

## Data Use Tip Sheets

The following tip sheets have been reformatted from those available on the Minnesota Department of Health's Community Health Promotion Guide website at <http://www.health.state.mn.us/divs/hpcd/chp/hpkit/index.htm>

### Translating Data into Policy

1. Know the limitations of your data.
2. Data should dictate advocacy
3. Have a clear and concise message.
4. Keep the data presentation simple.
5. Involve the community in analysis and presentation of the data.
6. Link data to ongoing activities
7. Use every possible opportunity to present data.
8. Help people make connections between data and policy.
9. Find a data champion.
10. Think small.

Remember, small numbers do not necessarily mean insignificant!

### What to Consider When Reviewing the Data

#### Small Numbers/Infrequent Events

Example: One year a county has one liver cirrhosis death; the next year the county has two liver cirrhosis deaths. This means there has been a 100 percent increase in liver cirrhosis death. It seems dramatic, but the actual increase was by one case. When you are interested in events that happen infrequently, any change in the number of events leads to abrupt fluctuations in trends.

#### Strategy: Combine two or more years of the data.

This strategy works as long as there has not been a major change in the way the event is measured (e.g., changes in the law, data collection methods, the definition of the problem, or the cultural context)

When combining years, work with the number of events not the percentages. Add the events across years, and then calculate the percentages.

Example: Combining two or more years of data

<b>Mock Duck County Motor Vehicle Fatalities</b>			
	Total Fatalities	Alcohol-Related Fatalities	Percent Alcohol-Related
1998	1	0	0%
1999	3	1	33%
2000	4	3	75%
Combined	8	4	Combined avg.=50%

## Comparisons

Comparisons can help you target your audience. Common comparisons include: age, gender, race/ethnicity, and geography.

## Trends

Trends over time can help you see patterns in the behavior or event you are observing. When considering trends in data, note the following:

- What time period are you looking at? (e.g. years, seasons, days)
- Is there an increase or decrease in the number of events over time?
- What is the overall extent of change over time?

Trends can be influenced by:

1. Small numbers of events
2. Changes in data collection methods: a change in the way the data are collected can alter the answers gathered.
3. Changes in how problems are defined: trends in driving while impaired (DWI) are affected by the change in the definition of the legal drinking age. In 1973, the legal drinking age was 18; in 1976, it was raised to 19; and in 1986, the drinking age was raised to 21.
4. Changes in cultural context: trends may be influenced by changes in: social/political norms, laws, organizational policies, and/or attitudes and beliefs of teachers, physicians and police officers. For example: the rate of reported cases of fetal alcohol syndrome (FAS) among newborns in the United States during 1979-1992 increased approximately fourfold. The increase may reflect a true increase in the number of infants with FAS, or an increase in the awareness and diagnosis of FAS in newborns.
- 5.

## Framing the Data for Your Audience

- Determine the audience you want to reach. (Funding source, county commissioners, parents, professionals, merchants, etc.)
- Determine the issue they are most interested in. Focus on the issue(s) and make your points concise. Most audiences are interested in a few solid numbers and a couple of anecdotes to illuminate the your findings and recommendations.
- Decide what information you want to emphasize.
- Decide which findings most strongly justify or support the prevention strategies and policies you advocate. Frame these findings in a way that "speaks out" to the audience.

Remember: The same information can be framed in different ways. In Minnesota, the percent of 12th graders who used alcohol at least once a month in the previous year decreased from 54% in 1989 to 41% in 1992. If you want to focus on the message that prevention work has been effective, highlight this as a positive trend. If you want to focus on the work that still needs to be done, emphasize that alcohol is illegal for 12th graders until age 21.

## Qualitative Data

Qualitative data are gathered by watching and listening to what is happening in a community and recording it. The data are descriptive and are based on perceptions, perspectives and experiences. Gathering qualitative data provides a way of assessing community norms and attitudes. Qualitative data are often anecdotal, but not always. It can be gathered through community opinion surveys, key informant interviews and focus groups.

*Qualitative* data are often thought of as being less important than *quantitative* data. They are neither more nor less important. Quantitative data can affirm the qualitative data that have been gathered. If the quantitative data does not affirm the qualitative data it could mean the beliefs about what is going on in the community are not accurate. It could also mean a new trend is developing which is too new to quantify.

There are many areas that can be explored to collect qualitative information about alcohol, tobacco and other drug abuse (ATOD abuse) in a community. The questions that can be asked include, but are not limited to:

- What is the reputation of the community regarding ATOD abuse? What are the stories/folk tales about ATOD in the community historically?
- Is illicit drug use tolerated or not accepted in the community?
- What are the community norms about the use of alcohol and tobacco, e.g. during meals, at parties, after work, and at gatherings like community celebrations and festivals?
- What are the community attitudes about youth consumption of alcohol and tobacco? Are they accepted as rites of passage or not tolerated? Are adults willing to provide alcohol for youth, i.e., at graduation parties? Is smoking/chewing tobacco considered to be too small a problem to address?
- Are there local laws about the hours of sale and the age of sellers/servers? Are laws regarding alcohol and tobacco sales and use enforced? Do youth have easy access to tobacco and/or alcohol products? Does the community monitor compliance of the laws?
- Do alcohol or tobacco companies sponsor community events?
- Are youth and others exposed to tobacco/alcohol advertising and promotions?
- Is responsible hosting (providing non-alcoholic beverages for those who either choose not to or should not consume alcohol) promoted and practiced?
- Is beverage server training (training for bartenders and waiters to know when to not serve alcohol to a customer) offered/required for on-sale establishments?
- Are there chemical free events and activities for adults? Youth?
- Are non-smokers exposed to environmental tobacco smoke in your community? Where? Do restaurants or worksites in the community have no-smoking policies?

Though these questions are specific to chemical health, similar questions can be asked to collect qualitative data about other behavioral risk factors.

## Nine Guidelines for Selecting, Analyzing, and Presenting Data

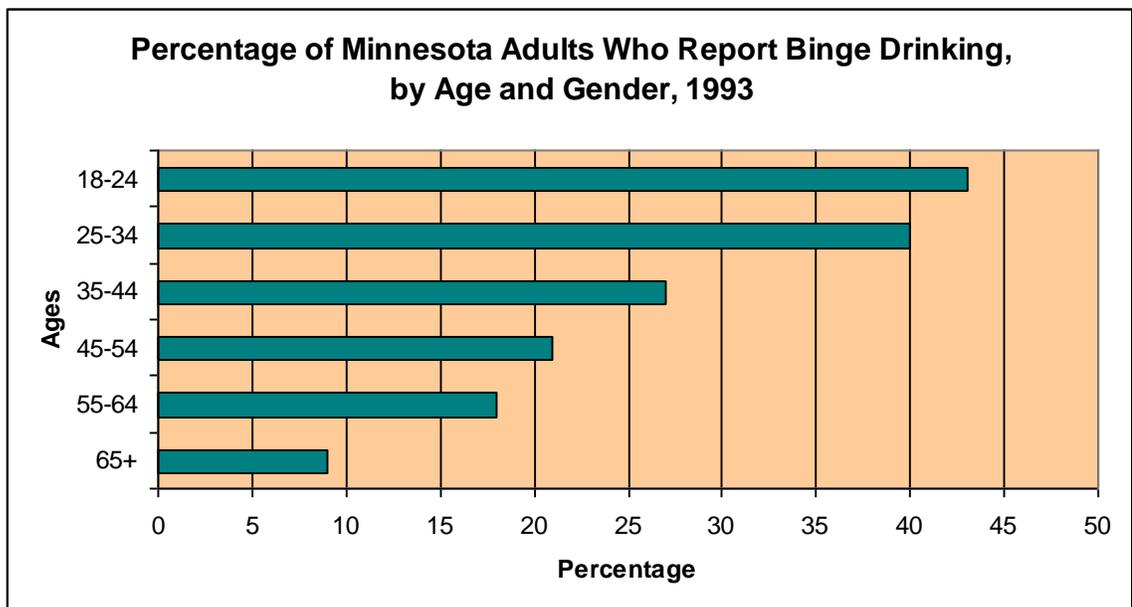
- Use data from official sources only.
- Use statistics from the geographical area of your concern.
- Use the most recent data you can.
- Check your numbers, then check them again.
- Do your own analysis. You need to be able to explain the information to your intended audience.
- Make your presentation simple.
- Link statistics to real stories or examples.
- Try to show change over time.
- Show intervention data that makes a difference.

## Examples of Data Collection

### Age Data

When you are comparing your county or city with another county or city, be aware of age differences in the populations. The difference in distribution of ages is the single most important fact when comparing populations. For comparisons, make sure the age distributions are similar.

Using age-related data can help your organization prioritize the needs of your target audience.



## Desirable Characteristics of Data

The results of a needs assessment or community assessment are only as good as the data that are used to gain the results. Therefore, it is of vital importance that planners and evaluators make sure that the data they collect are:

- Reliable
- Valid
- Unbiased
- Culturally Appropriate

<b>Reliability</b>	<ul style="list-style-type: none"> <li>• Consistency in the measurement process</li> <li>• Gives the same (or nearly the same) result every time</li> </ul>
<b>Validity</b>	<ul style="list-style-type: none"> <li>• Measuring instrument measures what it is intended to measure</li> <li>• Measuring instrument correctly measures the concepts under investigation</li> </ul>
<b>Unbiased</b>	<ul style="list-style-type: none"> <li>• Decreasing the distortion of data based on the manner in which it was collected</li> </ul> <p>Steps to take to limit bias:</p> <ol style="list-style-type: none"> <li>1. If data are being collected via observation, observation should be as unobtrusive as possible.</li> <li>2. If sensitive questions are being asked, then those collecting such data need to ensure that the data are being collected in a confidential way.</li> <li>3. Consider collecting data via anonymous means.</li> <li>4. Do not select a bias sample from the target population.</li> </ol> <ul style="list-style-type: none"> <li>• No matter how data are collected, the reduction of bias techniques will increase the accuracy of the results.</li> </ul>
<b>Culturally Appropriate</b>	<ul style="list-style-type: none"> <li>• People from different cultures are likely to possess different values, beliefs, traditions, and perceptions that affect nearly all activities of individuals, including their health-related behavior and responding to questions related to health.</li> <li>• Culture influences program participants' ability to understand, internalize, and exercise positive health practices that will enhance the quality of life. When collecting data from diverse populations, evaluators need to respond appropriately to cultural differences.</li> </ul>

## Race/Ethnic Differences in Health Risk

While Minnesota continues to rank as one of the healthiest states in the nation, those high marks start to plummet when the data are examined more closely. American Indians, populations of color, and foreign-born populations simply do not enjoy the same level of health as other Minnesotans.

- Infant mortality rates in the African American and American Indian populations are two to four times higher than for the white population.
- Rate of diabetes for American Indians in Minnesota is 600% higher than whites.
- African American males between 15 and 25 are 25 times more likely to die as a result of firearms than whites of the same age.
- Adults from populations of color are more likely to be under immunized than their white counterparts.
- Foreign-born individuals with TB in Minnesota are twice as likely as U.S.-born cases to have drug-resistant TB.
- Compared with their white and Asian peers, African American, American Indian, and Hispanic 9th graders are more than twice as likely to report having had sexual intercourse at least three times.
- Among 15-17 year olds, pregnancy rates among populations of color are approximately 3-7 times higher than the comparable rate for whites. The gap is narrower among 18-19 year olds, although a very sizeable gap remains.
- On the 1998 Minnesota Student Survey, almost half of 9th grade Hispanics (49 percent) and American Indians (45 percent) said they drank alcohol in the past month, compared with 37 percent of whites, 33 percent of African Americans, and 24 percent of Asians.
- Among adults, whites have the highest rate of current alcohol use (62 percent), followed by Hispanics (41 percent) and African Americans (43 percent). American Indians and Hispanics have the highest rates of binge drinking (28 percent and 21 percent, respectively)
- The overall mortality rate for American Indians, African Americans and Hispanics is consistently high-up to 3.5 times higher than for white Minnesotans.
- If all racial groups in Minnesota had the same infant mortality rate as African Americans in Minnesota, an additional 3,356 babies-mostly white children-would have died during the years 1994-1998.
- Among adults, the suicide rate is substantially higher among American Indians than any other racial/ethnic group.

In order to assure health for all Minnesotans, it is essential that we work to close these and other health gaps, and assure that all Minnesotans experience healthy parity.

## Presenting Your Case

After you collect, compile and analyze the local data, you are ready to develop a plan to present the data to community groups and interested community members.

Follow these tips when making a presentation before a committee or elected officials:

1. Present your strongest speakers first and last.
2. Have one person present the facts you wish to get across. Use as much local data as possible.
3. Submit written testimony of the most important information before the presentation.
4. Demonstrate that this is not an attempt to penalize, for example, adult smokers by having both smokers and non-smokers testify.
5. Most people know the hazards, for example, of smoking. Have one person present the health issues.
6. Don't ad lib-write out your testimony. Role-play a question and answer session before you present.
7. Designate one person to handle questions. If a person can't answer the question, he or she should say so and get back to the question after the meeting.
8. Have one person in the group monitor the "mood" of the meeting and make decisions about who should speak and keep track of the time.
9. Don't rely on "outside" experts-primary support for any local policy must come from the community.
10. Keep the testimony brief-one to two minutes per speaker.
11. An underage youth who has been involved, for instance, in a compliance check should speak.
12. Provide ample information to the local media.
13. Have spoken/written testimony from diverse community and civic groups.
14. Have the support and presence of your local police. If they are not supportive, try to keep them from opposing you.
- 15.

Note: In one community the local public health agency interviewed people who presented issues before the city council within the past year. They did this to gain their insights on what were successful approaches in working with city council members.

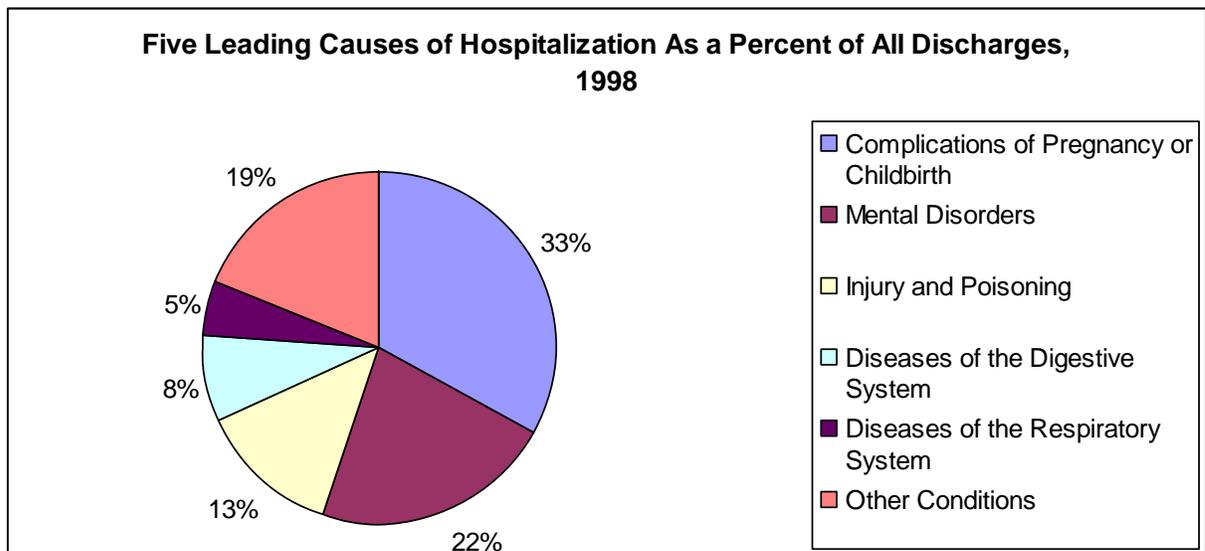
## Presenting the Data

Now that you've got the data, don't confuse yourself and the community by using them inappropriately. These tips present ways to state your case, using data that will be clear and accurate.

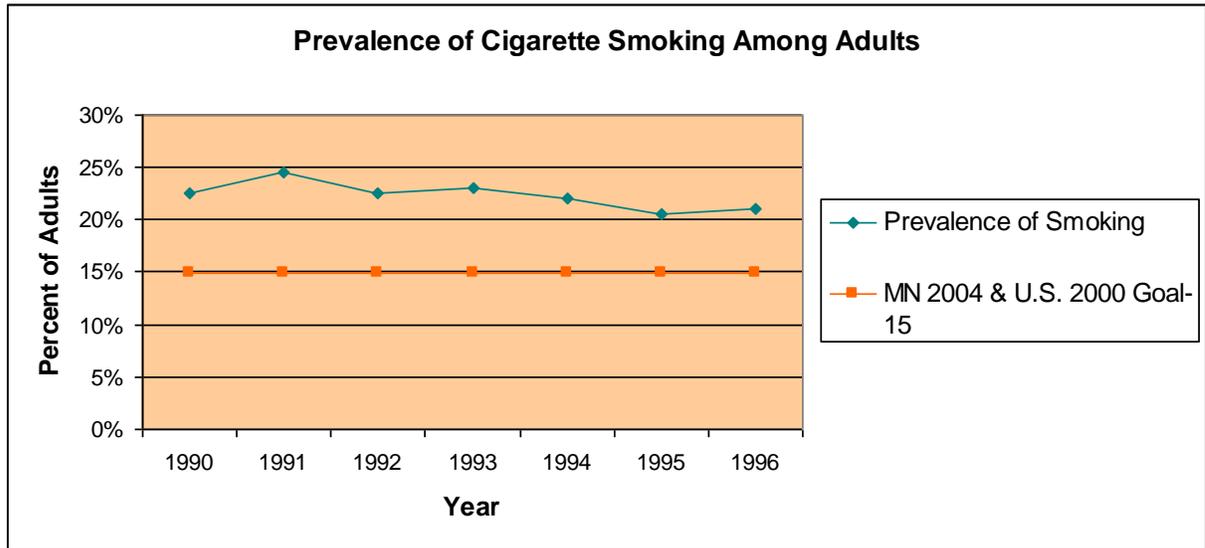
- Avoid using tables with lots of numbers. They are fine as a reference tool, but they should not be used in presentations.
- When comparing yourself with other populations, it is better to use percent/proportions instead of total numbers. Never do this if you are only using data for one year. Average at least three years before comparing. Use numbers when you are estimating number of people who will use a particular program. Then you will be able to determine whether it is a cost-effective program.
- Present your data in terms that “speak loudly” to the population. Use number of events per minute or day.
- Take percents/proportions or rates and translate them into a situation that strikes close to home for the audience.
- Proportions represent the percent of the population—they do not mean rates. Therefore, it is incorrect to take a percent, 20% of all people, and call that a rate. Rate is the number of events per multiplier.

Some information may be most effectively displayed in a graph format. The following are examples of different graphs that can be used to analyze and interpret your data:

**Pie Charts:** used when you want to demonstrate proportions

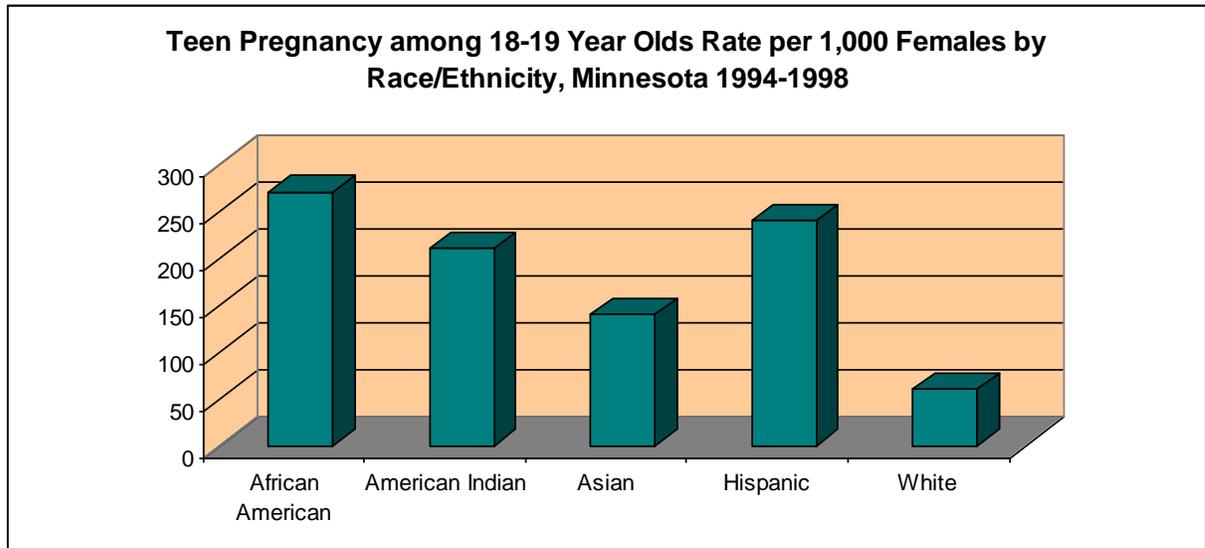


**Line Graphs:** used when you want to show change across time



Source: Minnesota Behavioral Risk Factor Surveillance System, 1998

**Bar Graphs:** used when you want to show differences among different groups of people



Source: MDH, Center for Health Statistics. Rates are calculated per 1,000 females in each group.

## How to Analyze Data

### Understanding and Presenting Your Data

The term "data" refers to a set of information which can be organized for making decisions. The use of data is central to each of the core public health functions. Sometimes the data are in the form of numbers (e.g. the number of youth drinking alcohol). Sometimes the data are in the form of stories and opinions (e.g. community attitudes about youth consumption of alcohol).

This section will discuss the following:

- How to Trust the Data
- Questions to Ask About the Data
- What to Consider When Reviewing the Data
- How to Frame the Data for Your Audience

#### How Can I Trust the Data I Have?

##### Work with a team to interpret data.

Talk to community members about the patterns in the quantitative data. They may be able to explain the trends in the data. For example, a sudden increase in DWI arrests in your community does not necessarily mean that there was an actual increase in DWI activity. The increase in arrests may be the result of increased patrolling for impaired drivers.

##### Compare the information from different sources.

You'll get a better picture of the chemical health issues affecting your community if you compare findings from different sources (community forums, student surveys, community health profiles).

##### Determine if different data sources are measuring different aspects of the issue.

For example: in a survey of Minnesota women, more women thought that crack or cocaine use during pregnancy harmed the largest number of newborns in the United States, when the actual numbers show that alcohol use during pregnancy affects more newborns than cocaine. The perception is different from the facts. Knowing that can help when educating the public.

### **Ask the Following Questions:**

- 1) Is the sample representative of the general population?

Usually, data are not collected from 100% of the people you are interested in studying. This is too expensive. Instead, data are collected from a smaller group, or a “sample” of people. To have confidence in sample data, the sample needs to “look like” or be representative of the general population.

- 2) Who was included in the study and who was excluded?

If only people enrolled in community education classes were surveyed, then you can only draw conclusions about people who were enrolled in the classes. There may be something special about the people attending the class (perhaps they live mostly in one part of town, or have more interest in the subject matter). Therefore, their opinions may not mirror the opinions of the rest of the population.

- 3) Is the data item under-reported?

The Department of Public Safety notes that in alcohol-related crashes, only the officer's perception of alcohol use is reported. Thus, the number of alcohol-related crashes is probably underestimated.

- 4) Who are the experts on this information?

If you are getting data from other sources, read their reports or ask them questions about the data. They will be able to tell you the strengths and limitations of the data.

### **How to Use Data-Data Analysis**

Once evaluators have collected the data, they must compile and analyze the information collected in order to interpret the findings. Basically, the analysis determines whether the outcome was different from what was expected. The data must be cleaned, reduced, coded, and pulled into a usable form. Information from surveys and observation sheets, for example, must be coded and entered into the computer to be compiled and analyzed.

Statistical analysis techniques can be used to describe data, generate hypotheses, or test hypotheses. Techniques that summarize and describe characteristics of a group or make comparisons between groups are known as descriptive statistics.

**Three types of statistical analyses are as follows:**

1. Univariate: when one variable is analyzed
2. Bivariate: analysis of two variables
3. Multivariate: analysis of three or more variables

The following are examples of Evaluation Questions Answered Using Univariate, Bivariate, and Multivariate Analysis:

<b>Univariate Analysis</b>	<b>Bivariate Analysis</b>	<b>Multivariate Analysis</b>
What was the average score on the cholesterol knowledge test?	Is there a difference in smoking behavior between the Individuals in the experimental and control groups after the healthy lifestyle program?	Can the risk of heart disease be predicted using smoking, exercise, diet, and heredity?
How many participants at the worksite attended the healthy lifestyle presentation?	Is peer education or classroom instruction more effective in increasing knowledge about the effects of drug abuse?	Can mortality risk among motorcycle drivers be predicted from helmet use, time of day, weather conditions, and speed?
What percentage of the participants in the corporate fitness program met their goal?	Do students' attitudes about bicycle helmets differ in rural and urban settings?	

## Advantages and Disadvantages of Data Collection Methods

Method	Advantages	Disadvantages
Written Questionnaire (via mail)	<ul style="list-style-type: none"> <li>· Large outreach</li> <li>· No interviewer bias</li> <li>· Convenient</li> <li>· Low Cost</li> <li>· Minimum staff time required</li> <li>· Easy to administer</li> <li>· Quick</li> <li>· Standardized</li> </ul>	<ul style="list-style-type: none"> <li>· Possible low response rate</li> <li>· Possible un-representation</li> <li>· No clarification of questions</li> <li>· Need homogeneous group if response is low</li> <li>· No assurance addressee was respondent</li> </ul>
Telephone Interview	<ul style="list-style-type: none"> <li>· Moderate cost</li> <li>· Relatively easy to administer</li> <li>· Permits unlimited callbacks</li> <li>· Can cover wide geographic area</li> </ul>	<ul style="list-style-type: none"> <li>· Possible problem of representation</li> <li>· Possible interviewer bias</li> <li>· Requires trained interviewers</li> </ul>
Face-to-Face Interview	<ul style="list-style-type: none"> <li>· High response rate</li> <li>· Flexibility</li> <li>· Gain in-depth data</li> <li>· Develop rapport</li> </ul>	<ul style="list-style-type: none"> <li>· Expensive</li> <li>· Requires trained interviewers</li> <li>· Possible interviewer bias</li> <li>· Limits sample size</li> <li>· Time consuming</li> </ul>
Email Interview	<ul style="list-style-type: none"> <li>· Low cost</li> <li>· Easy and convenient</li> <li>· Almost instantaneous</li> <li>· Can cover wide geographic area</li> </ul>	<ul style="list-style-type: none"> <li>· Must have email access</li> <li>· Self-selection</li> <li>· Lacks anonymity</li> <li>· Risk of being “purged”</li> <li>· Lack of “cueing”</li> <li>· Must be short</li> <li>· Noninvasive items only</li> </ul>
Group Interview	<ul style="list-style-type: none"> <li>· High Response rate</li> <li>· Efficient and economical</li> <li>· Can stimulate productivity of others</li> </ul>	<ul style="list-style-type: none"> <li>· May intimidate and suppress individual differences</li> <li>· Fosters conformity</li> <li>· Group pressure may influence responses</li> </ul>
Observation	<ul style="list-style-type: none"> <li>· Accurate behavioral data</li> <li>· Can be unobtrusive</li> <li>· Moderate cost</li> </ul>	<ul style="list-style-type: none"> <li>· Requires trained observers</li> <li>· May bias behavior</li> <li>· Possible observer bias</li> <li>· May be time consuming</li> </ul>
Existing Records	<ul style="list-style-type: none"> <li>· Low cost</li> <li>· Easy to randomize</li> <li>· Avoid data collection</li> <li>· Minimum staff needed</li> </ul>	<ul style="list-style-type: none"> <li>· May need agency cooperation</li> <li>· Certain data may be unavailable</li> <li>· Often incomplete</li> <li>· Confidential restrictions</li> </ul>
Meetings	<ul style="list-style-type: none"> <li>· Good for formative evaluation</li> <li>· Low cost</li> <li>· Flexible</li> </ul>	<ul style="list-style-type: none"> <li>· Possible result bias</li> <li>· Limited input from participants</li> </ul>

## Writing a Report

If you've done a health check, an opinion survey, or a resource inventory, you might consider writing a report. If you've done reports along the way, it may be just a matter of pulling all the information together into a summary report. A report can be used as a forum for recommendations and as a basis for future planning and action.

### **The report could include:**

- A definition of the target group, community, etc. to be served
- A table of actual or estimated health data by age, race, sex
- A description of the methods used to collect the data
- A description of the opinion leader survey and results
- A description of the groups interviewed, surveyed, etc.
- An inventory of other health promotion programs operating in the community or serving the population with information on their services and client populations
- Descriptions of available manpower, facilities, and other resources for use in program activities
- Interpretations of the results
- Suggestions for program actions—with pros and cons on feasibility

This report will have a number of applications even after your program is developed and new activities are well under way. For example, the report can be used as a method of informing influential leaders in the community of the health problem and later, or program progress. It can also be used as background information for grant and other funding opportunities as they arise.

## What's the Health of the Community?

### How to Get Information:

The more you understand a health problem, the better you can build community support for programs that address the problem. If the community doesn't perceive the issue as an important health problem, they won't be willing to invest much of their time in helping the target the problem. What methods can be used to determine the health needs in a community?

- Community Health Assessment and Action Planning (CHAAP): 2005-2009 Introduction and Handbook
  - <http://www.health.state.mn.us/divs/cfh/ophp/system/planning/chaap/index.html>
    - Identifies and prioritizes health problems
- Minnesota Department of Health, Minnesota Center for Health Statistics
  - [www.health.state.mn.us/stats.html](http://www.health.state.mn.us/stats.html)
    - Health profile for every county in Minnesota
    - Lists the major indicators of health status for each county
- Public Health Nursing Director

To foster community ownership of the program, it is wise to have citizens and local organizations participate in the assessment of the community. This may be a core group of people who come together to identify priority health problems, the risk factors that contribute to the health problem, and the influences on risk factors in their community. CHS agencies will have already completed substantial steps in this phase through the community assessment portion of the CHS planning process. However, special applications or refinements may be useful for planning health promotion programs. The types of information helpful to plan your health promotion program include:

- A description of the problem incidence
  - Number of people who develop the health problem
  - Effects of individual and community
  - Causes and preventive measures
  - Solutions
- A description of who is affected (potential target audiences)
  - Age, sex, ethnicity, places of work and residence
  - Causative/preventive behaviors
  - Related knowledge, attitudes, behavior

### **How to Find Existing Data**

The facts you need are there-you just have to find them. By pooling many sources of incomplete data, you can interpret the data to paint a larger picture. Turn to other organizations that may already be addressing the problem. You may want to contact them to discuss:

- What they have learned
- What information or advice they may have to help you
- Opportunities for working together

Besides the MDH Center for Health Statistics and the CHS Planning and Reporting Manual, there are many other local, state, and federal agencies, which can be sources of information.

### **State and Local Sources: (Vital Statistics)**

- Department of Health  
Minnesota Health Profiles [www.health.state.mn.us/divs/chs/profile2.htm](http://www.health.state.mn.us/divs/chs/profile2.htm)  
Publishes biannually selected health statistics report (i.e. immunizations, low birth weight, deaths by age, ethnicity, cause, etc.)
- County Health Departments, Local Health Clinics  
Local needs assessments and county health profiles, demand and use of services
- Local and State Government departments and bureaus  
Income Support Division of the Human Services  
Department publishes a Monthly Statistical Report on enrollment in public assistance programs
- Department of Labor, [www.dol.gov](http://www.dol.gov)  
Keeps records of percent unemployment and real capita income
- Universities and Colleges  
Health Departments
- Police or Fire Departments  
Crime, high-crime areas, driving under the influence statistics, requests for emergency services
- Community Service Agencies  
Needs assessments for particular services and numbers of the population served
- School Districts and Department of Education  
Drop out rates, literacy profiles, participation in school nutrition programs
- State and Local Service Departments  
Variety of Data, including percentages of population on welfare and unemployment

- State and Local Departments of Highway Safety  
Department of Public Safety, [www.dps.state.mn.us](http://www.dps.state.mn.us)  
Data on traffic injuries and seat belt usage
- Voluntary Agencies  
Have data on resources offered and population served
- Major Employers  
Data on health services offered, demographic information on work force and disability information
- Regional Medical Libraries, Local Libraries  
Census results, available by county or census tract
- Insurance Companies  
Prevalence data, mortality data, hospital and medical utilization figures

#### **Federal Sources:**

- Center for Disease Control [www.cdc.gov](http://www.cdc.gov)  
Provides information in the areas of preventive medicine, immunization, disease control, occupational safety and health, family planning, and health promotion and education
- U.S. Department of Commerce [www.census.gov/](http://www.census.gov/)  
Bureau of the Census  
Provides a wide array of demographic information, including race, ethnic origin, age, and household and family characteristics by subpopulation
- Healthy People 2010 [www.health.gov/healthypeople](http://www.health.gov/healthypeople)
- National Center for Health Statistics [www.cdc.gov/nchs](http://www.cdc.gov/nchs)  
Provides information on births, deaths, marriages, and divorces in the United States; the extent and impact of illness and disability; determinants of health; health personnel and services; utilization of health care; and health care costs and financing
- Department of Labor-  
Bureau Of Labor Statistics [www.dol.gov/asp/public/dollabdata/labdata.htm](http://www.dol.gov/asp/public/dollabdata/labdata.htm)  
Provides information on several hundred occupations concerning what the work involves, training and education required, earnings, working conditions, related occupations, job prospects for the future, and referral groups for additional information
- National Health Information Center [www.health.gov/nhic](http://www.health.gov/nhic)  
Refers inquiries to the most appropriate resources, using a database of more than 2,000 health-related organizations

[http://www.health.state.mn.us/divs/hpcd/chp/hpkit/text/hcheck\\_methods.htm](http://www.health.state.mn.us/divs/hpcd/chp/hpkit/text/hcheck_methods.htm)

## Methods of Data Collection

### Self-Report Data

Written questionnaires, telephone interviews, face-to-face interviews, and email are methods of collecting self-report data. Self-report data refers to data that are generated by having individuals report about themselves. Respondents are asked to recall and report accurate information. Self-report measures are essential for many needs assessments and evaluations because of the need to obtain subjective assessments of experiences. Self-report measures are often quick to administer and involve little interpretation from the evaluator.

**The following 8 steps should be used to maximize the usefulness of self-report and increase the accuracy of this method of data collection:**

1. Select measures that clearly reflect program outcomes.
2. Select measures that have been designed to anticipate response problems and that have been validated.
3. Conduct a pilot study with the target population.
4. Anticipate and correct major sources of unreliability.
5. Employ quality-control procedures to detect other sources of error.
6. Employ multiple methods.
7. Use multiple measures.
8. Use experimental and control groups with random assignment to control for biases in self-report.

Presentation, wording, and sequence of questions in self-report questionnaires and interviews can be critical in gaining the necessary information. Both should begin by explaining the purpose of the study and why the individual's responses are important. A cover letter should accompany the questionnaire, explaining the need for the information and including very clear directions for supplying it. [Cover Letter to Survey Respondents \(PDF: 7 KB 1 page\)](#)

**When writing questions, examine the following suggestions:**

1. Any questions that deal with sensitive issues should be posed at the end of the questionnaire or interview.
2. When asking questions that may be sensitive, the assurance of confidentiality or anonymity is extremely important.
3. The actual questions should be clear and unbiased.
4. Avoid questions with a specific direction that would guide the respondent's answer.
5. Two-part questions should always be avoided.
6. Do not assume that the individuals have knowledge or understanding of certain terminology.
7. If possible, use existing questionnaires-after gaining permission from the author.

## **Direct Observation**

Observation can be used to obtain information regarding the behavior or participants in a program. Observation can be direct or indirect

- Direct Observation means actually seeing a situation or behavior
- Indirect Observation is used to determine whether a behavior has occurred. It is also used to verify self-reports when observations of the actual changes in behavior cannot be observed. For example, measuring weight loss is an indirect measure of diet and exercise.

## **Existing Records**

Using existing records may be an efficient way to obtain the necessary information for a needs assessment or evaluation without the need for additional data collection. One example includes checking physician records to monitor blood pressure and cholesterol levels of participants in an employee health promotion program.

## **Meetings**

Meetings are a good source of information for a preliminary needs assessment or various aspects of evaluation. For example, if a fitness program is being evaluated, the evaluators, staff, and some participants may meet early in the planning and implementation stages to discuss the status of the program.

## **Community Assessment**

Community Assessment: the participatory process of involving community members as well as equal partners in identifying the needs, strengths (resources) and weaknesses (obstacles or limitations) of their community. Assessments are conducted with the goals of identifying and developing a shared understanding of community concerns and of laying a foundation for joint problem-solving by community members.

### **Components of Community Assessment**

- Visioning community well being and what that well-being will bring to individuals and the community as a whole
- Defining community
  - [Community Assessment](#)
- Identifying burning issues and current concerns
- Reviewing community history to identify how the population typically addresses community needs or problems
- Documenting the perception of need by affected populations
- Conducting an inventory of human, organizational, institutional and material resources in the community
- Identifying the strengths and resources available to effectively address burning issues

- Identifying the barriers or obstacles to effectively addressing issues
- Identifying skills and knowledge needed to enhance problem-solving capabilities
- Identifying points of intervention for bringing about change
- Ongoing monitoring of community perceptions, strengths, and weaknesses to ensure that community work remains relevant over time

## Needs Assessment

Needs Assessment: The process by which the program planner identifies and measures gaps between what is and what ought to be through identifying the needs of the target population and determining whether these needs are being met

Two basic types of information (data) are used to describe a community:

- Primary Data is data that is gathered through new surveys, interviews or observations and reflects the beliefs, attitudes, behaviors and cultural values of the community.

Techniques for collecting primary data:

- Formal Interview
  - Informal Interview
  - Focus Groups
  - Surveys
  - Observation
  - Community Meeting or Forum
  - Facilitated Discussion
  - Mapping
- Secondary Data/Existing Data is data that is derived from existing assessments or studies of community characteristics.

### Steps for Needs Assessment:

STEP 1-Determine the purpose and scope of the needs assessment

STEP 2-Gather data

STEP 3-Analyze data

STEP 4-Identify the factors linked to the health problem

STEP 5-Identify the program focus

STEP 6-Validate the prioritized needs

## Preparing For Data Collection

**The following steps will be useful as you prepare to gather your data:**

- Decide how the information will be collected: survey, records and documents, telephone interview, personal interview, observation.
- Determine who will collect the data.
- Plan and administer a pilot test.
- Review the results of the pilot test to refine the data collection instrument or the collection procedures.
- Determine who will be included in the evaluation-for example, all program participants or a random sample of participants.
- Conduct the data collection.

[http://www.health.state.mn.us/divs/hpcd/chp/hpkit/text/hcheck\\_info.htm](http://www.health.state.mn.us/divs/hpcd/chp/hpkit/text/hcheck_info.htm)