

**UCLA Center for
Health Policy Research
Health DATA Program**

**Data & Democracy
Train the Trainer Course**

**PERFORMING A COMMUNITY ASSESSMENT
CURRICULUM**

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THE CALIFORNIA ENDOWMENT

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PERFORMING A COMMUNITY ASSESSMENT

Introduction to the Curriculum

"Here, then, is our shared dilemma and our shared challenge. Community leaders make differences they don't know how to measure. And academic researchers measure differences they don't know how to make! Each of us without the other is like the proverbial sound of one hand clapping."

— David L. Katz, MD, MPH, FACPM, FACP. "Representing your community in community-based participatory research: differences made and measured." *Preventing Chronic Disease* 1(1): 2004 Jan [December 15, 2003]. Available from: <http://www.cdc.gov/pcd/issues/2004/jan/katz.htm>

This curriculum provides the information needed to plan and conduct a public health assessment in your community. The six steps needed to create a Community Assessment Plan are presented. Each step is followed by a worksheet. Once completed, the worksheets become your Community Assessment Plan.

Curriculum Overview:

- **Introduction**
- **Step 1** – Develop a Community Partnership
- **Step 2** – Determine Your Focus
- **Step 3** – Determine the Information (Data) You Need
- **Step 4** – Determine How to Get the Information (Collect Data)
- **Step 5** – Determine How to Understand the Information (Analyze Data)
- **Step 6** – Determine How to Use and Communicate the Results
- **Appendices:**
 - A. Data Collection Methods:
 1. Asset Mapping
 2. Focus Groups
 3. Surveys
 4. Key Informant Interviews
 5. Community Forums
 6. Direct Observation and Photovoice
 - B. Computer Software to Compile and Analyze Data
 - C. Materials for Step 5 Data Analysis Exercises

- D. Ethical Considerations in Human Subjects Research
- E. Resources

What is a Community Assessment?

A Community Assessment, also called a “Community Needs Assessment,” is a process of collecting, analyzing and reporting information about the *needs* in a community as well as its *strengths* and *assets*. The purpose is to identify unmet community needs and plan ways to meet them.

A community assessment should be driven by community leaders and organizations, and actively involve community residents. An assessment can raise awareness about unmet community needs, can identify and prioritize areas for change, and can help your community to act on its own behalf. An assessment also builds skills around research, leadership, collaboration, and community involvement.

Why Do a Community Assessment?

There are many good reasons to conduct a community assessment, which may include:

- Identifying new community public health issues
- Understanding known community public health issues
- Learning more about the priorities, assets, and concerns of community members
- Offering solutions to address unmet health needs
- Collaborating with essential community health leaders and partner organizations
- Gaining community member support for health improvement solutions
- Convincing funders to provide needed resources
- Convincing policymakers and other decision-makers to provide your community with needed programs or services
- Your community asked you to do it
- You have already received funds to conduct a community assessment

Whatever your reason or reasons for conducting a community assessment, this curriculum provides the basic steps, tools and resources to help you through the process.

What Resources Will I Need to Conduct a Community Assessment?

This curriculum and planning process use a very collaborative approach. It is easier to conduct a community assessment if you build partnerships that share common interests and can contribute or share the resources necessary to conduct a community assessment. The size and the focus of the assessment is up to you and your partners. If a larger assessment is beyond the resources of your group, then you may consider a narrower focus. If a larger assessment is what is needed, then you may need to consider applying for a small grant to assist you. How to apply for funding is not included in this curriculum, but please see *Appendix E: Resources* (page 5-93) for sources of information on grant writing.

How Do I Use this Curriculum?

Whether you are starting from scratch, have already formed a community partnership, or have already started to conduct a community assessment—this curriculum will be useful to you. The following will help you get the most from this curriculum:

- 1. Complete each of the six step worksheets.** Complete them whether you have already started or are just beginning. They provide you with a complete Community Assessment Plan at the end of the process, and identify any major gaps in your approach.
- 2. Complete the six steps in the order best for your group.** You may want to determine your assessment focus (Step 2) before you identify community partners (Step 1). Just be sure to complete each step, as they are all necessary to plan and conduct an effective community assessment.
- 3. This is a dynamic process.** You may need to revisit the steps several times throughout the planning process, because you may find better ways to accomplish the previous steps. Checking your previous decisions ensures you are on track, and allows you to make changes as needed. This also helps you deal with conflicts or inconsistencies early on, and makes your job a lot easier!

TRAINING GOALS AND OBJECTIVES

Goal:

To help participants plan and conduct a community assessment.

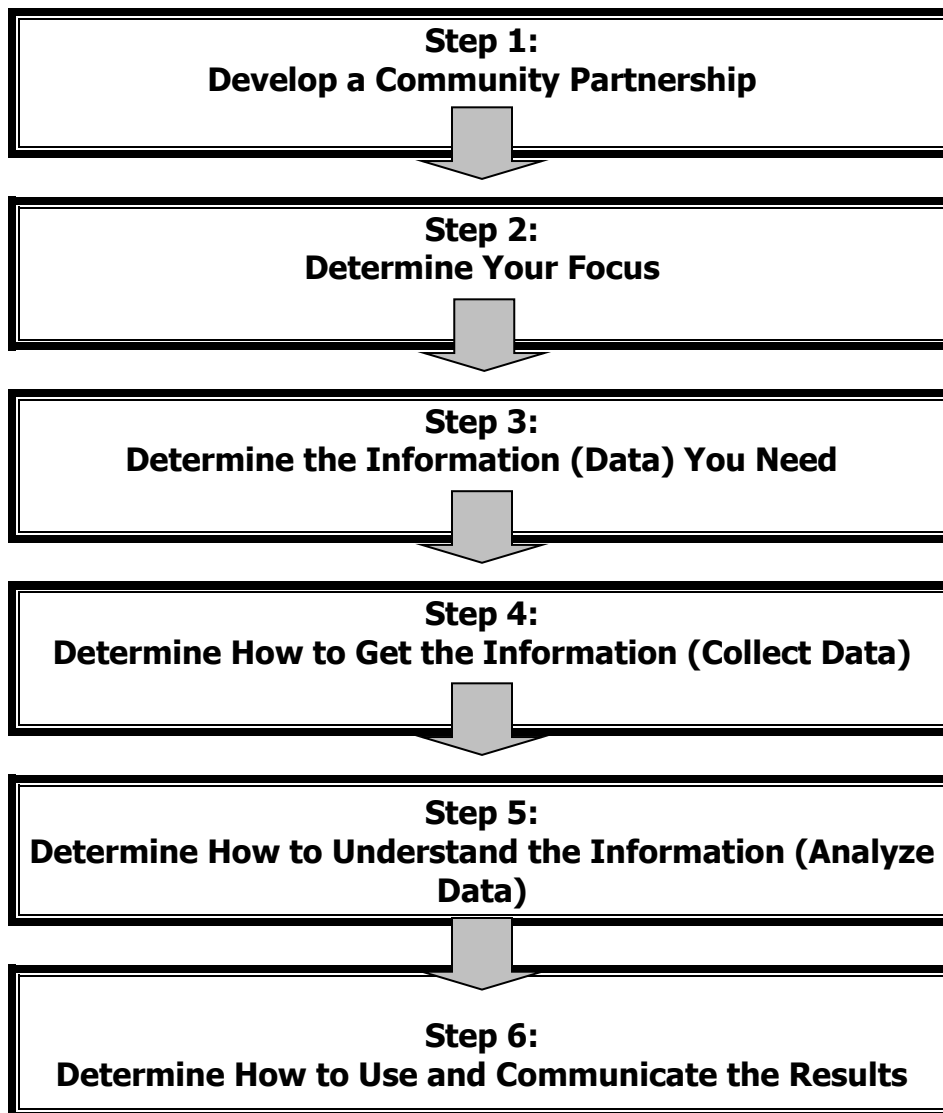
Objectives:

Upon completion of this workshop participants are able to:

1. Develop a partnership to plan and conduct a community assessment
2. Develop goals and objectives to focus the community assessment
3. Identify good sources of secondary (existing) data and determine the need to collect primary (new) data
4. Identify appropriate methods for collecting primary data
5. Identify appropriate methods for analyzing quantitative and qualitative data
6. Identify appropriate ways to report results and identify target audiences
7. Complete a community assessment plan

SIX STEPS TO A COMMUNITY ASSESSMENT PLAN

This curriculum includes six steps to plan and conduct a community public health assessment. These steps are necessary for conducting a thorough assessment, and will provide you with the instructions and tools for each step along the way. Use each section's planning activities. Fill out the worksheets at the end of each section. These six worksheets will become a realistic and achievable ***Community Assessment Plan***.



STEP 1: DEVELOP A COMMUNITY PARTNERSHIP

Before conducting a community assessment, it is important to identify the key individual and organizational stakeholders, and what skills and community resources they bring to the assessment.

⇒ Step 1 has four activities, which are reflected in the *Step 1 Planning Worksheet: Community Partnership Organizational Chart* (following page 4-9):

Identify Stakeholders

Form a Community Partnership

Assess the Individual and Organizational Capacity of the Partnership

Identify Benefits and Risks

1.1 Identify Stakeholders

The first step in a community assessment process is to identify a core group of individuals and organizations with a vested interest in the assessment and what will be done with the results. We'll call these persons **stakeholders**.

Identifying stakeholders in your community may seem easy, especially if this community assessment has been set in motion by previous collaboration or grant-writing efforts. However, you might be surprised at just how many community-based organizations, health agencies, and neighborhood and civic associations exist in your community that will want to participate in the process. Take some time to think about which of them might be interested in advising or participating in a community public health assessment, and then ask each potential stakeholder you identify to recommend others they think might be interested.

If you are conducting this assessment through an already established group, start there. Each member of that group will be a stakeholder, and should be able to help you identify additional community assessment stakeholders. This activity is an important one even if you feel your group already contains key community stakeholders, because you may find through this process that one important person or agency was left out of the original planning.

Here are some good questions to ask yourself when attempting to identify assessment stakeholders:

1. What is a community? What defines your community?

2. What major social institutions exist in your community (education, health, recreation, business, media, civic, government, others)? Which impact health? Which have an interest in health?
 3. What clubs, associations, organizations, voluntary groups, support groups and faith-based institutions exist in your community? Which are related to health?
 4. Who are respected leaders in your community? Who do community members go to for guidance? Who do they use for support?
 5. Who influences decisions in your community? These could include elected or appointed officials, boards or councils, administrators, or other key decision-makers.
 6. Thinking about the community assessment, which of the individuals or organizations would have the most expertise to help conduct a community assessment?
 7. Which of them must be involved in order to conduct a community assessment?
 8. Which ones would most use the results of the community assessment?
 9. Which of these has a positive image and respected reputation in the community?
- ⇒ Look at the individuals and organizations mentioned in questions 6 through 9 above. They are your stakeholders. You will need to be sure that persons who are representing organizations have the power to act on behalf of that organization.

Keep in mind that ideally your stakeholders should be composed of an equal number and mix of professionals, social service staff members, community residents, respected leaders, and other key decision-makers. This gives the assessment an array of expertise, experience, perspectives and values. A few may be from outside the community, such as academics or research professionals, but choose outsiders carefully.

1.2 Form a Community Partnership

A **community partnership** is a collaboration that represents the most intense way for individuals to work together, while still retaining the separate identity of the participating entities. Once you have identified your stakeholders, you need to discuss with them the possibility of collaborating in the community public health assessment and becoming a **community partner**. You should consider ahead of time what levels of collaboration you are prepared to offer and accept from these stakeholders. Some may want to only be updated with progress, some may wish to provide occasional consultation or feedback, and others may wish to be included in all aspects of the work involved.

When inviting stakeholders to participate in your community partnership, you should consider the benefits of engaging stakeholders:

- They can pool their resources and skills.
- A diverse group can expand the reach and acceptability of the assessment.
- Their input assures that the assessment meets community needs.
- They can ensure that results and reports are distributed widely.

If you are conducting a community assessment with an already established group, then you need to start with this step. Your group should decide which stakeholders identified in the above activity should be asked to join the group in this assessment effort, and then determine how they will be involved.

Inviting stakeholders to become involved in a community partnership can be a potentially tricky and political process, depending on how the individuals and organizations have worked together in the past. Therefore, it is important to keep in mind the history and context of your community experience when inviting stakeholders into your partnership. It may be easier for you in the long run to invite *all* interested stakeholders from the outset, and maintain an open invitation for participation in the process.

Inviting all stakeholders may help you in several ways:

- Controversial relationships and issues can be addressed openly and early.
- Opposing views are understood and addressed more easily.
- The perspectives and values of everyone are considered.
- Stakeholders make contributions to and have ownership of the plan.
- You probably need all the major players in your community to conduct a needs assessment.

Once formed, the community partnership is responsible for articulating assessment goals and objectives, planning and coordinating activities, on-going evaluation of the assessment process, and using the results. It is essential that all partnership members have an active role in the group—including opportunities for gaining new skills, and an equal voice in any group consensus-building or problem-solving processes.

The community partnership is also responsible for determining the most appropriate and relevant community assessment methods. The methods used largely depend on what is appropriate for the community, and can be realistically achieved given the resources, skills and the capacity of the stakeholders. Finally, the community

partnership also works on planning and implementing next steps after the assessment—such as raising community awareness of the public health issues discovered in the assessment, mobilizing the larger community around one of these issues, getting involved in local policy decision-making processes, or seeking funding.

As you bring together this community partnership to work together throughout the community assessment process, it is important to keep in mind characteristics of a successful collaboration:

- Shared goals and interests
- Inclusive governance
- Shared responsibility and input
- Shared ownership and commitment
- Trust
- Balance of power and influence
- On-going management and support
- Clear roles and responsibilities
- Ground rules for maintaining a safe atmosphere
- Active participation

Another major component of successful collaboration is **leadership and facilitation**. Throughout this curriculum, we make suggestions for steps to take with the partnership and questions that can be asked in order to stimulate discussion at each of these steps. However, before embarking on this process you may want to take some time to think about who in your partnership would make the best leader and discussion facilitator—whether it should be you, some other partner, or some more neutral stakeholder. It is important for the success of the partnership efforts that the person who takes on this role is comfortable with his/her leadership, communications and facilitation skills. It is also important that this person is the most appropriate person for the job, given group dynamics and history. The potential partnership leader and facilitator can assess his/her own leadership values, beliefs, knowledge and skills with this on-line self-assessment tool —

<http://www.connectccp.org/resources/22assessment.pdf>

It is also important to note here that most groups experience some level of conflict and disagreement. A good leader and facilitator employs strategies to **resolve conflict and build consensus**. Although this is a complicated issue that is outside of the scope of this curriculum, there are many good references on this subject that are included in *Appendix E: Resources*.

1.3 Assess the Individual and Organizational Capacity of the Partnership

Although interest and commitment from your partners may be high, it is actually the amount of resources, time and capacity of each member or organization that can be dedicated to this effort that should determine the magnitude and scope of work. So before defining your goals and objectives, you need to look critically at individual and organizational capacity.

It is essential that you go through this organizational capacity activity whether you are working with a long-standing or recently created partnership. Even within groups that have worked together for a long period of time, organizational capacity is seldom assessed or communicated to members. Often assumptions are made in this area about participating individuals or organizations that may be incorrect, so articulating group capacity is critical to the planning process.

In order to appraise individual and organizational capacity, you need to answer the following about each partner:

1. **Mission** - What is their organizational mission? This is a specific statement that captures an organization's purpose, clientele orientation, and philosophy.
2. **Clientele** - What community or population(s) do they serve?
3. **Funding** – Does their current funding situation allow for them to be involved and at what level? Can they dedicate any funding or other resources to this effort? Are there any conflicts of interest?
4. **Staffing** – Do they have staff who can dedicate some of their time to the assessment? If so, what skills do they possess that could be useful to the assessment?
5. **Organizational support** - What role can their current work play in the assessment process? What kind of organizational support can they dedicate to the assessment? Can they dedicate office space?
6. **Research** - Do they have any data research capacities (data collection, data management, data analysis, report writing, other)?
7. **Technology** – Do they have computer or other technology that could be useful to the assessment? Can they dedicate any of this technology or the use of it?
8. **Media** – Can they offer access to the media for assessment efforts? These could mean contacts within radio, television or newspaper media outlets, or any other ability to get press coverage.
9. **Allies** – Do they have a community advisory board or highly involved clientele? Can these allies lend any support or strength to the partnership or assessment process?

10. **Interests** – What is their particular interest in the community assessment? What would they like to see happen as a result of participating in this process?
11. **Involvement** – How would they like to be involved in this effort? What level and type of involvement can they commit?

Once you have all this information about the partners, compile it into the *Step 1 Planning Worksheet: Community Partnership Organizational Chart*, and share it with the rest of the group. This appraisal step is important for several reasons:

- It allows the group to see the amount of available resources, skills, and knowledge that each member brings to the community assessment effort. Based on this, the group can determine which person or organization can take responsibility to carry out each planned activity of the assessment – “by whom.” It can also help determine what might be a reasonable amount of time to expect each activity to be completed – “by when.”
 - It helps to identify any gaps or limitations in the group and strategize ways to overcome or resolve these. For instance, this process might identify other contributing members or organizations that add to the group’s collective resources and skills.
 - The time, available resources, and level of knowledge of the group also determines the type of assessment methods that will be used. Each assessment method differs in the amount of time needed to collect data, the number of people who should be involved, the necessary funding, and the required technical knowledge. The most commonly used methods, how they differ, and their advantages and disadvantages are discussed later in this section.
 - It allows the partnership to see the potential reach of the assessment results.
- ⇒ The community partnership capacity outlined here represents the *assets* with which you need to work in order to best accomplish the community assessment.

1.4 Identify Benefits and Risks

Every undertaking has risks and benefits associated with it. If these are identified and discussed up front, the benefits of the community assessment are maximized and the risks are minimized. The first time you bring the group together, take a few minutes to identify the potential risks and benefits of a public health community assessment to the following entities:

- Community partners
- Community residents
- Community leaders and advocates
- Public health professionals and agencies
- Health service providers

- Elected and appointed officials

The process of identifying and discussing risks and benefits helps the community partners to air any concerns they might have about this assessment, about working together as a group, or about how the end results will be used.

Examples of Benefits:

- There will be a greater understanding of public health strengths and needs in the community.
- Community leaders and advocates will have the data they need to more effectively advocate for health programs, services, policies and resources in the community.
- Public health agencies will have the information they need to more strategically and effectively design and implement public health programs and services for community members.

Examples of Risks:

- Health service providers may not share valuable data and information about the health of the community if they are not included as members of the partnership or otherwise participate in the planning and execution of the community assessment.
- Elected and appointed officials may not be supportive of community assessment efforts and findings if they feel it will shed a bad light on them.
- Community members may become hostile toward the partnership organizations if they feel assessment results were not used to benefit them.

STEP 2: DETERMINE YOUR FOCUS

Now that you know who will be involved in this process, your first step together is to determine what you collectively want to achieve with this assessment. Clearly articulating this is essential for building group consensus and for ensuring that you are successful in accomplishing what you set out to do.

⇒ Step 2 has three activities, which are reflected in the *Step 2 Planning Worksheet: Issues, Problems, Goals and Objectives* (following page 4-16):

- 2.1 Identify and Prioritize Community Public Health Issues
- 2.2 Define the Problem
- 2.3 Create Realistic and Achievable Goals and Objectives

2.1 Identify and Prioritize Community Public Health Issues

The first time you bring your partnership together, identify the public health issues that each of the community partners, their families, or clients are concerned about. The particular health issues your group prioritizes as being the most important become your **community assessment focus**. Your focus ensures that your community assessment explores one topic well, rather than taking on more topics than your partnership resources can handle. **The focus can be broad**. This is useful if you are not quite sure what the major health concerns of your community are, and want to collect some general information about disease rates, availability of health services, or community members' perspectives on health and health care. **Or, the focus can be more specific**. This might be the best option if your community is already aware of particular health concerns in the community, and would prefer to invest the community assessment in this one particular area. For example, if diabetes rates are already known to be high in your community, the assessment can focus on diabetes. Thus you might concentrate on assessing availability and use of diabetes screening services, diabetes-related care, or explore issues related to diabetes management such as nutrition and physical activity.

In many cases, the different members of your community partnership will have their own particular health issue interests. It is very important to discuss these different interests to identify the health issues on which everyone can agree. You can facilitate this discussion with your community partners using some of the following questions to stimulate a thoughtful conversation. Write each issue raised on paper posted to the wall so that everyone can see what is being said.

Discussion Questions:

- Do all community members have access to basic health needs, such as food, shelter, health education, clean water and clean and safe environments?
 - In your opinion, what are the illnesses most affecting members of the community? Keep in mind the different illnesses experienced by infants, children, adolescents, adults, the elderly, people with special health care needs, men and women.
 - Do you think community members are able to get health services when they need them? Are there any particular groups you feel have a harder time accessing services?
 - Do you think most community members have sufficient health insurance coverage? Are there any particular groups you think have less insurance coverage?
 - What health services are not being provided to the community that you feel are needed?
 - What health services are being provided to the community that you feel are underutilized?
 - Do community members have to go outside of the community for health services and resources?
 - What group(s) of individuals do you think have the most unmet health needs?
- ⇒ If questions about the current health of the community are being raised and no one has the answers, write them up on a different piece of paper. These can help inform the questions this group would like the assessment to answer, as well as the type of information which needs to be collected in order to answer them.

After you have a long list of health issues on the wall, it is a good idea to prioritize which ones are best to explore and address in this community assessment. It is probable that not all issues can be realistically explored with this assessment, and may need to be a part of the “next steps” to be taken after the assessment. Agreeing on what issues are the most important may be a difficult process, so here are things to consider or to pose to the group when prioritizing public health issues:

- Which issues were raised and discussed the most?
- Which issues do community partners feel are the most severe in the community? Which would be considered the most severe by community members?
- Which affect the most people? Which have the largest number of at-risk people?
- Which result in the highest rate of premature death or disability?

- Which present the largest social burden to the community?
 - Which create the largest economic burden on the community?
 - Which are already being addressed by programs, services, or resources?
- ⇒ Use this discussion to identify the issues the partnership wants to address in the community assessment.

2.2 Define the Problem

The selected health issue can be framed in terms of **unmet needs, gaps in health care services, or a lack of community-wide resources or funding**. It is important to define the focus of your assessment in terms of a specific public health problem for the following reasons:

- It focuses your assessment and drives the kind of data to be collected.
- It helps identify and implement an appropriate community improvement as a result of what you find in your assessment, such as public health programs, policy changes, or grant seeking.
- It provides a rationale for these community improvements.
- It allows you to define the problem from the perspective of your community when you seek help from outside audiences—such as policymakers and funders—to implement your community health improvements.

In defining the problem, consider the following question for each prioritized health issue:

1. What is the problem?
2. How severe do you think this problem is in your community?
3. What do you think contributes to this problem?
4. What are the health consequences of this problem?

2.3 Create Realistic and Achievable Goals and Objectives

The differences between goals and objectives can be confusing. In fact, many people believe they are writing goals, when they are actually writing objectives, and vice versa. It is best to begin the discussion about goals and objectives for the assessment by having each of the community partners present to the group:

1. Their ideal for the health and well-being of community members
2. Their perception of the current reality
3. The difference between their ideal and reality

Once everyone has articulated this, it is easier to draft goals and objectives for the community assessment. Here are some definitions and helpful hints:

A Goal

- Is a broad statement
- Provides overall focus, vision and direction
- Can be lofty and idealistic, as it is not necessary that a goal be reached during the time frame
- Can be non-specific and non-measurable

Objectives

- Are more realistic steps to achieve goal(s)
- Are always *active*, and use strong action verbs like “plan”, “conduct”, “examine”, “collect”, “produce”, “analyze” and “write”
- Answer the following questions: WHO?, WHAT?, WHEN?, WHY?
- Are clear to everyone
- Are **SMART**:
 - Are as *Specific* as possible
 - Are *Measurable*, in order to determine progress toward your stated goal(s)
 - Are *Achievable*, given available time, staffing and resources – you don’t want to set your assessment up for failure by setting objectives that are not possible to accomplish
 - Are *Relevant* to the goals, needs and interests of the community and the partnership
 - Specify a *Time frame* for when they will be accomplished

Remember that what you want to develop here are **goals and objectives specifically for your community assessment**. Community partner organizations have their own goals and objectives, and you may have other partnership goals and objectives if you work together on other projects. Do not confuse these with the assessment goals and objectives.

Here are some examples of community assessment goals and objectives. Please keep in mind that these are **just a few examples** of the many different types of goals you

could develop for your own community assessment. Also, there are only three examples provided for each goal out of the infinite number of possible community assessment objectives that could be developed to address each example goal. The goals and objectives you develop may look very different.

Examples of goals and objectives for a community assessment with a broad focus:

Goal Examples	Community Assessment Objective Examples
<ul style="list-style-type: none"> ▪ To understand community members' access to health care. 	<ul style="list-style-type: none"> ▪ Gather secondary data from at least 10 local health care service providers in spring 2005 to better understand which services are most utilized by the community, and which are not. ▪ Perform asset mapping in four low-income neighborhoods in spring 2005 to determine what services are accessible by what neighborhoods in the community. ▪ Survey 20% of residents in spring 2005 about their use of local health care services to better understand community health assets and needs.
<ul style="list-style-type: none"> ▪ To examine community health needs and identify possible community-based program solutions. 	<ul style="list-style-type: none"> ▪ Examine four sources of existing county-level health data in March and April of 2005 to determine the three most common community health problems. ▪ Conduct four to six focus groups with the leaders of community-based health organizations in July of 2005 to identify program challenges, success stories, and possible future collaborations. ▪ Conduct six to ten focus groups with community members in May and June of 2005 to discuss their top unmet health needs and possible programmatic solutions.

Goal Examples	Community Assessment Objective Examples
<ul style="list-style-type: none"> ▪ To determine community resident readiness for local advocacy and policy efforts. 	<ul style="list-style-type: none"> ▪ Conduct two focus groups with 20 community leaders in 2005 to discuss challenges and successes mobilizing community residents. ▪ Survey 20 community leaders in 2005 to identify major community associations, networks, clubs, and volunteer organizations. ▪ Survey 150 residents recruited through identified community associations in 2005 to see how interested and motivated they would be to participate in community advocacy or policy efforts, and what community issues are most important to them.

Example of a goal and objectives for a community assessment with a more narrow focus:

Goal Examples	Community Assessment Objective Examples
<ul style="list-style-type: none"> ▪ To understand the dietary behaviors of community teens. 	<ul style="list-style-type: none"> ▪ Gather sales data from one high school food service director in 2005. ▪ Conduct surveys with 50% of local high school students regarding their at-home and in-school dietary behaviors before January 2005. ▪ Map the locations of fast food and convenient store outlets before June 2005 near one high school campus and students' walking routes.

After developing your goals and objectives, look back through your *Step 1 Planning Worksheet: Organizational Chart* to see if your partnership has representation from organizations that work in the various public health topic areas raised in your goals and objectives. If not, then identify additional key community stakeholders and invite them to join your community partnership.

STEP 3: IDENTIFY THE INFORMATION (DATA) YOU NEED

Now that you have developed the health issues, problems, goals and objectives that focus your assessment, it is time to consider in more detail what data is needed. What you want to do in this step is articulate your primary questions that guide the rest of your assessment steps.

⇒ Step 3 includes three activities, which are reflected in the *Step 3 Planning Worksheet: Questions, Data Types and Data Sources* (following page 4-28):

Articulate the Primary Questions to Be Answered

Identify what Type of Data is Needed

Identify Data Sources

3.1 Articulate the Primary Questions to Be Answered

A **primary question** is a question you wish to answer with the information you collect through the community assessment. Stating your primary questions ahead of time helps the partnership establish boundaries for the assessment by stating what aspects of the community experience are to be addressed. A good rule of thumb is to develop three to six primary questions. The process of discussing and prioritizing these questions among stakeholders further refines the direction and focus of the assessment. Expect differences in priorities, as certain stakeholders want to address different questions—some may want to look at community health status, others may want to find out how well specific local programs or services are being utilized, and others may want to examine individuals' health behaviors.

Here are some helpful brainstorming ideas to consider when developing your questions:

1. What is the primary purpose of your assessment?
2. What do you need to know more about to fulfill this primary purpose?
3. What are the primary health problems or needs this assessment hopes to address?
4. What do you need to know to address these primary problems?
5. Are there any other interests that community partners have that have not been discussed yet? If so, does anyone else share these interests?
6. Will answering these questions allow you to achieve your goals and objectives?
7. Can all of these questions be addressed within the scope of this assessment? If not, which can be addressed in the "next steps" after the assessment?

It is important to remember that what you want to develop are **primary questions related specifically to your community assessment**. These are not to be confused with the data collection questions you will develop to ask in a survey, focus group or interview. However, if you develop clear and answerable assessment questions, the responses you get to your data collection questions will help to answer them.

Here are some examples of primary questions for a community assessment. Again, please keep in mind that these are **just a few examples** of the many different kinds of questions you could develop for your own community assessment. The ones you develop may look very different.

Examples of primary questions for a community assessment with a broad focus:

Primary Questions
1. Where do community residents go for health services?
2. What local health services do residents use the most? Which do they use the least?
3. Are those services accessible to most people? (Are the location and hours of operation convenient? Is there public transportation to the site?)
4. Which diseases or conditions affect the community the most?
5. Which of these diseases and conditions are most addressed by local health services and programs? Which are least addressed?
6. How does our community compare to other communities around health issues?
7. What kinds of associations, networks, clubs and other volunteer groups exist in the community?
8. What kinds of community issues have these groups taken on in the past?
9. What current community issues are the most important for residents? With which ones would residents most likely get involved?

Examples of primary questions for a community assessment with a more narrow focus:

Primary Questions
10. Where do teens in the community get information regarding diet and nutrition?
11. What do high school students know about eating a healthy diet?
12. What foods are available for high school students, both on campus and nearby?

⇒ Keep in mind when identifying and prioritizing possible questions that each question **MUST BE ANSWERABLE**.

- ⇒ After developing your primary questions, look back through your *Step 1 Planning Worksheet: Community Partnership Organizational Chart* to see if your partnership has representation from organizations that work in the various public health topic areas addressed in your questions. If not, then identify additional key community stakeholders and invite them to join your partnership.

Create a list of the questions you have prioritized to answer through this community assessment and distribute it to all of the community partners. Make sure that if anything is unclear to anyone in the group, it is clarified and defined. You want these questions to be very clear and answerable, and you want the entire partnership to buy into them. That is because these questions are the driving force of any later research or data collection you conduct during the assessment. The more logically they lead into the data collection phase of the assessment, the easier this phase will be for you. And any unvoiced disagreements between community partners that lead to changes in the questions down the line will only disrupt the assessment process.

3.2 Identify What Type of Data Is Needed

In order to answer these questions, you first need to decide what type(s) of data is needed. It might seem easy to figure out how to answer your questions, but sometimes there are multiple types of information that could give you an answer. In order to maximize your success and minimize any wasted time, you want to be sure to determine ahead of time which of these types of data (or which combination of types of data) will help you to best answer the questions you have outlined for the assessment.

In order to answer your assessment questions, you may want to collect any of the following information about your community members, resource agencies, or institutions:

1. Opinions, priorities
2. Aspirations, motivations
3. Level of awareness, knowledge, attitudes or beliefs
4. Behaviors, practices
5. Assets, skills
6. Networks, associations
7. Needs, fears, problems, concerns
8. Demographic characteristics
9. Services or resources provided
10. Resident utilization of services or resources provided

11. Numbers or rates of disease, illness, disabilities, injuries
12. Sales transactions, purchases
13. Policies
14. Pictures, other visuals
15. Maps

Sometimes the most difficult part of designing a research project like an assessment is determining which data would best answer your questions. They would ALL be good to know about your community, right? But in order to be able to achieve your assessment successfully, you need to always come back to the following considerations in your planning process:

- ⇒ Time frame of the assessment
- ⇒ Available resources
- ⇒ Dedicated staff time and skills
- ⇒ Assessment goals and objectives
- ⇒ Problem statement
- ⇒ Prioritized questions

Examples of the types of data that help answer the example primary questions listed in section 3.1:

Primary Questions	Types of Data
1. Where do community residents go for health services?	Behaviors
2. What local health services do residents use the most? Which do they use the least?	Behaviors; Opinions
3. Are those services accessible to most people? (Are the location and hours of operation convenient? Is there public transportation to the site?)	Behaviors; Opinions; Services and resources provided; Policies
4. Which diseases or conditions affect the community the most?	Numbers or rates of disease, illness, disability, injury
5. Which of these diseases and conditions are best addressed by local health services and programs? Which are least addressed?	Services and resources provided; Utilization of services or resources provided; Opinions
6. How does our community compare to other communities on health issues?	Numbers or rates of disease, illness, disability, injury
7. What kinds of associations, networks, clubs and other volunteer groups exist in the community?	Level of awareness and knowledge
8. What kinds of community issues have these associations taken on in the past?	Level of awareness and knowledge
9. What current community issues are the most important for residents? With which would residents most likely get involved?	Level of awareness and knowledge; Opinions and priorities
10. Where do teens in the community get information regarding diet and nutrition?	Behaviors
11. What do high school students know about eating a healthy diet?	Level of awareness, knowledge and beliefs
12. What foods are available for high school students, both on campus and nearby?	Maps; Photographs; Sales transactions

3.3 Identify Data Sources

Next you will want to brainstorm as a group where you can get each type of data. You'll want to start with already existing data sources you can access. Any type of data that already exists is called **secondary data**. That means someone has already collected it for another purpose and may be able to make it available to you for your purposes. This is the best place to start, as using pre-existing data means you won't have to spend as much time or expense collecting original data. In fact, it may be that you won't need to collect any data at all! Which is fine, as long as your primary questions are answered adequately and you can accomplish your assessment goals and objectives.

You will discover that some of the members or organizations in your partnership already have—or have access to—a lot of this data. In fact, any source of locally collected data should be top choice, as it is more tailored and relevant to your community. Other local sources of data may include:

- Local or county health department
- Vital statistics → Birth certificates (also available in local or county health departments):
 - National birth registration program started in 1915
 - Hospital and date/time of birth
 - Baby's name, sex, plurality (single, twin, etc.) and birth weight
 - Mother and father's age, education level, race/ethnicity, place of birth, marital status
- Vital statistics → Death certificates (also available in local or county health departments):
 - Age, race/ethnicity, gender, residence, occupation
 - Primary cause of death
 - Any other secondary causes of death
 - Note: The leading causes of death in your community can be calculated from the above information.
- City or county governments
- Schools (including school nurse records)
- Hospital or clinic records
- Local health, health promotion or health education agencies
- Local health advocacy groups
- Private insurance plans
- Private foundations which fund services or programs in your community
- Universities or local community colleges

- Local surveys or research efforts being conducted in your community. These resources can provide the most relevant and easy-to-use data. Perhaps you can combine efforts.

However, in order to answer your questions, you may need to look beyond local resources. Sometimes data is collected on the regional, state or federal level about your community or county. It is important to look at these sources before deciding if you need to collect your own data.

Here are some pros and cons to consider when looking for secondary data sources:

Pros	Cons
<ul style="list-style-type: none"> • It is <i>cheaper</i> than collecting your own data – secondary data is often available at low or no cost (some government-collected data is public information) • It is <i>quicker</i> than collecting your own data • If it answers some or all of your research questions, then you can spend your time and money on other aspects of your community assessment • Large, secondary data sources include a larger population than you will most likely be able to sample 	<ul style="list-style-type: none"> • The data may be outdated • The data most likely is not exactly what you need • It may have restrictions on sharing data due to confidentiality/privacy or ownership issues • Often local data, neighborhood data, or data from smaller subgroups (i.e. ethnic groups, new immigrants, homeless, migrant agricultural workers, etc.) has not been collected • The quality of the data cannot be ensured

Some other possible sources of secondary data include:

1. State agencies and foundations:

- California Cancer Registry: <http://www.ccrca.org/>
- California HealthCare Foundation’s Medi-Cal Policy Institute: <http://www.medi-cal.org/>
- Office of Statewide Health Planning and Development, Health Care Information Division: <http://www.oshpd.cahwnet.gov/hid/index.htm>
- RAND Corporation Public Use Databases: <http://www.rand.org/services/databases.html>

2. State surveys:

- California Cancer Registry:
<http://www.ccrca.org/>
- California Health Interview Survey, Ask CHIS site:
<http://www.chis.ucla.edu/main/default.asp>
- California Department of Health Services, Office of AIDS. HIV/AIDS Case Registry: <http://www.dhs.ca.gov/AIDS/Statistics/default.htm>
- California Department of Health Services, Office of Women's Health. Women's Health Survey:
http://www.dhs.ca.gov/director/owh/owh_main/cwhs/wmns_hlth_survey/survey.htm
- United Way list of California county websites:
<http://national.unitedway.org/myuw/browseCities.cfm?abbr=CA>

3. Federal agencies:

- Centers for Disease Control and Prevention, CDC Wonder:
<http://wonder.cdc.gov/>
- Centers for Disease Control and Prevention, AIDS Public Use Data by major metropolitan area: <http://wonder.cdc.gov/AIDSPublic.html>
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control WISQARS Database (Web-based Injury Statistics Query and Reporting System): <http://www.cdc.gov/ncipc/wisqars/>
- Centers for Disease Control and Prevention, Sexually Transmitted Disease Morbidity Data Request Screen (by state): <http://wonder.cdc.gov/sexu00.html>
- Healthy People 2010 Data– state level data queries that provide some benchmarks: <http://wonder.cdc.gov/data2010/focus.htm>
- Indian Health Service: <http://www.ihs.gov/>
- National Center for Education Statistics: <http://www.nces.ed.gov/>
- US Census Bureau: http://factfinder.census.gov/home/saff/main.html?_lang=en
- US Department of Justice Bureau of Justice Statistics:
<http://www.ojp.usdoj.gov/bjs/>

4. Federal surveys through the National Center for Health Statistics:

<http://www.cdc.gov/nchs/>

- National Health Interview Survey (NHIS):
http://www.cdc.gov/nchs/products/elec_prods/subject/nhis.htm
- National Health and Nutrition Examination Survey (NHANES):
<http://www.cdc.gov/nchs/nhanes.htm>
- Behavioral Risk Factor Surveillance System (BRFSS): <http://www.cdc.gov/brfss/>

- Youth Risk Behavior Surveillance System (YRBSS): <http://www.cdc.gov/nccdphp/dash/yrbs/index.htm>
- National Immunization Study public use data files: <http://www.cdc.gov/nis/datafiles.htm>
- Ambulatory Health Care Data: <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm#Micro-data>
- National Hospital Discharge and Ambulatory Surgery data: <http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm>
- National Nursing Home Survey data: <http://www.cdc.gov/nchs/about/major/nnhsd/nnhsd.htm>
- National Home and Hospice Care Survey data: <http://www.cdc.gov/nchs/about/major/nhhcsd/nhhcsd.htm>
- National Employer Health Insurance Survey data: <http://www.cdc.gov/nchs/about/major/nehis/nehis.htm>
- National Health Provider Inventory data: http://www.cdc.gov/nchs/products/elec_prods/subject/nhpi.htm
- National Survey of Family Growth data: <http://www.cdc.gov/nchs/nsfg.htm>
- State and Local Area Integrated Telephone Survey: <http://www.cdc.gov/nchs/slait.htm>
- National Vital Statistics System: <http://www.cdc.gov/nchs/nvss.htm>

Examples of the possible sources for the types of data and questions outlined in sections 3.1 and 3.2:

Primary Questions	Types of Data	Data Sources
1. Where do community residents go for health services?	Behaviors	Community residents
2. What local health services do residents use the most? Which do they use the least?	Behaviors; Opinions	Community residents
3. Are those services accessible to most people? (Are the location and hours of operation convenient? Is there public transportation to the site?)	Behaviors; Opinions; Services and resources provided; Policies	Community residents; Health care delivery sites
4. Which diseases or conditions affect the community the most?	Numbers or rates of disease, illness, disability, injury	City, county, and/or state health departments; Local, county or national survey or surveillance data
5. Which of these diseases and conditions are best addressed by local health services and programs? Which are least addressed?	Services and resources provided; Utilization of services or resources provided; Opinions	Local health care service directors; Providers; Public health agencies; Community residents
6. How does our community compare to other communities on health issues?	Numbers or rates of disease, illness, disability, injury	City, county, and/or state health departments; Local, county or national survey or surveillance data; Same data from other communities
7. What kinds of associations, networks, clubs and other volunteer groups exist in the community?	Level of awareness and knowledge	Community residents; Community leaders

Primary Questions	Types of Data	Data Sources
8. What kinds of community issues have these associations taken on in the past?	Level of awareness and knowledge	Association leaders
9. What current community issues are the most important for residents? With which would residents most likely get involved?	Level of awareness and knowledge; Opinions and priorities	Community residents
10. Where do teens in the community get information regarding diet and nutrition?	Behaviors	High school students
11. What do high school students know about eating a healthy diet?	Level of awareness, knowledge and beliefs	High school students
12. What foods are available for high school students, both on campus and nearby?	Maps; Photographs; Sales transactions	School food service directors; Local listings; Photographs

Once you have identified possible secondary data sources for the types of data you want to collect, it is important to evaluate this data source. You can do this by answering the following questions about each source of data:

1. Credibility

- What is the reputation of the data source?
- What is the mission of the organization?
- What is the organization’s public image or reputation?
- Do organizational interests bias the interpretation and presentation of the data?

2. Specificity (how well the data captures what you want to measure)

- How do the goals or content of the study relate to your needs?
- Are the conditions of the study unique to a particular case?
- Does the research hypothesis relate to your question(s)?
- How close is the relationship between what you need and the research data?

3. Generalizability (how well the data applies to your community members)

- What are the characteristics of the population/sample?
- Do the participants provide data that can be applied to other similar populations or sub-populations?

- Do the “who, what, why, when and where” of the data relate to the “who, what, why, when and where” of your work?

4. Reliability

- Does the research seem free of bias or error?
- Have the methods and results been proven?
- Was the research repeated? Did the second study get the same or similar results?

5. Timeliness

- When or how recently was the data collected?
- Is it the best available data to suit your needs, even if it is “old”?

⇒ If you are unsure about the answers to any of the above questions, then go to the source and ask them, if possible.

⇒ No data is perfect. No data will fulfill all of the above criteria. It is up to your partnership to balance the pros and cons of each data source and decide what criteria are more and less important for your needs.

STEP 4: DETERMINE HOW TO GET THE INFORMATION (COLLECT DATA)

Now that you have identified what data is needed to answer your questions and have identified potential secondary data sources, it is time to determine what data, if any, you need to collect from scratch. This is called **primary data**.

⇒ Step 4 has three activities, which are reflected in the *Step 4 Planning Worksheet: Data Collection Plan* (following page 5-35):

Identify What New Data Needs to be Collected

Select the Appropriate Data Collection Method(s)

Revisit Steps 1-3 to Ensure You're on Track

4.1 Identify What New Data Needs to be Collected

Once you have filled out the *Step 3 Worksheet* data, it will become clear what data you can access, and what data you cannot. Now is the time to decide what data you need to collect in order to answer your primary assessment questions. First circle each of the data sources listed in the third column in the Step 3 worksheet that your community partnership does not think can be accessed through any identified secondary data sources. If there are many sources of data, then you need to facilitate another consensus-building process with your partnership to prioritize which data is the most important to answer your stated questions.

Here are some helpful hints to consider when determining which data to collect:

- **Be flexible** – you may need to refine or modify your data decisions after deciding which methods are most feasible and appropriate for your community partnership to conduct. Go back and forth between activities 4.1 and 4.2, as they will ensure you make sound decisions everyone in the partnership feels are achievable.
- **Don't reinvent the wheel** – borrow data or data collection processes from local sources, similar community assessment efforts, or anything you can find on the Internet. The less you need to create from scratch, the more time and effort you can spend on other parts of the process.
- **Don't bite off more than you can chew** – collect less data well, rather than collecting lots of data poorly that won't end up being useful. It's more important to answer one assessment question well, than only answering parts of many assessment questions. Your results from answering the first question may help you find the funding, staff skills and data collection processes you need to answer another question later.

- **Be humble** – constantly ask for input and help from community partners and other community stakeholders about data collection. The more others are engaged, the easier it will be accomplish what you have set out to do.

4.2 Select the Appropriate Data Collection Method(s) (Given Time, Staffing, Resources and Skills)

The most difficult part about selecting the most appropriate data collection method is making sure that your partnership has the resources to perform that particular methodology. In *Appendix A: Methods* (page 5-1), you will find detailed descriptions and instructions on how to perform each of the following data collection methods:

1. Asset Mapping
2. Focus Groups
3. Key Informant Interviews
4. Surveys
5. Community Forums
6. Rapid Appraisal Techniques

Using the *Step 4 Planning Worksheet*, brainstorm with your partnership to develop your data collection plan. Here are some helpful questions for your partners to consider:

- Which of these methods has anyone used before?
- What were those data collection experiences like?
- What was challenging and what was successful about using these methods in the past?
- Which data collection methods were more successful than others?
- What are some difficulties you encountered when using these methods?
- Which method or methods do you think would best collect the types of data you have prioritized?
- Which method or methods do you think would best answer the assessment questions you have prioritized?
- What would be the potential benefits of using this particular method(s) for the assessment?
- What challenges do you imagine the partnership might face if you used this particular method(s) for the assessment?
- Do you think this partnership can collect data through this method(s), given the available staffing, skills, and funding? If not, what might be a better method to use?

- What community members would be the best to target with this method?
- Which of your prioritized types of data from Step 3 will each method specifically collect?
- Which of your primary assessment questions from Step 2 will this method specifically answer?
- What activities need to take place in order to perform this data collection method(s)? (see the *Methods Appendices* for details on conducting data collection methods)
- Which community partner or members will be responsible for carrying out each activity?
- What is the timeline or due date for each specified data collection activity?

Keep in mind that there are two different kinds of data you can collect, quantitative and qualitative. Depending on your partnership's level of data collection expertise, time frame, and level of funding or other resources, you may want to collect just quantitative data, just qualitative data, or a combination of both, in order to answer your assessment questions.

Quantitative data are usually measured and expressed in the form of numbers or percentages. This data can answer the who, what, when and where questions of an assessment.

Qualitative data is usually measured and expressed in the form of words, concepts, themes, or categories rather than numbers. Qualitative data is often used to gain a more in-depth understanding of a particular incident or phenomenon—they answer how or why something is occurring.

Here are some important distinctions between quantitative and qualitative data that may help you in your decision-making:

	Quantitative	Qualitative
Description	<ul style="list-style-type: none"> • Measured and expressed in the form of numbers or statistics • Also called numeric data • Can answer the who, what, when and where of an issue 	<ul style="list-style-type: none"> • Measured and expressed in the form of words, stories or themes • Also called anecdotal data • Can answer the how or why • Used to gain a more in-depth understanding of an issue
Data Collection Methods	<ul style="list-style-type: none"> • Secondary data • Surveys • Interviews 	<ul style="list-style-type: none"> • Observations • Focus group • Surveys • Interviews
Benefits	<ul style="list-style-type: none"> • Can demonstrate cause and effect • Can “represent” a community by capturing the perspectives of many respondents • Usually easier to interpret 	<ul style="list-style-type: none"> • Richer, more in-depth information about the topic being studied • Can provide data from respondents in their own words • Can collect new data and new ideas from respondents in a dynamic and unstructured way
Drawbacks	<ul style="list-style-type: none"> • Unable to provide rich, in-depth data • Cannot collect new ideas or responses – only those thought of previously 	<ul style="list-style-type: none"> • Cannot demonstrate cause and effect • Usually not able to “represent” a community • Can be difficult to interpret

Note that surveys and interviews can collect quantitative or qualitative data, depending on whether the question is asked in a closed- or open-ended format.

- An example of a closed-ended question may be: How many times have you seen a doctor during the past six months? Answer choices: 0, 1-2, 3-4, 5 or more.
- An example of an open-ended question may be: What challenges, if any, have you faced when trying to see a doctor in the past six months?

In addition, multiple methods can be combined to collect both quantitative and qualitative data at one time. For example, focus group participants can be given a brief quantitative survey before or after the focus group, in addition to the qualitative discussion that would occur during the focus group.

We recommend that both kinds of data be collected, if possible, because they serve two very different and necessary functions when attempting to paint a complete picture of your community's health experience. Quantitative data can describe the size of a health problem and determine its associations with other issues, such as demographic factors or insurance coverage. Qualitative data helps give meaning and appropriate interpretation of the quantitative data, as well as answering "why" and "how".

The Data Collection Methods chart below outlines the methods discussed at length in *Appendix A: Data Collection Methods*, and provides some useful comparisons of advantages and disadvantages.

Once you have selected the appropriate data collection method or methods, you will want to complete the data collection plan included as the *Step 4 Planning Worksheet*. Some important issues you will want to consider for this data collection plan include:

1. What **types of data** (identified in step 3) will be collected with each data collection method?
2. How would you define the source of data for each data collection method more specifically? In other words, define your **target respondents**. If the source for a particular method is "community members", then how would you define community members more specifically? Will you target a specific gender, age, racial/ethnic group, clients of a specific service or program, members of a specific community group? These decisions are up to you and should be included in your data collection plan.
3. Which of your **assessment questions** will each method answer? This will ensure that the data you collect through each method are strategic to answering these questions.
4. What **specific activities** will need to be accomplished in order to best plan and perform these proposed data collection methods? These steps will be specific to your community partnership and the resources and timeline you have for this project, as well as the methods you have chosen. Some activities may include data collection tool development, data collector training, respondent recruitment, etc.
5. Determine who in your community partnership has the experience, interest and time to accomplish each activity.
6. Select a due date or timeline for each activity so that this planning worksheet can become an achievable Data Collection Plan.

Data Collection Methods Chart

Method	Advantages	Disadvantages
<p>Asset Mapping An inventory of community health assets, such as available resources, services, facilities, community-based organizations and associations. Usually represented by geographically mapped data.</p>	<ul style="list-style-type: none"> • Builds on existing community assets • Can generate a lot of community participation • Mapping the inventory creates a visual depiction of existing and lacking assets • Data can be used to raise awareness about the availability of assets, develop or improve services and programs, or to apply for funding 	<ul style="list-style-type: none"> • Finding the right maps can be difficult, and mapping software can be expensive and difficult to use • Some community assets will be difficult to map if they don't have a physical location • Needs community buy-in and collaboration to adequately inventory up-to-date community resources
<p>Focus Groups A series of structured discussions involving 8-12 people, selected to share their perceptions of a defined topic.</p>	<ul style="list-style-type: none"> • Flexible • Captures rich, in-depth data • Immediate results • Encourages and stimulates individuals to share more openly • Data can be combined with quantitative data to provide a complete picture about an issue 	<ul style="list-style-type: none"> • May be challenging to recruit participants • Need to schedule at least 2-3 focus groups to capture diversity • Difficult to generalize results to the larger population because of small numbers of participants • Difficult to compare results across groups
<p>Survey A survey conducted over the phone, in person or via mail with closed-ended or directed questions.</p>	<ul style="list-style-type: none"> • Data can be collected from a lot of respondents easier than any other method • Can get a large enough sample that can be representative of the larger population • Findings can be generalized to the larger population • Can cover a lot of topics • Can easily compare different groups' data to each other 	<ul style="list-style-type: none"> • Survey instrument must be carefully constructed to avoid leading questions, and to make sure the appropriate responses are available • Response rates can be low for self-administered surveys, especially mailed ones • Response will be low if survey is too long
<p>Key Informant Survey A survey conducted over the phone, in person or via mail with short answers or other open-ended questions.</p>	<ul style="list-style-type: none"> • Detailed and rich data can be gathered in a relatively easy and inexpensive way • Allows interviewer to establish rapport with the respondent • Provides an opportunity to build or strengthen relationships with important community informants and stakeholders • Can raise awareness, interest, and enthusiasm around an issue • Can contact informants to clarify issues as needed 	<ul style="list-style-type: none"> • Selecting the "right" key informants may be difficult so they represent diverse backgrounds and viewpoints • May be challenging to reach and schedule interviews with busy and/or hard-to-reach respondents • Difficult to generalize results to the larger population unless interviewing many key informants

Data Collection Methods Chart

Method	Advantages	Disadvantages
<p>Community Forums A series of public meetings focused on a defined topic. Forums are often moderated to ensure that important topics are covered and that time is efficiently allocated.</p>	<ul style="list-style-type: none"> • Can raise awareness and knowledge on an issue • Relatively easy and inexpensive to conduct • Allows for community and stakeholder participation in issue • Participants can identify new areas or topics not previously considered • Forums can help identify new leaders or stakeholders that may help in the planning and implementation of a project or initiative 	<ul style="list-style-type: none"> • May be difficult to schedule a series of public meetings with the community members and other stakeholders you want to reach • Participants may not be representative of the larger population as those who attend may not reflect the entire community or target audiences • Participants come with their own expectations and agendas
<p>Direct Observation and Photography (Rapid Appraisal Methods) Observations and photography that can help to describe or visually depict community conditions.</p>	<ul style="list-style-type: none"> • Relatively easy and inexpensive • Data can be gathered quickly • Can create community input and participation • Provide descriptions and visual imagery that give meaning to quantitative data 	<ul style="list-style-type: none"> • Can be difficult to interpret and summarize photographs and observation notes • Can be difficult to represent the entire community experience

4.3 Revisit Steps 1-3 to Ensure You're on Track

Before you spend any time or resources collecting data, be sure your community assessment plan adheres to these helpful standards:

- **Feasible** – Will the assessment be practical, realistic, and achievable? Is it doable?
- **Useful** – Will the amount and type of information you collect meet the needs of those who intend to use it? Will this information help to address the community public health needs you identified?
- **Accurate** – Will the assessment methodologies collect information that accurately reflects reality?
- **Fair** – Will the assessment be conducted with awareness of the rights of the people involved?
- **Responsive** – Is the assessment guided by the community needs, defined problems, goals, objectives and assessment questions articulated by the partnership throughout the planning process?

If at any point it seems clear that any part of your assessment plan does not meet the above standards, it is important to recognize that now and go back and make

adjustments. It may seem difficult to go back through the whole or part of the above process, but it will be more difficult later if you have set unrealistic assessment objectives or committed to collect data that does not ultimately answer your primary questions.

STEP 5: DETERMINE HOW TO UNDERSTAND THE INFORMATION (ANALYZE DATA)

Now that you have collected data, what does it mean? Making sense of this information is arguably one of the hardest parts of a community assessment. However, **acquainting yourself with the process allows you to become a good “user” of data.** This means being able to understand the basics of how data is analyzed, so that you can include it effectively as you plan and conduct your community assessment. Planning for your data analyses:

- Determines if the data you collect is practical for analysis.
- Reviews the appropriateness of your data collection methods.
- Informs the data collection instrument you create. How you ask a question and structure the responses affects how that data is analyzed later.
- Lets you know if you will need help with analysis. Do community partners have the needed skills, knowledge and resources? Do you need to find someone else to do it?

Data analysis may seem like a daunting task, especially if you plan to collect a lot of data. But every data analysis plan involves the same six basic stages, which are outlined here. Discuss these six stages with your partnership during planning. Determine who is responsible for each stage.

⇒ Step 5 has 6 stages, which will be reflected in the *Step 5 Planning Worksheet: Data Analysis Plan* (following page 4-57):

- 5.1 Check the Data
- 5.2 Go Back to the Primary Assessment Questions
- 5.3 Reduce the Amount of Data
- 5.4 Analyze the Data
- 5.5 Verify Findings
- 5.6 Interpret Findings and Draw Conclusions

5.1 Check the Data

First, take a look at all of your compiled data to ensure it’s all there and that it all makes sense. **You want complete and quality data.** You are looking for any mistakes people might have made when filling out a survey, or an interviewer or focus group facilitator might have made when asking questions or taking notes. Correct

these common mistakes before data analysis. **Perform quality checks throughout your data collection process.** Start from the very beginning.

Common mistakes include:

- A **missing or incomplete response**. Any missing or incomplete responses will exclude that respondent from your analysis of that particular question. This may change the total number of respondents for that question, so you should be careful of this change when it occurs. You may want to consider completely excluding a questionnaire or qualitative interview with many missing or incomplete responses. If there are many missing or incomplete responses to a particular question, you may ask your data collector or respondents why this occurred. Some common reasons include: a lack of relevant responses, a question that respondents don't know how to answer, or a question that makes many respondents feel uncomfortable and so they don't want to reveal their answer. If you find out that either of these reasons are behind the missing data from a particular question, you may consider eliminating that particular question from any later analyses.*
- An **impossible response** (i.e. age answered as "168"). If it is possible to determine the reason for this data collection mistake, and to accurately fix it, then you should do so. If the mistake is less clear, then you may want to consult with the data collector to see what might have happened. If you are unable to determine why the mistake happened and how to fix it, then you can treat it the same as missing data.
- A **response unrelated to the question** (i.e. age answered as "female", or a qualitative interview question response included under the wrong question). Again, if it is possible to easily fix this data collection mistake, you should. However, this may mean a mistake occurred when asking or answering the questions during data collection, and thus you may want to consult with the data collector. If it is appropriate to contact the respondent, then you may want to clarify this mistake with that person. If neither of these options are available for you, or the lost data isn't critical, then can treat these mistakes the same as missing data.
- A **response that contradicts an earlier response** (i.e. answered as non-smoker in one question and answered as smoking one pack a day in a later question). Again, if appropriate, it may be possible to check with your data collector or respondent to see what might have happened. If this is not possible or critical, then you will have to eliminate those particular responses and treat

* If you are collecting the data yourself, and are still in the middle of data collection, another way to solve this problem is to rephrase the way the question is asked, or the way the responses are given. This allows you to change the question in time to collect the appropriate information before data collection ends.

them like missing data. If you believe these mistakes occur throughout a particular survey or interview, you may want to consider removing this respondent from later analyses.

- An **unclear response**. If a discussion occurs in a focus group that is unclear, you may want to discuss with the moderator how to better understand what is being said at that point in the focus group. If a qualitative interview response is unclear, you can also check with the interviewer to clarify what was said. If you still are unable to understand the response, and if it is appropriate to do so, then you may want to follow up with that respondent and ask him or her to help you better understand the response.

5.2 Go Back to Your Primary Assessment Questions

Before analyzing your data, return to your primary assessment questions and use them as your starting point.

- Be sure to only analyze the data that helps you answer the primary assessment questions.
- This ensures you don't get sidetracked into analyzing any other pieces of data with your limited time and resources.
- It is normal to collect more data than is needed for your community assessment. You can return to any other interesting data after completing your Community Assessment Plan.

⇒ **Here are some examples of how assessment questions can guide your analysis:**

1. If your question asks — *What public health issues concern community members?* You need to pick out all of the concerns mentioned by your survey, interview or focus group respondents. Count the number and percentage of people who identified each concern, then rank the concerns into the order they were most mentioned so you can rank their importance to your community members.
2. If your question asks – *How do residents think about their neighborhoods?* You need to identify the different ways that survey, interview or focus group respondents discussed their neighborhoods. Then you can list them and provide some description and numbers of times each were mentioned.
3. If your question asks – *How are women's perceptions different than men's?* Then you can summarize survey, interview or focus group data separately for women, and then for men. Once you understand the responses from each group, you can compare them to see how similar or different they are from each other.

5.3 Reduce the Amount of Data

Examine your compiled data and figure out ways to reduce its sheer magnitude in order to analyze and interpret it.

- Look at small pieces of the data at a time. Start with one data collection method or health issue, and then move on to another when you are done.
- Don't be afraid to eliminate from your analysis any irrelevant data—data that doesn't answer your primary questions or is unrelated to what you would like to include in your assessment findings.
- Be sure to save your data in its original form so that—if needed—you can return to it later.

At this point it is helpful to create a master spreadsheet or document, which allows you to compile your data so you can look more easily for interesting findings.

1. Numeric Spreadsheet

A spreadsheet is a grid of rows and columns, which can be used to enter and look at your quantitative data all at once. This is sometimes called “eyeballing” your data, and it allows you to look for data patterns, see what comparisons might be interesting to make, and determine what might be important to examine further.

Create a spreadsheet with your questions listed across the top and your respondents listed down the left-hand side. You can indicate each question and respondent with a number, which makes it easier to fit your data into a smaller number of pages, as well as protects the confidentiality of your respondents. Your questions are organized into columns and your respondents organized into rows, then the response to each question can be placed in the row that corresponds with that respondent.

You can total up the number of responses to each question at the bottom of that column. To make it easier to enter your data into the spreadsheet and to calculate the totals, you may create a number corresponding to each response. This is called **coding**. That is, you have created a number code for each question response. You should keep track of what the codes are for each question. Some common codes are:

- “Yes” or “True” = 1
- “No” or “False” = 0
- Multiple choice responses numbered 1 through 5
- Scaled responses (strongly disagree, disagree, neither disagree nor agree, agree, strongly agree) = 1 through 5
- “Don't know” = 8

- No response/ missing data = 9

Mistakes may be made during data entry. In order to avoid any mistakes, make sure one person enters the data from the survey and a second person double-checks the data entry.

See *Appendix B: Computer Software to Compile and Analyze Data* (page 5-63) for instructions and resources on using computer software to create a spreadsheet.

2. Qualitative Summary Document

It is more difficult to compile qualitative data in a way that enables you to “eyeball” it all at once. By its very nature, qualitative data is lengthy. However, you can help yourself in analyzing the data by creating a summary document that contains the gist of what discussion and responses were recorded for each focus group discussion question or qualitative interview question asked.

Create a new document and list each question as a heading. Under each heading, summarize the relevant discussion or responses underneath each. This may include some cutting and pasting from your source documents—your interview and focus group notes—to your summary document. However, you should be sure to keep your source documents intact. This is your original data, and you may find that you need to go back and re-read the context in which the discussion or response occurred.

If you have only a few interviews or short focus group discussions, this summary may be all you need to “eyeball” the data. However, if you have a lot of qualitative data, you may need to do some further summary of the data in order to be helpful to your analysis. You can do this by summarizing the discussions or responses into concise bullet points under each of the question headings. You can always refer to the source documents to get additional information.

If you think it might be helpful, you can also create a table of your questions and summarized discussion points for easier viewing. This is an excellent way to organize qualitative data so you can look for relationships between discussion points, and across questions.

5.4 Analyze the Data

Once you have accomplished phases 1-3, the specific techniques for analyzing the data look very different for qualitative and quantitative data. What follows is a description and an exercise for each data analysis technique. For quantitative data, the technique is **Looking for Patterns in the Data**, and for qualitative data the technique is **Looking for Themes in the Data**.

⇒ Quantitative Data Analysis — Looking for Patterns in the Data

Analysis of quantitative data usually includes the following numeric calculations and comparisons. For information on how to conduct higher-level statistical analyses, please see *Appendix E: Resources* (page 5-89). If you are ready to learn more about statistics, enroll in a basic statistics course at your local community college.

1. Calculate averages:

An average is calculated by adding up numeric data and dividing that sum by the total number of persons from whom the data was collected. An average is also called a “mean.” For example: $2 + 4 + 6 + 10 = 22$. $22/4=5.5$, where 5.5 is the average or mean.

Averages are calculated from data that makes sense to be averaged. Such data is called **continuous data**, which means it has a potentially infinite number of possible values. An example is personal income. If personal income is collected by asking how much money a person makes per year, and then recording the specific number given, there are an infinite number of specific responses that could be collected. To average this data, you would add up all of the income responses, and divide them by the number of persons from whom this income data was collected. The average you get is the average income of the respondents, which is a meaningful number.

Some other examples of data that could be collected in a continuous way include: age, height, weight, blood pressure, number of years living in the United States, number of years working for an employer, number of visits to the doctor and number of children, to name a few.

2. Count frequencies:

Some data cannot be averaged, because the average you get is not meaningful. That is because this is **discrete data**, and not continuous data. Discrete data is numeric data that has been arranged into sets of values that create breaks in continuity. Let’s take the income example again. If that same question were collected in a discrete way, then instead of being able to give a specific number, the respondent would have to pick from some choices that were set up ahead of time. These look something like this:

1. Less than \$15,000 per year

2. \$15,000 to \$24,000 per year
3. \$25,000 to \$50,000 per year
4. Over \$50,000 per year

The income question could also collect a “yes” or “no” response if participants were asked if their annual income last year was above or below \$15,000 (this might be interesting to you if \$15,000 was the cut off for eligibility to a specific public assistance program). The responses would then look like:

1. Yes
2. No

You can see from this example how the data would look very different, as it will be a series of 1’s and 2’s, or 1’s through 4’s. Averaging those numbers is not as meaningful as averaging the continuous income data.

Instead you will want to use a different calculation technique, where you count the frequency of responses. A frequency is the number of times each response was given. In the multiple choice example above, count the frequency of each of the four responses. In the yes/no example, count the number of times “yes” was chosen, and each time “no” was chosen.

3. Calculate proportions (percentages)

Once you have counted frequencies, this number can be expressed as a proportion, also called a “percentage”. You do this by creating a fraction with your data, so that the frequency count is in the numerator (the number on top) and the total number of respondents is in the denominator (the number on the bottom). To calculate the proportion, the numerator is divided by the denominator, and then the answer is multiplied by 100. Proportions are calculated like this:

$$\text{Proportion} = \frac{\text{number of responses}}{\text{total number of respondents}} = \text{result} \times 100$$

Expressing data frequencies as a proportion is helpful because it standardizes the data. What you get as a result of your calculation in each case is the proportion of total respondents who chose that particular response, from 0 to 100% - even if the number of responses and the number of respondents look very different for each calculation. This makes it easier to make comparisons between different data.

Let’s look at the income example again. If 45 of your respondents selected “yes” to the question asking if their annual income is less than \$25,000 per year, and there were a total of 100 respondents, then your percentage would equal:

$$\text{Proportion} = \frac{45 \text{ answered "yes"}}{100 \text{ respondents}} = 0.45 \times 100 = 45\%$$

If there were 165 total respondents and still 45 who selected “yes”, the proportion of the total who answered yes would get smaller. We can see this when we calculate the new proportion:

$$\text{Proportion} = \frac{45 \text{ answered "yes"}}{165 \text{ respondents}} = 0.27 \times 100 = 27\%$$

4. Calculate rates:

Rates are similar to proportions, in that they are standardized calculations allowing for easier comparisons of different kinds of data. But instead of being expressed as a percentage, a rate is expressed as the frequency of a given event per some unit of the population. This is helpful when an event is uncommon, such as the occurrence of a rare disease. Rates are calculated much like proportions, although the fraction you calculate is multiplied by a larger number than 100. This number is usually 1,000, 10,000 or 100,000, and is equivalent to the standardized number of persons the rate will be expressed as. The equation is:

$$\text{rate} = \frac{\text{number of some event in population}}{\text{total population}} = \text{result} \times 100,000$$

For example, if there were 15 cases of lung cancer in your community, and 3,500 community members, the rate of lung cancer could be calculated as:

$$\text{Lung cancer rate} = \frac{15}{3,500} = 0.00428 \times 100,000 = 428 \text{ cases per } 100,000 \text{ persons}$$

Disease data is often calculated in this way, which makes it easier to compare the rates of specific diseases in your community with the rates from other communities, counties, or the state. You can see from this calculation that multiplying by 100,000 makes the number more meaningful: 0.00428 doesn't mean much, but 428 cases of lung cancer for every 100,000 persons is a useful way of determining how common a disease is in your community. The unit of population used may differ from 1,000 to 100,000, depending on who is doing the calculations. You can redo the calculation if the rate you would like to compare it to (such as the rate for all Californians) is calculated in a different way.

5. Compare averages, frequencies, proportions and rates:

If you are interested in whether the data looks different between different groups, then you can calculate the averages, frequencies or proportions within those specific groups, and then compare them. Some groups you may want to compare are men and women, different age groups, different racial or ethnic groups, individuals with insurance and those without, for example. Sometimes it's helpful to compare your data in many different ways to see if any patterns emerge.

In the income example, you may want to compare the incomes of men and women:

- If **comparing averages**, you want to first average income for women, and then average income for men. This comparison is fairly easy, as your results will look something like this: the average income for women in our sample was \$24,000 per year, and the average income for men was \$32,000.
- In **comparing frequencies** between men and women, you might find that 37 women have incomes less than \$15,000 per year (responded “yes”), and 27 men have incomes under \$15,000. This is a meaningful comparison if there were approximately the same number of men and women included in the analysis.
- If there are different numbers of men and women included in the analysis, then comparing frequencies is not very meaningful. This is when you want to calculate and **compare proportions**. Using the number above, if there were 200 women included in the analysis and 350 men, then your proportions of respondents with income less than \$15,000 per year would be 19% among women, and 8% among men. Comparing the data in this way shows a bigger difference between men’s and women’s incomes, than just comparing frequencies.
- If **comparing rates**, make sure that the rate you calculate and the rate you compare it to are calculated and expressed in the same way, using the same unit of population. Using the lung cancer example, your community’s lung cancer rate is 428 cases per 100,000 persons. If you find that the state rate is 475 cases per 100,000 persons, then your community fares better, on average, than the rest of the state. If the state rate is 102 cases per 100,000, then you know that your community suffers from lung cancer more frequently than the rest of the state, alerting you to a major health problem that should be addressed.

6. Present the data:

Using tables or graphs provides a useful visual presentation of the data.

Tables:

- Suitable for providing simple or more complicated numeric or percentage information
- Best used for side-by-side comparison of data for various variables or groups
- Important to use when you want to show the exact numeric or percentage values
- Here is an example of a table that was used to show results in a research report about diabetes from the California Health Interview Survey (AL Diamant, SH Babey, ER Brown, N Chawla. *Diabetes in California: Findings from the 2001 California Health Interview Survey*. Los Angeles: UCLA Center for Health Policy Research, 2003.) The full report is available at:
<http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=68>

EXHIBIT 10. HEALTH INSURANCE COVERAGE OF NONELDERLY ADULTS BY DIABETES DIAGNOSIS, AGES 18-64, CALIFORNIA, 2001		
	ADULTS DIAGNOSED WITH DIABETES (N=915,000) %	ADULTS NOT DIAGNOSED WITH DIABETES (N=19,488,000) %
EMPLOYMENT-BASED	57.7	63.8
MEDI-CAL	22.0	9.7
PRIVATELY PURCHASED	3.9	6.7
OTHER PUBLIC	2.6	1.3
UNINSURED	13.9	18.4
TOTAL	100	100

Note: Totals may not add to 100% due to rounding.

Source: 2001 California Health Interview Survey

Pie Charts:

- Best when you have simple percentages and the “slices” of the pie are not too numerous
- Ideal for depicting the size of each part as a percentage of the whole
- Avoid dividing the pie graph into too many “slices”. It can lead to confusion when interpreting it
- Important to make sure the grayscale or patterns you use to represent the different “slices” are clear and distinguishable from one another. The best option is to display in color, if possible.
- Here is an example of a pie chart that was used to show results from a research report on hunger in Los Angeles County from the California Health Interview Survey (CA DiSogra, W Yen, M Flood, and A Ramirez. *Hunger In Los Angeles County Affects Over 200,000 Low-Income Adults, Another 560,000 At Risk*. Los Angeles: UCLA Center for Health Policy Research, 2003.) The full report is available at: <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=92>

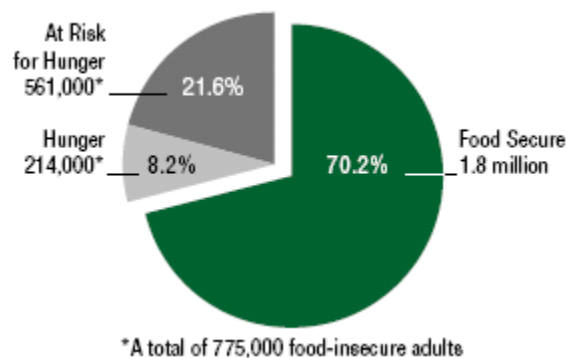
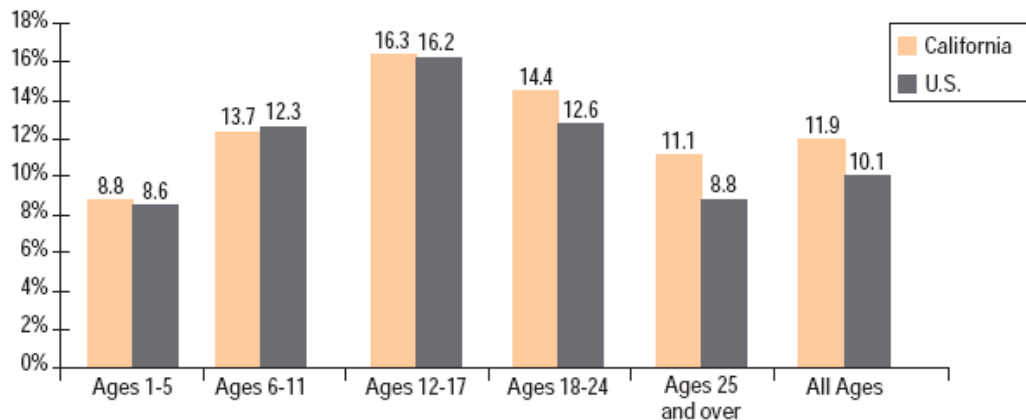


Exhibit 1:
*Food Insecurity among
 2.6 Million Adults with
 Family Incomes Less
 Than 200% FPL,
 Los Angeles County*
 Source: 2001 California
 Health Interview Survey

Bar Graphs:

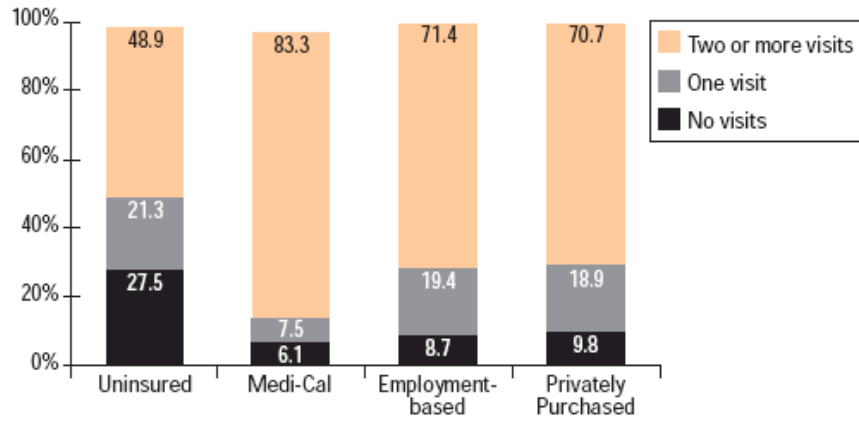
- Good for comparing quantities – simple bar lines are easy to read and compare
- Avoid comparing things that are on different scales—uneven scales can lead to confusion when interpreting the graph
- Important to make sure the grayscale or patterns you use to represent the different "bars" are clear and distinguishable from each other. The best option is to display in color, if possible.
- Here are two examples of bar graphs used to show results in a research report about asthma in California from the California Health Interview Survey (YY Meng, SH Babey, E Malcolm, ER Brown, and N Chawla. *Asthma in California: Findings from the 2001 California Health Interview Survey*. Los Angeles: UCLA Center for Health Policy Research, 2003.) The full report can be found here: <http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=83>

EXHIBIT 1. LIFETIME ASTHMA PREVALENCE BY AGE IN CALIFORNIA AND THE UNITED STATES



Source: 2001 California Health Interview Survey and 2000 National Health Interview Survey

EXHIBIT 12. VISITS TO A MEDICAL DOCTOR IN THE PAST YEAR BY TYPE OF INSURANCE, NONELDERLY ADULTS WITH ASTHMA, AGES 18-64, CALIFORNIA, 2001



Note: Totals may not add to 100% because a small percentage of respondents reported they did not know how many times they had seen a doctor in the past 12 months.

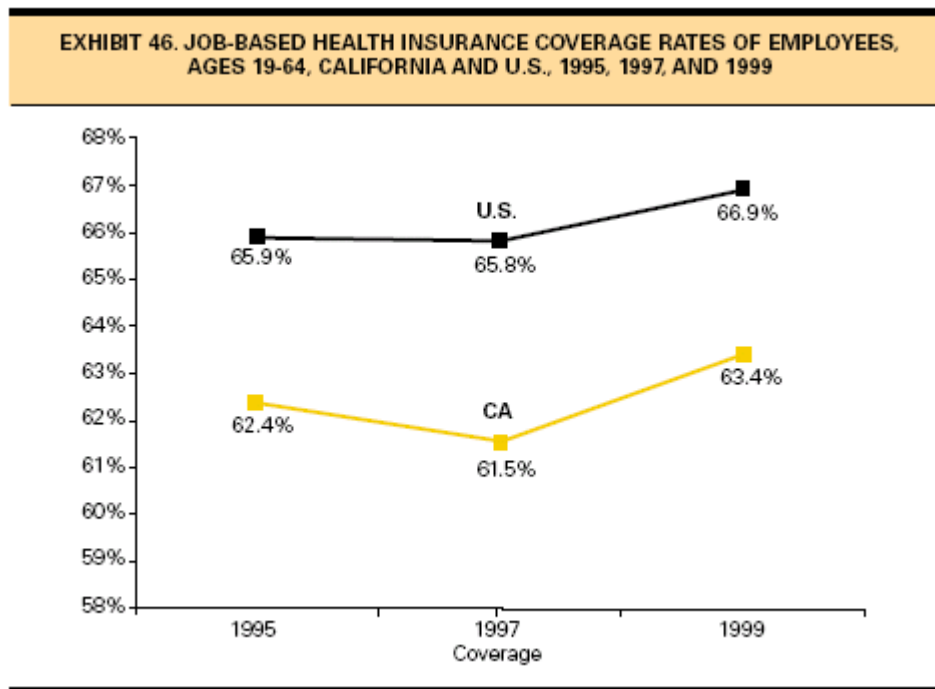
Source: 2001 California Health Interview Survey

Line Graphs:

- Excellent choice when illustrating trends over time
- Line movement, up and down, is easy to understand and interpret

Here is an example of a line graph that was used to show results from a research report on health insurance (ER Brown, N Ponce, T Rice. *The State of Health Insurance in California: Recent Trends, Future Prospects*. Los Angeles, CA: UCLA Center for Health Policy Research, 2001.) The full report can be found at:

<http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=78>



Source: February 1995, 1997, and 1999 Current Population Surveys

7. Determine your findings:

Did you discover interesting results from your data? Did you find interesting patterns? These are your findings.

EXERCISE 5.4A

Please go to *Appendix C: Materials for Step 5 Data Analysis Exercises* (page 5-73) to find the materials for this exercise. Included there is a sample quantitative survey about childhood asthma, and an example of a numeric spreadsheet created to enter the data collected through this survey. The columns represent the questions, numbered 1 through 8, and the rows represent the respondents, numbered 1 through 20. You'll notice that only the respondents who answered "yes" to survey question four— "Has a doctor ever told your child that he or she has asthma" —were included in this spreadsheet. The numbers next to the response check boxes correspond to the way the data was coded and entered into the spreadsheet.

Use the data in this spreadsheet to answer the following questions:

- 1) What is the **average** age of the survey participants' children?
- 2) **How many** children are male? **How many** are female? What **proportion** of the children are male and female?
- 3) **How many** children are:
 - Latino?
 - Pacific Islander?
 - American Indian/ Alaskan Native?
 - Asian?
 - African American?
 - White?
 - Other?

What **proportion** of children are:

- Latino?
- Pacific Islander?
- American Indian/ Alaskan Native?
- Asian?
- African American?
- White?
- Other?

Create a table that allows you to compare the frequencies and percentages for each race/ethnicity category. Put numbers and percentages in the columns, and the different categories of race and ethnicity in the rows.

- 4) If the total population of this community is 54,786, and there were a total of 600 diagnosed cases of childhood asthma, calculate the **rate** of childhood asthma per 1,000 people.

- 5) If the state rate of childhood asthma is 65 cases per 1,000 people, then how does this community compare to the entire state of California?
- 6) Calculate the frequency of each of the responses to survey question five, "How often does your child's asthma limit his or her physical activity?", among the African American children.
- 7) Calculate the frequency of the responses to survey question five among the white children.
- 8) How do these frequencies among African Americans and whites compare? What conclusions could you draw from these results?

⇒ **Qualitative Data Analysis – Looking for Themes in the Data**

The process for analyzing qualitative data is very different than the process for analyzing quantitative data. Although there are fewer steps involved, qualitative data analysis can often be trickier—and just as time-consuming—as quantitative data analysis. Qualitative data is always more voluminous than numbers, and determining data findings is more subjective than doing calculations with numeric data, as it requires more abstract thinking and interpretation. Even with the best of intentions, readers and analysts of qualitative data bring with them their own set of values, interests and assumptions, which may bias the way they interpret a focus group discussion or an interview response. You want to minimize the amount of bias that occurs in the analysis process, as releasing biased findings is not helpful in addressing the real issues of concern to your community. It also allows potential opponents or critics to discredit your work.

There are two very important steps you can take to avoid this bias in your qualitative data analysis:

- Involve at least two, but preferably three persons in every step of the data analysis process. This ensures that at least two different viewpoints and interpretations are captured when determining the findings. Qualitative data analysis is more about consensus, and less about calculations.
- Create as structured a data analysis process as is appropriate, to ensure that the data is processed in a thorough and efficient way. It can be tempting to quickly summarize the data, highlighting topics you heard raised in one focus group or you “know” are important ones to your community. However, if you systematically read and summarize the data, you may find that those topics were not raised as much as other topics that were discussed. Sometimes the data can be surprising, so let it surprise you.

1. Read data:

Read through all of your qualitative data. This may include transcripts or notes from focus group discussions or qualitative interviews. As you read through the data, note common topics or ideas that emerge several different times.

2. Create categories:

A category is a major topic area into which your qualitative data naturally falls. The categories you use in your qualitative data analysis can be either the main health issues on which your assessment has decided to focus, or they can be the particular questions of your interview or focus group. Once you have identified and listed the main categories, you should reorganize the data to fit under these categories, so you can re-read the discussions related to each category.

Examples of broad categories include: health status, access to health care, demographic issues, and opinions about community life.

3. List emerging themes:

When you read through the data again, reorganized by category, note the different sub-categories—or themes—that emerge throughout the discussion. For example, if the category is access to health care, the themes that may emerge in the discussions could include: lack of insurance, lack of transportation to get to health facilities, inconvenience of hours of operation of health facilities, lack of child care and lack of time.

4. Rank order:

After re-reading the data and noting the emerging themes, create a list of each theme that emerged under each category. Arrange these themes in order of how frequently they appear in the data. What you will have is a separate list for each category, ordered from the most frequent to the least frequent themes.

Compare these lists to see if any of the same themes emerged under multiple categories. This reveals relationships between ideas discussed under one topic to ideas discussed under another topic.

Compare the lists created by your two (or three) analysts, and discuss the reason for these differences. All the analysts should then discuss the themes they found until they are able to agree and create one list from which to guide the rest of the analysis.

5. Summarize:

Summarize the discussion that occurred around each of your themes. Organize this summary by category heading, starting with the most common themes and ending with the least common. You may decide to include only the themes raised by more than one person, so you can conclude that these were more representative of the community experience than a lone voice. You may decide to highlight certain findings, as you may want to highlight certain categories or themes that were discussed.

Summarize those themes that emerged under two different categories separately.

If you find that different kinds of focus group participants or interviewees discussed the topics in distinctly different ways, then summarize these differences separately. For example, if some focus groups were conducted among men, and others among women, you may want to summarize the discussions separately on topics where the opinions expressed were different. Compare and contrast these differences in your summary.

6. Determine your findings:

Did you discover interesting results from your data? Did you find interesting patterns? These are your findings.

EXERCISE 5.4B

Please go to *Appendix C* to find the materials for this exercise. This is a sample page from a focus group discussion that was conducted among Women, Infants and Children (WIC) program participants who were asked to discuss the eating habits of their children under five years old. Using this discussion, please discuss and answer the following questions within a small group.

- 1) What themes are being discussed in this focus group? Discuss these within your group until you can express each theme so that it reflects what was said in the focus group, and not any one person's bias.
- 2) What themes occur most frequently in the focus group discussion? Discuss these within your group until you agree on the same set of five most commonly occurring themes.
- 3) Are there any surprising themes? Why are they surprising?
- 4) What conclusions can you draw from these themes?
- 5) What additional information would you like to know to be able draw accurate conclusions?
- 6) Did your group disagree? Why? How can this help to identify themes and draw conclusions?

Once you have selected whether you will collect quantitative or qualitative data, you will want to complete the data analysis plan included as the *Step 4 Planning Worksheet*. Some important issues you will want to consider for this data analysis plan include:

1. What is the nature of the data collected with each method – **is it quantitative, qualitative, or both?**
2. What **specific activities** will need to be accomplished in order to best plan and perform the proposed data analysis? These steps may include some of the data analysis stages outlined for quantitative and qualitative data in this step, as well as activities specific to your community partnership's resources and timeline. These activities will also be specific to the methods you have chosen, so be sure to read more detail about each method you select in *Appendix A: Data Collection Methods*. Some activities may include entering the data, training data entry persons, purchasing computer software, performing calculations or summaries of the data, etc.
3. Determine who in your community partnership has the experience, interest and time to accomplish each activity.
4. Select a due date or timeline for each activity so that this planning worksheet can become an achievable Data Analysis Plan.

5.5 Verify Findings

After looking for patterns in your quantitative data and themes in your qualitative data, you should verify your data findings to ensure that your data analysis was effective in creating reliable findings.

- Based on the results tallied or summarized previously, pull out the main findings from each method.
- Verify these findings by re-tallying and re-summarizing the data to make sure you get the same results.

5.6 Interpret Findings and Draw Conclusions

Discuss the data findings with community partners to discuss how to interpret them.

- Determine what interpretations can be drawn from each of these findings. Invite different perspectives from different community partners, as this strengthens your conclusions.
- Think about whether the results are similar to what you expected. If not, discuss why you think they are different.

- Brainstorm alternative explanations for your results to make sure you have considered all possibilities.
- Make sure the data answers the original assessment questions.
- Draw conclusions that wrap up the main findings and can be shared with external audiences.

EXERCISE 5.6

Please go to *Appendix C* to find the materials for this exercise. These four data tables are from a secondary data source called the California Health Interview Survey (CHIS). Use these tables to answer the following questions in a small group. Discuss your responses.

- 1) What is the rate of asthma among African-American children in Los Angeles?
- 2) What is the rate of asthma among white children in Los Angeles?
- 3) What is the rate of asthma among Latino children in Los Angeles?
- 4) What is the rate of asthma among American Indian/ Alaskan Native children in Los Angeles?
- 5) What is the rate of asthma among African-American children in California?
- 6) What is the rate of asthma among white children in California?
- 7) What is the rate of asthma among Latino children in California?
- 8) What is the rate of asthma among American Indian/ Alaskan Native children in California?
- 9) Do the rates in California differ from the rates in Los Angeles County?
- 10) How would you interpret these findings?
- 11) What conclusions can you draw?

STEP 6: DETERMINE HOW TO USE AND COMMUNICATE THE RESULTS

Now that you have determined your assessment findings, you need to decide what to do with them. If you have been strategic from the beginning of the planning phase about what your assessment products and who the intended audiences are for the assessment findings, then your assessment will reach the right people with the right message when the time comes.

⇒ Step 6 has three activities, which are reflected in the *Step 6 Planning Worksheet: Ways to Report Results to Target Audiences* (following page 5-66):

Identify Assessment Products

Identify Target Audiences

Present Your Findings

Determine Next Steps

Celebrate and Acknowledge Your Work

6.1 Identify Assessment Products

Once you have developed your assessment findings, it is important to develop products that effectively communicate those findings to internal and external audiences. These products may take the form of:

- Written reports
- Report summaries or Executive Summaries
- Presentations
- Community Forums
- Recommendations
- Fact sheets
- Policy briefs
- Newspaper articles

First, develop a written report, which provides the foundation for other assessment products. This report is the full product with all the important findings you can give your intended audiences. It also provides background for the recommendations you make.

What do you usually do with reports you receive? Put them on a shelf and never look at them again? However, you want your report to be read and used. You can do that by making it:

- **Concise** – Make it short and to the point. Make it easy to find information.
- **Interesting** – Take the time to sort through all of your assessment findings, and present and discuss those that are new and compelling.
- **Responsive** – Consider your target audiences. Keep them in mind while writing the report.
- **Useful** – Write clear conclusions and recommendations. They are more usable. If the reader knows what to do with the information, they will be more likely to do it.
- **Attractive** – Spend a small portion of your budget to print bound reports in color to distribute to your important target audiences.

Here are some helpful instructions for writing a report:

1. Get community input and make the necessary modifications

- Community residents, community groups, and community leaders should always be your primary audience, so be sure to report the findings to them first and incorporate their feedback into the report.
- Multiple perspectives and feedback always benefit your final product, by ensuring that everything is correct and verified.

2. Pull out key points

- Key Findings and conclusions:
 - ⇒ What you learned
 - ⇒ Make a bulleted list, with one finding or conclusion per bullet
- Recommendations:
 - ⇒ Practical advice you can give your report audiences on what should happen next
 - ⇒ If controversial or complex, include the pros and cons of each recommendation
 - ⇒ Make a bulleted list, with one action item per bullet, beginning with who should carry out the action

3. Decide carefully how to present data to back up your findings and conclusions

- Use multiple ways of presenting data and different kinds of data to keep your audience interested and engaged.
- Use color printing and attractive formatting, as the more professional your data looks, the more seriously you will be taken by your target audiences.

This can be very important when you are trying to get the attention of funders, policymakers, and other decision-makers.

- ⇒ **Quantitative data:** data is best understood when one graph or table is used to depict each major concept or finding from the data. The more findings that are combined into one depiction, the harder it is for your audience to understand.
- Be sure to avoid any marks that don't help to depict the data, such as graph gridlines, frames, hatch marks, or extraneous graphics which distract the reader from understanding the data. Simplicity is best!
 - Never use three-dimensional graphs, as these distort the data for the observer, and make it very difficult to understand.
 - The ratio of graph height to width should be around 1 inch tall to 1.3 inches wide. Anything significantly taller or wider is difficult to read.
 - Be sure none of your data points are hidden behind any others. All of the points you want to highlight should be visible and clear.
 - Start graph x- and y-axis both at zero. Use a scale that is simple, such as 10, 50 or 100.
 - Don't forget to describe what's in the graphic—and anything else about the data—in narrative.
- ⇒ **Qualitative data**—presenting qualitative data in some ways can be much more difficult than quantitative data, as the main findings cannot be reduced down to numbers or percentages. However, since the main findings from qualitative data include categories, themes, quotes, or anecdotes, they are easier to weave into a very interesting narrative. You may still want to use a graphical depiction of the data which can take the form of:
- A table summarizing your main categories, themes and summarized findings. This is an excellent way to demonstrate the relationships between different themes or ideas discussed by interview respondents and focus group participants. Below is an example from a qualitative study of influences of self-management of type 2 diabetes among African American women (From: Samuel-Hodge CD, Headen SW, Skelly AH, Ingram AF, Keyserling TC, Jackson EJ, Ammerman AS, Elasy TA. Influences on day-to-day self-management of type 2 diabetes among African-American women: spirituality, the multi-caregiver role, and other social context factors. *Diabetes Care*. 2000 Jul;23(7):928-33).

Table 3—Summary of emergent themes

Psychosocial issue/code category	Emergent themes
Spirituality/religiosity	Spirituality and religiosity as significant factors in coping and emotional support
Diabetes Impact	Impact of diabetes expressed as fear of suffering, deprivation (diet-related), and a physical and emotional "tiredness"
Multi-caregiver role	Care-giving responsibilities to multiple family members as a significant stressor and potential barrier to self-management
Stress	General life stress as a major barrier to diabetes self-management Stressors were related to life stage, a multi-caregiving role, and health (including fear of diabetes-related suffering)
Coping	Several styles of coping used, with reliance on God and prayer as the most significant
Social support	Significant emotional and instrumental support from daughters God as a source of emotional support

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- Story boxes that highlight quotations or stories that are particularly illustrative of the findings being discussed. These boxes should be in a different color and font, in order to draw attention to them on the page. You will want to spend a good amount of time selecting the quotations and stories for these boxes. Even though many quotes and anecdotes may seem very important and interesting to you, only select the ones that appropriately and colorfully illustrate the main themes or findings you are discussing. Below is a picture and quote from a qualitative study of religious and spiritual coping in children with cystic fibrosis. (From: Pendleton SM, Cavalli KS, Pargament KI, Nasr SZ. Religious/spiritual coping in childhood cystic fibrosis: a qualitative study. *Pediatrics*. 2002 Jan;109(1):E8).



Fig 1. Jenny is a 7-year-old Lutheran girl who... recently developed insulin-dependent diabetes. She drew herself standing next to her hospital bed that she surrounded with a blue guardrail. Rather than draw God, who is in "every single place at one time" and therefore difficult to depict, Jenny drew angels flying around her bed. She explained, "The angels watch over people. They seem to take care of everyone. I think that God is their boss." She reported, "God is IN me every single minute of my life. He looks out by you and makes sure I am healthy."

- ⇒ **Maps:** use maps that contain only the necessary geographical information—avoid unnecessary details as it is difficult to see the main points you want to make. If you can't get an electronic map of your community, then find a good print map and photocopy the right areas in the right size. Be sure to include a clear legend to indicate how you have coded the areas or points on the map.

- ⇒ **Photographs:** when presenting photographs collected through a Photovoice method (see *Appendix A: Data Collection Methods*), select pictures to present much like you choose your quotations and anecdotes. You first want to eliminate unclear or fuzzy pictures. If your audience cannot determine what is in the picture, then it doesn't make any kind of impact. You also want to select the pictures that best highlight or illustrate the findings you will be discussing. Also be sure to reproduce the pictures into print or slide format with care. You do not want to use black and white or photocopying unless the reproduction is extremely clear, otherwise your wonderful pictures will have been reduced to a fuzzy graphic that may not elicit the response from your audience you desire.

4. Putting the report together

Now that you have your main findings and key points, and have thought about how to best present your data, you're ready to put them all together in a written report. You should consider this written report the source material for any other product you develop and distribute, so you want to make sure it is complete and well constructed. Research reports are usually written in the following way:

- a. Cover page: title of the report, preparer(s), organization(s), date
- b. Executive Summary: one or two page summary of main findings, conclusions, and recommendations
- c. Table of Contents
- d. Introduction: includes information about your agency, your partnership, your community, the assessment goals and objectives, primary questions, and the public health needs/problems this project aims to address.
- e. Methodology: includes information about the particular details of the assessment project and the assessment methods used.
- f. Main findings: a presentation of findings by category or theme; includes graphical depictions of data.
- g. Discussion: an opportunity to discuss your interpretation of each of the findings, as well as their importance to your community's health. If you think there were any major limitations or weaknesses of your community public health assessment, then use this opportunity to address them here. This

makes it harder for any critics or opponents to find faults with your assessment later.

- h. Conclusions: concise conclusions that summarize the major findings.
- i. Recommendations: what you would like your community assessment audiences to do next, such as program, policy, or other recommendations.

5. Design tips for easy reading

- Use a clear, readable, and large font. Some good suggestions are Times New Roman, Arial, Palatino, Garamond, and Tahoma.
- Develop clear, uniform heading formats in bold or bold italic
- Leave plenty of “white space” between paragraphs, graphics and bullet points
- Include page numbers

6.2 Identify Target Audiences

It is critical in the planning phase that your partnership identifies the intended target audiences. These are the ones with whom you wish to share your assessment findings and products. They could include internal audiences, such as community partners and other stakeholders identified in Step 1 of the planning process. They could also include external audiences, as you may decide as a group to use the findings and products from the assessment to increase awareness regarding your particular health issue, or the state of health in your community. Sharing products may also serve to “open the door” to work with new stakeholders or community partners on implementing any recommendations or next steps.

External target audiences may include:

- Community members and patients
- Hospitals, clinics, or other health centers
- Local businesses and employers

- Health insurance plans
- Other local, regional or statewide advocacy groups
- Legislators and policymakers
- Elected officials
- Funders or private foundations

Discuss the following questions with your partnership:

- Who will want to hear your findings?
- Who needs to hear your findings?
- What do you think each target audience most wants to hear?
- Can you tailor your assessment products to be responsive to what each target audience wants to hear?
- If you have too many target audiences for your report to accommodate them all while still being concise, then can you develop multiple products that highlight different assessment findings and recommendations for each target audience? (Such as policy implications for policymakers or health service implications for health care providers)

6.3 Present Your Findings

Plan your presentations for each audience. Formulate your argument and anticipate opposing arguments. Counter opposing arguments using data and findings. Focus your message around common health care values:

- Cost
- Quality
- Access
- Equity
- Rights

EXERCISE 6.3: ARGUMENT/ COUNTER-ARGUMENT

This exercise is provided to help organize your focus, assessment findings, and arguments when you get to the point of presenting them to your target audiences. Focus and tailor your arguments to each audience and you have a better chance of convincing them.

<ul style="list-style-type: none"> • What are your findings? • What data supports your argument? 	<ul style="list-style-type: none"> • What will your critics argue? • What data might you expect from them? 	<ul style="list-style-type: none"> • What is your response? • What data supports your response to opponents?

6.4 Determine Next Steps

Discuss the possible next steps for your partnership. Obviously these will probably change depending on your results and the experience of the assessment. However, identifying some of these next steps during the planning phase helps your assessment be more strategic. Some possible next steps are to:

- Identify additional stakeholders, allies, or partners
- Seek funding
- Identify program or service needs
- Identify necessary policy changes
- Engage in policy change or advocacy efforts
- Mobilize leaders and residents around an issue
- Identify needed research or program evaluation activities
- Develop an on-going collaboration with your partnership
- Develop a longer-term work plan with your partnership

Once you have achieved your community assessment, the possibilities for future action are endless!

6.5 Celebrate and Acknowledge Your Work!