



## ISSUE BRIEF: Using Data to Shape Health Programs for Youth

*From the National Initiative to Improve Adolescent and Young Adult Health by the Year 2010*

### Introduction

Data can be used in many ways to shape an initiative to improve the health of adolescents and young adults. For example, data can be used for assessment, program design, evaluation, and policy analysis. Data can be a powerful tool because it helps to make issues concrete, make arguments more persuasive, challenge assumptions, guide decision-making, illustrate a need for policies and programs, demonstrate the effectiveness of interventions, and illuminate important new directions for research, policy and program development. This document will examine different ways data can be used to promote young people's health, review indicators of adolescent and young adult health, and describe different sources of data and data collection. The primary aim of this document is to describe how communities can create a youth health profile based on the *Healthy People 2010* 21 Critical Health Objectives for adolescents and young adults and conduct a needs-and-assets assessment in order to shape a local health initiative for youth.

### How Data Can Shape a Local Health Initiative for Youth

Data serve many purposes for policymakers and health professionals working in the area of adolescent and young adult health. Understanding data and using it effectively are essential skills for any advocate, as data can help quantify an issue and lend credibility to programs and initiatives. At the local level, community members and service providers may have a sense that a certain issue has become a problem in their community. Data documents the extent and nature of the problem, proving information that can shape effective interventions.

There are several ways that communities can use data. Creating a health profile is a way to **assess the state of young people's health** in a community, region or state. A health profile of youth presents available data on the major indicators of health (such as those outlined in the 21 Critical Health Objectives) and compares national, state and local data. The profile can be used as a point-in-

time assessment of adolescent and young adult health. Conducting a needs-and-assets assessment is a way to obtain more in-depth information about a particular issue. It can uncover complexities in a way that a simple point-in-time rate cannot. For example, it is important for a community to know if the rate of alcohol-related motor vehicle deaths among adolescents and young adults is significantly higher than state and national rates. Yet it is much more instructive to know how rates have changed over time, if there are differences in trends based on gender or race/ethnicity, what behaviors protect or put young people at risk for motor vehicle deaths, and what interventions have been shown by research to strengthen factors that protect young people from risks and reduce factors that put them at higher risk. By using data to paint a clearer picture of the issue, program planners can **identify important areas for intervention** and select strategies that are most likely to have an impact on the problem. Ultimately, this also helps communities to make informed decisions about using limited resources effectively.

Both public and private funders are increasingly requiring that, as a condition of receiving funds, organizations demonstrate progress toward program goals. Data play an important role in assuring accountability. Funders, often in collaboration with grantees, establish indicators to **measure progress toward program goals**. For example, they may measure change in program participants' behavior, skills, knowledge or attitudes. They may also assess whether any change in program participants is also evident in a similar group that did not participate in the program. By monitoring these indicators of progress, funders can gauge whether project goals are being met and whether success can be attributed to the program. Where progress toward goals is slow, funders often provide support to help organizations address barriers to achieving goals. In some cases, funders may reduce funding or take more direct control over programs. The type of data collection required by funders varies considerably, as does funders' responses to lack of progress.

Organizations and programs may choose to collect data on their own as a **management tool**. Also known as process evaluation, data can be collected to monitor whether the program is staying true to its action plan, and whether program strategies are being implemented in their entirety in a way that is faithful to their original design. Program managers can also assess whether the intervention is reaching the intended audience by collecting data on the age, gender, race/ethnicity, and geographic residence of participants.

Data can also be used for **policy advocacy**. Much of the data collected in a youth health profile and a needs-and-assets assessment can be used to frame arguments and talking points for advocates working toward policy change. For example, data can illustrate the severity of a problem such as drunk driving: the regions and populations most affected; the cost of the problem to tax payers; and the dollars saved by reducing rates of alcohol-related motor vehicle deaths—all important details for those making policy decisions. Trend data can also be used to make projections about the growth in death rates if no prevention efforts are put into place. The same messages can be used to educate the public about an issue in order to gain public support and bring fellow advocates on board.

Many states are initiating statewide **strategic planning** efforts that use data to provide a snapshot of adolescent health across the state and help with priority setting, planning, and resource allocation. This is much like an adolescent and young adult health profile and needs-and-assets assessment, but at the state level. States with strategic plans include California, Minnesota, Colorado, Hawaii, and Alaska. Some organizations publish health report cards. For example, Children Now publishes an annual report card that looks at the education, health and economic status of children in California (<http://www.childrennow.org>).

Clearly, there are several ways that communities can use data to assess the health status of adolescents and young adults in their communities and pinpoint areas for intervention. This document presents a two-phase process consisting of a Youth Health Profile and a Needs-and-Assets Assessment. Communities can draw on national, state and local data to create a **youth health profile** based on the 21 Critical Health Objectives (See Table 1). Using this initial profile, community leaders can identify a

Critical Health Objective(s) that warrant(s) further attention. In the second phase, community leaders can conduct a **needs-and-assets assessment** to examine community factors related to the selected objective(s)—including factors such as existing programs and services, and attitudes and beliefs among different stakeholders and sectors of the community. More information on these two forms of assessment is provided in subsequent sections of this document.

### Types of Data

There are various types of data that are useful in different situations. For example, health profiles commonly use existing data. Yet, it is important to collect original data in addition to existing data as part of a needs-and-assets assessment. Quantitative, or numerical, data can be used to determine rates, averages, and percentages. However, it is important to seek a balance with information that is more difficult to quantify, such as opinions and attitudes obtained from interviews and focus groups. Using different types of data can help check reliability and reinforce findings. The following is a brief description of different types of data:

**PRIMARY:** Original data collected by the user such as responses from a parent focus group, results from key interviews or community survey responses. When collecting primary data, it is desirable to reach a significant number of people for surveys and a diverse set of stakeholders for qualitative data collection. For example, interviewing at least 10 stakeholders from different sectors of society (e.g., youth, parents, health and social services department, education, law enforcement, community agency, business) will help provide a more in-depth picture of the community's awareness regarding a particular issue or Critical Health Objective.

**SECONDARY:** Data collected by others that can be analyzed or reanalyzed (e.g., statistics from state and local health departments, and government or local agency reports). It is important to do research and be selective with secondary data because the information may not be specific to the community or the data set may have significant limitations. It is also advantageous to look at data collected over a 5-10-year period to note any trends and changes.

**QUALITATIVE:** Data presented in narrative form that usually cannot be expressed numerically. Examples include information gathered from focus groups, informant interviews, community forums, and public hearings. Qualitative primary data offer community perceptions of young people's health, provide a context for the collection and analysis of quantitative data, and yield a better understanding of health behaviors and attitudes.

**QUANTITATIVE:** Data presented in numerical terms (e.g., vital statistics, responses to closed-ended questions on surveys). Quantitative data provide information on a large population sample, allow tracking of trends and changes within a population, and help determine and monitor health indicators.

### CHALLENGES IN USING DATA

Although data can and should play a critical role in shaping local efforts to improve the health of young people, working with data poses significant challenges. Some communities may not be comfortable working with statistics and numbers. Others may fear being labeled a "problem community" when it comes to particular health issues such as alcohol, drug or tobacco use. To address these types of challenges, people playing leadership roles in adolescent health must work in close collaboration with their community; they need to engage a diverse range of stakeholders, and develop a comprehensive strategy for communicating data to the public. It is important not to be deterred from using data when challenges arise. In fact, challenges can present opportunities for improvement, such as building new skills, changing the data collection system, creating new partnerships, and finding new uses for existing resources.

Knowing the limitations of data sets used in profiles, assessments, and other data projects is very important.

Different data sources represent a variety of research methodologies, each having its advantages and disadvantages. For example, data from household interviews may underestimate the prevalence of particular behaviors, as some young people may not be candid when talking on the phone to a stranger with their parents in close proximity. A school-based sample may also understate the prevalence of certain behaviors among all youth, since many risky behaviors are more prevalent among out-of-school youths. To balance the limitations of any one source of data, communities can use multiple data sources, where possible, to validate findings. Communities can work with data experts to decide how best to use available data sources to develop the most accurate measures.

Many of the official data sources for the 21 Critical Health Objectives have some limitations. For this reason, health professionals must be careful in interpreting the national- and state-level statistics and rates provided by these data sources. It is even more important to use caution when drawing on these data sources to create a local youth health profile, as illustrated in the following boxes. These examples serve to familiarize the reader with data issues and are not intended as comprehensive guidelines for using data.

Communities should not let limitations or lack of data stop them from going forward with a health initiative for youth. Not having enough data or information should not be a reason to avoid taking action. Communities will need to develop a realistic plan for creating a health profile—one that is feasible given existing resources. It is important to emphasize that, despite their limitations, current data sources represent a significant improvement over the data available a decade ago and permit a greater understanding of adolescent and young adult health.

## Using Data Locally

### 1. MULTI-YEAR INDICATORS FOR VITAL

**STATISTICS.** It is relatively easy to obtain vital statistics for young people (overall mortality, motor vehicle accidents mortality, homicide, suicide, births). In some cases, however, these events are relatively rare among young people at the local and sometimes the state level, resulting in misleading indicators. Even small changes in the number of births or deaths in such cases can change a rate dramatically. To adjust for these distortions, states and communities can calculate multi-year rates.

For example, the small size of many Kentucky counties makes it difficult to calculate valid county-level teen birth rates. Many of the state's 120 counties have less than 20 births to teens ages 15-17 each year. To adjust for these small numbers, the state calculates three-year averages. In one county, 11 births in 1998 translated into a birth rate of 39.4/1,000 females ages 15-17. The same county had 35 births between 1996-1998, for a three-year average birth rate of 46.8/1,000. State officials use the latter figure as the official county rate. Former state adolescent health coordinator John Webb notes that sometimes, when there are two or three births in one high school, for example, he receives calls from local health officials inquiring about the county birth rate. With the three-year averages, the state can provide accurate rates, allowing local health officials to assess the extent of teen births, establish priorities, and allocate resources accordingly.

### 2. SYNTHETIC ESTIMATE FOR RISKY BEHAVIORS.

More than 30 states administer the Youth Risk Behavior Survey (YRBS) and at least two states conduct similar surveys of risky behavior among youth. If such surveys are administered in the community, it is relatively easy to obtain local data for many behaviors contained in the 21 Critical Health Objectives. However, if there is no such local survey, communities might consider developing a synthetic estimate. A synthetic estimate

involves adapting state- (where available) or national-level data, based on demographic characteristics (e.g., income, race/ethnicity) of the community's adolescent and young adult population. For example, to create a local estimate of physical exercise in a community that has a large Hispanic population, a data expert would adapt state-level data to reflect the higher percentage of Hispanics. Most communities will need to work with a data expert to develop synthetic estimates.

In addition, communities can use relatively simple strategies to tailor their estimates to better reflect their local conditions. For example, if a community has strictly enforced local ordinances to restrict tobacco sales to minors, or has instituted a particularly strong tobacco education program in school and after-school programs, it might lower its estimate of tobacco use slightly. The community could further adjust this estimate if there were local data on the number of students participating in these educational efforts. That is, a larger number of participants would increase the likelihood that the program is influencing teen smoking. Conversely, if communities do not strictly enforce minor access to tobacco laws or do not have education programs, they may decide that the "real" indicator for this Critical Health Objective may be higher.

If the data on which the synthetic estimate is based are a few years old, communities might consult with local professionals and service providers for a "reality check." For example, if a local synthetic estimate for alcohol-related motor vehicle accidents has been calculated, a community might ask local police or emergency room clinicians if they have witnessed any changes (e.g., increases or decreases) in alcohol-related accidents among teens over the past year. To supplement a synthetic estimate for the prevalence of obesity, communities might ask doctors or physical education teachers for their perceptions of the problem.

For more information on using synthetic data, see: *Sourcebook of Comparison Data for Evaluating Adolescent Pregnancy Prevention Programs* (2000), available from: <http://www.socio.com>.

## Measures of Health and Well-being

Despite some limitations, the quality of data on risk behaviors among youth has advanced considerably over the past decade. The 21 Critical Health Objectives for adolescents and young adults reflect this progress, as each of the 21 Objectives has (or will soon have) national- and state-level data on outcomes related to mortality, unintentional injury, violence, reproductive health, substance abuse and mental health, and chronic disease prevention. However, many public health professionals advocate for a broader approach to defining young people's health—one that complements the focus on negative outcomes and individual problem behaviors with measures of healthy development and health-promoting environments. While progress has been made in measuring these concepts over the last few years, there are no ongoing national and few state surveys comparable to those that provide data on the 21 Critical Health Objectives.

## YOUTH DEVELOPMENT

Research on broader measures of health and well-being of adolescents and young adults has advanced considerably over the last decade. In the area of youth development, several approaches have emerged. **Table 1** presents an overview of youth development surveys. The approaches differ in some aspects, for example, in the extent to which each emphasizes community context versus individual traits. However, all approaches share:

- a focus on fostering strengths and assets of youth;
- the influence of community and environmental factors on youth development; and
- a philosophy that young people's assets can be fostered through programs, policies, and community efforts.

There has been tremendous progress in youth development research, especially in the development and refinement of surveys to measure the various domains of youth development. There is some overlap in the domains measured by the various youth development approaches including: bonding with adults, social competence, and recognition of positive behavior. Although national consensus is still lacking on the actual questions to use to measure these domains, states and communities interested in measuring these concepts have several options to consider. In fact, several states currently collect data

on some aspects of youth development. For example, some states are incorporating youth development measures into their ongoing state-wide surveys of risk behaviors and negative outcomes. In addition, many local communities are collecting data on positive youth development measures. Where state and local data are not available, communities may want to look at national data sets to determine how their findings might be applicable. For example, if a community has a large Latino population, it might make sense to review research from a national study to see which risk and protective factors have the strongest relationship to risky behaviors in this population.

## CONTEXTUAL DATA

The past decade has also witnessed significant progress in the development of contextual data indicators. Research has demonstrated that the social context in which people live affects their health, above and beyond individual and family factors. For example, youth who live in poor neighborhoods or neighborhoods with a high percentage of single-parent households are more likely to become pregnant, regardless of whether the individual teen is poor and/or lives in a single-parent household. Driving the progress in contextual data is the development of Geographic Information Systems (GIS), which can provide neighborhood-specific data on a wide range of social indicators. National efforts to support local use of GIS to enhance community-building endeavors include the National Neighborhood Indicators Project (NNIP), spearheaded by the Urban Institute in Washington, DC. The Baltimore Neighborhood Indicators Alliance (BNIA), a NNIP partner, provides an example of the range of data that GIS can provide. Neighborhood data available from BNIA include: demographic features such as income, age, gender, racial/ethnic composition, and household/family composition; education statistics such as drop-out and graduation rates; and health measures ranging from hospitalizations, teen enrollment in drug/alcohol treatment programs, births to teenagers, and age-specific homicide rates. (For more information, go to <http://www.urban.org/nnip>).

Contextual factors are an important complement to individual- and family-level data. Communities can use these data for many purposes, such as identifying strategies to coordinate neighborhood services more



effectively. In developing youth health profiles, communities can use these data to better understand the context in which young people make health-related decisions.

## Using Data Sources to Create a Youth Health Profile and Conduct Needs-and-Assets Assessments

### HEALTH PROFILE FOR YOUTH

A health profile is a point-in-time look at indicators of health. Data on health behaviors and health outcomes are collected to gauge the status of adolescent and young adult health relative to state and local measures and national objectives. The health profile can be used to guide decisions on where to focus efforts and can indicate areas where additional or improved data collection efforts are necessary.

The 21 Critical Health Objectives are a useful tool for deciding which indicators to include in the profile. *Healthy People 2010* identifies an official data source for each of the 467 objectives, including the 107 objectives related to adolescents and young adults and, by extension, the 21 Critical Health Objectives. **Table 2** presents an overview of the different indicators and official data sources for the 21 Critical Health Objectives. In addition, other sources can be used at the state and local levels to monitor progress toward these objectives. Sources of secondary data include local and state reports, newspapers, journals, and data gathered by local branches of government (e.g., health, education, law enforcement).

A comprehensive local health profile for youth includes data for the 21 Critical Health Objectives, as well as measures of youth development and environmental contexts—measures that have a strong influence on the health issues addressed in the 21 Objectives themselves. **Table 3** presents a sample health profile for adolescents and young adults, based on the official data sources for these Objectives. This sample profile reflects the reality that, in many communities, local measures may not be available for all 21 Objectives. However, the profile still serves as a useful starting point. In addition to presenting figures for the Objectives, the table also suggests some figures for young people's feelings of connectedness to family, school, and community. These measures are suggested to complement the traditional "problem-focused" measures represented by the Objectives. As

noted earlier, there is currently no national consensus on which measures of youth development are the most critical. Some communities may find other youth development measures more appropriate.

Since most communities can focus on one or just a few Objectives, having a local profile can guide a community's initial decisions about which Objectives to address. However, determining local priorities for adolescent and young adult health (or any related issue) involves more than reviewing a list of indicators. In addition to considering data, leaders must weigh other issues related to the community context, such as local values and the political will to address given topics. Some communities may opt not to focus on an Objective that is more likely to lead to divisiveness or controversy among community partners interested in young people's health. Furthermore, a community's profile might suggest that five Objectives warrant further attention because of their prevalence. In selecting priority Objective(s), communities may want to consider additional criteria after reviewing data by answering the following questions:

- Which Critical Health Objective(s) is (are) most likely to engage the community?
- Which will be the least divisive?
- How many young people are affected by the health issue? (For example, while the community's suicide rate might be very high compared to the national average, physical fighting probably affects more young people, even if the community estimate for that behavior is relatively low.)
- For which Objective(s) are resources (e.g., funding, staff support) already available?
- Would it be logical to address two or three Objectives that cluster? (e.g., binge drinking and alcohol-related motor vehicle accidents; or pregnancy, chlamydia & HIV prevention?)

Communities may also consider the extent to which a collaborative process should be used in selecting priority objective(s). Since the health profile can be created with just a few staff people in the local health department, some may decide it is best to have those people select the Objective(s). Alternatively, others may solicit guidance from a larger group, for example, by convening a meeting of key community stakeholders to present the health profile.

## NEEDS-AND-ASSETS ASSESSMENT

Once a decision has been made about the priority objective(s), a needs-and-assets assessment can provide more in depth information about the selected health issue.

The needs-and-assets assessment is a multistage process of collecting, analyzing, and presenting information whose purpose is to answer the following questions:

- What is the extent and scope of a problem in a community?
- Are there demographic groups and geographic areas with greater needs?
- What are local perceptions of the problem, what causes it, and how might it be prevented?
- What is the current knowledge about “what works” in addressing a particular health issue?
- What current efforts are under way to address that problem?
- What gaps are there in existing services?
- What community capacities and strengths exist, and how can they be mobilized?

With this information, practitioners, policy makers, and community members can identify priority issues and measure how well the community is meeting the needs of its young people. The needs-and-assets assessment simultaneously provides an objective picture of a community's health status using data and quantifiable information and provides a subjective view of the community and its health concerns from the perspectives of many stakeholders, including families, policy makers, school officials, the medical community, and youth themselves. Data collected for an assessment can serve as a baseline from which progress can be measured after an intervention has been implemented.

### Overview of Assessment Steps

**1. Recruit Team Members.** An assessment team should be composed of both traditional and non-traditional stakeholders in adolescent and young adult health. A good group will include a diverse group of members who possess the necessary skills and resources and have credibility and influence both professionally and in the community. The group should include professionals in fields such as health, research, media and education, as well as youth and adults from the community.

### 2. Determine Goals and Scope of the Assessment.

Outlining goals and objectives from the start can serve as a road map for the assessment process. Needs-and-assets assessments can be conducted for a variety of reasons: to provide baseline data prior to intervention implementation, to study a specific health issue or community, or to take a broader look at several health issues within a population or region. The scope of an assessment depends on how much time, staff, funding, and information are already available. To assure proper resources and to avoid duplicating efforts, an inventory of these things must be done before undertaking an assessment.

**3. Specify Questions.** When designing questions, it is important to keep in mind the goals for the assessment and the different audiences for its results. Typically, an assessment answers questions about the scope of the health issue being addressed, risk and protective factors, service and resource availability, community environment and norms, and community assets. Communities can create their own assessment questions based on an outline similar to the one in **Figure 1** or they can use one of the many existing assessment guides for areas addressed by the 21 Critical Health Objectives.

### FIGURE 1: SAMPLE NEEDS-AND-ASSETS ASSESSMENT OUTLINE

- 1) Individual/Family**
  - a) Socioeconomic Status/Family Structure
  - b) Family Connectedness
  - c) Development
  - d) School Performance
  - e) Attitudes and Knowledge
- 2) School/Peers**
  - a) School Connectedness
  - b) School Services/Classes
  - c) School Environment
- 3) Community**
  - a) Community Attitudes and Perceptions
  - b) Availability of Health and Social Services
  - c) Safety
- 4) Policy/Society**
  - a) Policies
  - b) Funding
  - c) Media

**4. Collect Data.** It is best to begin by gathering existing data from sources such as state and county health departments and the U.S. Census. To fill in gaps and confirm conclusions drawn from existing data, it is important to collect new data using surveys, focus groups, and interviews with key informants.

**5. Analyze the data.** *Quantitative* data can be analyzed with computerized data analysis packages and can be presented with statistics such as percentages, averages and differences. An analysis of quantitative data can yield information about changes in health indicators over time and provide comparison across groups. Analyzing *qualitative* data involves organizing ideas and information captured in notes from meetings, focus groups, and interviews. The information is organized around topics, themes, observations, descriptions, and conclusions. Several people should review this data to avoid subjective interpretation. Programs such as Ethnograph and Atlas can be helpful for analyzing qualitative data. Once the whole body of data is analyzed, it is presented and summarized in a final report. Communities may want to hire a consultant to assist with data collection, analysis and reporting.

**6. Share the Results.** Information can be presented as a formal written report, a condensed executive summary, fact sheets, press releases, and slide presentations. These documents can be tailored to different audiences such as health professionals, policy makers, school administrators, young people, and parents. Widespread and effective dissemination of findings from the assessment lays the foundation for action. The findings should be organized around a few key points and presented clearly and simply. It might be helpful to work with a public relations or media consultant to create a dissemination plan that involves different stakeholders and creates media attention.

Communities should make it a priority to involve young people in the assessment process. This gives

youth the opportunity to create their own definitions of the problems they face and identify their own assets and priorities. When adults speak for young people without soliciting their input, they risk designing interventions that do not resonate with youth. Youth can help design the questions or data collection instruments, collect and interpret data, and present the findings. By participating, they learn important skills in research, community organizing, public speaking, and community planning.

Upon completion of the needs-and-assets assessment, the community is armed with an invaluable resource for action planning. Information gathered from the assessment can help identify important points of intervention, existing resources, potential challenges, and a wealth of other information that will help adolescent and young adult health professionals and community members make informed decisions about resource allocation and program planning.

## Conclusion

Communities can create coalitions or workgroups to undertake a data project such as a needs-and-assets assessment, program evaluation, or public education campaign. Those who would like a more in-depth description of data use and a comprehensive list of resources should consult *Improving the Health of Adolescents and Young Adults: A Guide for States and Communities* (<http://nahic.ucsf.edu/2010guide>) and *Improving Adolescent and Young Adult Health: Non-Federal Resources* (<http://nahic.ucsf.edu/nationalinitiative>). Some communities may choose to hire a consultant or researcher to help with data collection and use. However, public health professionals who engage a diverse team may find that all of the necessary skills and resources already exist within the community. Despite limitations, data on the health of adolescents and young adults have advanced considerably over the past decade and can be an extremely useful tool.



Table 1: **OVERVIEW OF YOUTH DEVELOPMENT SURVEYS**

APPROACH NAME	SURVEY FEATURES
<b>Community Change for Youth Development (CCYD)</b> 1. JP Connell & MA Gambone 2. The Youth Survey 3. <a href="http://www.ppv.org">http://www.ppv.org</a>	<ul style="list-style-type: none"> <li>■ includes measures of community support, attitudes, &amp; risk behaviors</li> <li>■ appropriate for diverse populations (e.g., culturally &amp; socio-economically)</li> <li>■ length of survey requires individual interviews (extensive focus on how time is spent)</li> </ul>
<b>Communities That Care (CTC)</b> 1. JD Hawkins & R Catalano 2. The Youth Survey 3. <a href="http://depts.washington.edu/sdrg/CTC.html">http://depts.washington.edu/sdrg/CTC.html</a>	<ul style="list-style-type: none"> <li>■ focus on adolescents' negative outcomes and their antecedents</li> <li>■ measures have high predictive value</li> <li>■ appropriate for diverse populations (e.g., culturally &amp; socio-economically)</li> <li>■ requires high reading level</li> <li>■ must purchase</li> </ul>
<b>Resilience</b> 1. B Bernard et al. 2. Healthy Kids Resilience Assessment (HKR) 3. <a href="http://www.wested.org/hks/">http://www.wested.org/hks/</a>	<ul style="list-style-type: none"> <li>■ most rigorously tested instrument focusing on resiliency</li> <li>■ relatively short, can be used with younger children</li> <li>■ appropriate for diverse populations (e.g., culturally &amp; socio-economically)</li> </ul>
<b>Search Institute</b> 1. P Scales, D Blythe 2. Profiles of Student Life: Attitudes & Behaviors (PSL/AB) 3. <a href="http://www.searchinstitute.org">http://www.searchinstitute.org</a>	<ul style="list-style-type: none"> <li>■ pioneering survey, leading first efforts to measure external and internal assets</li> <li>■ limited diversity in samples (primarily White, from Midwest)</li> <li>■ no published reports of psychometric analysis</li> <li>■ must purchase</li> </ul>
<b>National Longitudinal Survey of Adolescent Health*</b> ■ R. Udry ■ AddHealth ■ <a href="http://www.cpc.unc.edu/addhealth/">http://www.cpc.unc.edu/addhealth/</a>	<ul style="list-style-type: none"> <li>■ Large national survey examining the role of context in shaping adolescents' health and well-being (including risky behaviors). Contexts examined include: family, friends and peers, school, neighborhood, and community</li> </ul>

\* AddHealth is included here because analyses of this survey have made significant contributions to our understanding of context influences on adolescents. Due to the complexity of the survey and study design, it is beyond the capacity of most communities to use the AddHealth survey. However, readers can review the easy-to-read reports based on AddHealth that are listed in *Improving Adolescent and Young Adult Health: Non-Federal Resources*, available at <http://nahic.ucsf.edu/nationalinitiative>.

**Table 2: NATIONAL, STATE AND LOCAL DATA SOURCES FOR THE 21 CRITICAL HEALTH OBJECTIVES FOR ADOLESCENTS AND YOUNG ADULTS**

CRITICAL HEALTH OBJECTIVE (Healthy People 2010 Objective Number)	INDICATOR	NATIONAL SOURCE*	STATE SOURCES	LOCAL/COUNTY SOURCES
<b>MORTALITY</b>				
Reduce deaths of adolescents and young adults. (16-03)	Rate per 100,000	<u>NVSS</u> <sup>1</sup> ; NCIPC <sup>2</sup> , CDC	State Department of Health, Vital Statistics; NCIPC	County Department of Health, Death Certificates (Note: large cities maintain registries)
<b>UNINTENTIONAL INJURY</b>				
Reduce deaths caused by motor vehicle crashes. (15-15)	Rate per 100,000	<u>NVSS</u> ; FARS <sup>3</sup> ; NCIPC	FARS, NCIPC	County Department of Transportation; Coroners' offices
Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes. (26-01)	Rate per 100,000	FARS	FARS; State Traffic Record Systems	County Department of Transportation
Increase the use of safety belts. (15-19)	Percent	<u>YRBSS</u> <sup>4</sup>	YRBSS	Local surveys of high school students
Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol. (26-06)	Percent	YRBSS	YRBSS	Local surveys of high school students
<b>VIOLENCE</b>				
Reduce homicides. (15-32)	Rate per 100,000	<u>NVSS</u> ; NCIPC	State Department of Health Services, Vital Statistics; NCIPC	State Department of Health Services, Vital Statistics, Coroners' offices, Police departments
Reduce physical fighting among adolescents. (15-38)	Percent	<u>YRBSS</u>	YRBSS	Local surveys of high school students
Reduce weapon carrying by adolescents on school property. (15-39)	Percent	<u>YRBSS</u>	YRBSS	Local surveys of middle and high school students

**Table 2: NATIONAL, STATE AND LOCAL DATA SOURCES FOR THE 21 CRITICAL HEALTH OBJECTIVES FOR ADOLESCENTS AND YOUNG ADULTS (continued)**

CRITICAL HEALTH OBJECTIVE (Healthy People 2010 Objective Number)	INDICATOR	NATIONAL SOURCE*	STATE SOURCES	LOCAL/COUNTY SOURCES
<b>MENTAL HEALTH &amp; SUBSTANCE ABUSE</b>				
Reduce the suicide rate. (18-01)	Rate per 100,000	<u>NVSS</u> , NCIPC	State Department of Health Services, Vital Statistics; NCIPC	CDC Wonder; County Department of Health
Reduce the rate of suicide attempts by adolescents that required medical attention. (18-02)	Percent	<u>YRBSS</u>	YRBSS	Local surveys of high school students
Reduce the proportion of children and adolescents (with disabilities) who are reported to be sad, unhappy, or depressed. (06-02)	Percent	<u>NHIS</u> <sup>6</sup>	State Department of Mental Health	Local Surveys
(Developmental) Increase the proportion of children with mental health problems who receive treatment. (18-07)	Percent	<u>NSDUH</u> (proposed)		
Reduce the proportion of persons engaging in binge drinking of alcoholic beverages. (26-11)	Percent	<u>NSDUH</u> <sup>5</sup> ; YRBSS, Monitoring the Future (supported by NIDA)	YRBSS	Local surveys of middle and high school students
Reduce past-month use of illicit substances (marijuana). (26-10)	Percent	<u>NSDUH</u> ; YRBSS, Monitoring the Future (supported by NIDA)	YRBSS	Local surveys of middle and high school students
<b>REPRODUCTIVE HEALTH</b>				
Reduce pregnancies among adolescent females. (09-07)	Rate per 1,000	<u>NVSS</u> ; <u>National Survey of Family Growth (NSFG)</u> ; <u>Abortion Provider Survey</u> ; <u>Alan Guttmacher Institute</u> ; <u>CDC Abortion Surveillance</u>	State Department of Health, Vital Statistics	Local Department of Health; State Department of Health, Vital Statistics
Reduce the number of new HIV diagnoses among adolescents and adults. (13-05) (Developmental)	Number of Cases	<u>HIV/AIDS Surveillance System</u> (proposed)	NVSS; State Health Department HIV Office/Control Program	Local Health Department

**Table 2: NATIONAL, STATE AND LOCAL DATA SOURCES FOR THE 21 CRITICAL HEALTH OBJECTIVES FOR ADOLESCENTS AND YOUNG ADULTS (continued)**

CRITICAL HEALTH OBJECTIVE (Healthy People 2010 Objective Number)	INDICATOR	NATIONAL SOURCE*	STATE SOURCES	LOCAL/COUNTY SOURCES
Reduce the percent of adolescents and young adults with Chlamydia trachomatis infections. (25-01)	Rate per 100,000	<u>STD Surveillance System (STDSS)</u> <sup>7</sup>	State Health Department STD Control Programs and Regional Infertility Prevention Programs	Local Health Department
Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active. (25-11)	Percent of sexually abstinent youth, percent of condom use among sexually active youth	<u>YRBSS</u>	YRBSS	Local surveys of high school students
<b>CHRONIC DISEASE PREVENTION</b>				
Reduce tobacco use by adolescents. (27-02)	Percent	<u>YRBSS</u>	State Youth Tobacco Survey; YRBSS	Local surveys of high school students, State Youth Tobacco Survey
Reduce the proportion of children and adolescents who are overweight or obese. (19-03)	Percent	<u>NHANES</u> <sup>8</sup>	YRBSS	Local surveys of middle and high school students
Increase the proportion of young persons who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 minutes or more (22-07)	Percent	<u>YRBSS</u>	YRBSS	Local surveys of middle and high school students
<b>DEMOGRAPHICS</b>	Population & Population Growth; Race/Ethnicity; Socio-economic Status	U.S. Census Bureau	State Department of Finance; U.S. Census Bureau	County Department of Health, U.S. Census Bureau

KEY:

<sup>1</sup>NVSS-National Vital Statistics System Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

<sup>2</sup>NCIPC-National Center for Injury Prevention and Control CDC

<sup>3</sup>FARS-Fatality Analysis Reporting System Department of Transportation (DOT), National Highway Traffic Safety Administration (NHTSA)

<sup>4</sup>YRBSS-Youth Risk Behavior Surveillance System, CDC, National Center for Chronic Disease Prevention and Health Promotion

<sup>5</sup>NSDUH-National Survey on Drug Use and Health formerly called the National Household Survey on Drug Abuse (NHSDA)

<sup>6</sup>NHIS-National Health Interview Survey CDC, NCHS

<sup>7</sup>STDSS-STD Surveillance System, CDC, National Center for HIV, STD, and TB Prevention

<sup>8</sup>NHANES-National Health and Nutrition Examination Survey CDC, NCHS

\*Note: The sources used to determine the national baseline and 2010 targets are underlined.

**Table 3: SAMPLE ADOLESCENT COMMUNITY HEALTH PROFILE**

CRITICAL HEALTH OBJECTIVE	U.S. BASELINE	2010 TARGET	EXAMPLE STATE MEASURE	EXAMPLE COMMUNITY MEASURE
<b>MORTALITY</b>				
Reduce deaths of adolescents and young adults. (16-03)				
• 10 to 14 year olds	22.1/100,000 (1998)	16.8/100,000		19.3/100,000 (1999)
• 15 to 19 year olds	70.6/100,000 (1998)	39.8/100,000		67.4/100,000 (1999)
• 20 to 24 year olds	95.3/100,000 (1998)	49.0/100,000		90.6/100,000 (1999)
Reduce deaths caused by motor vehicle crashes. (15-15)	26.4/100,000 (1998)	[1]		34.5/100,000 (1999)
Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes. (26-01)	13.5/100,000 (1998)	[1]		17.2/100,000 (1999)
Increase the use of safety belts. (15-19)	84% (1999)	[1]	78% (1999)	72%
Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol. (26-06)	33% (1999)	30%	29% (1999)	Data unavailable.
<b>VIOLENCE</b>				
Reduce homicides. (15-32)				
• 10 to 14 year olds	1.5/100,000 (1998)	[1]		1.2/100,000 (1999)
• 15 to 19 year olds	11.7/100,000 (1998)			8.0/100,000 (1999)
Reduce physical fighting among adolescents. (15-38)	36% (1999)	[1]	34% (1999)	Data unavailable.
Reduce weapon carrying by adolescents on school property. (15-39)	6.9% (1999)	32% 4.9%	7% (1999)	Data unavailable.



Table 3: SAMPLE ADOLESCENT COMMUNITY HEALTH PROFILE (continued)

CRITICAL HEALTH OBJECTIVE	U.S. BASELINE	2010 TARGET	EXAMPLE STATE MEASURE	EXAMPLE COMMUNITY MEASURE
<b>MENTAL HEALTH AND SUBSTANCE ABUSE</b>				
Reduce the suicide rate. (18-01)				1.0/100,000 (1997)
• 10 to 14 year olds	1.6/100,000 (1998)	[1]		9.0/100,000 (1997)
• 15 to 19 year olds	8.9/100,000 (1998)	[1]		14.0/100,000 (1997)
• 20 to 24 year olds	13.6/100,000 (1998)	[1]		
Reduce the rate of suicide attempts by adolescents. (18-02)	2.6% (1999)	1.0%	8% (1999)	Data unavailable.
Reduce the proportion of children and adolescents with disabilities who are reported to be sad, unhappy, or depressed. (06-02)	[2]	[2]	30% (1999)	Data unavailable.
Reduce the proportion of persons engaging in binge drinking of alcoholic beverages. (26-11)	7.7% (1998)	2.0%	22% (1999)	5.2% (1997)
Reduce past-month use of illicit substances (marijuana). (26-10)	8.3% (1998)	0.7%		8.0% (1997)
<b>REPRODUCTIVE HEALTH</b>				
Reduce pregnancies among adolescent females. (09-07)	68/1,000 females (1996)	43/1,000 females		62/1,000 females (1998)
Reduce the number of cases of HIV infection among adolescents and adults. (13-05)	[3]	[3]		Data unavailable.
Reduce the proportion of adolescents and young adults with Chlamydia trachomatis infections. (25-01)	5.0% (1997)	3.0%		4.0% (1998)
• Females attending FP clinics	12.2% (1997)	3.0%		11.1% (1998)
• Females attending STI clinics	15.7% (1997)	3.0%		14.9% (1998)
• Males attending STI clinics				
Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active. (25-11)	85% (1999)	95%	85% (1999)	82% (1997)

**Table 3: SAMPLE ADOLESCENT COMMUNITY HEALTH PROFILE (continued)**

CRITICAL HEALTH OBJECTIVE	U.S. BASELINE	2010 TARGET	EXAMPLE STATE MEASURE	EXAMPLE COMMUNITY MEASURE
<b>CHRONIC DISEASE PREVENTION</b>				
Reduce tobacco use by adolescents. (27-02)	40% (1999)	21%	29% (1999)	43% (1997)
Reduce the proportion of children and adolescents who are overweight or obese. (19-03)	11% (1994)	5%		17% (1997)
Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiovascular fitness 3 or more times/week for 20 minutes/occasion. (22-07)	65% (1999)	85%	84% (1999)	50% (1997)
<b>SUGGESTED ADDITIONAL MEASURES</b>				
Contextual				
• poverty rate	16.9% (1999)		10.1% (1999)	Not available
• family structure	63.6% (1999)		69.6% (1999)	
• high school drop out rate	5.1% (1998-99)		3.1% (1998-99)	
Family & School*				
• highly engaged in school	40.1% (1999)		43.5% (1999)	
• parent who is highly aggravated	9.9% (1999)		11.7% (1999)	

[1] 2010 target not provided for adolescent/young adult age group.  
 [2] Baseline and target inclusive of age groups outside of adolescent/young adult age parameters.  
 [3] Developmental objective—baseline and 2010 targets will be provided by 2004.

\* These two measures come from the National Survey of American Families (NSAF) conducted by the Urban Institute. NSAF measures were selected as examples of indicators with state level data. This survey contains numerous other indicators from which to choose. For more documentation on these two measures and others contained in this survey please see the following web site: <http://www.urban.org/content/Research/NewFederalism/NSAF/Snapshots/Snapshots.htm>

## Bibliography

We drew on the following resources in the development of this brief:

Brown, B. & Moore, K. (2001). *The youth indicators field in research and practice: Current status and targets of opportunity*. Washington, DC: Child Trends. Prepared for The William T. Grant Foundation.

Urban Institute. (1999). *Stories: Using information in community building and local policy*. Washington, DC: Author, National Neighborhood Indicators Partnership. [Available online at URL (12/04): <http://www.urban.org/nnip/publications.html>]

Family Health Outcomes Project. (2000). *Data sources & tools for measuring adolescent health status*. San Francisco: University of California, San Francisco, Author. [Available online at URL (12/04): <http://www.ucsf.edu/fhop/fhophi.html>]

Cagampang, H., Brindis, C., & Oliva, G. (2001, draft.) *Assessing the multiple processes of adolescent health: Youth development approaches*. San Francisco: University of California, San Francisco, Institute of Health Policy Studies. Prepared for The William T. Grant Foundation.

Brindis, C. "Finding the trees from the forest: Comparing and contrasting youth development strategies." Presented at State Adolescent Health Coordinators Annual Meeting, Washington, DC, March 24, 2001.

**Adapted From:** Centers for Disease Control & Prevention, National Center for Chronic Disease Prevention & Health Promotion, Division of Adolescent & School Health; Health Resources & Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health; National Adolescent Health Information Center, University of California, San Francisco. *Improving the Health of Adolescents and Young Adults: A Guide for States and Communities*. Atlanta, GA: 2004. To download, visit the NAHIC web site: <http://nahic.ucsf.edu/2010guide>.

**Suggested Citation:** National Adolescent Health Information Center. (2004). *Issue Brief: Using Data to Shape Health Programs for Youth*. San Francisco, CA: Author, University of California, San Francisco.

This document was developed with support from the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health (CDC-DASH), and the Health Resources and Services Administration, Maternal and Child Health Bureau, Office of Adolescent Health (MCHB-OAH) (2U45MC0002-11-00).

This document is a product of the National Initiative to Improve Adolescent and Young Adult Health by the Year 2010, a collaborative effort to improve the health, safety, and well-being of adolescents and young adults. For more information on the National Initiative, please visit the Official Federal National Initiative web site (<http://www.cdc.gov/HealthyYouth/NationalInitiative/>) and the National Initiative page of the NAHIC web site (<http://nahic.ucsf.edu/nationalinitiative>).

**Published by:**  
National Adolescent Health Information Center  
University of California, San Francisco,  
Division of Adolescent Medicine  
3333 California Street, Box 0503, Suite 245  
San Francisco, California, 94143-0503  
Phone: 415-502-4856  
Fax: 415-502-4858  
Email: [nahic@itsa.ucsf.edu](mailto:nahic@itsa.ucsf.edu)  
Web site: <http://nahic.ucsf.edu>