

Community-Monitoring Systems:

TRACKING AND IMPROVING THE
WELL-BEING OF AMERICA'S
CHILDREN AND ADOLESCENTS

Patricia Mrazek, M.S.W, Ph.D.
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Funding from the National Institutes of Health and Robert Wood Johnson Foundation—coordinated through the National Science Foundation and the Society for Prevention Research—supported the preparation of this paper.

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FOREWORD

The Society for Prevention Research is dedicated to promoting practices that will reduce the prevalence of health, social, and emotional problems and enhance the well-being of people of all ages. This monograph documents the growing practices of monitoring the well-being of children and adolescents. Monitoring systems are an integral part of efforts to prevent child and adolescent problems and ensure successful development. The monograph was developed thanks to funds from the National Science Foundation and the Robert Wood Johnson Foundation. It was written based on input from numerous organizations that are developing and using monitoring systems. It is hoped that the monograph will assist prevention scientists and practitioners in furthering the practice of monitoring child and adolescent well-being. Its recommendations define the next steps that must be taken if the full promise of this practice is to come to fruition.

Gilbert J. Botvin, Ph.D.
Immediate Past President
Society for Prevention Research

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EXECUTIVE SUMMARY

Monitoring the well-being of children and adolescents is a critical component of efforts to prevent psychological, behavioral, and health problems and of efforts to promote young people's successful development. As documented in this monograph, systems for monitoring well-being are coming into ever-increasing use. To the extent that such systems can be made widely available to communities, it will foster support for prevention efforts and guide the selection of increasingly effective prevention practices.

Research over the past 40 years has helped to pinpoint which aspects of child and adolescent functioning are important to monitor. It has identified behavioral and psychological problems that are unacceptably prevalent and costly to young people and those around them. These problems include substance use, antisocial behavior, risky sexual behavior, and academic failure. From a public health perspective, the problems most important to monitor can be chosen based on their prevalence and consequences to youth, their families, and their communities.

To a lesser extent, there is evidence about the importance of some aspects of young people's successful functioning, such as academic success and participation in volunteer activities. Communities that monitor these aspects of youth functioning are engaging in a practice fundamental to ensuring successful development.

At the same time, research has pinpointed risk and protective factors that influence the development of problems. These factors include family, peer, school, and neighborhood influences. Communities that monitor these influences are in a position to reduce the risk of problems and increase protection against them.

Good systems for monitoring child and adolescent well-being are becoming more available. The present monograph describes statewide systems, such as Connect Kansas, which provides estimates of problem prevalence and risk and protective factors for every county in Kansas, and The Cleveland Area Network for Data Organizing (CANDO), which provides profiles regarding indicators such as mobility, economic status, and public safety for neighborhoods in the Cleveland area. Data for these systems come from surveys of adolescents and from archival records.

The key features of successful community-monitoring systems (CMSs) are:

1. To provide the community with accurate estimates of well-being for the entire population of children and adolescents.
2. To encourage widespread participation of community members in the design, maintenance, and use of the system.
3. To identify and assess key indicators of well-being shown by research to be important. This includes measures of youth functioning and of the factors influencing development.
4. To use all available data, both survey-based and archival.
5. To generate easily understandable information for decision-makers and community members that is readily usable to answer specific questions.
6. To provide timely data about trends in well-being and in risk and protective factors that predict youth outcomes.
7. To guide priority-setting and decision-making regarding choice of programs, policies, and practices to improve youth well-being.

Recommendations

It is clear that the practice of monitoring child and adolescent well-being is growing. However, a number of things are needed to make such systems widespread and maximally effective.

At the federal level, at least five things are considered necessary. These are:

- Government must support research to help improve community-monitoring systems. Research can improve the validity of data collection systems, identify efficient methods for widespread implementation, evaluate the effects of such systems on outcomes for young people, and assess their cost-effectiveness for promoting effective prevention.
- The government should play a leadership role to help states and communities define the aspects of youth functioning and risk and protective factors most in need of monitoring.
- Federal support is needed to enable states and local communities to develop the infrastructures required to collect, organize, and make available data on well-being.

- Federal policies calling for assessments of child and adolescent well-being can influence the adoption of community-monitoring systems.
- The federal government should develop a unified approach in support of the development of monitoring systems. Development of systems for monitoring the broad range of child and adolescent indicators is hampered by the fact that responsibility for various aspects of functioning is spread across multiple federal agencies.

States also have a critical role. These are some of the important steps they can take:

- Develop a consensus among state agencies and local communities about the aspects of child and adolescent functioning to monitor.
- Create coordinated, comprehensive systems to assess child and adolescent well-being, assist communities in collecting the data, and organize them so that it is used by communities.
- Collect and organize data in public archives and make these data available to the communities.
- Provide training and technical assistance to communities on how to use data on risk, protection, and youth outcomes in planning drug abuse and violence prevention activities, social services, youth development programs, and educational policies and programs.
- All of these developments will be fostered by a clear set of policies that makes such assessment systems a priority.

With respect to local communities, we recommend that they:

- Develop a community consensus about what behaviors—and influences on those behaviors—require monitoring.

- Develop a coordinated strategy among relevant local agencies to collect, share, organize, and make use of available data. To the extent that the use of such data becomes a standard practice in the community, a greater number of effective preventive practices will be shaped over time.
- Encourage local news media to report the results of assessments and to describe the efforts that community leaders are making to respond to the findings.
- Use data to guide prevention and treatment practices in the community. When evidence of progress in reducing a problem—such as heavy episodic drinking by many teens or high rates of school dropout—emerges, the programs and policies previously implemented to achieve the outcome will receive increased support.

The collection, organization, and use of community-monitoring data may seem remote from the personal and compelling details of the lives of our youth. However, as communities become skilled at implementing and operating CMSs, they can use data to guide them in choosing programs and policies in important ways. They can prevent young people from dying in alcohol-related car crashes, becoming depressed and committing suicide, taking up smoking and dying at an early age, becoming pregnant while in adolescence, dropping out of school, or entering a life of crime. By focusing attention on measurable outcomes, community-monitoring systems can help bring about genuine and critical improvements in the lives of children and adolescents in every community.

COMMUNITY-MONITORING SYSTEMS AND THE WELL-BEING OF YOUTH

Communities can create environments in which children and adolescents develop the skills, interests, and habits they need to live healthy, happy, and productive lives in caring relationships with other people. The accumulating research on factors that influence successful and problematic development and on the interventions that prevent diverse problems demonstrates our potential to achieve these outcomes.

Over the past 40 years, researchers have pinpointed numerous malleable influences on behavioral development, including family, peer, school, and community influences. Studies experimentally evaluating preventive interventions have shown that we have the potential to create communities where many fewer young people smoke or develop problems with alcohol and other drug use, where crime is less prevalent, where unwanted pregnancies and sexually transmitted diseases are rare, and where there are many less problems with depression and anxiety (Biglan et al., 2004). However, translating this research into community practices remains the challenge. Yet, before communities can implement effective programs and policies, they need to know what is happening with the young people in their communities. For this reason, an increasing number of communities are establishing community-monitoring systems (CMSs). These systems monitor the well-being of children and adolescents and the factors that influence their development.

We begin this monograph by placing CMSs within the framework of public health efforts to improve the well-being of populations. We then describe seven key features of CMSs and their value in supporting successful development of children and adolescents. See Box A. Examples describe functioning CMSs in the context of state and national developments in monitoring young people's well-being. Finally, the monograph presents key strategies to advance widespread and effective implementation of CMSs.

A PUBLIC HEALTH PERSPECTIVE: THE FOUNDATION FOR A CMS

A public health perspective is concerned with the well-being of entire populations. It goes beyond attention to individual well-being and asks about the incidence and prevalence of indicators of health in defined populations. In the case of youth, the public health perspective seeks to understand the factors influencing the prevalence of a range of common youth problems and to intervene in ways that reduce the prevalence of those problems.

A thoroughgoing and comprehensive approach to the public health of young people is concerned with the entire range of problems that threaten those youth. Based on considerable epidemiological evidence, we know that each of the following problems is common among adolescents and costly to them and those around them: tobacco, alcohol, and other drug use; anti-social

Box A: An Ideal Community-Monitoring System

1. Provides the community with accurate estimates of well-being for the entire population of children and adolescents
2. Encourages widespread participation of community members in the design, maintenance, and use of the system
3. Identifies and assesses key predictors of well-being that research shows are important. This includes measures of youth functioning and of the factors influencing development
4. Uses all available data, including both survey and archival
5. Generates information for decision-makers and community members that is easily understandable and readily usable to answer specific questions
6. Provides timely data about trends in well-being and in risk and protective factors that predict youth outcomes
7. Guides priority setting and decision-making regarding choice of programs, policies, and practices to improve youth well-being

behavior; depression; sexual behavior that risks pregnancy or disease; and drunken driving (Biglan et al., 2004). The public health approach recognizes that these problems are inter-related; the same young people tend to engage in multiple problems. Moreover, this approach concentrates on affecting the risk and protective factors influencing involvement in multiple problems.

Community organizations concerned with children and youth often concentrate their work on individuals. If it serves the children and adolescents with whom it works, an organization’s mission is accomplished. However, even if a community’s organizations do the very best with and for the people they serve, many children and young people remain unaffected—unless organizations examine whether or not they are reaching all the young people who might benefit from their assistance.

Thus, it is important for communities to focus on the well-being of all of its youth by monitoring the prevalence of the entire range of problems in the population of young people. By doing so, the community is most likely to affect all of the young people in the population.

KEY FEATURES OF AN IDEAL CMS

In this section, we present seven key features of community-monitoring systems. We illustrate how these systems contribute

to reducing the incidence and prevalence of problems among children and adolescents and increase the proportion of young people who develop into successfully functioning adults.

Provides accurate estimates of well-being

To have the greatest impact on the well-being of youth, a CMS must monitor the most important aspects of young people’s functioning. Existing epidemiological research has produced important information about young people’s psychological and behavioral health problems that are both common and costly.

From a public health standpoint, the population of young people will benefit most by a concentration first on the most common and costly problems that affect them. Further, community monitoring should include indicators of positive youth outcomes, such as high school graduation and achievement test scores, because of their importance in their own right. A balance of positive and problem indicators prevents the stigmatization of youth that can occur when only problems are the focus.

Table 1 lists key outcomes in four domains: physical, mental, and behavioral health, and education. Biglan et al. (2004) presents a discussion of the evidence for the importance of these outcomes. Communities that promote health and educational

Table 1: Domains of functioning of children and adolescents

Physical health	Prematurity Birth weight Immunizations Nutrition	Physical activity Death rates: Suicide Homicide Unintentional injuries
Mental health	Depression Anxiety disorders Eating disorders	
Behavioral health	Tobacco use Alcohol use, especially binge drinking Use of other drugs	Sexual behavior: Multiple partners Sex without condoms Antisocial behavior: Violent behavior Property crimes Drug sales
Education	Academic achievement Truancy Graduation rates	

success, and prevent and reduce problems in these domains, have the potential to improve substantially youth outcomes.

By providing accurate estimates of the well-being of the entire population of young people in a community, a CMS guides the community to focus on improving the lives of all its youth. Taking this type of population-based perspective fosters an emphasis on prevention. Once a community adopts the goal of reducing the proportion of young people with any given problem—in addition to treating those who are manifesting problems at levels that warrant intervention—the community becomes interested in doing everything that will minimize the proportion of youth affected. That interest inevitably brings preventive interventions into play.

Accurate information about the risks young people encounter, the strengths they have, and the strengths they need could help a community focus on the aspects of youth functioning that need attention. Valid, reliable indicators can arm advocates for young people with information that motivates others in the community to devote resources to help those young people.

To the extent that this type of information system is built into a community's decision-making processes, the system supports

an infrastructure of people and organizations working to prevent youth problems and advocating that the community focus on youth well-being. Thus, the monitoring system helps to ensure that the well-being of young people is an ongoing priority.

Annual estimates of the functioning of young people also provide a basis for evaluating the success of prevention efforts. Declining levels of problems suggest that community efforts are of value. As levels of problem behavior increase over time, it alerts the community to the need for added efforts.

Oregon Healthy Teens, for example, provides annual reports to surveyed communities about the prevalence of adolescent problem behaviors and about the levels of risk and protective factors. Communities can make policy decisions using these data. See Box B for details about the program.

Encourages community participation

An ideal CMS fosters participation of community members in the efforts to improve the well-being of children and adolescents. Good models exist for involving community members in decisions on what behaviors to monitor and on finding ways to make data available to the community (Arthur,

Box B: Oregon Healthy Teens

Collaborators

- Oregon Department of Human Resources
- Oregon Department of Education
- Oregon Research Institute

Assessment Tool

- Addresses information needs of state agencies concerned with adolescents
- Provides estimates to 80 communities on the prevalence among students of 23 problem behaviors (e.g., tobacco, alcohol, and other drug use; high-risk sexual behavior; inadequate exercise; antisocial behavior; drinking and driving; suboptimal nutrition) and 7 positive social behaviors (e.g., volunteering, doing chores or homework, exercising, participating in religious activities)

Process: A randomly selected third of Oregon middle and high schools receive the survey. Each 8th and 11th grader receives—by random assignment—three of six survey modules. Schools access system data to check youth status on the most common and costly adolescent problems.

Funding/Future: Received NCI funding to support the study of factors influencing adolescent tobacco use for three years and state agencies then begin to fund it. A large, growing number of state and local leaders in education, treatment, and substance-use prevention supports this system. Researchers are developing a web-based system to make the data more accessible to ease the decision-making processes.

Hawkins, Pollard, Catalano, & Baglioni, 2002; Fawcett, Paine, Francisco, & Vliet, 1993; Fawcett, Schultz, Carson, Renault, & Francisco, 2002; Hawkins, Catalano, & Arthur, 2002). The involvement of community members in these decisions fosters their commitment to the use of data systems and motivates them to implement the improvements necessary as suggested by the data (Arthur et al., 2002; Roussos & Fawcett, 2000).

A community can weave a CMS into its decision-making procedures. If school boards, city councils, business, civic, and neighborhood organizations, and human service agencies offer input on what to monitor, procedures for monitoring, and uses of data, their commitment to the system and their use of the data in their governance processes are likely to increase.

A community might establish a tradition of convening representatives of these organizations for an annual review of

the CMS's findings. At this review, community members might set goals and modify practices based on their own community's evidence. Over time, the system can become a fundamental component of decision-making—one that keeps issues of youth well-being at the forefront of community concerns. Alternatively, a community may institutionalize a collaborative planning board or body to continuously plan, implement, and monitor the results of policy and program improvements using community-monitoring results (Hawkins, Catalano, & Arthur, 2002).

Oswego County, New York provides an example of how a CMS can foster community improvement in promoting the well-being of its citizens. See Box C.

Several communities in Kansas, with support from researchers at the University of Kansas, the University of

Box C: Family Services Task Force, Oswego County, New York

- Members: 60 partners from 27 human service agencies and organizations
- Goal: To improve the physical and mental well-being of Oswego's youth and families
- First assessment in 2000; updated in 2002
- Communities That Care model (Hawkins et al., 2002; Hawkins & Catalano, 1992)
- Measured archival risk indicators
- Helped create database on
 - Risk and protective factors
 - Resource assessment data on county assets & services
- Undertook comprehensive, countywide planning
- Use the data to decide, through consensus, what to prioritize for action
- Improves ability to respond to new funding opportunities
- Community leaders and agencies use the data on a regular basis
- Collaborative grant-writing forum has grown out of the monitoring process
- FSTF members
 - Interpret and use the data
 - Expand understanding of research-based best practices
- Forge collaborative relationships to reduce risks; increase protective factors
- Participate in county planning forums
- Offer input to address community needs
- Use these data to inform local planning and resource-allocation processes

The SAMHSA Center for Substance Abuse Prevention provided funding to the New York State Office of Alcoholism and Substance Abuse for a substance abuse prevention improvement initiative, which helped develop this system.

Washington, and the Greenbush Education Service Center in Girard, Kansas, are able to utilize data obtained using the Communities That Care model (Arthur et al., 2002; Hawkins & Catalano, 1992) and other tools (e.g., needs assessment and staff development). The goal of Greenbush and its members is "to provide innovative solutions that guide data-driven decisions" (Greenbush website, 2004). Started in 1976, Greenbush began "on the basis that it would provide area school districts a way of accomplishing things that would be too costly individually" (see website at <http://www.greenbush.org/>).

Assesses key predictors of well-being

Risk and protective factors

Communities that want to promote health and success and prevent youth problems before they develop must monitor not only youth outcomes, but also the factors that influence those outcomes—the risk and protective factors. It is important to understand that preventing something before it happens requires understanding and addressing its causes. Risk and protective factors are conditions in the environment or individual that affect the likelihood of a certain outcome, whether healthy behavior or health-compromising behavior. It is noteworthy that a shared set of risk factors predicts a wide range of youth outcomes and certain protective factors inhibit development of a range of problems.

There is evidence that both risk and protective factors contribute to youth outcomes (Pollard, Hawkins, & Arthur, 1999; Sameroff, Gutman, & Peck, 2003), so focusing solely on reducing risk or solely on promoting strengths or protection is not likely to be as effective as addressing both risk and protective factors in community planning. Thus, reducing the most prevalent risk factors and strengthening the most depressed protective factors in a community can affect the prevalence of many adolescent health and behavior outcomes. It is, therefore, important to know what risk factors are most elevated and what protective factors are most depressed among a community's young people in order to design education, youth development, and preventive systems that can have the strongest effects in promoting healthy child development.

To illustrate, in a community where a large proportion of adolescents have favorable attitudes toward drug use, more young people are likely to use drugs. A tested and effective drug abuse-prevention curriculum in school is one way to reduce this risk factor of favorable attitudes toward drug use. A community with monitoring data showing high rates of teen drug use and widespread attitudes favorable toward drug use might choose to adopt and implement such a curriculum. Thus, it is important for monitoring systems to include measures of risk and protective factors shown by research to be predictors of youth outcomes. Figure 1 lists risk and protective factors for drug abuse, delinquency, teen pregnancy, school drop out, and violence validated in longitudinal and epidemiological studies.

Utilizes all available data

Communities typically collect data about youth well-being from a variety of sources. These sources include survey data about both problem and healthy behavior; data on academic achievement; archival records on crime, teenage pregnancy, and vandalism; and data on the economic functioning of neighborhoods and the community. The optimal CMS makes use of all this information. By using multiple sources of data, a community can derive a comprehensive picture of how its young people are doing and can address the informational concerns of diverse groups in the community. However, practicality may necessitate starting with a limited data set, and adding to it as the capacity to collect and summarize data expands.

CMSs in operation to date do not incorporate information about all types of data conceivably available, but a number of systems do provide comprehensive information about communities. The Cleveland Area Network for Data Organizing (CANDO), for example, gathers data on adult well-being as well as that of children and adolescents. CANDO provides profiles in the form of eight data tables on 41 indicators. The data tables include population composition, vital statistics (births), residential mobility, economic status, educational attainment, housing stock, housing investment, and public safety.

Another system, Connect Kansas (<http://www.connectks.org>) provides information about every county in Kansas in terms of nine characteristics of a "caring community":

- Families, youth, and citizens are part of community planning, decision-making, and evaluation
- Families and individuals live in a safe and supportive community
- Pregnant women and newborns thrive
- Infants and children thrive
- Children live in stable and supported families
- Children enter school ready to learn
- Children succeed in school
- Youth choose healthy behaviors
- Youth successfully transition to adulthood

Sources of data that describe these nine characteristics range from student surveys to records of public health, economic, and criminal justice systems. The Communities That Care survey (Arthur et al., 2002; Hawkins et al., 2002), administered throughout Kansas, provides the data on youth well-being and on risk and protective factors. By accessing the Connect Kansas website (<http://www.connectks.org>), county residents can learn how their county is doing on those indicators.

By making such extensive information readily available, the system empowers multiple individuals and groups to become interested and involved in improving the community. The

Figure 1: Risk factors for adolescent problem behaviors (Hawkins et al., 2002).

Risk Factors	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
Community						
Availability of drugs	✓				✓	
Availability of firearms		✓			✓	
Community laws/norms favorable toward drug use, firearms, crime	✓	✓			✓	
Media portrayals of violence					✓	
Transitions and mobility	✓	✓		✓		✓
Low neighborhood attachment and community disorganization	✓	✓			✓	
Extreme economic deprivation	✓	✓	✓	✓		
Family						
Family history of the problem behavior	✓	✓	✓	✓	✓	✓
Family management problems	✓	✓	✓	✓	✓	✓
Family conflict	✓	✓	✓	✓	✓	✓
Favorable parental attitudes and involvement in a problem behavior	✓	✓			✓	
School						
Academic failure beginning in late elementary school	✓	✓	✓	✓	✓	✓
Lack of commitment to school	✓	✓	✓	✓	✓	
Individual/Peer						
Early and persistent antisocial behavior	✓	✓	✓	✓	✓	✓
Alienation and rebelliousness	✓	✓		✓		
Friends who engage in the problem behavior	✓	✓	✓	✓	✓	
Favorable attitudes toward the problem behavior	✓	✓	✓	✓		
Early initiation of the problem behavior	✓	✓	✓	✓	✓	
Constitutional factors	✓				✓	✓

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website provides assistance in planning actions to improve specific aspects of the county's functioning.

effectiveness and efficiency of prevention efforts can be expected to grow with it.

Generates data useful for decision-makers

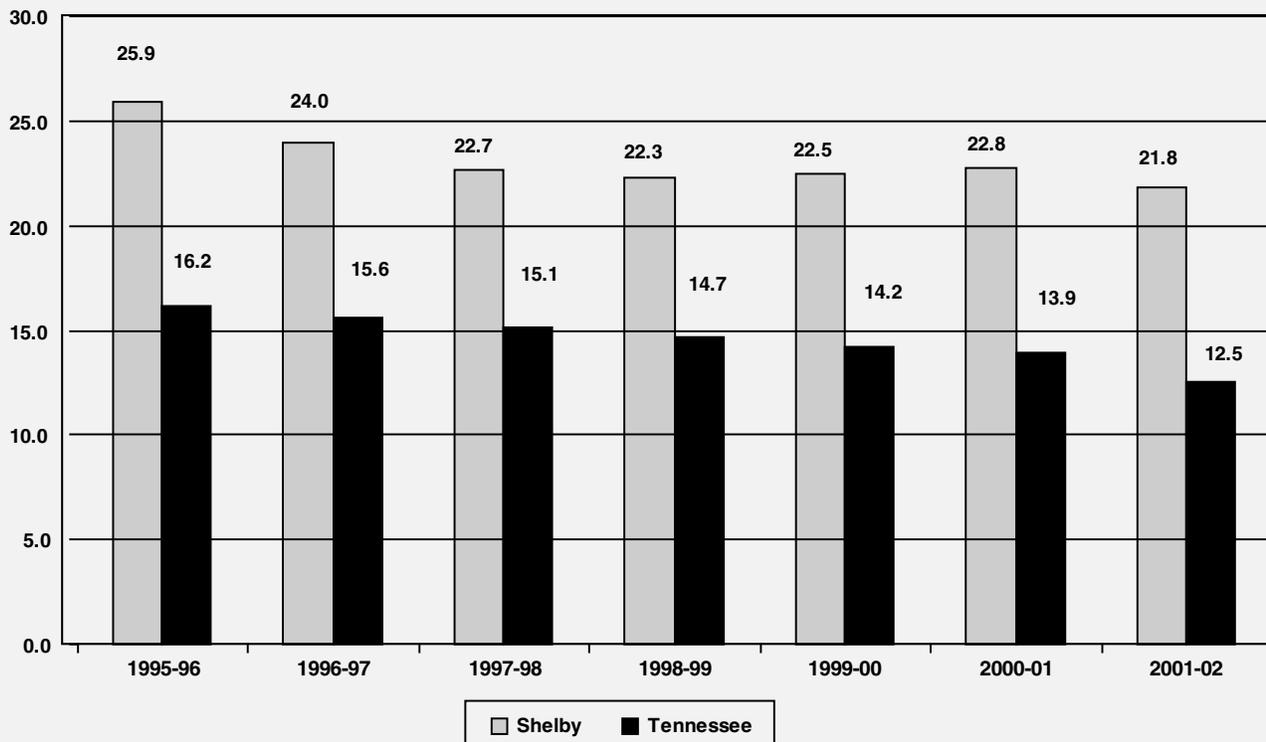
A well-organized CMS that uses data from multiple sources can guide decision-making of community leaders and prevention practitioners. Evidence about the trends in adolescent behavior can indicate problems that call for additional prevention or treatment efforts. Information about risk and protective factors can pinpoint targets for intervention. For example, a community might identify a grade cohort with particularly high levels of alcohol use and norms that are supportive of such use. This information might prompt a concerted effort to combat the problem by trying to alter the norms for alcohol use in that grade cohort. Such a targeted strategy may be far more efficient than directing interventions designed to prevent most problems among all young people in the community. As the sophistication of monitoring systems grows, the

Provides timely data on trends

Each year, communities with a CMS will have better evidence about whether the well-being of young people is improving—or not. For example, since 2000, Oregon Healthy Teens has provided data to communities about problems and positive behaviors among youth. Schools and communities can determine readily whether rates of youth smoking, alcohol use, etc., are trending up or trending down.

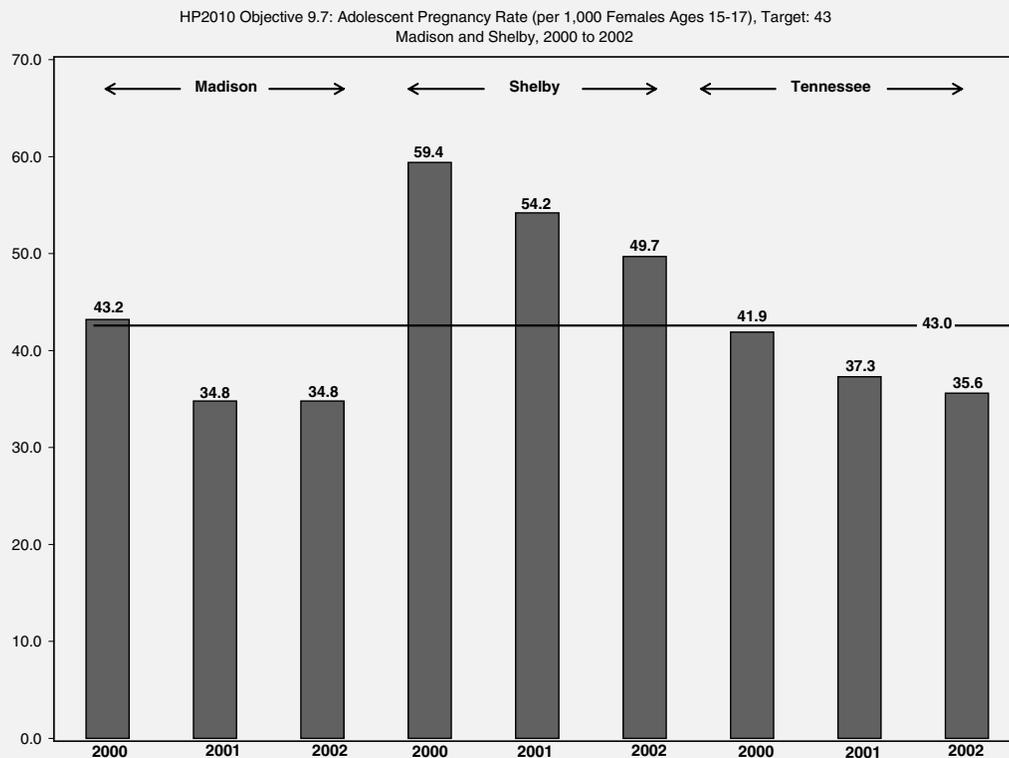
On its website (<http://hitspot.state.tn.us/hitspot/index.htm>), Health Information Tennessee (HIT) has trend data accessible that provide a wealth of information about the health and well-being of Tennessee's population as a whole and in its counties and cities. We show two examples of the kind of output possible. Figure 2a shows the way a county might compare information from Department of Education school system data over time to the state as a whole.

Figure 2a: Education Tennessee, School Dropout Cohort Rate



Source: Annual Statistical Reports, Tennessee Department of Education

Figure 2b: Healthy People 2010, Tennessee



Source: Tennessee Department of Health

Figure 2b demonstrates the output from a HITSPOT query on Healthy People 2010 objectives for adolescent pregnancy rates, charted for two counties and the state as a whole, and indicating the progress toward meeting the objective over a two-year period.

Trend information is valuable to motivate communities. Numbers headed in the right direction give support for continuing current practices. Numbers headed in the wrong direction may provide the impetus to modify existing practices.

For many issues, of course, more frequently generated data on trends would be even more valuable. For other issues, less frequent measurement might be adequate. Although it generally is unrealistic to expect data on youth behaviors or exposure to risk or protective factors to be collected more than once a year, data on problems such as school discipline referrals, vandalism, or youth participation in community programs can be obtained more frequently. These types of data can guide efforts to address these concerns. For example, communities increasingly obtain ongoing data about crime and vandalism and use them to guide resource allocation and crime control efforts (Kelling & Coles, 1996).

Having data does not mean that a community has useful information. A CMS must provide readily accessible, easily understood data to help answer specific questions and to motivate community members to work to prevent youth problems.

An ideal CMS provides readily understandable profiles of young people's functioning as well as risk and protective factors for the community and, in larger communities, for neighborhoods. Increasingly, CMSs are web based and user friendly. For example, the Seattle Public School System has posted on its website profiles of risk and protective factors and behavior outcomes from the Communities That Care Youth Survey for all secondary schools in the district (See the Seattle Public School System website at <http://www.seattleschools.org/area/ctc/survey/survey.htm>). This web-based system enables all community members to see the data, increasing the likelihood that the data will be used. Ideally, such a system could allow the user to explore relationships in the data, for example, to examine the proportion of young people who smoke according to gender, ethnicity, or neighborhood.

Table 2: Violent crime rates in Cleveland

Neighborhood	Total violent crime count	Age of victim of violence			
		0-9	10-14	15-19	20-24
Cudell	157	5	5	24	17
Detroit-Shoreway	330	4	14	48	53
Downtown	245	2	2	19	32
Total	732	11	21	91	102
Cleveland City	6,390	143	298	930	979

Source: Center on Urban Poverty and Social Change, Mandel School of Applied Social Sciences, Case Western Reserve University

The Cleveland Area Network for Data Organizing offers an example of what is possible with data. The network incorporates federal, state, and local data into a data warehouse. From the combined data, it is possible to create neighborhood profiles, including geographical maps of data. More than 1,000 users, including individual citizens and policymakers, use the “one-stop shopping” system for data of all sorts—rates, counts, indexes.

Table 2 shows statistics for three Cleveland neighborhoods, plus Cleveland as a whole, in 2001 for total violent crime and crime affecting victims by age groups age 0 through 24. It took less than five minutes to generate the statistics. With such easy and quick access to information, a neighborhood group can pinpoint aspects of well-being that need the most attention and then can marshal the evidence to advocate for support of efforts to address their concerns.

Guides choice of programs, policies, and practices

CMSs can guide communities to set appropriate priorities for themselves and to choose programs and policies that are likely to have the greatest positive impact on young people. By indicating the prevalence of various problems—and strengths—among children and adolescents, a CMS can help the community identify and select the aspects of youth functioning that most need attention. Information about the levels of specific risk and protective factors may indicate which factors most need to be improved. If the monitoring system also provides information about programs and policies that have been effective in other settings in changing risk and protective factors, the system can help decision-makers choose the programs and policies most likely to affect the aspects of youth functioning of greatest concern.

To illustrate, Nova High School, an alternative school located in Central Seattle serving grades 9 through 12, has been monitoring levels of risk, protection, and youth outcomes through the Communities That Care (CTC) process. Figure 3 shows levels of some youth outcomes monitored by Nova. Note the relatively high prevalence of alcohol, cigarette, marijuana, and hallucinogen use in this school compared with previous reporting from the Monitoring the Future national samples of 10th grade students in 2002. Over 50% of Nova students also reported that they had been drunk or high at school in the past month. Through the CTC process, the Nova school team identified “favorable attitude toward drug use” as the most elevated risk factor reported by students on the CTC Youth Survey. Risk level represents the percent of surveyed students whose attitudes are favorable toward drug use. See Figure 4.

The team also noted (Figure 5) that social skills, including drug refusal skills, ranked among the lowest of the protective factors measured on the survey. Based on these data, Nova selected Project Toward No Drug Abuse (PTND) as the tested effective program to use to change these prioritized risk and protective factors. PTND is an interactive program designed to change substance use norms and to increase coping and self-control skills. It has been tested and shown to be effective in alternative high schools. Nova’s Implementation Plan, shown in Figure 6, documents the use of monitoring data to design a change aimed at improving youth outcomes by addressing an elevated risk and a low protective factor among Nova students.

A CMS should provide ongoing feedback about the effects of implemented programs and policies. Empirically tested interventions found to be effective are the best bet to affect targeted problems, but programs found to be effective in experimental

studies may or may not prove to be effective when they are widely implemented among diverse populations (Biglan, Mrazek, Carnine, & Flay, 2003). Studies of programs conducted under field conditions may shed light on probable effectiveness (e.g., Flay, 1986; Lamb, Greenlick, McCarty, & Institute of Medicine, 1998).

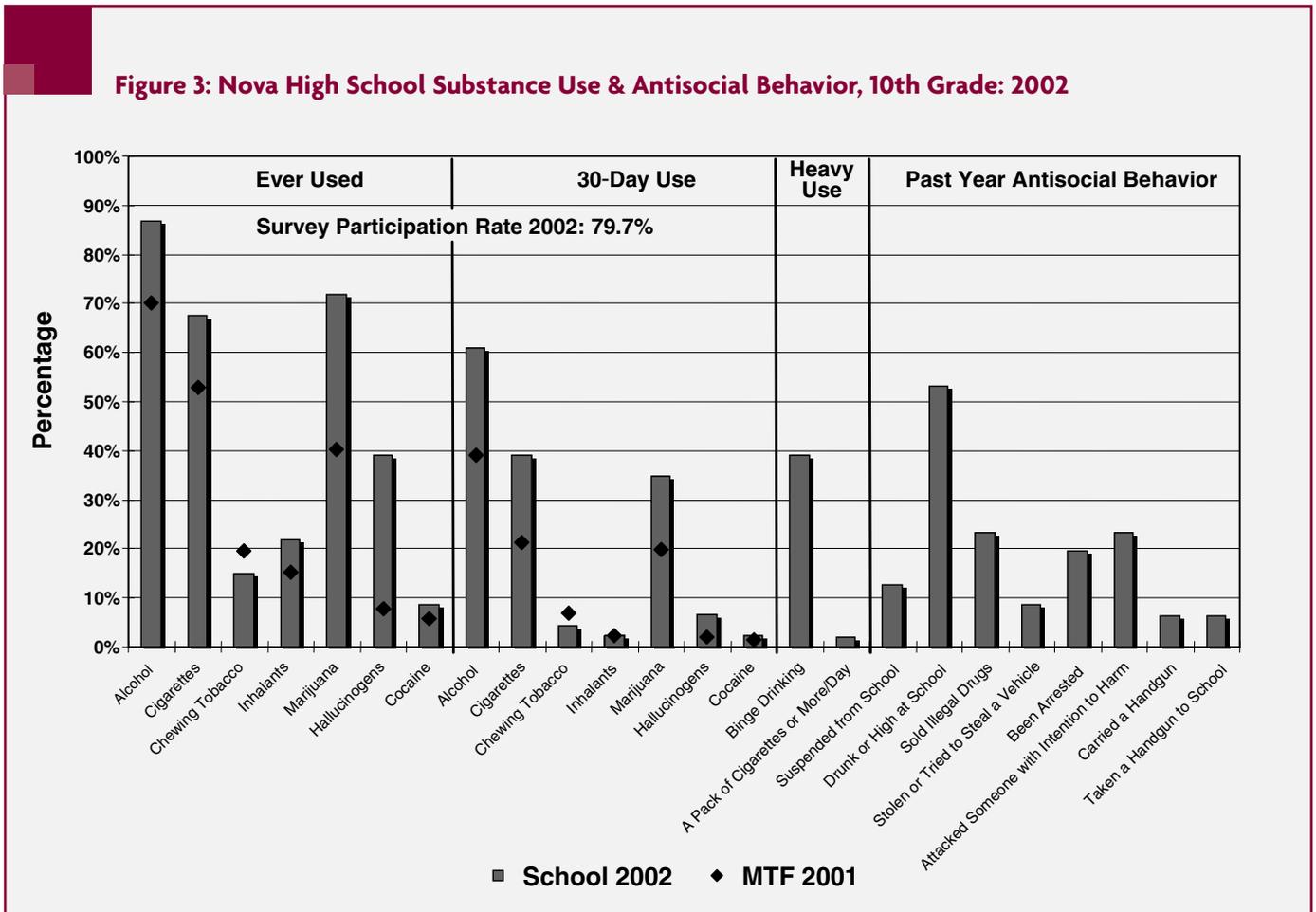
In education, the best instructional systems rely on frequent assessment of student progress (e.g., Becker, 1996). Similarly, in manufacturing, monitoring is a critical component of the process of achieving good outcomes. If communities wish to ensure that the programs they implement actually are working to achieve better outcomes for the community and youth, it is essential to establish and maintain a CMS.

CMSs can contribute to the selection of a greater number of more-effective practices as these practices become widely adopted. Monitoring of the population in the communities that implement these systems can lead directly to the selection of more-effective practices (Biglan et al., 2003, 2004; Hawkins

et al., 2002). Communities that engage in ongoing monitoring will tend to drop or alter practices that are not associated with desirable outcomes and to retain practices that are associated with good outcomes. Undoubtedly, some communities may make mistakes, but over time and across all communities, the trend will be to select more-effective practices—just as practices that make more profits tend to be selected in free-market economic systems (Friedman & Friedman, 1980).

The Washington State Initiatives Grant (SIG), directed by Mary Ann Lafazia, illustrates a change in practices resulting from monitoring outcomes associated with new programs. Through a competitive procurement process, Lafazia and colleagues selected 18 communities from across the state to participate for three years in the Washington SIG. As part of the SIG, communities received data about risk and protective factor profiles and youth behavior outcomes specific to their geographic area. They also received detailed instructions and extensive training on the interpretation of these data to help them select the most

Figure 3: Nova High School Substance Use & Antisocial Behavior, 10th Grade: 2002



appropriate prevention strategies to reduce risk factors and enhance protective factors.

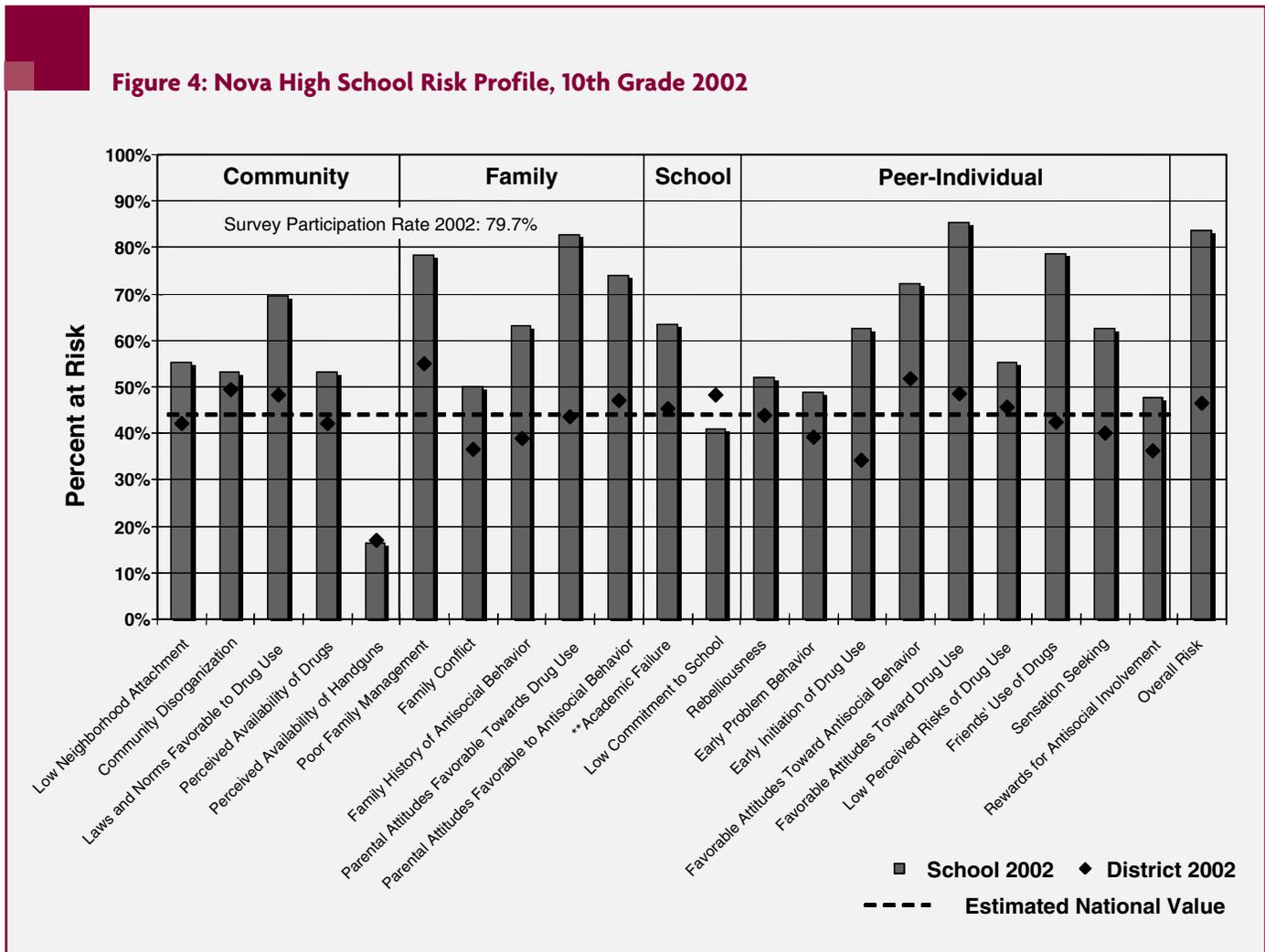
The 18 SIG community sites implemented 103 prevention strategies over three years. Of these 103 strategies, 65% were evidence based. The communities gained a web-based management information system (Everest Prevention Outcomes Evaluation Management System) designed so a community could self-manage its program outcomes. This system provided the community programs with pre- and post-questionnaires, with valid scales and immediate reports on outcomes for both pre- and post-tests.

Throughout the three years of SIG grant implementation, several communities in the project dropped unproven prevention programs they had initially adopted in favor of tested, effective preventive interventions. They made these changes after prevention programs they had initially adopted

did not produce the desired changes in targeted risk and protective factors or outcomes in participants. Others replaced one tested, effective prevention intervention that was not giving them the results they wanted with another tested, effective prevention intervention.

One community in rural Eastern Washington added Parents Who Care (Hawkins & Catalano, 1996) to their general county-wide parent information program. Parents could choose Parents Who Care in conjunction with the county's family support agencies, such as the Children's Home Society. A second community in Eastern Washington dropped its alternative programs altogether in favor of adding Strengthening Families (Kumpfer, Molgaard, & Spoth, 1996), in conjunction with a PTA parent volunteer program. A SIG community on Whidbey Island and one in Eastern Washington added SMART Moves programs (Boys & Girls Clubs of America; see St. Pierre &

Figure 4: Nova High School Risk Profile, 10th Grade 2002



Kaltreider, 2001) to their non-evidenced based after-school activities. A SIG community in Eastern Washington dropped its after-school “homework” program in favor of structured after-school tutoring services.

A rural community in Western Washington added Preparing for the Drug-Free Years (now Guiding Good Choices; Kosterman et al., 1997) to their Strengthening Families and Strengthening Multi-Ethnic Families components in order to give parents options for receiving parenting education services. A large school district in Western Washington expanded its Strengthening Families SIG component to the entire school district. Finally, a community in Eastern Washington, unable to recruit senior citizens as mentors for its Across Ages program, dropped the program in favor of a Big Brother/Big Sister-type mentoring program.

Overall, three of the 18 communities implemented only tested effective prevention programs. An unexpected finding from the Washington SIG was the decision by 12 of the

remaining 15 communities to provide non-evidenced-based prevention programs only as an infrastructure for an evidence-based program. For example, one community decided that it would provide after-school homework club only as part of a structured one-on-one or group tutoring program. In another community, after-school recreation programs served as the “infrastructure” for skill building and resistance curricula.

Eighty-three percent of the prevention programs continued implementation after the SIG project ended; 73% of the continuing programs are evidence based or provide the infrastructure for the evidence-based prevention programs (Stark & LaFazia, 2002).

ACTION AGENDA TO DEVELOP COMMUNITY-MONITORING SYSTEMS

Widespread, effective use of CMSs requires strategic actions at the federal, state, and local levels. In this section, we describe the requirements at each level to make effective CMSs widely available.

Figure 5: Nova High School Protective Profile 10th Grade, 2002

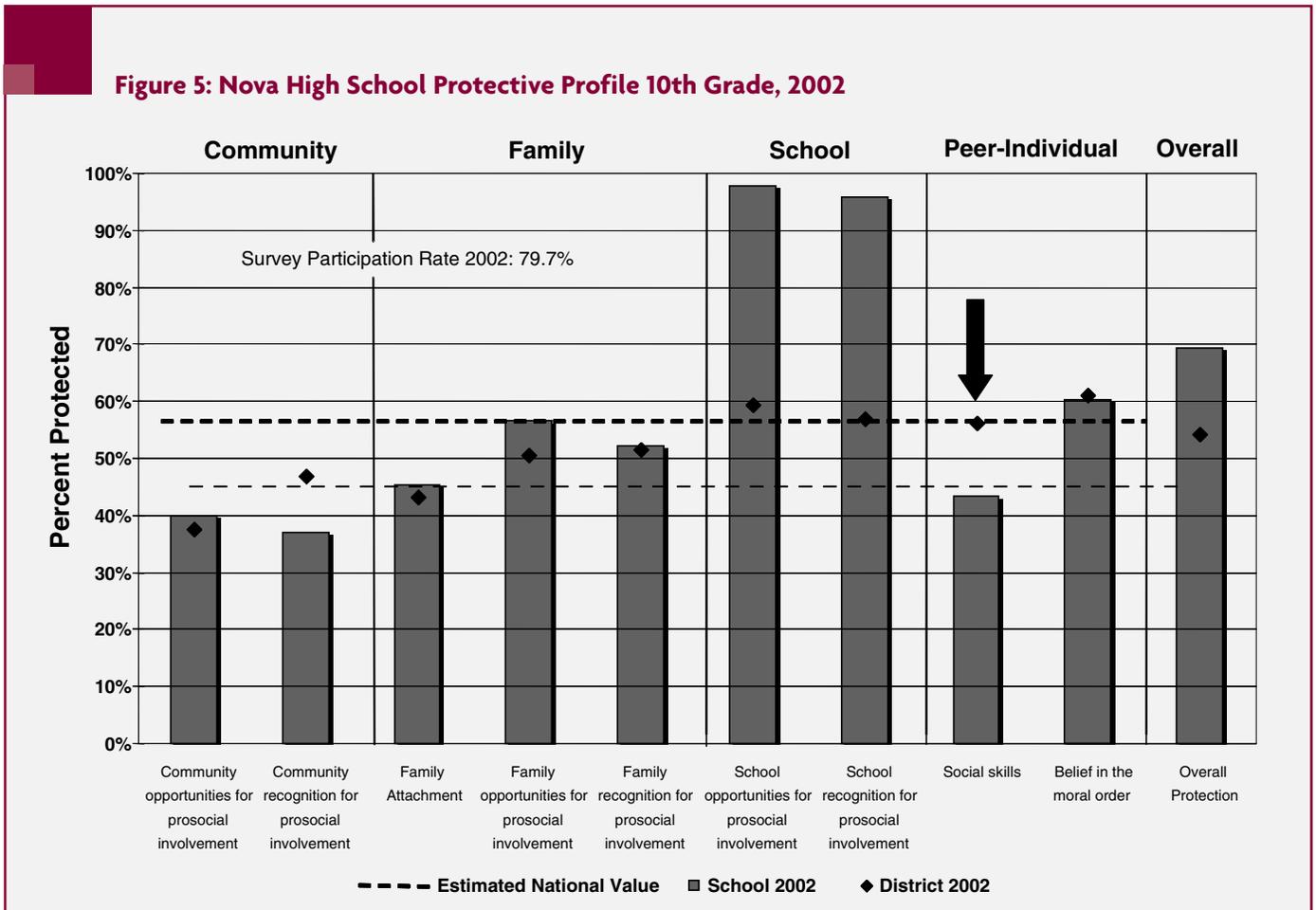


Figure 6: Nova Implementation Plan

SEATTLE PUBLIC SCHOOLS
Communities That Care®
Nova High School
FINAL Implementation Plan

1. School vision:

Nova is a democratically governed learning community. We strive to be creative, independent and critical thinkers who work collaboratively and demonstrate a high degree of individual and social responsibility.

2. Identified priority risk factor (and protective factor):

Risk Factor: Favorable attitude toward drug use (peers-individual domain)

Protective Factor: Social skills (peer-individual domain)

Substance Use: alcohol, tobacco, marijuana

3. What is the rationale for selecting these priorities?

Based on the CTC student survey, substance use was prevalent in areas of alcohol and marijuana use. The 1999 Teen Health Survey results also shared a high level of substance use among the students at NOVA. There seems to be an increase of substance abuse reported at the 12th grade in comparison to the 10th grade.

4. Desired outcomes:**a. Healthy youth development/problem behavior outcomes:**

- To decrease 30-day alcohol use, as measured by survey from baseline of 61% of 10th graders and 64% of 12th graders to 45% of 10th graders and 50% of 12th graders by 2004.
- To decrease 30-day use of marijuana for 10th graders from 35% to 25%. To decrease 30-day use of marijuana for 12th graders from 54% to 43%.

b. Risk factor outcomes:

To decrease peer-individual favorable attitudes toward drug use, as measured by survey from baseline of 85% of 10th graders and 82% of 12th graders to 70% of 10th graders and 70% of 12th graders by 2004.

c. Protective factor outcomes:

To increase peer-individual social skills as measured by survey from baseline of 44% of 10th graders and 51% of 12th graders to 54% of 10th graders and 58% of 12th graders by 2004.

5. Tested, effective program/strategy to achieve outcomes:

Project Toward No Drug Abuse (PTND)

6. What is the rationale for selecting this program/strategy?

PTND is a curriculum that provides students with information about the social and health consequences of drug use and addresses topics including instruction in active listening, effective communication, stress management, tobacco cessation, and self control. The curriculum is designed for older teens and tested effective for alternative high school students.

Role of the federal government

The federal government can foster the development of CMSs by:

- Supporting research to improve the systems
- Identifying what needs to be monitored
- Supporting state and local infrastructures for CMSs
- Developing policies that encourage the use of such systems
- Changing federal infrastructure

Research

Federal funding for research is crucial in the development of effective CMSs. It is necessary to conduct research in four broad categories: methodology, system implementation, outcome evaluation, and cost-effectiveness.

Methodological research will refine methods of obtaining accurate, timely, and relevant data for communities' monitoring systems. For example, optimal procedures for sampling young people to obtain accurate estimates of their functioning

could reduce the cost and increase the accuracy of assessments. Given the large number of aspects of youth functioning requiring assessment, it is also a priority to create valid scales with as few items as possible.

Researchers must find ways to reduce the cost of collecting and organizing data. For example, standardization of survey instruments would reduce costly duplication of effort across communities. Similarly, creating standards for the collection and storage of archival measures, such as crime statistics and academic achievement, would make it easier to organize these data and make them available to communities.

Research is necessary on how to implement monitoring systems to be useful to the communities—to enable effective and efficient community decision-making. Even if a community's user-friendly monitoring system provides relevant data about the most important aspects of child and adolescent well-being and risk and protective factors that influence youth, there is no guarantee that the community will use the information. Research should help to develop and test strategies to embed the use of CMSs into the decision-making processes of the school, criminal justice, mental health, and public health systems. Research should investigate the effectiveness of CMSs in influencing community decisions about priorities, programs, and policies.

Finally, research is necessary to evaluate experimentally the impact of community-level information on child and adolescent well-being. This research will investigate whether or not the implementation of monitoring systems affects risk and protective factors and the incidence and prevalence of problems of young people.

Identification of data to monitor

In recent years, federal agencies have begun to identify programs and policies likely to be effective in preventing youth problems. Although various agencies have used different criteria to determine what makes a program worthy of dissemination (Biglan et al., 2004), the efforts generally have encouraged communities to adopt practices for which there is empirical evidence.

A similar effort could articulate those aspects of outcomes and risk and protective factors that most need monitoring. Epidemiological evidence specifies behaviors and the most common and most costly psychological problems. Aspects of

successful development, such as academic achievement and high school completion, must also be included as major objects of public policy and expenditure. Similarly, evidence abounds about specific risk and protective factors that contribute to problematic versus successful development.

Good strategies are crucial for combining all this information in a way that articulates what needs monitoring and how that monitoring should occur. Optimally, agencies will come together to speak with one voice on this topic. However, research can help to facilitate such consensus building.

Support for state and community infrastructure

Reflecting recent advances in prevention science, federal funding agencies focus increasingly on developing the state and local infrastructure for effective prevention of problems in childhood and adolescence. An essential feature of this infrastructure must be a system that measures risk and protective factors and outcomes for children and adolescents in states and communities.

Federal agencies that fund prevention or treatment practices in states and communities include the U.S. Department of Health and Human Services (DHHS) Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA funds prevention and treatment services for substance abuse through the Center for Substance Abuse Prevention (CSAP) and the Center for Substance Abuse Treatment (CSAT), and prevention of mental health problems and treatment of mental disorders through the Center for Mental Health Services (CMHS).

Other funding agencies include the Office of Juvenile Justice and Delinquency Prevention (OJJDP) in the U.S. Department of Justice, the U.S. Department of Education, and the Centers for Disease Control and Prevention, Bureau of Maternal and Child Health, and Administration for Children and Families (all in DHHS).

With few exceptions, these agencies typically have not funded development of local or state measurement infrastructures that provide ongoing information about local communities' records in preventing health and behavior problems and promoting youth well-being.

One exception is CSAP, which played a vital role in fostering the development of monitoring systems during the 1990s through its State Needs Assessment Grants. Under this initiative, many states began monitoring risk and protective factors

and youth outcomes on a state and regional basis. Several states used settlement money from the tobacco lawsuit or general funds to allow any secondary schools in the state that wanted to do so to conduct surveys of their students and to create local community profiles of youth. Under that initiative, a number of states that received State Needs Assessment Grants used the public domain Communities That Care Youth Survey (Arthur et al., 2002; Hawkins et al., 2002) to monitor levels of risk, protection, and youth outcomes during the period of grant funding. Many states continue to survey representative samples of youth ages 12 to 18 to create state, regional, and local profiles using the CTC Youth Survey Instrument. These include Arizona, Arkansas, Colorado, Florida, Illinois, Kansas, Louisiana, Maine, Montana, New Jersey, New York, Oklahoma, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

Policies

Federal policies also can affect the development of monitoring systems. For example, the Synar Amendment requires each state to assess systematically the level of illegal sales of tobacco to young people. The Safe Schools Act of 1994 envisioned that, by the year 2000, every school in America would be free of drugs and violence and would provide a disciplined environment that fosters learning. The Safe and Drug-Free Schools and Communities Act of 1994 provides for federal assistance to support programs that help to achieve that goal. These programs, coordinated with related federal, state, and community efforts and resources, and involving parents, help to prevent school violence and strengthen programs that prevent the illegal use of alcohol, tobacco, and drugs. It would further enhance these programs if it were required that recipients of funds for those efforts must obtain useful, standardized data on the outcomes they seek to affect.

Federal infrastructure

The current structure and practices of federal agencies that support research and practice related to young people's well-being are not ideal for development of CMSs. Typically, agencies focus on one problem (e.g., tobacco use) or on a small set of problems. Thus, no single agency is responsible for assessment of the entire range of youth problems and all the risk and protective factors. Nevertheless, the Federal Interagency Forum

on Child and Family Statistics is undertaking the organization of all data available on child and adolescent well-being. The Forum has participants from 20 federal agencies and partners in private research organizations. It cultivates coordination, collaboration, and integration of federal efforts to collect and report data on conditions and trends for children and families. The latest report (*America's Children: Key National Indicators of Well-Being, 2003*) is the seventh in the annual series.

Role of states

States can create coordinated, comprehensive systems to assess child and adolescent well-being. These systems collect data on the predictors and indicators of well-being, compile and analyze those data, and make them available to the communities in which they have been collected. Several states have begun to develop these systems. Archival indicators supplied by the Department of Social and Health Services and by biennial survey data of 6th through 12th grades (supplied by the Superintendent of Public Instruction) fuel the Washington State county-by-county reporting system. Also, refer to earlier examples (e.g., Connect Kansas, Oregon Healthy Teens).

States can promote the development of CMSs. One way is to develop consensus among state agencies and local communities about the aspects of child and adolescent functioning to monitor. As noted above, the monitoring system should include aspects of young people's behavioral functioning, and risk and protective factors shown to influence behavior. Forging consensus will allow the development of a standardized system of monitoring and of cost-effective data collection. The system would not prevent individual communities from obtaining additional data they deemed important. Consensus is also an important prelude to fostering among diverse state and local agencies a shared view of what specific factors need addressing in order to prevent problems among young people.

States also must create or adopt a system to collect and organize data and to provide the data to communities. States can support communities that are implementing systems to monitor predictors and indicators of youth well-being by conducting youth surveys for the community and by feeding the survey data back to the community in useful formats. States

also can collect and organize data in public archives and make these data available to the communities.

States also should provide training and technical assistance to communities on how to use data on risk, protection, and youth outcomes in planning drug abuse and violence prevention activities, social services, youth development programs, and educational policies and programs.

Finally, like the federal government, states should develop policies and funding mechanisms that promote the initiation and improvement of monitoring systems. For example, policies should require communities or schools to provide data about the well-being of their young people in order to obtain or renew funding; this approach fosters the development of monitoring systems. Maine, Oregon, Pennsylvania, and Washington are a few of the states that have adopted this approach.

Role of local communities

Communities wishing to institute effective monitoring systems for their young people must take at least two steps. First, they must develop community consensus about what behaviors—and predictors of those behaviors—require monitoring. As noted above, the federal government should take the lead in articulating the findings of epidemiological research on those aspects of, and influences on, child and adolescent development that are most important to monitor. In addition, states must develop consensus about targets for monitoring. Nevertheless, no matter how solid the consensus at these levels, each community benefits from reviewing what to monitor and from deciding on the information it views as most important. This process fosters consensus among community members about what they think is important and increases commitment to taking action based on trends the data reveal.

To be useful, a monitoring system must become a tool used in community efforts to ensure the successful development of young people. However, unless agencies that have responsibility for young people adopt the monitoring system as an integral part of their decision-making, the CMS will have little benefit for children and adolescents.

At a minimum, each agency must make a review of the available data a routine part of their governance. For exam-

ple, as a requirement for the school district, a school board might establish a policy-making annual review of all data on youth functioning. A consortium of agencies concerned with young people might convene an annual meeting to review the data and to develop a strategic plan to improve outcomes for young people. For example, in communities that use the CTC system, an ongoing community board representing wide-ranging constituencies is responsible for ongoing monitoring of community levels of risk and protection and youth outcomes. That board also has the responsibility of planning changes in presentation policies and programs based on the monitoring data.

Local news media might be encouraged to report the results of assessments and to describe the efforts that community leaders are making to respond to the findings.

Over time, communities can learn from what the data show about how their children and adolescents are doing. When an emerging problem becomes evident, the data can help to prompt the relevant organizations to take action. When evidence of progress in reducing a problem—such as heavy episodic drinking by large numbers of teens or high rates of school dropout—emerges, the programs and policies previously implemented to achieve the outcome will receive increased support.

CONCLUSION

The collection, organization, and use of community-monitoring data may seem remote from the personal and compelling details of the lives of our young people. However, as communities become skilled at implementing and operating CMSs, they can use the data to guide them in choosing programs and policies in important ways. They can prevent young people from dying in alcohol-related car crashes, from becoming depressed and committing suicide, from taking up smoking and dying at an early age, from becoming pregnant as a teenager, from dropping out of school, or from entering a life of crime. By focusing attention on measurable outcomes, community-monitoring systems can help bring about genuine and critical improvements in the lives of children and adolescents in every community. ■

RESOURCES

This list of resources describes selected neighborhood, community, and state monitoring systems; sources for state and national data, and decision-making tools. The Society for Prevention Research does not necessarily endorse all the resources listed. Many of the systems described retrieve archival data and gather their own data, provide computer linkages among local agencies, and post real-time data on the Internet regarding the status of the young people in their local areas for use by decision-makers and the public.

All Kids Count, Decatur, Georgia

Supported by the Robert Wood Johnson Foundation, this National Technical Assistance Center fosters development of integrated child-health information systems. Historically, separate information systems have developed to meet public health needs and the needs of clinical practitioners. But, All Kids Count is developing a database of integrated child-health information systems in the U.S. Theoretically, data from many systems could be integrated, but barriers, such as concerns about confidentiality, must be addressed. The website provides information regarding where child-health information systems are being integrated and the tools available to integrate child-health programs and information systems (<http://www.allkidscount.org>).

Chapin Hall Center for Children, University of Illinois at Chicago

With help from states over the past few years, the Center has recently developed a series of cross-state matrices on measures of well-being used in different states. These matrices capture 1) youth health and safety, 2) self sufficiency, 3) youth social and emotional well-being, 4) youth educational achievement, 5) family context in which youth live, and 6) the community context in which youth live. See http://www.chapinhall.org/article_abstract_new.asp?ar=1343&L2=65&L3=120.

Child Trends, Washington, DC

Since its founding in 1979, this nonprofit, nonpartisan research organization has tracked trends in the well-being of children and their families. In June 2002, Child Trends launched its Data Bank, a continuously updated online resource. The Data Bank provides national and subgroup data on more than 80 indicators of child and youth well-being. It analyzes data gathered by others and is now gathering its own data. Many communities use this resource to help understand what indicators can be measured. See website at <http://www.childtrends.org> or <http://www.childtrendsdatbank.org>.

Cleveland Area Network for Data Organizing (CANDO), Cleveland, Ohio

Cleveland is one of 12 original cities in the National Neighborhood Indicators Partnership (NNIP). These cities have built advanced information systems with integrated and recurrently updated information on neighborhood conditions. Measures of child well-being are one part of the picture. Cleveland's Neighborhood Indicators System has tracked its neighborhood indicators for so long that the online database, CANDO (<http://www.povertycenter.cwru.edu>), predates the Internet. The system incorporates federal, state, and local data into a data warehouse, from which neighborhood profiles, including geographical mapping, can be compiled. More than 1,000 users of the system, including individual citizens and policymakers, appreciate the "one-stop shopping" venue for data of all sorts—rates, counts, indexes, meta-data, and data precautions.

Communities That Care (CTC), Channing Bete, South Deerfield, MA

This five-phase operating system helps a community organize at all levels to ensure involvement, ownership, and use of its monitoring system. The system helps the community install a monitoring system and trains community members to monitor, analyze, and interpret data on risk, protection, and outcomes. The system trains community boards to conduct resource assessments of existing policies, programs, and activities in the community; trains them to choose tested, effective prevention programs targeting their ranked risk and protective factors; and helps them develop, implement, and monitor an action plan for youth development and prevention of problem behaviors. The system uses archival indicators of risk factors and outcomes and data from the CTC Youth Survey. The system is unique in its focus on indicators of risk and protective factors and on youth outcomes, including drug use, violent behavior, delinquency, and school suspensions. The system has been widely implemented in the United States and internationally. See <http://www.channing-bete.com/positiveyouth/pages/CTC/CTC.html>.

Communities That Care Youth Survey, Channing Bete, South Deerfield

This survey (CTCYS) provides a comprehensive set of validated indicators of community, family, school, peer, and individual risk and protective factors and a set of youth outcomes, including measures of academic achievement, drug use from the National Monitoring the Future survey, violent behavior, delinquency, and school suspensions. Youth ages 12 to 18 in grades 6, 8, 10, and 12 take the survey in a single class period. Analysis has shown its risk and protection indicator scales to be reliable and valid across both genders and across African American, Asian American, Latino, Native American, and European American ethnic groups. Channing Bete provides CTCYS surveys for administration, analyzes CTCYS data, and provides state and community reports of CTCYS results. See the website at <http://www.channing-bete.com/positiveyouth/pages/CTCYS/CTCYS.html>.

Community Tool Box, Kansas

The Community Tool Box was created by the Work Group on Health Promotion and Community Development at the University of Kansas in Lawrence, Kansas. It provides comprehensive information to community members about how they can improve the well-being of children and adolescents, including implementing systems for monitoring youth well-being and community efforts to improve well-being. See their website at <http://www.ctb.ku.edu>.

Family Services Task Force, Oswego County, New York

The Family Services Task Force (FSTF) members represent 61 organizations engaged in strategies to promote the physical and mental wellness of its citizens, including children. FSTF has developed vision and mission statements, forged consensus about the key influences on development, instituted a needs assessment protocol based on the Communities That Care model, created a common database on child and adolescent well-being, and instituted countywide comprehensive planning. Service providers requesting county youth funding must demonstrate that they are affecting the risk and protective factors targeted by the plan. Their contact number is 315-343-9261.

Federal Interagency Forum on Child and Family Statistics

Founded in 1994 and established by presidential executive order in 1997, the Forum fosters coordination and collaboration in collection and reporting of federal data on children and families. Its specific mandates are to develop priorities for collecting enhanced data on children and youth, improve reporting and dissemination of information on the status of children to the policy community and the general public, and produce complete data on children at state and local levels. *America's Children: Key National Indicators of Well-Being 2002* is the sixth annual report on the condition of the nation's children. Eight contextual measures describe the changing population and family context in which children are living, and 24 indicators depict the well-being of children in the areas of economic security; health, behavior, and social environment; and education. The Forum's current membership includes 20 federal agencies plus partners from private research organizations. For more details about the Forum, see its website at <http://www.childstats.gov>.

Health Information Tennessee (HIT)

This Best Practices web-based data dissemination system was developed by the Community Health Research Group at the University of Tennessee in Knoxville in 1997. Currently sponsored by the Tennessee Department of Health, HIT disseminates accurate and comprehensive population-based public health data for Tennessee communities and counties and for the entire state. The website (<http://hitspot.state.tn.us/hitspot/index.htm>) offers the public the ability to access, profile, tabulate, display, and map comprehensive data from 19 individual data sets. One of these data sets is called TNKIDS and features 18 health, social, economic, and education indicators similar to Kids Count. TNKIDS is accessed at <http://hitspot.state.tn.us/hitspot/tnkidsform.htm>.

Kids Count

This project of the Annie E. Casey Foundation is a national and state-by-state effort to track the status of U.S. children. It provides an interactive online database, using multiple sources of data (e.g., the 2000 U.S. Census), to profile benchmarks of child well-being in each state. *The Kids Count Data Book*, available online (<http://www.aecf.org/kidscount>) and in hard copy, summarizes 10 key indicators for all 50 states. Community planners can contact a Kids Count state organization/agency for ways to start developing local indicator systems. *The 2003 Kids Count Fact Book for Baltimore* is an example of how to present community data to generate discussion and put children's issues on the political agenda.

Massachusetts Community Health Information

The Massachusetts Department of Public Health supports the online Massachusetts Community Health Information Profile (MassCHIP; <http://masschip.state.ma.us>), which provides access to 28 sources of data on vital statistics; communicable disease; sociodemographic indicators; public health program usage; and other health, education, and social service indicators across the life span. It provides reports on adolescent health and on the health of children with special needs. It also provides a report of the health and sociodemographic status of the children and youth of Massachusetts, based on Kids Count (profiled above). Due to the availability of the Massachusetts data at the local level, the data elements included in MassCHIP do not precisely match those in Kids Count. State and local areas report data, but officials suppress some data for confidentiality reasons and do not report data if numbers are so small they cannot yield valid statistical calculations.

Monitoring the Future (MTF)

Monitoring the Future is a National Institute on Drug Abuse-funded annual survey conducted at the Survey Research Center in the Institute for Social Research at the University of Michigan. Each year, MTF (see <http://www.monitoringthefuture.org>) surveys the behaviors, attitudes, and values of some 50,000 8th, 10th, and 12th grade students. Additionally, researchers mail annual follow-up surveys to a sample of each graduating class for a number of years after their initial participation.

Multi-National Project for Monitoring and Measuring Children's Well-Being

This ongoing effort is coordinated at Chapin Hall Center for Children (University of Illinois, Chicago) to improve the ability to measure and monitor the status of children worldwide. Its underlying philosophy incorporates assumptions that children are entitled to basic human rights and that there is a need to focus on child well-being beyond survival. The unit of observation is the child, the focus is on positive dimensions of children's lives and situations, and the goal is to inform and evaluate programs and policies (Ben-Arieh et al., 2000). Over 80 experts from a variety of disciplines and organizations in 28 countries collaborated and identified five domains and 60 indicators of children's well-being: safety and physical status, personal life, civic life, economic resources and contributions, and children's activities. Project staff is now developing a database of measures and building a collaborative multinational network of partners who use this protocol to study children's well-being. See <http://multinational-indicators.chapinhall.org/>.

National Neighborhood Indicators Partnership (NNIP)

NNIP (<http://www.urban.org/nnip/partners.html>) is a collaborative effort of the Urban Institute of Washington, DC (established in 1968 as a non-profit, non-partisan research institute) to develop and use neighborhood information systems. NNIP currently has 21 partner cities across the U.S. Each city has built an advanced information system with integrated and recurrently updated information on neighborhood conditions.

Oregon Healthy Teens, Eugene, Oregon

Oregon Healthy Teens (OHT), a four-year NIH-funded study, measures positive and negative behaviors in seven key areas, among 8th and 11th grade students in one-third of Oregon middle and high schools. OHT is a collaborative effort among Oregon Research Institute, Oregon Departments of Education and Human Services, and Oregon's Commission on Children and Families. See the OHT website at <http://ori.org/oht>.

Prevention Decision Support System

This system was created by the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention to help local communities and states make informed decisions in assessing youth well-being and in planning, implementing, and evaluating prevention programs. Based on a logic model, this online management tool (<http://prevtech.samhsa.gov>), which is in the public domain and free of charge, continues to evolve. Its goals are to identify available, relevant data sources; retrieve Internet-based data at the national, state, and county levels; collect original community data; compare findings to existing state and national data; and use this information to establish baseline indicators. All the data will be used in the selection of modifiable risk and protective factors; those factors will be the targets for intervention.

Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBSS), developed by the Centers for Disease Control and Prevention (CDC; see the YRBSS website at <http://www.cdc.gov/nccdphp/dash/yrbs/>), includes a bi-annual survey on most adolescent problem behaviors. The CDC conducts the national survey, which provides data representative of high school students in public and private schools in the United States. The departments of health and education in each state conduct the state and local surveys, which provide data representative of the state or local school district.

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