
- The lowest/smallest score in a data set (min.)
- The highest/largest score in a data set (max.)

For more specific information about analyzing quantitative evaluation data **click here** or check out the additional resources listed in the appendix.

QUALITATIVE DATA ANALYSIS: KEY STEPS

Transcribe your interviews or focus groups from your notes and recordings.

Become familiar with the data. It is important to read and re-read the data, writing down impressions, looking for meaning and determining which pieces of data have value.

Focus the analysis. In this step, it is important to identify key questions that you want to answer through the analysis. One approach would be to focus the analysis on the answers to a particular question or topic. Another way to focus the analysis would be to examine the data as it relates to a particular group (e.g., elders, teens, women, etc.).

Categorize the data and create a framework. This is often referred to as coding or indexing the data. Begin by identifying ideas, concepts, behaviors, key words, and phrases that frequently emerge in your data. A code is then assigned to those pieces of data in an effort to label the data and make it easier to organize and retrieve. A coding plan helps to provide a framework that will structure, label and, define the data.

Identify patterns and make connections. Review codes and patterns of codes to identify themes and relationships between themes.

Interpret the data and explain findings. After themes, patterns, connections, and relationships are identified, attach meaning and significance to the data. It can be helpful in this process to develop lists of key ideas, create diagrams, or use models to explain the findings. It is important to remember that qualitative data are not suited to make generalizations across a population.

For more specific information about analyzing qualitative evaluation data, **click here** or check out the additional resources listed in the appendix.

TRIANGULATION

Triangulation involves combining different sources of information in your evaluation to reach a larger understanding of the impact of your Tribal Traffic Safety Program. These different sources might include:

- Quantitative data (surveys)
- Qualitative data (focus groups and interviews)
- Primary data (data that you collect)
- Secondary data (existing data that you use)

One of the main benefits of triangulation is that it uses a range of data to provide more comprehensive insight into your program and that is particularly useful as a way to validate and strengthen your evaluation findings.

STANDARDS

Once you have analyzed your evaluation data, the next step is to interpret the findings to make claims and judgements about your Tribal Traffic Safety Program. This step is accomplished by comparing the evidence against standards selected by your program. Standards establish a comparison by which your program can be judged and be considered successful. The box below lists possible standards you might use for determining the progress and/or success of your program:

- Needs of the participants/community
- Program mission
- Program SMART objectives
- Performance by previous or similar programs
- Performance by a comparison group
- Targets or fixed criteria of performance
- Change in performance over time
- Change in performance since baseline
- Professional or existing standards (e.g., **Healthy People 2030**, **Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices**, **The Guide to Community Preventive Services**)
- Mandates, policies, statutes, regulations, laws

Your standards for performance and outcomes should be determined at the beginning of your program, based on achievable targets, and aligned with you goals and SMART objectives. It is also important to note that multiple standards can be applied to a given program.

INTERPRETING THE FINDINGS AND MAKING JUDGEMENTS AND RECOMMENDATIONS

Interpretation is the effort of figuring out what your findings mean about your Tribal Traffic Safety Program. Evaluation evidence must be interpreted to determine the practical significance of what has been learned. **Judgements** are statements concerning the merit, worth, or significance of the program. They are formed by comparing the findings and interpretations regarding your Tribal Traffic Safety Program against one or more of your selected standards. **Recommendations** are actions for consideration resulting from the evaluation. Sharing draft recommendations, soliciting reactions from multiple partners, and presenting options instead of directive advice will increase the likelihood that recommendations are relevant and well-received.

TIP

TIPS TO REMEMBER WHEN INTERPRETING YOUR FINDINGS AND MAKING JUDGEMENTS & RECOMMENDATIONS

- Interpret evaluation results with the goals of your program in mind.
- Keep your audience in mind. What do they need and want to know?
- Consider the limitations of the evaluation.
- Consider the possible biases of the individuals conducting the evaluation.
- Consider alternative explanations for your results.
- Compare program outcomes with those of previous years.
- Compare actual outcomes with intended outcomes.
- Explore how your results compare with those of similar programs.
- Check to see if the different data collection methods used to measure your progress show similar results.
- Evaluate whether or not your results are similar to what you expected. If not, consider why they may be different.
- Keep all recommendations relevant and feasible.

STEP 6: ENSURING USE AND SHARING LESSONS LEARNED

Lessons learned in the course of an evaluation do not automatically translate into informed decision-making and appropriate action. This final step is therefore critical to ensure that the evaluation processes and findings are used and disseminated appropriately.

REMEMBER YOUR PURPOSE!

The ultimate purpose of program evaluation is to use the information to improve your Tribal Traffic Safety Programs to maximize its benefits for the community. The purpose(s) you identified early in the evaluation process should guide the use of the evaluation results. The evaluation results should be used to demonstrate the effectiveness of your program, identify ways to improve your program, modify program planning, demonstrate accountability, and justify funding.

ADDITIONAL PURPOSES OF PROGRAM EVALUATION

- Demonstrate to legislators or other partners that resources are being well spent and that the program is effective
- Aid in forming budgets and to justify the allocation of resources
- Compare outcomes with those of previous years
- Compare actual outcomes with intended outcomes
- Suggest realistic intended outcomes
- Support annual and long-range planning
- Focus attention on issues important to your program
- Ppromote your program
- Identify partners for collaboration
- Enhance the image of your program
- Retain or increase funding
- Provide direction for program staff
- Identify training and technical assistance needs
- Document the level of success in achieving objectives
- Identify areas of the program that need improvement
- Mobilize community support
- Redistribute or expand the locations where the intervention is carried out
- Focus program resources on a specific population

WHO WILL USE THE EVALUATION RESULTS?

Many different people and organizations will be interested in your evaluation findings, including:

- **Partners –** Remember your work in step 1 to identify those people or organizations that are invested in your Tribal Traffic Safety Program or that are interested in the results of the evaluation. Although each Tribal Traffic Safety Program is unique, some common partners might include, but are not limited to: tribal leaders, schools, head start, day care centers, Community Health Representatives (CHR), WIC, transportation departments, law enforcement, I/T/U health facilities, EMTs, environmental health, community members, BIA, IHS, and state and county partners.
- **Funders –** Most funding agencies want to know how their investment in your program is going. They might also use your evaluation findings to assess accountability, improve their grantmaking, disseminate successful programs to other grantees, increase the state of knowledge, assess the quality or impact of grants, and plan new programs.
- **You –** In addition to these important partners, you and your Tribal Traffic Safety Program team should use your evaluation findings to celebrate successes, troubleshoot challenges or unintended outcomes, and continuously improve the quality of your program.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Continuous Quality Improvement (CQI) is the process of using your process and outcome evaluation data to determine what worked well, where there is room for improvement, and what changes may be needed. CQI takes advantage of what you have learned over time from your evaluation to improve the program for the future without starting over from the beginning. It helps all staff involved to keep your program fresh and a good fit for your participants and your community. CQI should be performed throughout the life of your program to assess what went well and what should be improved. You will continually use the results from your evaluation to determine whether you met your goal and desired short-, intermediate-, and long-term outcomes. The results will prepare you to decide whether and how to revise your goals and desired outcomes, reassess fit and capacity, and revise your work plan. The process then repeats itself over time to assess whether the changes you make prove to be effective.

DEVELOPING AN EVALUATION REPORT:

Your evaluation report should clearly, succinctly, and impartially communicate all parts of the evaluation. The report should be written so that it is easy to understand by your audience. It need not be lengthy or technical.

Common Evaluation Report Outline:

- **Executive Summary** a short summary of the report that can be shared separately or as part of the full evaluation report
- **Background and Purpose**
  - Program background
  - Program description
  - Key evaluation questions/focus
- **Evaluation Methods**
  - Design
  - Sampling procedures
  - Measures or indicators
  - Data collection procedures
  - Analysis
  - Limitations
- **Results**
- **Discussion and Recommendations**

TIPS FOR WRITING YOUR EVALUATION REPORT

- Tailor the report to your audience; you may need a different version of your report for each segment of your audience.
- Present clear and succinct results.
- Include a summary.
- Describe essential features of the program (e.g., logic models).
- Explain the focus of the evaluation and its limitations.
- Summarize the evaluation plan and procedures.
- List the strengths and weaknesses of the evaluation.
- Organize the report logically and include appropriate details.
- Discuss recommendations for action with their advantages, disadvantages, and resource implications.
- Verify that the report is unbiased and accurate.
- Remove technical jargon.
- Use examples, illustrations, graphics, and stories.
- Prepare and distribute reports on time.
- Distribute reports to as many partners as possible
- Acknowledge partners and participants.

DISSEMINATION: SHARING RESULTS AND LESSONS LEARNED FROM EVALUATION

Dissemination involves communicating evaluation findings or lessons learned to relevant audiences in a timely, unbiased, and consistent manner. Disseminating the evaluation findings for your Tribal Traffic Safety Program is a critical step in the overall process that is sometimes overlooked. To avoid making this common mistake, work with your team to create a dissemination plan that maps the following essential details:

- Who is the key audience?
- What approaches and formats will be used to disseminate findings—hard copy print, electronic, oral presentations, briefings, mailings, etc.?
- How, where, and when will findings be used?
- Who is responsible for dissemination?
- What resources are available to accomplish the work?
- What are the follow-up activities to ensure that the evaluation findings are used?
- How will follow-up activities be monitored?

SOME METHODS FOR GETTING YOUR EVALUATION INFORMATION TO YOUR AUDIENCE INCLUDE:

ORAL PRESENTATIONS – Tribal councils, partners meetings, community groups, etc.

MAILINGS

WEB SITES

COMMUNITY FORUMS

MEDIA – television, radio, newspaper

PERSONAL CONTACTS

EMAIL LISTSERVS

ORGANIZATIONAL NEWSLETTERS

APPENDIX A: STANDARDS FOR EFFECTIVE EVALUATION

The steps in the **CDC Evaluation Framework** used throughout this guide are informed by a set of standards for evaluation. The standards provide practical guidelines to follow when having to decide among evaluation options at each step in the framework. The steps and standards are used together throughout the evaluation process. For each step, a subset of relevant standards should be considered. Furthermore, the standards can be applied while planning an evaluation and throughout its implementation.

The four categories discussed below include a total of 30 specific standards.

STANDARD 1: UTILITY

Utility standards ensure that information needs of evaluation users are satisfied. Seven utility standards address such items as identifying those who will be impacted by the evaluation, the amount and type of information collected, the values used in interpreting evaluation findings, and the clarity and timeliness of evaluation reports. The following utility standards ensure that an evaluation will serve the information needs of intended users:

- **Partner identification.** Persons involved in or affected by the evaluation should be identified so that their needs can be addressed.
- **Evaluator credibility.** The persons conducting the evaluation should be trustworthy and competent in performing the evaluation for findings to gain maximum credibility and acceptance.
- **Information scope and selection.** Information collected should address pertinent questions regarding the program and be responsive to the needs and interests of clients and other specified partners.
- **Values identification.** The perspectives, procedures, and rationale used to interpret the findings should be carefully described so that the bases for value judgments are clear.
- **Report clarity.** Evaluation reports should clearly describe the program being evaluated, including its context and the purposes, procedures, and findings of the evaluation so that essential information is provided and easily understood.
- **Report timeliness and dissemination.** Substantial interim findings and evaluation reports should be disseminated to intended users so that they can be used in a timely fashion.
- **Evaluation impact.** Evaluations should be planned, conducted, and reported in ways that encourage follow-through by partners to increase the likelihood of the evaluation being used.

STANDARD 2: FEASIBILITY

Feasibility standards ensure that the evaluation is viable and pragmatic. The three feasibility standards emphasize that the evaluation should employ practical, nondisruptive procedures; that the differing political interests of those involved should be anticipated and acknowledged; and that the use of resources in conducting the evaluation should be prudent and produce valuable findings. The following feasibility standards ensure that an evaluation will be realistic, prudent, diplomatic, and frugal:

- **Practical procedures.** Evaluation procedures should be practical so that you can keep disruption of the program to a minimum while still being able to obtain needed information.
- **Political viability.** During planning and while the evaluation is being conducted, consideration should be given to the varied positions of interest groups so that their cooperation can be obtained and possible attempts by any group to curtail evaluation operations or to bias or misapply the results can be averted or counteracted.
- **Cost-effectiveness.** The evaluation should be efficient and produce valuable information to justify expended resources.

STANDARD 3: PROPRIETY

Propriety standards ensure that the evaluation is ethical (i.e., conducted with regard for the rights and interests of those involved and affected). Eight propriety standards address such items as developing protocols and other agreements for guiding the evaluation; protecting the welfare of human subjects; weighing and disclosing findings in a complete and balanced fashion; and addressing any conflicts of interest in an open and fair manner. The following propriety standards ensure that an evaluation will be conducted legally, ethically, and with regard for the welfare of those involved in the evaluation as well as those affected by its results:

- **Service orientation.** The evaluation should be designed to assist organizations in addressing and serving effectively the needs of the participants.
- **Formal agreements.** All principal parties involved in an evaluation should agree in writing to their obligations (i.e., what is to be done, how, by whom, and when) so that each must adhere to the conditions of the agreement or renegotiate it.
- **Rights of human subjects.** The evaluation should be designed and conducted in a manner that respects and protects the rights and welfare of human subjects.
- **Human interactions.** Evaluators should interact respectfully with other persons associated with an evaluation, so that participants are not threatened or harmed.
- **Complete and fair assessment.** The evaluation should be complete and fair in its examination and recording of strengths and weaknesses of the program so that strengths can be enhanced and problem areas addressed.

- **Disclosure of findings.** The principal parties to an evaluation should ensure that the full evaluation findings with pertinent limitations are made accessible to the persons affected by the evaluation and any others with expressed legal rights to receive the results.
- **Conflict of interest.** Conflict of interest should be handled openly and honestly so that the evaluation processes and results are not compromised.
- **Fiscal responsibility.** The evaluator's allocation and expenditure of resources should be prudent, ethically responsible, and follow sound accounting procedures.

STANDARD 4: ACCURACY

Accuracy standards ensure that the evaluation produces findings that are considered correct. Twelve accuracy standards include such items as describing the program and its context; articulating in detail the purpose and methods of the evaluation; employing systematic procedures to gather valid and reliable information; applying appropriate qualitative or quantitative methods during analysis and synthesis; and producing impartial reports containing conclusions that are justified. The following accuracy standards ensure that an evaluation will convey technically adequate information regarding the determining features of merit of the program:

- **Program documentation.** The program being evaluated should be documented clearly and accurately.
- **Context analysis.** The context in which the program exists should be examined in enough detail to identify probable influences on the program.
- **Described purposes and procedures.** The purposes and procedures of the evaluation should be monitored and described in enough detail to identify and assess them.
- **Defensible information sources.** Sources of information used in a program evaluation should be described in enough detail to assess the adequacy of the information.
- **Valid information.** Information-gathering procedures should be developed and implemented to ensure a valid interpretation for the intended use.
- **Reliable information.** Information-gathering procedures should be developed and implemented to ensure sufficiently reliable information for the intended use.
- **Systematic information.** Information collected, processed, and reported in an evaluation should be systematically reviewed and any errors corrected.
- **Analysis of quantitative information.** Quantitative information should be analyzed appropriately and systematically so that evaluation questions are answered effectively.
- **Analysis of qualitative information.** Qualitative information should be analyzed appropriately and systematically to answer evaluation questions effectively.
- **Justified conclusions.** Conclusions reached should be explicitly justified for partners' assessment.

- **Impartial reporting.** Reporting procedures should guard against the distortion caused by personal feelings and biases of any party involved in the evaluation to reflect the findings fairly.
- **Meta-evaluation.** The evaluation should be formatively and summatively evaluated against these and other pertinent standards to guide its conduct appropriately and, on completion, to enable close examination of its strengths and weaknesses by partners.

Source: Joint Committee on Standards for Educational Evaluation. Program evaluation standards: how to assess evaluations of educational programs. 2nd ed. Thousand Oaks, CA: Sage Publications, 1994.

APPENDIX B - ADDITIONAL RESOURCES

Selected Web-based Resources on Program Evaluation

Centers for Disease Control and Prevention: **www.cdc.gov/eval/**

Community Tool Box, University of Kansas: **ctb.ku.edu/**

RAND Corporation – Getting to Outcomes:

www.rand.org/pubs/tools/TL259/introduction.html

University of Wisconsin Cooperative Extension: Evaluation Resources:

www.uwex.edu/ces/pdande/

W.K. Kellogg Foundation:
www.wkkf.org/resource-directory/resource/2017/11/wk-kellogg-foundation-step-by-step-guide-to-evaluation

Selected Publications on Program Evaluation

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APPENDIX GLOSSARY

Accountability: The responsibility of program managers and staff to provide evidence to partners and funding agencies that a program is effective and in conformance with its coverage, service, legal, and fiscal requirements.

Accuracy: The extent to which an evaluation is truthful or valid in what it says about a program, project, or material.

Activities: The actual events or actions that take place as a part of the program using inputs, such as funds, technical assistance and other types of resources to produce specific outputs.

Baseline Data: The initial information collected about the condition or performance of subjects prior to the implementation of an intervention, against which progress can be compared at strategic points during and at completion of the program.

Bias: A point of view that inhibits objectivity.

Coding: To translate a given set of data or items into descriptive or analytic categories to be used for data labeling and retrieval.

Comparison group: A group not exposed to a program or treatment. Also referred to as a control group.

Comprehensiveness: Full breadth and depth of coverage on the evaluation issues of interest.

Continuous Quality Improvement (CQI): An ongoing process that evaluates how a program works and ways to improve its processes.

Control group: In quasi-experimental designs, a group of subjects who receive all influences except the program in exactly the same fashion as the treatment group (the latter called, in some circumstances, the experimental or program group). Also referred to as a non-program group.

Data Material: Gathered during the course of an evaluation which serves as the basis for information, discussion, and inference.

Data collection method: The way facts about a program and its outcomes are amassed. Data collection methods often used in program evaluations include literature search, file review, natural observations, surveys, expert opinion, and case studies.

Descriptive statistical analysis: Numbers and tabulations used to summarize and present quantitative information concisely.

Dissemination: The communication of the actions–by written, oral, and/or audio-visual reporting–of evaluators to foster knowledge of the evaluation findings among all right-to-know audiences.

Evaluation design: The logical model or conceptual framework used to arrive at conclusions about outcomes.

Evaluation plan: A written document describing the overall approach or design that will be used to guide an evaluation. It includes what will be done, how it will be done, who will do it, when it will be done, why the evaluation is being conducted, and how the findings will likely be used.

Executive summary: A nontechnical summary statement designed to provide a quick overview of the full-length report on which it is based.

Focus group: A group of people selected for their relevance to an evaluation that is engaged by a trained facilitator in a series of discussions designed for sharing insights, ideas, and observations on a topic of concern.

Indicator: A specific, observable, and measurable characteristic or change that shows the progress a program is making toward achieving a specified outcome.

Inputs: Resources that go into a program in order to perform the activities successfully.

Interviews: Guided conversations between a skilled interviewer and an interviewee that seek to maximize opportunities for the expression of a respondent's feelings and ideas through the use of open-ended questions and a loosely structured interview guide.

Instrument: Device that assists evaluators in collecting data in an organized fashion, such as a standardized survey or interview protocol; a data collection device.

Key informant: Person with background, knowledge, or special skills relevant to topics examined by the evaluation; sometimes an informal leader or spokesperson in the population of focus.

Logic model: A systematic and visual way to present the perceived relationships among the resources you have to operate the program, the activities you plan to do, and the changes or results you hope to achieve.

Mixed-method evaluation: An evaluation design that includes the use of both quantitative and qualitative methods for data collection and data analysis.

Natural observation: A data collection method that involves on-site visits to locations where a program is operating. It directly assesses the setting of a program, its activities, and individuals who participate in the activities.

Objective: A specific, measurable description of an intended outcome.

Objectivity: The expectation that data collection, analysis and interpretation will adhere to standards that eliminate or minimize bias; objectivity insures that outcome or evaluation results are free from the influence of personal preferences or loyalties.

Outcome evaluation: The systematic collection of information to assess the impact of a program, present conclusions about the merit or worth of a program, and make recommendations about future program direction or improvement.

Outcomes: Changes in attitudes, values, behaviors or conditions between baseline measurement and subsequent points of measurement. Changes can be immediate, intermediate or long-term; the results/effects expected by implementing the program's strategies.

Outputs: The direct products of program activities; immediate measures of what the program did.

Partners: People or organizations who have a direct or indirect interest in the development intervention or its evaluation and/or what will be done with results of the evaluation.

Population: All the persons in a particular group.

Pre/post tests: Standardized methods used to assess change in subjects' knowledge and capacity to apply this knowledge to new situations. The tests are administered prior to implementation of the program and after completion of the program's activities. Determines performance prior to and after the delivery of an activity or strategy.

Primary data: Data collected by an evaluation team specifically for the evaluation study.

Process evaluation: The systematic collection of information to document and assess how a program was implemented and operates.

Program evaluation: The systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development.

Program goal: A statement of the overall mission or purpose(s) of the program.

Qualitative data: Non-numerical data rich in detail and description that are usually presented in a textual or narrative format, such as data from case studies, focus groups, interviews or document reviews. Used with open-ended questions, these data have the ability to illuminate evaluation findings derived from quantitative methods.

Quantitative data: Numeric information, focusing on things that can be counted, scored and categorized; used with close-ended questions, where participants have a limited set of possible answers to a question. Quantitative data analysis utilizes statistical methods.

Questionnaire: Highly structured series of written questions that is administered to a large number of people; questions have a limited set of possible responses.

Random assignment: A process by which the people in a sample to be tested are chosen at random from a larger population; a pool of eligible evaluation participants are selected on a random basis.

Reliability: The extent to which a measurement, when repeatedly applied to a given situation consistently produces the same results if the situation does not change between the applications. Reliability can refer to the stability of the measurement over time or to the consistency of the measurement from place to place.

Representative sample: A segment or group taken from a larger body or population that mirrors in composition the characteristics of the larger body or population.

Resources: Assets available and anticipated for operations. They include people, equipment, facilities, and other things used to plan, implement, and evaluate programs.

Sample: A segment of a larger body or population.

Sample size: The number of units to be sampled.

Secondary data: Data collected and recorded by another (usually earlier) person or organization, usually for different purposes than the current evaluation.

Standard: A principle commonly agreed upon by experts in the conduct and use of an evaluation for the measure of the value or quality of an evaluation (e.g., accuracy, feasibility, propriety, utility).

Statistical analysis: The manipulation of numerical or categorical data to predict phenomena, to draw conclusions about relationships among variables or to generalize results.

Subjectivity: Subjectivity exists when the phenomena of interest are described or interpreted in personal terms related to one's attitudes, beliefs or opinions.

Surveys: A data collection method that involves a planned effort to collect needed data from a sample (or a complete census) of the relevant population. Uses structured questions from specially designed instruments to collect data about the feelings, attitudes, knowledge, and/or behaviors of individuals. The relevant population consists of people or entities affected by the program (or of similar people or entities).

Triangulation: Using multiple data sources independent of one another to help verify the validity of evaluation findings so results are not informed (and possibly skewed) by only one or two sources. Having more sources helps ensure findings are replicable and unbiased.

Validity: The degree of accuracy of a measurement. For survey instruments, validity refers to the degree to which the instrument measures what it is intended to measure.

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Centers for Disease Control and Prevention

- CDC Program Performance and Evaluation Office
- Framework for Program Evaluation in Public Health
- Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide
- Tribal Motor Vehicle Injury Prevention Program Best Practices Guide

Community Tool Box, University of Kansas

Joint Committee on Standards for Educational Evaluation

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