

PARTICIPANT WORKBOOK



Program Planning

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Introduction

OVERVIEW OF TRAINING

The goal of this training is to provide you with the skills and knowledge needed to plan a public health program. You will learn how to describe a health problem, plan a program to address the problem, and achieve desired objectives.

In this module, a “program” refers to a series of activities supported by a group of resources intended to achieve specific outcomes among particular individuals, groups, and communities, such as a community intervention, field project, or anything with an intended outcome.

LEARNING OBJECTIVES

At the end of the training, you will be able to:

- Define a health problem
- Plan a program to address the health problem

ESTIMATED COMPLETION TIME

The workbook should take approximately 10 hours and 30 minutes to complete.

PREREQUISITES

Before participating in this training module, it is recommended you complete the following training modules:

- Introduction to NCD Epidemiology
- NCD Prevention and Control
- Prioritizing Public Health Problems
- Selecting Interventions

TARGET AUDIENCE

The workbook is designed for FELTP residents who specialize in NCDs; however, participants can also complete the module if they are working in infectious disease.

ABOUT THIS WORKBOOK

The format of the **Participant Workbook** consists of 4 sections. You will read information about how to plan a public health program and practice the skills learned using a case study.

ICON GLOSSARY

The following icons are used in this guide:

Image Type	Image Meaning
 Activity Icon	An activity you should complete.
 Stop Icon	A point at which you should consult a mentor or wait for the facilitator for further locally relevant information about the topic.
 Resource Icon	A resource or website that may provide further information on a given topic.

ACKNOWLEDGEMENTS

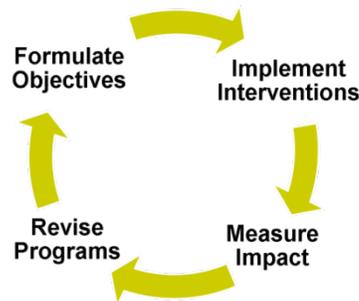
This module is based on Planning by the Sustainable Management Development Program (SMDP) at the Centers for Disease Control and Prevention (CDC). Thanks to Indu Ahluwalia CDC – Office of Noncommunicable Diseases, Injuries and Environmental Health – National Center for Chronic Disease Prevention and Health Promotion and Tom Schmid CDC - Office of Noncommunicable Diseases, Injuries and Environmental Health – Division of Nutrition, Physical Activity and Obesity for reviewing the module.

Section 1: Overview of Program Planning

PUBLIC HEALTH MANAGEMENT CYCLE

The public health management cycle is a continuous process as shown in the graphic below:

Figure 1: Public Health Management Cycle



In this module you will learn all the steps leading up to **formulate objectives** and how to develop an **implementation plan**. Specifically, you will learn how to describe a health problem and develop a program to address the problem.

Describing a health problem involves:

- Assessing population health data
- Assessing community needs, and
- Analyzing data and needs by identifying (and ranking) risk factors and subgroups

Planning a program involves:

- Creating a program goal
- Developing long-term objectives
- Identifying and ranking contributing factors
- Developing an intervention
- Developing medium- and short-term objectives
- Developing an implementation plan
- Planning for evaluation

You will benefit from learning a systematic process to program planning because it will help you to respond to health problems, set priorities, and establish goals in an organized manner. It will also assist you in using all available resources to improve the public health problem you are trying to address.

Section 3: Describing the Problem

INTRODUCTION

In this section, you will learn how to describe a health problem, which involves:

- Assessing **population health data**
- Assessing **community needs**
- Analyzing data and needs by identifying and (ranking) **risk factors** and **subgroups**

Assessing population health data and community needs is an iterative process. Information you collect from community members may cause you to go back and assess additional population data.

ASSESS POPULATION HEALTH DATA

To better understand a health problem, you should review population health data to identify mortality rates, incidence, and prevalence. By reviewing surveillance data, survey results, health records, and other data sources, you can also obtain information about the distribution of the health problem in terms of person, place, and time, as well as the risk factors.

You should recall that a risk factor is “an aspect of personal behavior or lifestyle, an environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease or other health-related event or condition”.¹ During your research into the causes of the health problem, you will identify both modifiable and nonmodifiable risk factors, also known as direct or indirect causes. A modifiable risk factor **can** be reduced or controlled by intervention, thereby reducing the probability of disease. Examples include high cholesterol and alcohol use. A nonmodifiable risk factor **cannot** be reduced or controlled by intervention, for example, age and family history.

Remember that different data sources can yield different results. For example, the prevalence of diabetes might be determined using health surveys, health records, etc., and each data source might show a different prevalence. One solution to this is creating a workgroup (e.g., prevalence workgroup), that would determine the rate to use when reporting the prevalence to stakeholders.

¹ Public Health Practice Program Office. 1992. *Principles of Epidemiology* (2nd ed.). Atlanta: CDC.

Table 1: Example of Population Health Data***Example of Population Health Data for Country X***

In this module, the examples presented will focus on heart disease as a health problem in country X. The following is an example of possible information you would collect through surveillance data, surveys, and other data sources.

- Mortality: Studies in north region showed that 40% of deaths are related to heart disease
- Prevalence: 35% of adults > 18 years old have heart disease
- Risk Factors: high cholesterol, high blood pressure, tobacco use, secondhand smoke, poor diet, family history
- 35% of adults reported no leisure time or physical activity
- 79% of adults reported consuming less than five servings of fruits and vegetables daily
- 2008 Youth Global Tobacco Survey: 75% of students in north region responded that they have at least one parent who smoked in the house; 90% of students reported being exposed to smoke outside the home
- 2008 Adult Global Tobacco Survey: 23% of adults believe exposure to tobacco smoke causes heart disease and lung cancer; 20% of adults believe exposure to tobacco smoke causes lung illnesses in children; 47% of nonsmokers, mainly women, are exposed to secondhand smoke

ASSESS COMMUNITY NEEDS

In addition to reviewing health data, you may learn about the health problem and health status of the community by meeting with or surveying community members, leaders, and stakeholders. Through focus groups, surveys, and/or interviews, you may ask them their opinion about:

- The importance of the health problem
- Who is affected by the health problem
- Why the health problem exists

Table 2: Example of Community Needs***Example of Community Needs in Country X***

- Many community leaders do not think heart disease is the main health problem; they believe smoking is a growing epidemic in the region, especially among youth.
- Community leaders believed smoking is prevalent because of the following factors:

Example of Community Needs in Country X

- Low cost of cigarettes
- Easy access to purchasing cigarettes
- Lack of knowledge about the hazards of smoking, and in particular, secondhand smoke
- Social acceptance of smoking
- Desirability of smoking
- Community leaders view secondhand smoke as an problem that they can do something about.
- Some community leaders and stakeholders view poor diet as directly related to heart disease but believe they have less control or influence over it.

ANALYZE DATA AND NEEDS

After you assess the population health data and community needs, you will get a clearer picture of the factors that may be affecting the health problem as well as the segments of the population who are at the highest risk.

Sometimes your community's health problem might relate to a particular disease such as cardiovascular disease or diabetes. Your organization will not have the resources to address all risk factors for a particular disease (e.g., poor diet, physical inactivity, tobacco use, and alcohol use). Identifying and ranking these risk factors will help plan interventions using available resources.

If your community's health problem pertains to one risk factor such as physical inactivity, then you do not have to rank the risk factors. You can focus your planning efforts on that particular risk factor. The same is true for subgroups or segments of the population. There are times when a health problem affects different groups in the community, such as males over 40 or women living in rural areas. Again, because resources are limited, you may need to focus your program planning efforts on one subgroup.

The following sections teach you a method for ranking risk factors and subgroups.

Identify and Rank Risk Factors

You may use the following tool to help you identify the risk factor where you can likely have the greatest impact.

Figure 2: Matrix Tool to Identify and Risk Factors

	More Important	Less Important
More Modifiable		
Less Modifiable		

This tool uses two variables: **degree of importance** and **degree of modifiability**. For importance, determine how strongly the risk factor influences the health problem. For modifiability, determine how likely a significant change can be made in the risk factor. Determine if it is more or less modifiable than the other risk factors you identified.

The risk factor that is the most important and most modifiable (appearing in the upper left quadrant) will be the one on which you focus your program planning efforts.

Table 3: Example of Ranking Risk Factors

<i>Example of Ranking Risk Factors for Country X</i>
In this example it was determined that secondhand smoke was a risk factor that was most important and most modifiable. Program planning efforts will therefore focus on this risk factor.

Figure 3: Ranking Risk Factors in Country X

	More Important	Less Important
More Modifiable	<i>Secondhand smoke</i>	
Less Modifiable	<i>Tobacco use Diet Physical activity High cholesterol High blood pressure</i>	<i>Family history</i>

Identify and Rank Subgroups

If the health problem affects more than one segment of the population or subgroup, and resources are limited, you may need to rank the subgroups to determine on which segment of the population to focus the intervention.

To rank subgroups, you can use the following variables or any other criteria that will help you make your decision:

- **Effect:** which subgroup will your program have the greatest impact on in terms of measurable results or outcomes, such as lowering prevalence or mortality
- **Influence:** which subgroup can your program have the most control over in terms of changing behaviors, increasing knowledge, etc.
- **Accessibility:** which subgroup will be most available to your program or easily reached

Table 4: Example of Ranking Subgroups

<i>Example of Ranking Subgroups for Country X</i>
If program planning efforts focused on secondhand smoke, it was believed that the program could have more effect and influence on adults compared to youth. They also assumed that both adults and youth would be equally reached by the program.

Table 5: Ranking the Youth and Adult Subgroups for Country X

Criteria	Subgroup: Youth	Subgroup: Adults
<i>Effect</i>		✓
<i>Influence</i>		✓
<i>Accessibility</i>	✓	✓

WRITE A HEALTH PROBLEM STATEMENT

After you assess health data and community needs, and identify (and possibly rank) risk factors and subgroups, you are ready to develop a health problem statement. This will help you focus the program you are planning by narrowing down the following:

- **What** is the health problem (e.g., exposure to secondhand smoke, heart disease)
- **Who** is being affected (e.g., women, students, adults)
- **How much** of the population is affected (e.g., 40% of adults)
- **When** did the problem occur or when was it identified (e.g., in 2009)
- **Where** is this problem located (e.g., in the country/region/district)

Table 6: Example of a Problem Statement

<i>Example of a Problem Statement for Country X</i>
<p>In this example, since secondhand smoke is the most important and modifiable risk factor, the community has decided to try to influence adults who smoke in the home. 75% of students have at least one parent who smokes in the home. The community believes that this problem of adults smoking in the home and exposing children to secondhand smoke can be the focus of program planning efforts.</p> <p>Problem statement: In 2008, 75% of students in the north region reported having at least one parent who smoked in the home.</p>



Stop

Let the facilitator or mentor know you are ready for the group discussion.

Table 7: Case Study – Part 1

Estimated Time	Case Study Instructions
<p>1 hour</p>  <p>Pencil</p>	<p>Take out the case study and complete Part 1.</p>

KEY POINTS

1. Describing a health problem involves three main components:
 - a) Assessing **population health data**
 - b) Assessing **community needs**
 - c) Analyzing data and needs by identifying and (ranking) **risk factors** and **subgroups**
2. Reviewing population health data to identify mortality rates, incidence and prevalence, as well as risk factors, helps you to better understand the health problem.
3. You can also learn about the health problem by assessing community needs through surveys, focus groups, and interviews of community members and stakeholders.
4. Because resources are limited, it is not feasible to address all the risk factors of a disease and all segments of the population who are at risk.
5. Ranking risk factors using criteria such as **degree of importance** and **degree of modifiability** helps you identify the risk factor where your program can likely have the greatest impact.
6. Ranking subgroups by **effect, influence, and accessibility** helps you determine on which segment of the population to focus the intervention.
7. A good problem statement answers the **what, who, how much, when, and where**.

Section 4: Planning a Program

INTRODUCTION

After writing a health problem statement, you can begin to plan your program. Planning involves decisions that provide you with a road map for addressing the health problem.

In this section, you will learn how to plan a program, which involves the following main tasks:

- Creating a program goal
- Developing long-term objectives
- Identifying and ranking contributing factors
- Developing an intervention
- Developing medium- and short-term objectives
- Developing an implementation plan
- Planning for evaluation

Where are you going?

How will you get there?

How will you know when you get there?

CREATE A PROGRAM GOAL

A program goal is a generalized statement of the result or achievement to which the program is directed. There are two main steps to writing a good program goal:

1. Specify an expected program effect in reducing the health problem,
2. Identify the subgroup or segment of the population to be affected.

A goal does not have to include a date, but having a date can provide you with a long range target on which to focus your efforts.

A good program goal conforms to the following characteristics or criteria:

- **Declarative statement:** a complete sentence that describes the intended result or outcome of a program.
- **Concise:** conveys the complete idea of your goal simply and briefly, omitting unnecessary detail.
- **Easily understood:** uses clear language that most people outside your organization will likely understand.
- **Positive terms:** frames the intended outcome or result in positive terms or in terms of a decrease in health risk behaviors or adverse health outcomes.

Table 8: Example of a Program Goal

Example of a Program Goal for Country X
Reduce exposure to secondhand tobacco smoke in children.

When developing program goals, you may use the following checklist to ensure they meet the recommended criteria:

Table 9: Criteria Checklist for Developing Program Goals

Criteria to Assess Goals	Yes	No
• Does it specify an expected program effect in reducing a health problem?		
• Is a subgroup or segment of the population identified?		
• Is it a declarative statement?		
• Is it concise?		
• Is it easily understood?		
• Is it stated in positive terms or in terms of a decrease in health risk behaviors or adverse health outcomes?		

Take a look at the following **goal**. Does it meet the above mentioned criteria?

To decrease risk of chronic diseases among youth within our area schools by increasing the number of schools and school districts that implement effective policies, environmental change, and educational approaches to address physical activity, nutrition, and tobacco (PANT) by increasing the number of schools and districts that implement coordinated school health programs.

This goal is not *concise* or *easily understood*. A better written goal is as follows:

Increase implementation of effective physical activity, nutrition, and tobacco-use prevention (PANT) efforts in schools and school districts within a coordinated school health framework.

DEVELOP LONG-TERM OBJECTIVES

Long-term objectives are incremental steps needed to accomplish the program goal. (Note: They are often called Program Objectives.) These objectives should explain the result you expect your program to have in the long-term. Well written long-term objectives:

- Include the **subgroup** or target of the program
- State the **expected result** or change of the program
- Specify the **degree of change** in measurable terms
- Include when the change will happen (**time frame**)

An objective that monitors progress of a program should contain five elements. To help remember these elements, we use the acronym **SMART**.

Table 11: Description of the SMART Objectives

SMART	Description
Specific:	<ul style="list-style-type: none"> • Provides the “who” (target population and persons doing the activity) and the “what” (action/activity). • Uses only one action verb since objectives with more than one verb imply that more than one activity or behavior is being measured.
Measurable:	<ul style="list-style-type: none"> • Specifies “how much” change is expected. • Note: It is impossible to determine whether objectives have been met unless they can be measured.
Achievable:	<ul style="list-style-type: none"> • Can be attainable within a given time frame and with available program resources.
Relevant:	<ul style="list-style-type: none"> • Accurately addresses the scope of the problem and programmatic steps that can be implemented within a specific time frame.
Time-bound:	<ul style="list-style-type: none"> • Specifies a time frame indicating when the objective will be measured or a time by which the objective will be met.

You will refer to your assessment of the health data and community needs to help you develop at least one long-term objective that addresses the program goal.

Table 12: Example of Long-Term Objective

<i>Example of a Long-Term Objective for the Secondhand Smoke Program Goal</i>
Goal: Reduce exposure to secondhand tobacco smoke in children.
Long-Term Objective: By the end of 2020, reduce by 25% the prevalence

Example of a Long-Term Objective for the Secondhand Smoke Program Goal

of adult smokers in the home.

When developing long-term objectives, you may use the following checklist to ensure they meet the recommended criteria.

Table 13: Criteria to Assess Long-Term Objectives

Criteria to Assess Long-Term Objectives	Yes	No
1. Is the objective SMART? <ul style="list-style-type: none"> • Specific: Who? (target population and persons doing the activity) and What? (action/activity) • Measurable: How much change is expected • Achievable: Can be realistically accomplished given current resources and constraints • Relevant: Addresses the scope of the health program and proposes reasonable programmatic steps • Time-bound: Provides a timeline indicating when 		
2. Does it relate to a single result?		
3. Is it clearly written?		

Look at the following **long-term objective**. Does it meet the above criteria?

In the next year, decrease by 85% the risk of chronic diseases among youth within our area schools and increase by 90% the number of schools and school districts that implement effective policies, environmental changes, and educational approaches.

Although this long-term objective has a timeframe, it is *not* achievable because of the high percentages (85% decrease of chronic diseases and 90% increase in number of schools) and the short period of time (next year). It also contains two results (decreasing chronic disease and increasing number of schools and districts implementing the program), making it difficult to measure.

A better written long-term objective is as follows:

Within 7 years, 75% of the schools in District A and B will implement effective physical activity, nutrition, and tobacco-use prevention (PANT) efforts.

Estimated Time	Practice Exercise #3				
<p>15 minutes</p>  <p>Activity</p>	<p>Background You will work individually, in pairs, or in a small group to determine whether the long-term objectives written below meet the recommended criteria.</p> <p>Instructions</p> <ol style="list-style-type: none"> 1. Read the two long-term objectives listed below. 2. List the criteria that have <i>not</i> been met next to each long-term objective. <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Goal</th> <th style="width: 50%; text-align: center;">Criteria Not Met</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top; border-right: 1px solid black; padding-right: 10px;"> <ol style="list-style-type: none"> a. Within 5 years, reduce the number of obese and overweight children b. All teens will wear motorcycle helmets. </td> <td style="vertical-align: top; padding-left: 10px;"> </td> </tr> </tbody> </table> <ol style="list-style-type: none"> 3. Rewrite each long-term objective so that it meets the recommended criteria. <ol style="list-style-type: none"> a. b. 4. Check your work with the answers in the Appendix. 	Goal	Criteria Not Met	<ol style="list-style-type: none"> a. Within 5 years, reduce the number of obese and overweight children b. All teens will wear motorcycle helmets. 	
Goal	Criteria Not Met				
<ol style="list-style-type: none"> a. Within 5 years, reduce the number of obese and overweight children b. All teens will wear motorcycle helmets. 					

Table 14: Case Study – Part 2, Questions 1 and 2

Estimated Time	Case Study Instructions
30 minutes  Activity	Take out the case study and complete Part 2, questions 1 and 2.

IDENTIFY AND RANK CONTRIBUTING FACTORS

Earlier you learned how identifying the direct and indirect causes of a health problem can help you to understand and articulate the problem. To better focus your program planning efforts, you will also want to review and research how factors in a person's **environment** might cause him or her to behave in ways that increase or decrease the chance to develop a certain disease or condition. These factors are known as **contributing factors** -- factors that contribute to the prevalence of the health condition.

For example, if the dangers of smoking are unknown, a person may be more likely to smoke. Or, if cigarettes are easily available through vending machines at restaurants and other buildings, a person might be more likely to smoke.

Identifying contributing factors requires a thorough understanding of the research and scientific evidence. You may also obtain this information during your assessment of the community.

Table 15: Example of Contributing Factors

<i>Example of Contributing Factors for the Secondhand Smoke Problem</i>
<ul style="list-style-type: none"> • Lack of knowledge about the dangers of smoking and secondhand smoke • Easy access to purchase cigarettes • Low cost of cigarettes • Social acceptance of smoking • Desirability of smoking

After understanding the contributing factors to a health problem, you can rank them by importance and modifiability to determine which ones to intervene against. To determine importance, consider how strongly the contributing factor influences the health problem. For example, do the low cost of cigarettes strongly influence the secondhand smoke problem? How does that compare with the social acceptance of tobacco smoking?

To determine modifiability, consider how likely it is for significant changes to be made in the contributing factor. Is it more or less modifiable than the other contributing factors you are ranking? For example, how easy is it to increase the cost of cigarettes? How easy is it to improve knowledge about the dangers of smoking?

Focus your intervention on the contributing factor that is most modifiable and most important.

Figure 4: Example of Ranking Contributing Factors for the Secondhand Smoke Program

	More Important	Less Important
More Modifiable	<i>Lack of knowledge</i>	<i>Access</i>
Less Modifiable	<i>Cost</i>	<i>Social Norms</i>

Table 16: Case Study - Part 2

Estimated Time	Case Study Instructions
<p>30 minutes</p>  <p>Activity</p>	<p>Take out the case study and complete Part 2, question 3.</p>

DEVELOP AN INTERVENTION

Now that you know where you are headed (program goal), the incremental steps you need to take to get there (long-term objectives), and the obstacles that might get in the way (contributing factors), you are ready to develop an intervention. This involves four main tasks:

- Determining a health strategy
- Researching existing evidence-based interventions
- Comparing interventions
- Selecting an intervention to adapt or create

Determine a Health Strategy

A health strategy is a general plan of action for affecting a health problem. There are three main types of strategies:

1. Behavioral/educational
2. Environmental
3. Policy

The health strategy you identify must relate to the program goal, the long-term objective(s), and the contributing factors that are most important and modifiable. To have a significant impact on the contributing factors of a health problem, you will often need to identify a combination of health strategies at the educational, behavioral, environmental, and/or policy levels.

Behavioral/Educational Strategy

This type of strategy is designed to change the awareness, knowledge, attitudes, and/or behaviors of community members. It may be targeted towards the community as a whole or individuals. An example of a behavioral or educational strategy based on the priority contributing factor of knowledge is *an advertising campaign about the dangers of secondhand smoke*.

Environmental Strategy

Use this type of strategy if you want to alter the physical or social environment. If the priority contributing factor was access, an example of an environmental strategy could be *decrease access by removing cigarette vending machines from public buildings*.

Policy

A policy strategy focuses on influencing change in the broader regulations, ordinances, rule enforcement, and decisions on resource distribution that may affect the contributing factors to the health problem.² If the priority contributing factor was cost, an example of a policy strategy could be *pass tobacco excise tax*. If the priority contributing factor was access, an example of a policy strategy could be *prohibiting smoking in government buildings*.

Research Existing Evidence-Based Interventions

After selecting a health strategy or strategies to use, you should research existing evidence-based interventions to gain the support your program will

² U.S. Department of Health and Human Services. (2003). *Planned Approach to Community Health: Guide for the Local Coordinator*.

need. Evidence-based interventions may also be cost effective to implement and can save time and resources during planning and implementation. By using an evidence-based intervention that successfully achieved its objectives, you will have more confidence that the intervention you develop will also be successful.

Table 17: Example of Evidence-Based Interventions

<i>Example of Evidence-Based Interventions for the Secondhand Smoke Problem</i>
<ul style="list-style-type: none"> • A 4-year marketing campaign about the dangers of secondhand smoke that reached 75% of adults • A 5-year smoking cessation program that increased the number of quit attempts by 25% in males and by 35% in women • A systematic increase in excise taxes resulted in a notable decline of smoking in youth

An excellent (and free) resource to use to research evidence-based program and policy interventions is **The Community Guide**. (See reference below.) The Community Guide contains systematic reviews of interventions so that you can determine which ones might be applicable to your situation, including the cost and likely return on investment. Although this guide is based on interventions implemented in the United States, countries can still use this resource to obtain ideas for effective interventions and then modify them according to their resources and setting.



The Community Guide:
<http://www.thecommunityguide.org>

Resource

Comparing Interventions

After you research evidence-based interventions, you will determine how well the intervention matches your program and organization's:

- Target audience (i.e., subgroup)
- Goals and objectives
- Culture
- Cost
- Setting or organizational capacity to implement it

You may choose additional criteria to which to compare interventions. You can also create a table like the one below to help with this comparison. In this table, you would list the criteria under the first column and the evidence-based interventions you have researched across the top row. Then you

would use the criteria to compare each intervention with your specific situation or environment.

Let's take a look at the table below and the criteria *target audience*. For this criterion, you would determine whether each of the evidence-based interventions target the same or similar subgroup that you want to target in your program. If similar, you would place a check mark (✓) in the appropriate box. If not similar, you would place an "x" in the appropriate box. For example, you should see checkmarks under *Marketing Campaign* and *Smoking Cessation* since these two interventions target adults, the same subgroup your program will target. The *Increase in Excise Tax* had resulted in a notable decline of smoking in *youth*; therefore, it did not necessarily target the same subgroup. In this case, you would place an "x" in the box.

Remember that this process of comparing interventions is very subjective, but it should help you narrow down your choices.

Table 18: Criteria to Compare Evidence-Based Interventions

Criteria	Marketing Campaign	Smoking Cessation	Increase in Excise Taxes
Target Audience	✓	✓	X
Program Goals/ Objectives	✓	X	X
Culture	✓	✓	✓
Cost	✓	✓	✓
Organizational Capacity	✓	✓	X

Selecting an Intervention to Adapt or Create

Because public health interventions do not uniformly apply to all groups, it may be more efficient and cost-effective to adapt an existing intervention to your organization's specific needs and situation. Or, if there is no current evidence-based intervention that fits the culture, target audience, organizational capacity, program goals, objectives, and delivery methods, you can create a new intervention. If you decide to create a new intervention, consider:

- Leadership support
- Resources (financial, personnel, facilities, partnerships)
- Feasibility
- Availability of program champion

DEVELOP MEDIUM- AND SHORT-TERM OBJECTIVES

After you select or adapt an intervention, you will create medium- and short-term objectives. These objectives will be the benchmarks of your program and should clearly describe what you expect your program to accomplish.

Medium-term objectives usually describe a behavior or policy change, typically within 3-5 years. Short-term objectives usually describe knowledge, skills, attitude, or awareness change, typically within 1-3 years.

Table 19: Example of Medium- and Short-Term Objectives

Example of Medium- and Short-Term Objectives for the Secondhand Smoke Problem

- **Program goal:** Reduce exposure to secondhand tobacco smoke in children
- **Intervention:** Marketing campaign about the dangers of secondhand smoke
- **Long-term Objective:** By the end of 2020, reduce by 25% the prevalence of adult smokers in the home.
- **Medium-term objective:** By 2015, the number of smoke-free homes will increase by 15%.
- **Short-term objective:** By 2013, increase by 25% both the awareness of and exposure to messages about the hazards of SHS.



Stop

Let the facilitator or mentor know you are ready for the facilitator-led discussion.

Table 20: Case Study – Part 4, Questions 4 and 5

Estimated Time	Case Study Instructions
<p>1 hour</p>  <p>Pencil</p>	<p>Take out the case study and complete Part 2, questions 4 and 5.</p>

DEVELOP AND IMPLEMENTATION PLAN

Now that you have your roadmap of how you will address the health problem, you will plan how the program will be implemented. In this section, you will learn three main tasks:

1. Identifying and addressing potential barriers to implementation
2. Developing a work plan to ensure you achieve the objectives
3. Developing a communication plan to ensure project members and stakeholders are kept informed

Identify and Address Potential Barriers

Identification and addressing potential barriers to implementing your program will prepare you to modify the intervention if necessary. It can also help you gain support of stakeholders who may raise similar issues.

When you are thinking about potential barriers, consider:

- Availability of resources
- Time involved in planning and implementing the program
- Political support of the program
- Economics

Once you have identified potential barriers to implementation, determine ways you can address them.

Table 21: Example of Potential Barriers

<i>Example of Potential Barriers for the Secondhand Smoke Issue</i>
<p>Limited resources to continue the marketing campaign for six months. May need to consider shortening the length of the intervention or find additional funding and support.</p>

Develop a Work Plan

A work plan is a tool you can use to achieve your objectives within the time-frame specified. You can develop a work plan in any format, for example, using a Gantt chart in MS Excel™ or MS Project™; however, the key questions a work plan answers should be the same:

- What** is the project deliverable?
- What** activities and tasks need to be completed?
- Who** will be responsible for each task?
- What resources** (i.e., money, staff) are needed to carry out each task?
- When** will each task take place, and for how long?

A project deliverable is a specific, tangible product or service that the project will deliver; for example, a marketing campaign or a training program. After you identify all the program deliverables, determine the activities and tasks needed to produce each deliverable. Record the specific tasks on the work plan and assign a person or persons responsible for completing each task. Estimate how long the task should take and record a due date. You can also fill in the date when the task is completed.

Table 22: Example of a Work Plan

Example of a Work Plan for the Secondhand Smoke Example					
<u>Work Plan</u>					
<ul style="list-style-type: none"> • Long-Term Objective: By the end of 2020, reduce by 25% the prevalence of adult smokers in the home. • Medium-Term Objective: By 2015, the number of smoke-free homes will increase by 15%. • Short-term Objective: By 2013, increase by 25% both the awareness of and exposure to messages about the hazards of SHS. • Project Manager (PM): J. Hucinda 					
Task	Person Responsible	Resources	Time Estimate	Due Date	Date Completed
<i>Design marketing message</i>	<i>A. Lee</i>		<i>2 weeks</i>	<i>12 Nov</i>	
<i>Create marketing materials</i>	<i>L. Wu</i>	<i>Poster board, laminator</i>	<i>2 weeks</i>	<i>26 Nov</i>	
<i>Select locations</i>	<i>P. Nsuga</i>		<i>1 week</i>	<i>12 Nov</i>	

Gantt Charts allow you to assess how long a project should take, to determine the resources needed, and to lay out the sequence that tasks need to be accomplished. You may divide the timeline in the Gantt Chart into days, weeks, or months depending on the time scale of your project. For example, if the project activities will not take more than 3 months, create a timeline that measures progress by weeks. For a longer intervention (one year or more), use months and quarters to track progress. When creating a Gantt chart, remember to allow for weekends and holidays!

Figure 5: Sample Gantt Chart

Tasks	Responsible Person(s)	Start Date	End Date	Schedule													
				Date													
				November													
				1	2	3	4	5	6	7	8	9	10	11	12	13	
Design marketing message	A. Jones	1-Nov	5-Nov	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Create marketing materials	A. Jones	8-Nov	11-Nov							◆	◆	◆	◆	◆			
Select locations	P. Nsuga	9-Nov	13-Nov							◆	◆	◆	◆	◆	◆	◆	
										◆	◆	◆	◆	◆	◆	◆	
										◆	◆	◆	◆	◆	◆	◆	
										◆	◆	◆	◆	◆	◆	◆	
										◆	◆	◆	◆	◆	◆	◆	

Gantt charts are useful to monitor progress of ongoing projects. You can immediately see what should have been achieved at a point in time and can therefore take timely action to bring the project back on course. This can be essential for the successful and implementation of the project.

Develop a Communications Plan

Developing and following a plan to communicate progress with project members and stakeholders will keep everyone informed and gain support of stakeholders. Your communication plan should answer these questions:

- What** needs to be communicated?
- Who** is the target of the communication?
- What is the **purpose** of the communication?
- How often** should is the communication needed?
- What is the **method or location** of communication?
- Who is **responsible** for creating or delivering the communication?
- When** should this communication take place?

Table 23: Example of a Communication Plan

Example of a Communication Plan for the Secondhand Smoke Program						
<u>Communication Plan</u>						
What needs to be communicated?	What is the target of the communication?	What is the purpose of the communication?	How often is the communication needed?	What is the method or location of communication?	Who is responsible for creating/ delivering the communication?	When should the communication take place?
<i>Program Plan</i>	<i>Stakeholders Program Staff Program Manager</i>	<i>Obtain buy-in from stakeholders; gain clarification of program goal and objectives; adjust plan if necessary</i>	<i>Once (prior to implementation)</i>	<i>Meeting</i>	<i>John</i>	<i>November</i>
<i>Program Activities</i>	<i>Key Stakeholders Program Staff Program Manager</i>	<i>Update on program activities (how we are doing)</i>	<i>Monthly</i>	<i>Email, phone call</i>	<i>Peter</i>	<i>January-June</i>

PLAN FOR EVALUATION

While you are planning and designing the program you should also be planning for evaluation. Evaluation is measuring the actual – what is really happening – and comparing it to the intended – what we want to happen.

You can learn how to use the CDC framework to evaluate a program in another module called *Evaluating Programs*. But remember that planning and evaluating should be done concurrently.

During the planning process, you will plan for evaluation by considering the following:

- Do you have the resources to do an evaluation?
- What component of the program will you evaluate?
- What do you want to know about your program? For example, do you want to learn whether all the activities were implemented as planned?
- When will you evaluate the program? For example, will you evaluate the program one year after implementation, several years after implementation?
- What type of data will you need to address the evaluation questions?
- Do you have a system or tools for collecting the data? Where, how, and when will you collect the data?
- Do you have a system or tools for organizing and interpreting the data?

Table 24: Case Study – Part 2, Questions 6 and 7

Estimated Time	Case Study Instructions
<p data-bbox="282 296 383 327">1 hour</p>  <p data-bbox="289 436 376 468">Activity</p>	<p data-bbox="509 296 1382 369">Take out the case study and complete Part 2, questions 6 and 7.</p>

Conclusion

TAKE HOME POINTS

Because the goal of a program is to address a health problem, program planning involves first defining the health problem based on population health data, community needs, risk factors, and subgroups affected. Moreover, assessing population health data and community needs is an iterative process. Therefore, while obtaining information from community members, you may collect and assess additional population data.

Part of analyzing data and community needs is identifying and ranking risk factors that may be affecting the health problem. Because your organization will probably have limited resources, it is not practical to plan a program that addresses all risk factors. This is why the ranking of risk factors is so important. You can rank risk factors by determining which one is the most important and most modifiable. Similarly, you may also need to rank subgroups to determine which segment of the population you can most likely affect or influence. To rank subgroups you may use variables such as effect, influence, and accessibility.

After assessing and analyzing health data needs, you will write a health problem statement that describe **what** is the health problem, **who** is being affected, **how much** of the population is affected, **when** did the problem occur (or when was it identified), and **where** is the problem located.

Use the health problem statement to plan the program. This involves creating a *program goal*, which states what needs to be accomplished in the long-term to address the health problem. You will then develop SMART *long-term objectives*, which describe the incremental steps needed to accomplish the program goal.

To help you better focus your program planning efforts, you will review and research contributing factors to the health problem. These are factors in a person's environment that might cause him or her to behave in ways that increase or decrease the chance to develop a certain disease or condition. You will rank the contributing factors by importance and modifiability.

All of the above mentioned tasks lead up to developing an intervention. This involves determining a *health strategy* (behavioral/educational, environmental, or policy) and researching existing evidence-based interventions. You then *compare interventions* using criteria such as culture, target audience, setting, or organizational capacity to implement it, program

goals and objectives, and delivery methods used in your organization. Based on this analysis, you will select an intervention to *adapt or create*. If you choose to create a new intervention, you should consider leadership support, resources, feasibility, and availability of a program champion. After you select an intervention, you will create *medium- and short-term objectives* that tell the project team and stakeholders what the intervention will accomplish.

Finally, you will develop an implementation plan that involves identifying and addressing potential barriers to implementation, developing a work plan to ensure you achieve the process objective, and creating a communications plan that describes how, when, and why you will communicate with project members and stakeholders.

Throughout the program planning process you will plan for evaluation. This involves, among other things, determining what you will evaluate and how you will collect the data.

KEY POINTS

1. You will plan a program by completing the following tasks:
 - Creating a program goal
 - Developing long-term objectives
 - Identifying and ranking contributing factors
 - Developing an intervention by selecting a health strategy, researching existing evidence-based interventions, comparing interventions, and selecting one to adapt or create
 - Developing medium- and short-term objectives
 - Developing an implementation plan
 - Planning for evaluation
2. When you create a program goal you will state what needs to be accomplished in the long-term to address the health problem.
3. Long-term objectives should be SMART and describe incremental steps needed to accomplish the program goal.
4. Contributing factors are factors in a person's environment that might cause him or her to behave in ways that increase or decrease the chance to develop a certain disease or condition. You will identify contributing factors to focus your program planning efforts, and then rank them by importance and modifiability.

5. A health strategy can be at the behavioral/educational, environmental, and/or policy level.
6. Once you decide on a health strategy, you will research existing evidence-based interventions and then compare them to each other using criteria such as culture, target audience, and delivery methods.
7. Develop medium- and short-term objectives to help guide/inform the project team and stakeholders what the intervention will accomplish.
8. Develop an implementation plan that involves identifying and addressing potential barriers to implementation, developing a work plan, and creating a communications plan.
9. Planning for evaluation involves determining what you will evaluate and how you will collect the data.

Resources

For more information on topics found in this workbook:

Internet Sites

- Analyzing Problems for Health Risk Factors
<http://www.uic.edu/sph/prepare/courses/ph420/resources/pt2analysis.htm>
- The Community Guide. <http://www.thecommunityguide.org>
- The Community Toolbox. <http://ctb.ku.edu/en/default.aspx>
- Force Field Analysis. http://www.mindtools.com/pages/article/newTED_06.htm.
- Healthy People.gov 2020. <http://www.healthypeople.gov/2020/default.aspx>
- Public Health Information and Data Tutorial. <http://phpartners.org/tutorial/>
- Steps in Program Evaluation. <http://www.cdc.gov/eval/steps/>
- Brief 3: Goals and Objectives Checklist and Tutorial 3: Writing Good Goals and Smart Objectives. <http://www.cdc.gov/HealthyYouth/evaluation/resources.htm>.
- *Assessment and Planning in Health Programs*. Bonni C. Hodges & Donna M. Videto. Jones and Bartlett Publishers. 2005.
- *Health Promotion Planning: An Educational and Environmental Approach*. Lawrence W. Green & Marshall W. Kreuter. Mayfield Publishing Company. 1991.
- *Health Promotion Programs: From Theory to Practice*. Carl L. Fertman & Diane D. Allensworth. Jossey Bass. 2010.
- *Planning Health Promotion Programs: An Intervention Mapping Approach*. L. Kay Bartholomew, Guy S. Parcel, Gerjo Kok, Nell H. Gottlieb. John Wiley and Sons. 2006.

Further Reading

Hodges BC, Videto DM. *Assessment and Planning in Health Programs*. Jones and Bartlett Publishers, 2005.

Green LW, Kreuter MW. *Health Promotion Planning: An Educational and Environmental Approach*. Mayfield Publishing Company, 1991.

Health Promotion Programs: From Theory to Practice. Fertman CL, Allensworth DD. Jossey Bass, 2010.

Planning Health Promotion Programs: An Intervention Mapping Approach. Bartholomew LK, Parcel GS, Kok G, Gottlieb NH. John Wiley and Sons, 2006.

Glossary of Terms

- **Adapt:** Change something to suit a different purpose or condition
- **Articulate:** To express thoughts, ideas, or feelings clearly
- **Attain:** To achieve a goal or desired state, usually with effort
- **Canter:** The pace of a horse; it is slower than a gallop but faster than a walk
- **Cessation:** A stop or permanent discontinuation
- **Component:** A part of something bigger
- **Concise:** Using as few words as possible to give the necessary information
- **Concurrent:** Happening or taking place at the same time
- **Convey:** To communicate or express something
- **Excise:** A tax on goods for a domestic market
- **Feasible:** Possible or plausible; capable of being achieved or put into effect
- **Impact:** The effect that something or somebody has
- **Initiative:** A plan or strategy designed to deal with a particular problem
- **Iterative:** Repetitive; repeating again and again
- **Notable:** Particularly important, significant, or distinguishable
- **Obtain:** To get possession of something by making an effort
- **Omit:** To leave somebody or something out
- **Segment:** A smaller section of a group
- **Vigorous:** Energetic; using great energy
- **Yield:** To produce something as the result of work, activity, or calculation

Appendix

Potential Answers to Practice Exercise #2

Potential Answers to Practice Exercise #2 for Goal A

Goal	Criteria Not Met
a. Reduce obesity	<i>It does not specify an expected program effect in reducing a health problem . Also it does not include segment of population</i>

Modified goal (a): *Reduce obesity in children; Eliminate obesity in children*

Potential Answers to Practice Exercise #2 for Goal B

Goal	Criteria Not Met
b. Because of the rise in motorcycle accidents over the last 5 years, increase the use of safety helmets in order to reduce the number deaths due to traffic accidents	<i>Not concise. Does not include segment of population. It also is unclear whether the goal is to increase the use of helmets or reduce deaths due to traffic accidents</i>

Modified goal (b): *Increase the use of motorcycle helmets by teens and adults.*

Potential Answers to Practice Exercise #3

Potential Answers to Practice Exercise #3 for Long-Term Objective A

Long-Term Objective	Criteria Not Met
a. Within 5 years, reduce the number of obese and overweight children	<i>It is not measurable because it does not say how much will be decreased.</i>

Modified long-term objective (a): *By 2020, reduce the number of obese children by 10%; by 2020, reduce the number of overweight children by 15%.*

Potential Answers to Practice Exercise #3 for Long-Term Objective B

Long-Term Objective	Criteria Not Met
b. All teens will wear motorcycle helmets.	<i>“All” is not achievable or realistic. No date is specified.</i>

Modified long-term objective (b): *By 2020, increase the number of teens who wear motorcycle helmets by 30%.*