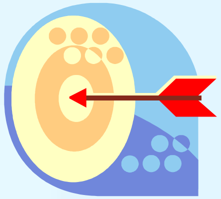
# Evaluating Public Health Programs

**Presenter's Name**

Presenter's Title

Title of Event

Date of Event



# Learning Objective

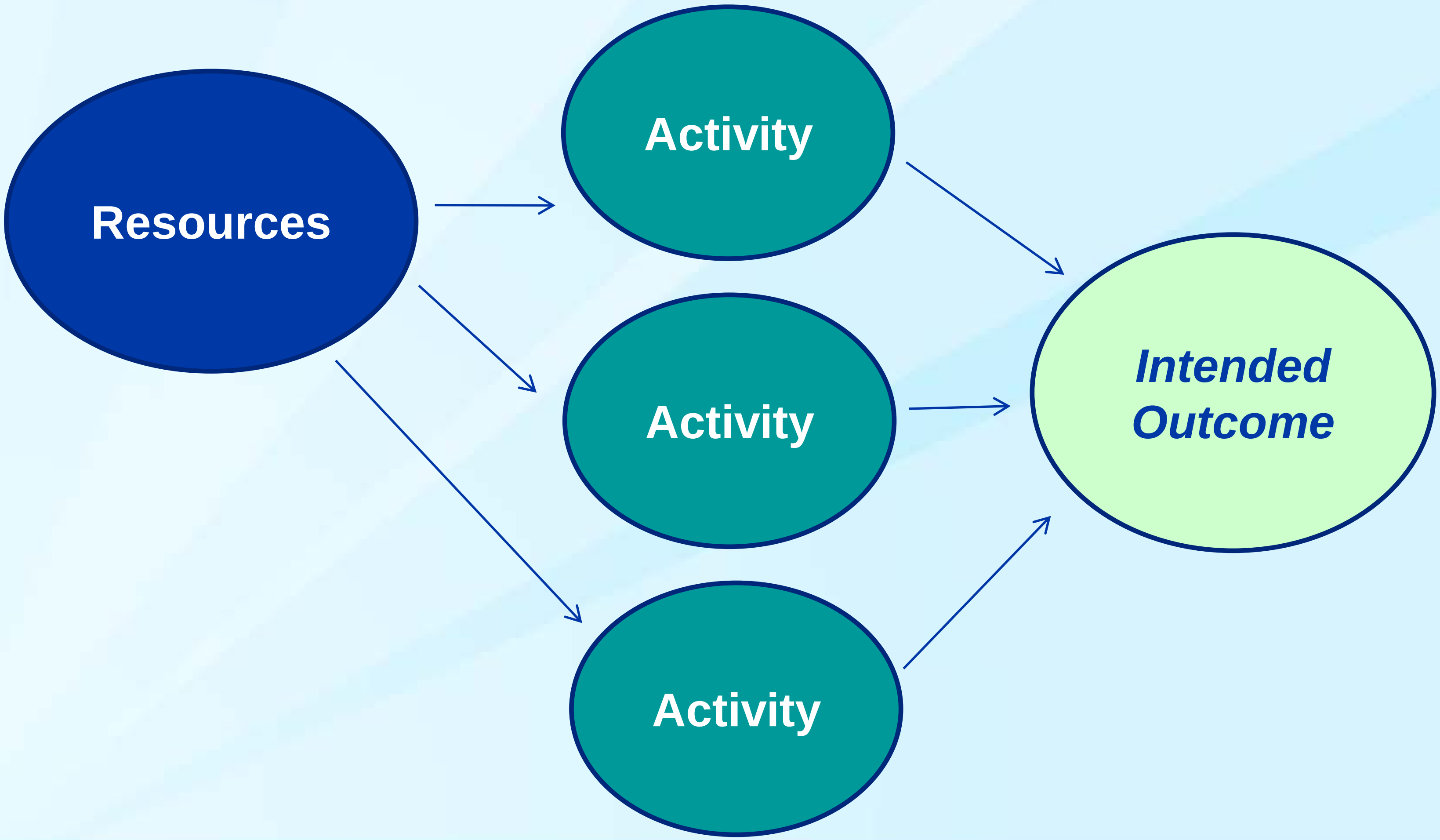
- At the end of the training, you will be able to follow CDC's framework to evaluate a public health program

# Lesson Overview

- Definition and purpose of program evaluation
- Types of program or project evaluation
- Steps in program evaluation
- CDC Evaluation Framework

# DEFINITION AND PURPOSE OF PROGRAM EVALUATION

# What is Meant by Program?



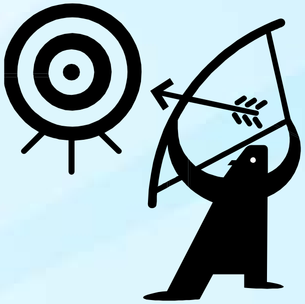
# Defining Program Evaluation

- Program evaluation is the systematic collection of information about the activities, characteristics and outcomes of the program to:
  - Make judgments about the program
  - Improve program effectiveness and/or
  - Inform decisions about future program development

# Types of Evaluation

Process

Outcome



# STEPS IN PROGRAM EVALUATION

# CDC Framework for Program Evaluation

# Standards for CDC's Evaluation Framework

# Step 1- Engage Stakeholders

# Engage Stakeholders

**Those involved in implementing the program**

- Community members
- Sponsors
- Collaborators
- Funding officials
- Managers
- Administrators

**Primary users of the evaluation**

- Community based organizations
- Groups of citizens
- Program staff and funders

**Those served or affected by the program**

- Family members
- Academic institutions
- Community residents
- Advocacy groups
- Elected and appointed officials

# Why Engage Stakeholders?

Build trust and understanding

Help implement or advocate for action

Have resources

Add credibility

# Determine Which Stakeholders Matter the Most

Review your list of stakeholders and think about these questions:

- “Who do we *need* to…”
- Enhance credibility?
- Implement program changes?
- Advocate for changes?
- Fund, authorize, or expand the program?

# Plan How to Engage Stakeholders

Step 2: Describe the program: understanding program components, implementation and intended effects

Step 3: Focus the design: identifying useful and feasible questions to ask

Step 4: Gather credible evidence: selecting credible data methods and sources

Step 5: Justify conclusion: doing the analysis or interpreting findings

Step 6: Ensure use and lessons learned: disseminating results or acting on findings

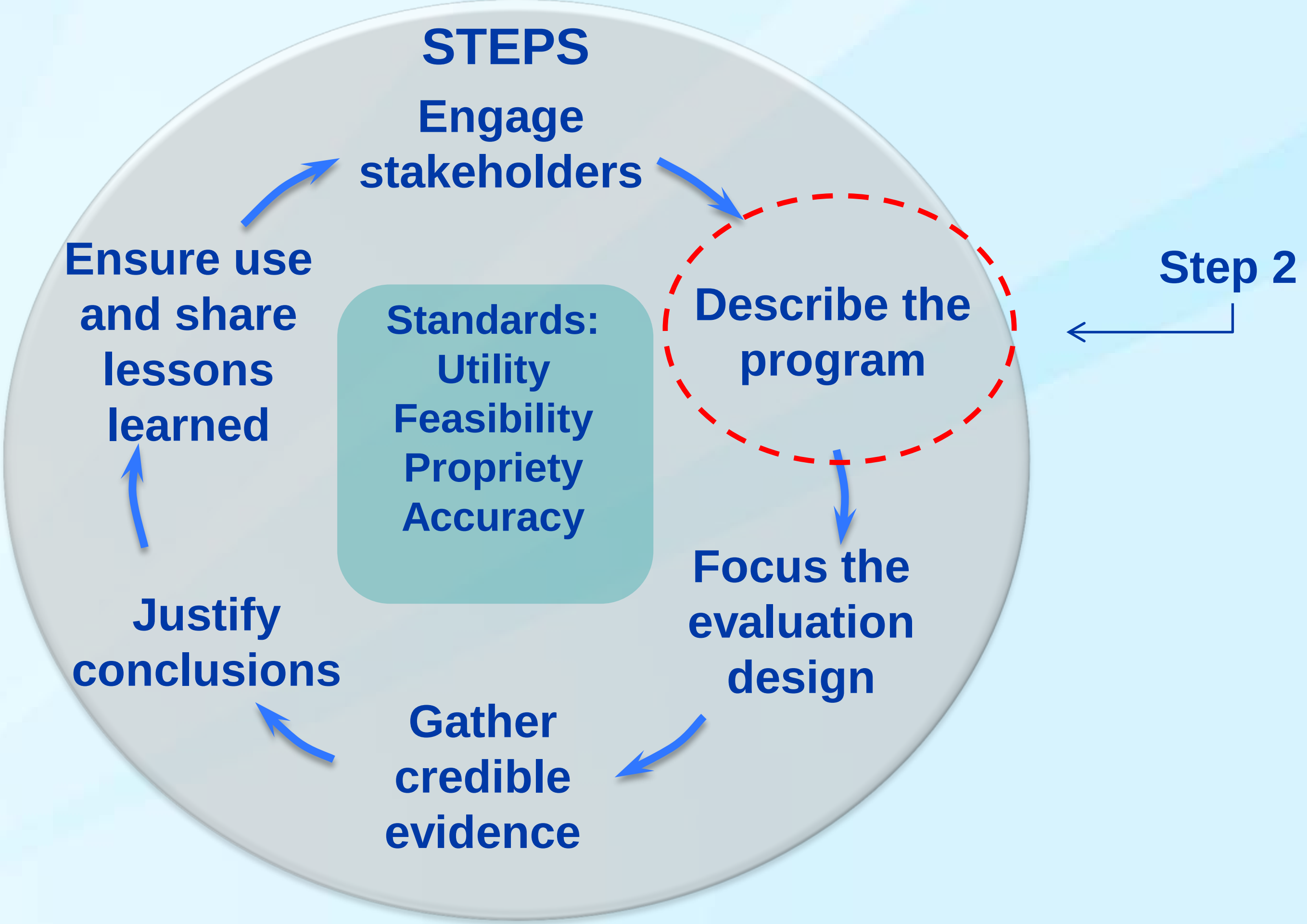
# Checklist for Engaging Stakeholders

- Identify stakeholders: those involved in operations, those affected, and those who will use the evaluation results
- Review the initial list of stakeholders to identify key stakeholders needed to improve credibility, implementation, advocacy, or funding/authorization decisions
- Create a plan for stakeholder involvement

# Exercise - Step 1: Engage Stakeholders

1. In this lesson, you will practice the six steps for effective program evaluation
2. The case study is comprised of six sections.  You will complete one section at a time in a small group, as instructed by your facilitator
3. In your small group, you will read the background information and answer only the questions for the section you have been instructed to complete
4. You will have 40 minutes to complete Step 1: Engage Stakeholders

# Step 2- Describe the Program



# Describe the Program

Develop a clear and succinct description of your program that will clarify the program's purpose, activities, and capacity to meet its intended goals

# Describe a Program

- Document the need for the program
- State expected effects
- Identify program activities
- Determine program resources
- Recognize stage of development
- Describe program context
- Prepare a logic model (optional)

# Document the Need

- Description of need for program should answer these questions:
  - What is the health problem and its consequences for the community?
  - What is the overall size of the problem and in various segments of the population?
  - What are the determinants of the health problem?
  - Who are the target groups?
  - What changes or trends are occurring?

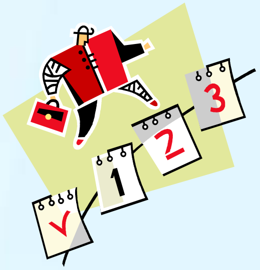
# State Expected Effects

**Program Planners**

- Goal
- Objectives

**Program Evaluators**

- Long-term outcomes
- Intermediate outcomes
- Short-term outcomes




# Outcomes

- Long-term outcome: ultimate impact, such as social or environmental change
- Intermediate outcome: medium-term results, such as behavior or policy change
- Short-term outcome: short-term efforts of program, such as knowledge, attitude, skills and awareness change

# Identify Program Activities

- Identify the activities that will produce or lead to your goal and outcomes
- What are the specific strategies and actions we need to take to meet our program expectations?

# Determine
# Program Resources

- Money
- People / Organizations
- Time
- Materials
- Equipment

# Recognize Stage of Development

- Maturity of a program
- Influences type of evaluation and outcomes to measure
- Three stages of development:
    1. Planning
    2. Implementation
    3. Maintenance / outcomes

# Describe Context

- Environment in which a program exists
- Factors that can influence program context:
  - Politics
  - Funding
  - Competing interests
  - Competing organizations
  - Social and environmental conditions
  - History (of program, agency, past collaboration)

# Prepare a Logic Model

- A logic model is one way of describing a program
- There are other acceptable approaches
- The important thing is to have a clear program description, and a logic model is one way to get there

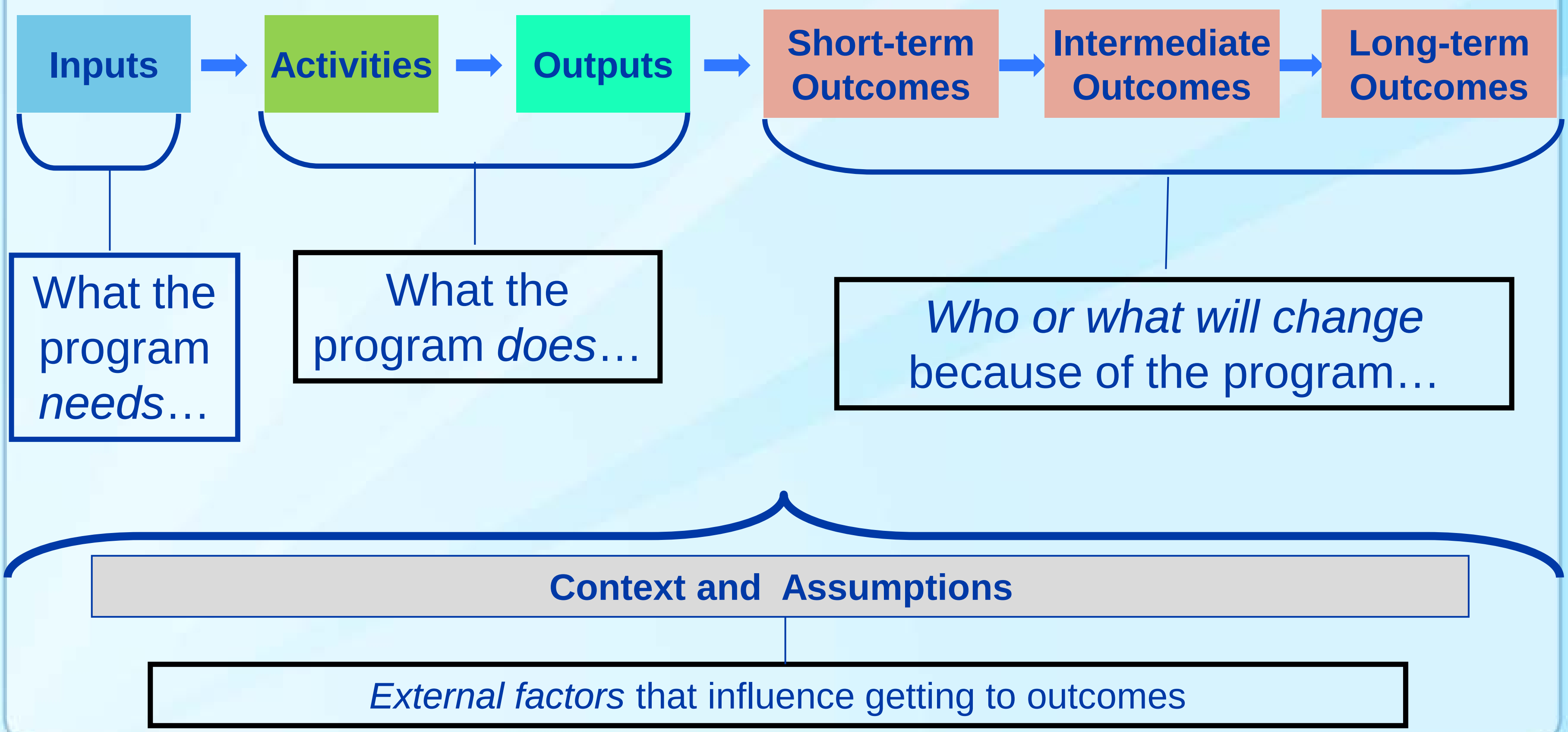
# What Is a Logic Model?

- A graphic representation of the intended relationship between a program’s activities and their intended effects
- Visually represents the program theory—why we expect the program to work—and helps identify any gaps in the program logic
- May describe a program at a high level or at an operational or ground level

# Developing a Logic Model: Steps

1. Identify and list:
   1. Intended effects or “outcomes”
   2. Activities
2. Order by time
3. Elaborate by:
   1. Adding boxes to represent inputs (resources) and outputs (results of activities)
   2. Drawing arrows to show relationships
   3. Considering assumptions, context, and stage of development
4. Review and refine

# Developing a Logic Model: Questions



# Developing a Logic Model: Step 1

1a. Identify and list intended effects or "outcomes"

**Outcomes**

Reduced exposure of young people to SHS

Reduced exposure of adult nonsmokers to SHS

**LT**

Increased percentage of workplaces with restrictions or prohibitions on smoking

Increased percentage of smoke-free homes and cars

**Intermediate**

Increased awareness of, and exposure to, messages about the hazards of SHS

Increased knowledge and improved attitudes and skills related to SHS

**ST**

# Developing a Logic Model: Identify and List Activities

1b. Identify and list activities

Activities

- Policy and regulatory action
- Counter-marketing
- Community mobilization

# Developing a Logic Model: Step 2

2. Order by time.

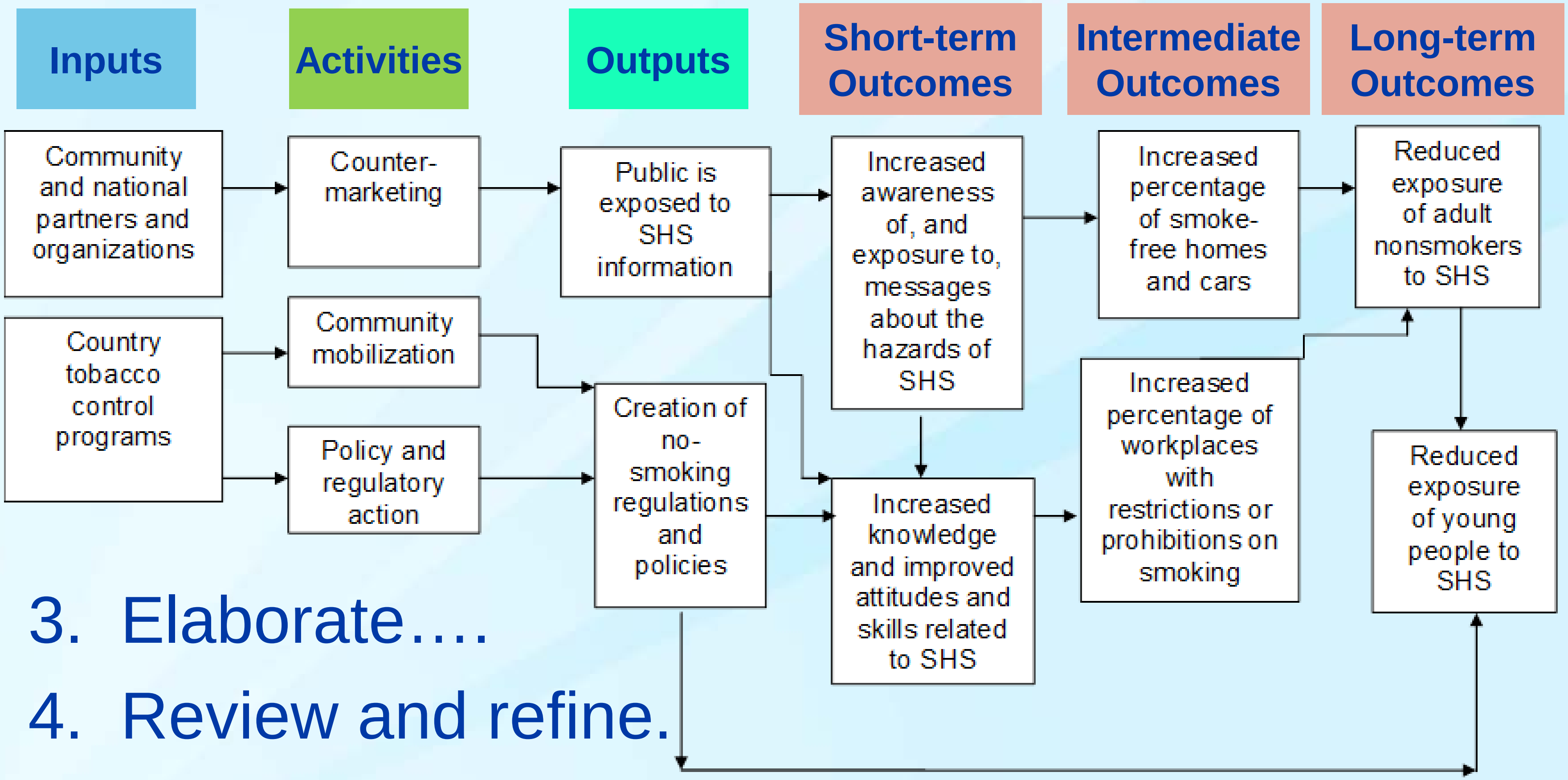
| Short-term Outcomes | Intermediate Outcomes | Long-term Outcomes |
|---|---|---|
| Increased awareness of, and exposure to, messages about the hazards of SHS | Increased % of smoke-free homes and cars | Reduced exposure of adult nonsmokers to SHS |
| Increased knowledge and improved attitudes and skills related to SHS | Increased % of workplaces with restrictions or prohibitions on smoking | Reduced exposure of young people to SHS |

# Developing a Logic Model

2. Order by time.

| Activities | Short-term Outcomes | Intermediate Outcomes | Long-term Outcomes |
|---|---|---|---|
| Counter-marketing | Increased awareness of, and exposure to, messages about the hazards of SHS | Increased % of smoke-free homes and cars | Reduced exposure of adult nonsmokers to SHS |
| Community mobilization | Increased knowledge and improved attitudes and skills related to SHS | Increased % of workplaces with restrictions or prohibitions on smoking | Reduced exposure of young people to SHS |
| Policy and regulatory action | | | |

# Developing a Logic Model: Step 3 and 4




3. Elaborate….
4. Review and refine.

# Applying Standards: Figure 1

| Standards | Question |
|---|---|
| Utility | • Is the level of detail appropriate for the intended user(s)?<br>• Is the logic model clear to those who need to use the information to make decisions related to the evaluation? |
| Feasibility | • Does the program description include at least some activities and outcomes that are in control of the program? |
| Propriety | • Does the description include sufficient detail for users to critically assess the content? |
| Accuracy | • Would diverse stakeholders consider the logic model a reasonable representation of the program? |

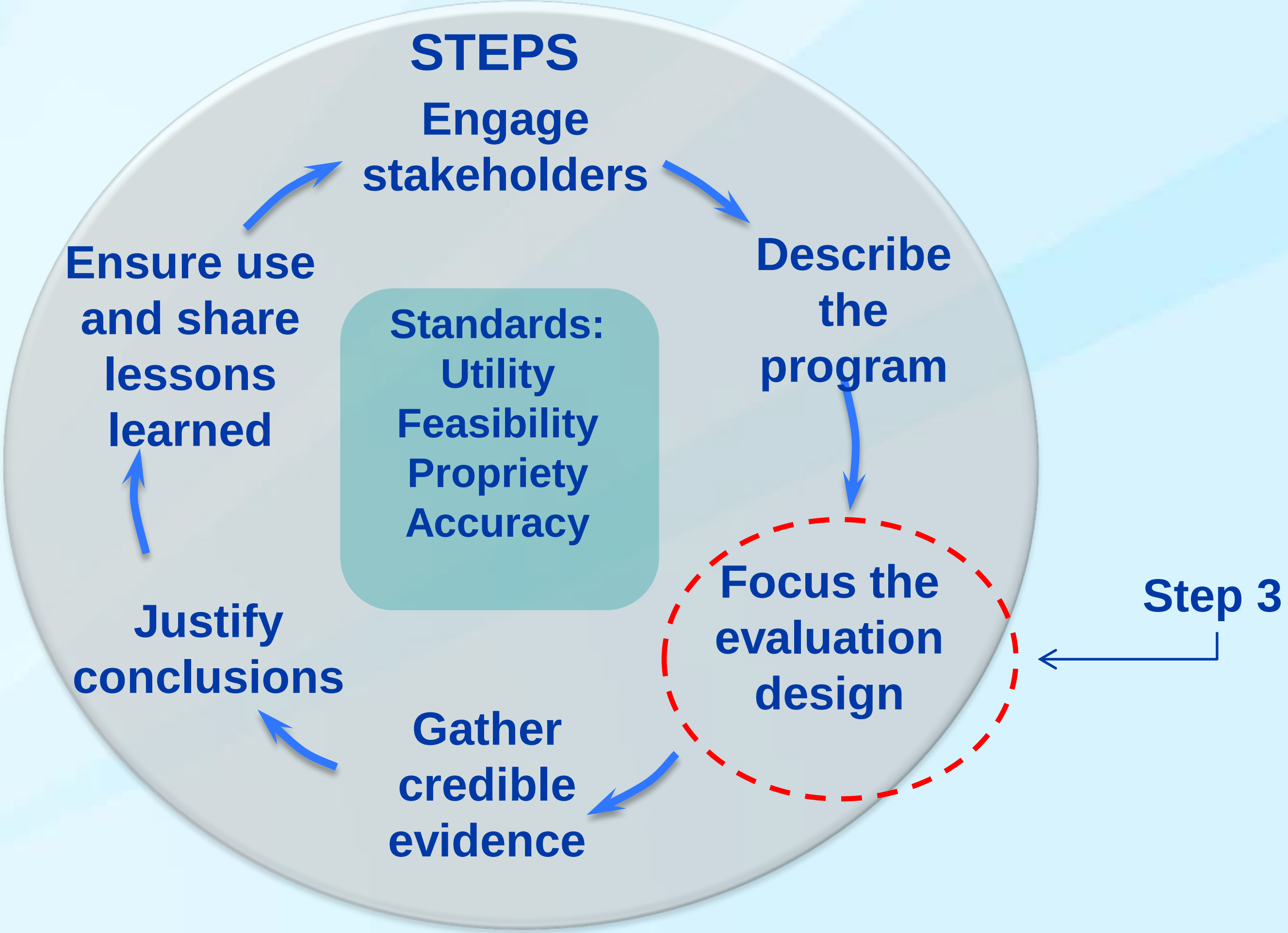
# Checklist for Describing the Program

- Document the need for the program
- State expected effects
- Identify program activities
- Determine program resources
- Recognize stage of development
- Describe program context
- Prepare a logic model (optional)

# Exercise - Step 2: Describe Program

1. In your small group, complete step 2 of the evaluation process – describe the program
2. You will have 1 hour to complete this part of the exercise
3. Be prepared to share your work with the rest of the class

# Step 3- Focus the Evaluation Design



# Focusing the Evaluation

- What is the purpose of the evaluation?
- Who is the user?
- What use will they make of the evaluation?
- What questions need to be answered?

# Determine Purpose

- Show accountability
- Examine program implementation
- Determine program improvement
- Facilitate judgment about a program’s fate

# Determine Intended Users

- Identify those who will use the evaluation results
- Information needs of intended users will determine how you focus the evaluation
- Give intended users the opportunity to provide input into the design
- Support from users will increase likelihood that they will use the evaluation results

# Determine Use

- How evaluation results will be used depends on purpose and intended users of the evaluation
- Evaluation information may be used, for example to:
    - Decide how to allocate resources
    - Apply for additional funding
    - Mobilize community support
    - Change or expand the locations of the intervention
    - To improve the content and/or delivery of the program

# Design Questions

- Design evaluation questions to meet stakeholder needs
- Your evaluation team and stakeholders should agree on the questions
- Consider the stage of your program's development

1. Planning
2. Implementation
3. Maintenance

# Focus the Evaluation: Scenario 1

After one year of implementing your program to reduce exposure to secondhand smoke, other communities/ organizations are interested in adapting your model/ program

**Purpose:**

To examine program implementation

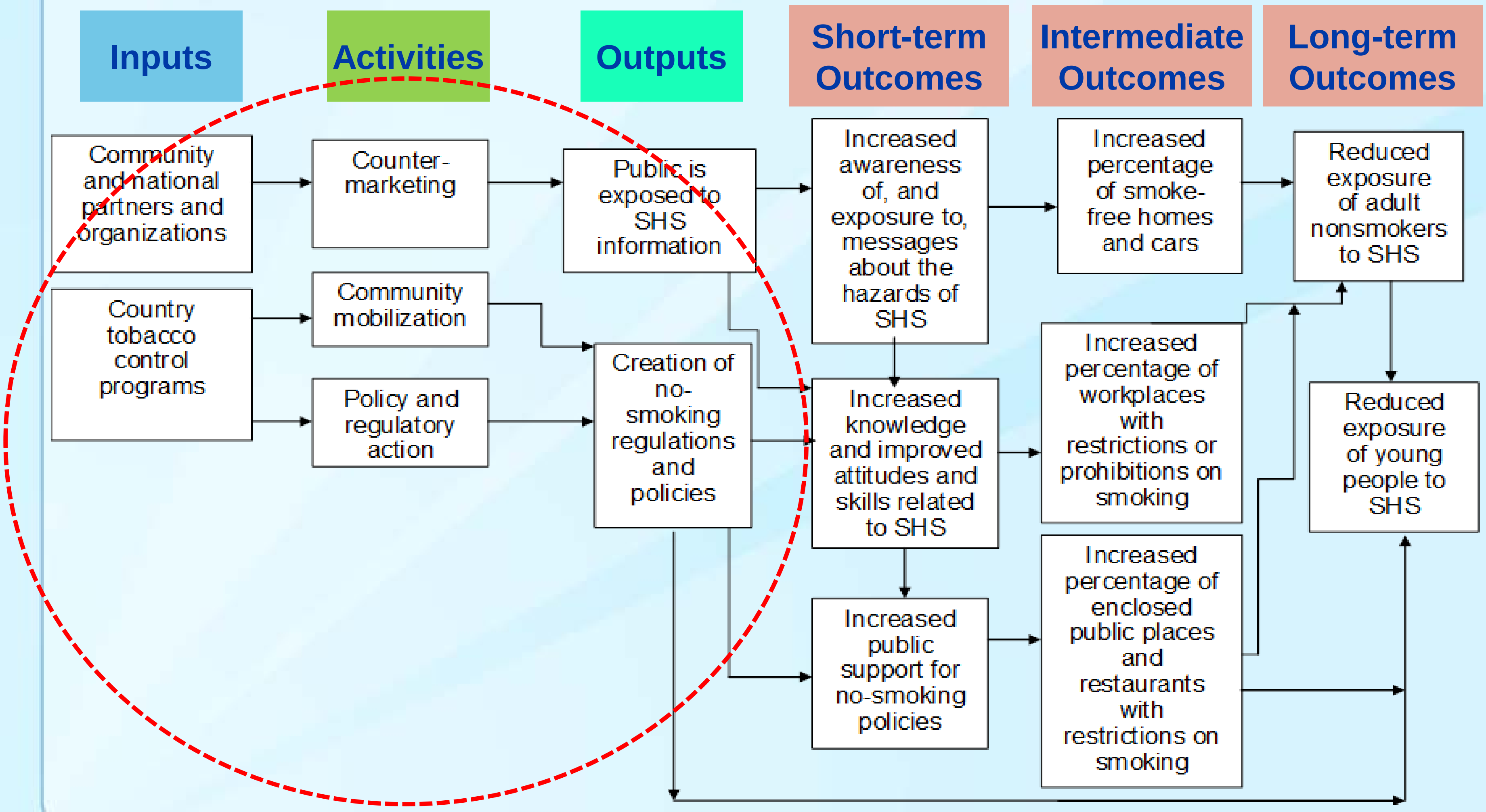
**User:**

Other communities/organizations

**Use:**

To determine whether to adopt the program

# Focus on Process Evaluation



# Focus the Evaluation:  Scenario 2

After 5 years of implementation, you need to demonstrate to legislators the importance of your efforts for a secondhand smoke program in order to justify continued funding

**Purpose**:

To facilitate judgment about a program's fate

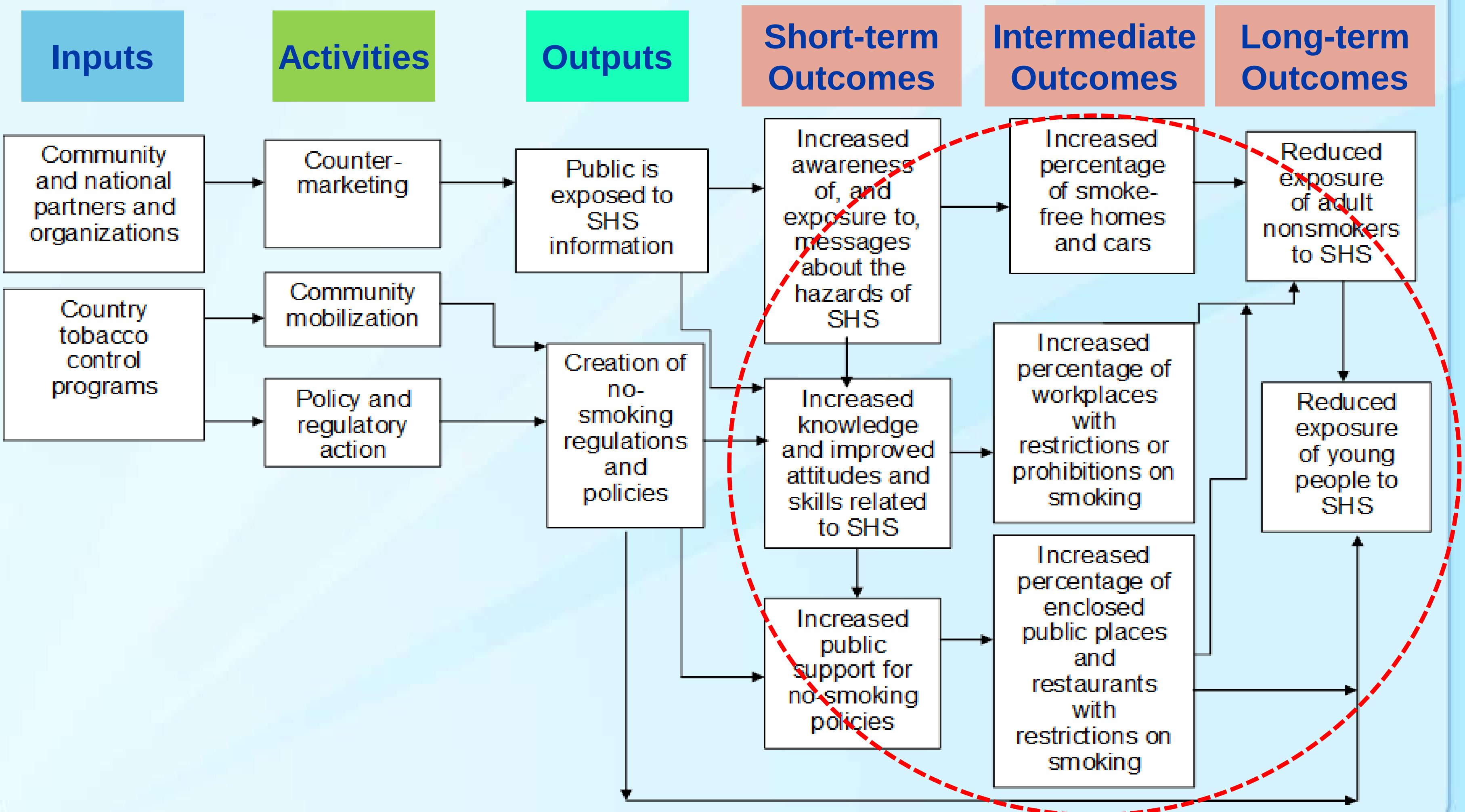
**User:**

Your organization and/or the legislators

**Use:**

To show evidence that proves sufficient effectiveness to warrant funding

# Focus on Outcome Evaluation



# Checklist for Focusing the Evaluation

- Determine the purpose of the evaluation
- Determine the intended users of the evaluation
- Determine how evaluation results will be used
- Design evaluation questions
- Consider stage of program development

# Exercise - Step 3: Focus the Evaluation Design

1. In your small group, complete step 3 of the evaluation process – focus the evaluation design
2. You will have 30 minutes to complete this part of the exercise
3. Be prepared to share your work with the rest of the class

# Step 4- Gather Credible Evidence

# Gather Credible Evidence

- Information must be perceived as trustworthy and relevant by the evaluation's primary users
- When stakeholders find evaluation data to be credible, they are more likely to accept the findings and to act on the recommendations

# How to Gather Credible Evidence

- Identify indicators to answer each evaluation question
- Indicators should be:
  - Specific
  - Observable
  - Measurable
  - Relevant
  - Identify where or how you will get the data

# Example 1- Indicators

| Evaluation Question | Indicators |
| --- | --- |
| Was the public exposed to second hand smoke information? | • The number of news stories on secondhand smoke in major newspapers<br>• The number of advertisements on billboards, radio and television |

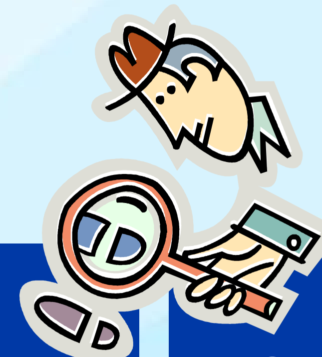
# Example 2- Indicators

| Evaluation Question | Indicators |
|---|---|
| Is there an increase in the number of workplaces with restrictions or prohibition on smoking? | • The percentage of workplaces with polices that prohibit or restrict smoking<br>• The percentage of adults employed at work sites with formal policies that prohibit smoking |

# Example 3- Indicators

| Evaluation Question | Indicators |
| --- | --- |
| Have there been changes in tobacco-related attitudes and beliefs? | • The percentage of adults who believe breathing secondhand smoke is bad for them<br>• The percentage of adults who believe smoking around children is harmful |

# Key Data Collection Sources/Methods



**People**

**Review Documents**

**Observations**

**Secondary Data Analysis**

# Choosing Data Collection Methods

Function of context:

- Time
- Cost
- Ethics

Function of content to be measured:

- Sensitivity of the issue
- Validity
- Reliability

# Example 1-Data Collection Sources/Methods

| Question | Indicator | Data Source / Method |
|---|---|---|
| Was the public exposed to second-hand smoke information? | • The number of news stories on secondhand smoke in major newspapers<br>• The number of advertisements on billboards, radio and television | Analysis of media materials |

# Example 2-Data Collection Sources/Methods

| Question | Indicator | Data Source / Method |
|---|---|---|
| Is there an increase in the number of workplaces with restrictions or prohibition on smoking? | • The percentage of workplaces with polices that prohibit or restrict smoking<br>• The percentage of adults employed at work sites with formal policies that prohibit smoking | Behavioral Risk Factor Surveillance System; State or local policy tracking |
| Have there been changes in tobacco-related attitudes and beliefs? | • The percentage of adults who believe breathing secondhand smoke is bad for them<br>• The percentage of adults who believe smoking around children is harmful | Global Adult Tobacco Survey |

# Applying Standards: Figure 2

| Standards | Question |
|---|---|
| Utility | • Have existing data sources been considered prior to new data collection?<br>• Will specific methods or data sources enhance credibility of the data with stakeholders? |
| Feasibility | • Can proposed data and analysis be implemented within the time line and budget? |
| Propriety | • Do issues of safety or confidentiality exist that must be addressed? |
| Accuracy | • Does data collection address how good the findings need to be? |

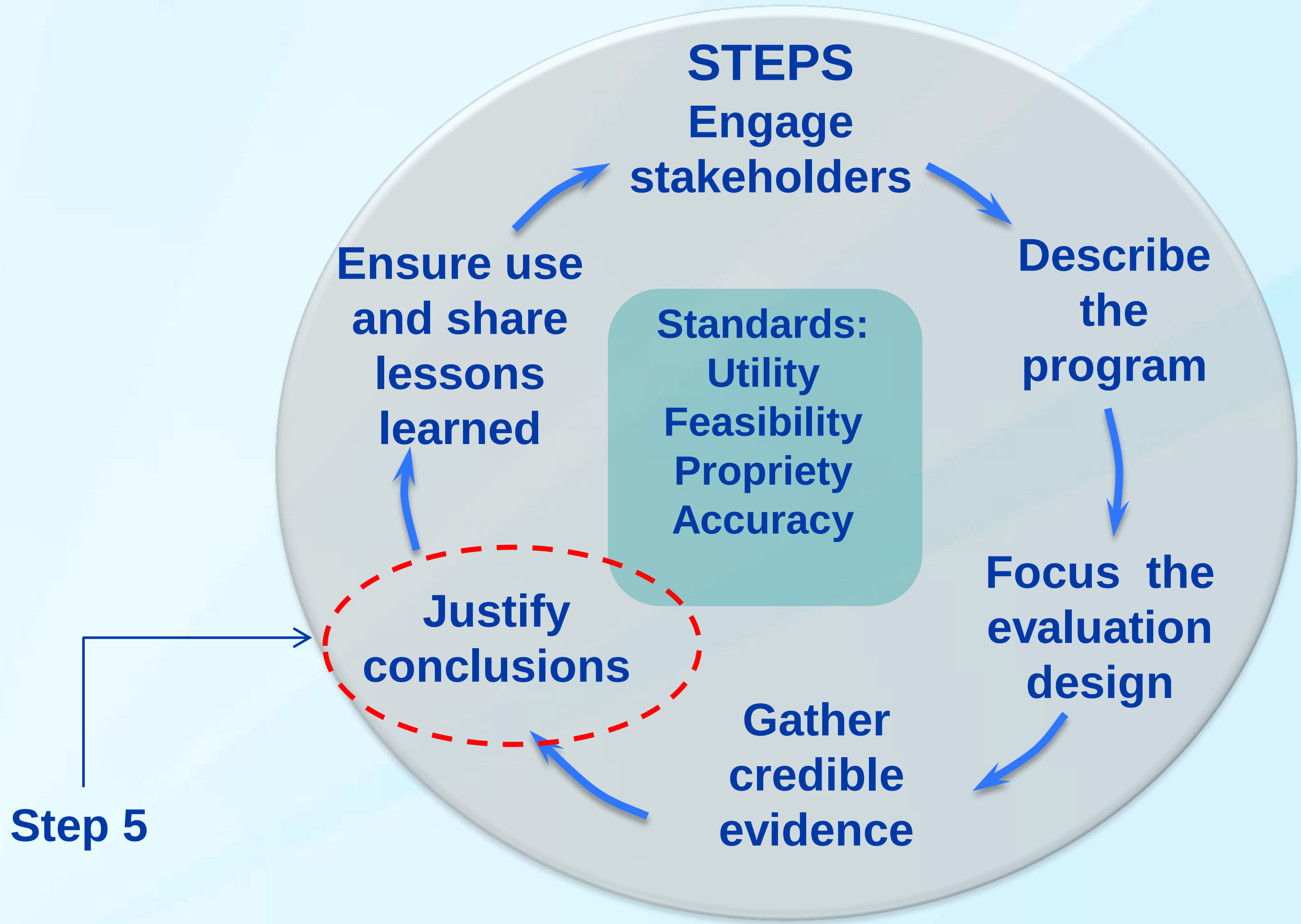
# Checklist for Gathering Credible Evidence

- Identify specific indicators to answer each evaluation question
- Identify where or how you will get the data.
- Choose data collection methods by considering:
  - Time
  - Cost
  - Ethics
  - Sensitivity of the issue
  - Validity
  - Reliability

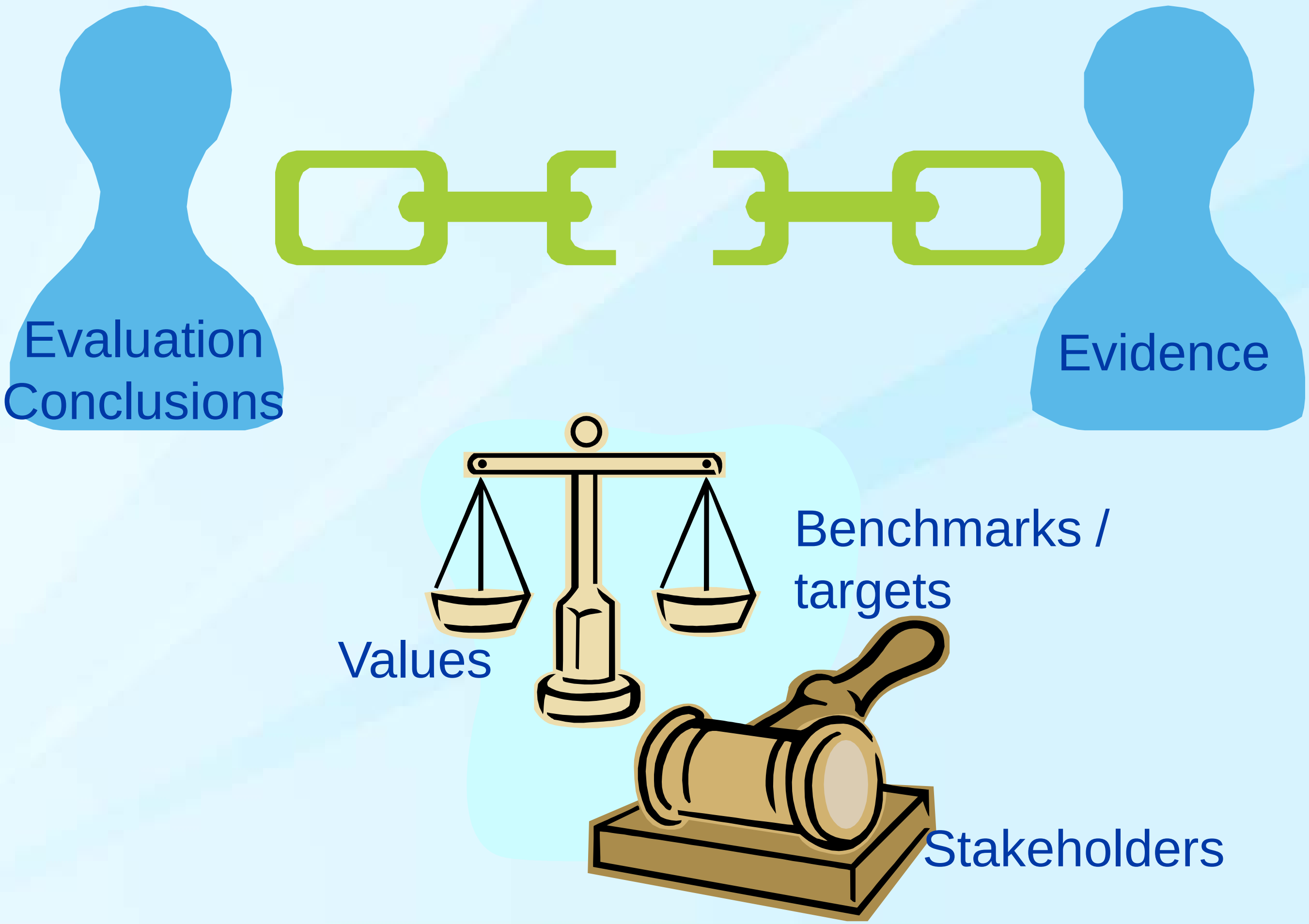
# Exercise - Step 4: Gather Credible Evidence

1. In your small group, complete step 4 of the evaluation process – gather credible evidence
2. You will use information from the previous steps in the evaluation
3. You will have 20 minutes to complete this part of the exercise
4. Be prepared to share your work with the rest of the class

# Step 5- Justify Conclusions



# Justify Conclusions



# How to Justify Conclusions

- Determine benchmarks/ targets
- Analyze data
- Interpret findings
- Make judgments
- Make recommendations

# Determine Benchmarks / Targets

- Determine which stakeholder values provide the basis for forming judgments
- Articulate and negotiate the values that will be used to consider a program "successful", "adequate", or "unsuccessful"
- Possible standards that might be used in determining these benchmarks:
    - Needs of participants
    - Program goals and objectives
    - Community values, expectations, and norms
    - Performance by similar programs
    - Performance by a comparison group

# Analyze Data

- Enter data into database and check for errors
- Tabulate data
- Stratify data by demographic variables of interest
- Make comparisons
- Present data in a clear and understandable format

# Interpret Findings

- Consider program goals when interpreting results
- Determine what the analysis says about your program
  - Are the results similar to what you expected? If not, why do you think they may be different?
  - Are there alternative explanations for your results?
  - How do the results compare with those of similar programs?
- Consider limitations of the evaluation:
  - Possible biases
  - Validity of results
  - Reliability of results

# Make Judgments

- Judgments:
  - Statements about a program's merit, worth or significance
- Compare findings and interpretations against one or more selected program standards
- Stakeholders may reach different or conflicting judgments

# Make Recommendations

- Actions to consider as a result of an evaluation
- Identify your audience
- Involve your stakeholders to ensure recommendations will be relevant and useful
- The purpose of your evaluation will shape how you frame your recommendations

# Making Meaningful Recommendations: Example

Audience: legislators

Purpose of evaluation: to facilitate judgment about a program's fate

Results: (from Global Adult Tobacco Survey) 80% of adults believe breathing secondhand smoke is bad for them; 90% of adults believe smoking around children is harmful.

Recommendation: continue funding the program

# Applying Standards: Figure 3

| Standards | Example Questions |
|---|---|
| Utility | • Have you carefully described the perspectives, procedures, and rationale used to interpret the findings?<br>• Have stakeholders considered different approaches for interpreting the findings? |
| Feasibility | • Is the approach to analysis and interpretation appropriate to the level of expertise and resources?<br>• Are the recommendations realistic for the program to implement? |
| Propriety | • Are the conclusions and recommendations reflective and respectful of key stakeholders, including those served by the program? |
| Accuracy | • Can the conclusions explicitly be justified?<br>• Are the conclusions understandable to stakeholders? |

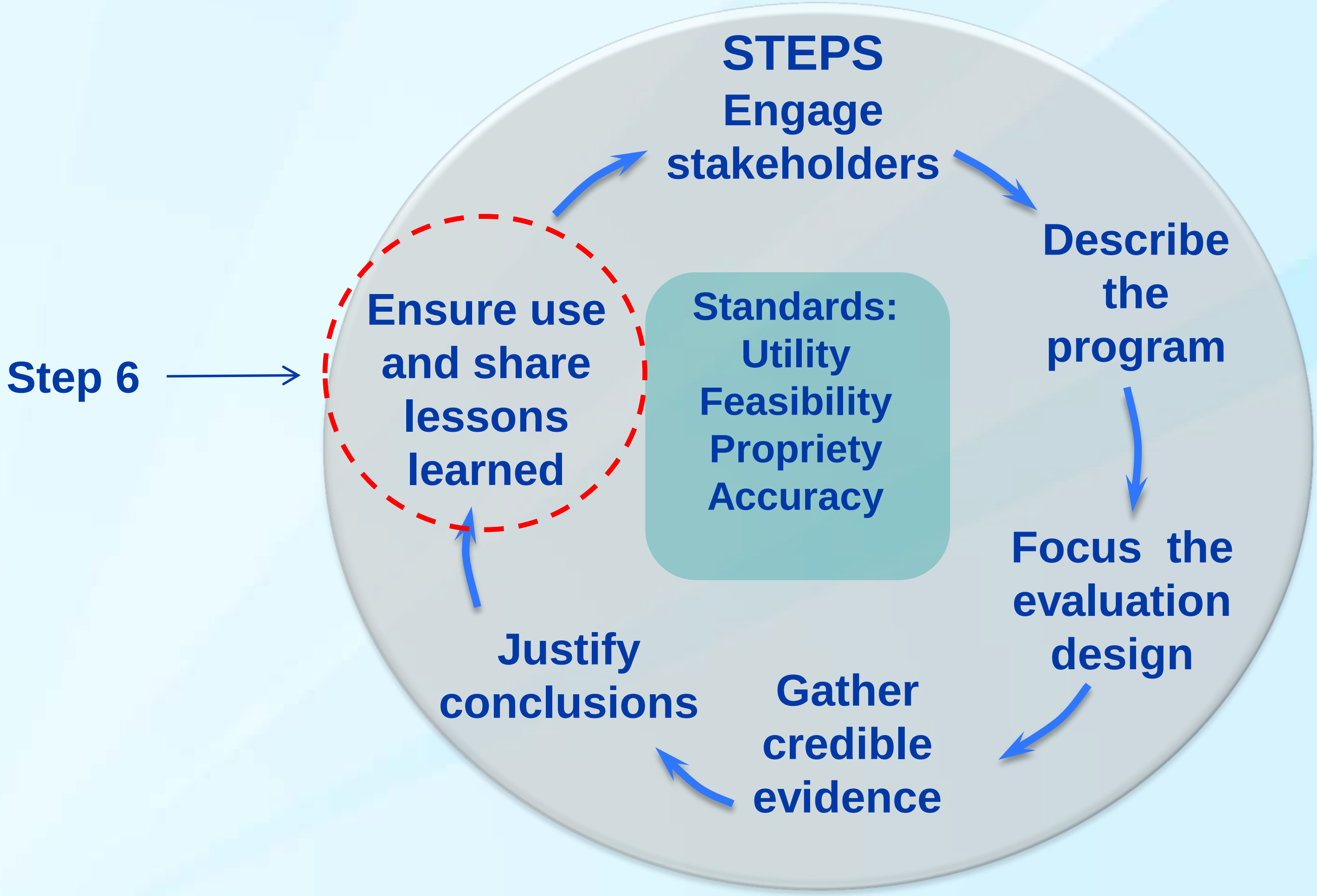
# Checklist for Justifying Conclusions

- Determine benchmarks/ targets
- Analyze data
- Interpret findings
- Make judgments
- Make recommendations

# Exercise- Step 5: Justify Conclusions

1. In your small group, complete step 5 of the evaluation process – justify conclusions
2. You will have 30 minutes to complete this part of the exercise
3. Be prepared to share your work with the rest of the class

# Step 6- Ensure Use and Share Lessons Learned



# When to Consider Use?

| Relevant |
| --- |
| Step 1 – Engage stakeholders<br>Step 2 – Describe the program<br>Step 3 – Focus the evaluation design |

| Accurate |
| --- |
| Step 4- Gather credible evidence |

# Ensure Use and Share Lessons Learned

Design

Prepare

Provide Feedback

Follow Up

Disseminate

# Why an Evaluation Communication Plan?

- Helps plan for communications throughout an evaluation
- Increases likelihood that information will meet users’ needs
- Increases likelihood of evaluation use
- Informs the evaluation budget

# Elements of a Communication Plan

- Identify the intended audience
- Tailor format and style of the communication
- Specify reporting frequency and timing
- Attend to deadlines

# Sample Communication Plan

| Stakeholder Audience | What to Communicate | Method of Communication | Frequency |
|---|---|---|---|
| XX | 1. Progress report on evaluation activities | XX | XX |
| XX | 2. Interim findings | XX | XX |
| XX | 3. Final findings | XX | XX |
| XX | 4. Follow-up activities | XX | XX |

From: Torres, Preskill & Piontek, 1996

# Informal Communication Formats

- Short communications: memos, faxes, email
- Personal discussions
- Working sessions

# Formal Communication Formats

- Verbal presentations
- Videotape presentations
- Conferences
- Public meetings
- Written reports
- Executive summaries
- Chart essays
- Poster sessions

# Choosing Communication Format

- Accessibility
- Reading ability
- Familiarity with the program and/or the evaluation
- Role in decision making
- Familiarity with research and evaluation methods
- Experience using evaluation findings

# Combine More Interactive and Less Interactive Formats

# Applying Standards: Figure 4

| Standards | Question |
|---|---|
| Utility | • Has the evaluation been planned, conducted, and reported in a manner that encourages follow-through by stakeholders? |
| Feasibility | • Are the findings communicated in formats appropriate given the available resources for the evaluation and the audiences? |
| Propriety | • Have the evaluation findings (including limitations) been made accessible to the appropriate stakeholders? |
| Accuracy | • Do evaluation reports impartially and fairly reflect evaluation findings? |

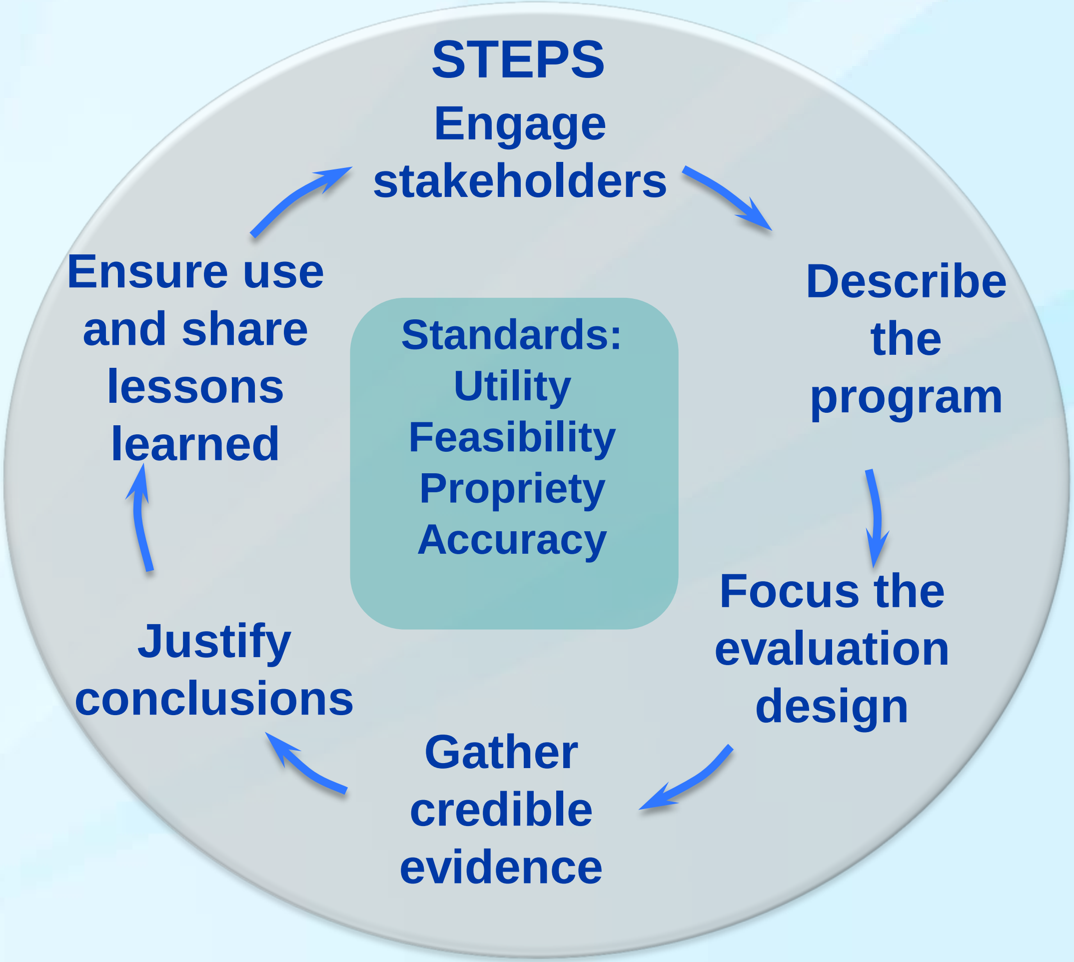
# Checklist for Ensuring Use and Sharing Lessons Learned

- Design evaluation from the start to achieve its intended use by the intended users
- Prepare users ahead of time to use evaluation findings
- Provide continuous feedback to ensure that primary intended users and other stakeholders have opportunities to comment on evaluation decisions
- Follow-up with stakeholders to facilitate transfer of evaluation findings into strategic decision-making
- Disseminate evaluation procedures or lessons learned to relevant audiences in a timely, unbiased, and consistent manner

# Exercise - Step 6: Ensure Use of Evaluation

1. In your small group, complete step 6 of the evaluation process – ensure use of evaluation
2. You will use information from the previous steps in the evaluation
3. You will have 20 minutes to complete this part of the exercise
4. Be prepared to share your work with the rest of the class

# CDC Framework for Program Evaluation- Overview




**Centers for Disease Control and Prevention (CDC). Evaluating Public Health Programs. Atlanta, Georgia: Centers for Disease Control and Prevention (CDC); 2013.**

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