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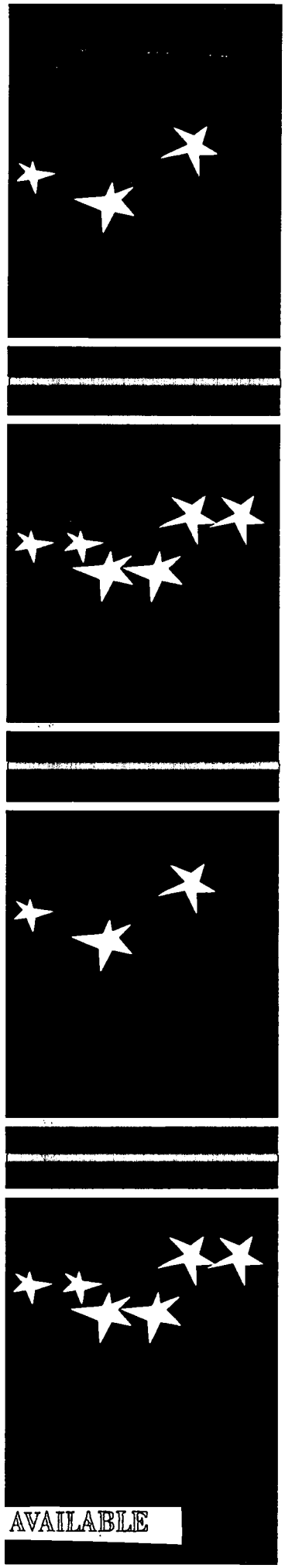
ABSTRACT

This publication is a project replication kit for practitioners who want to improve their school health programs. The project used a multidisciplinary model of comprehensive school health education in three secondary schools within the Cleveland School District, Ohio. Based on the Healthy People 2000 initiative, this publication focuses on six priority behaviors addressed by the project as critical in reducing premature illness and death in adolescents. Ten chapters are: (1) "Understanding the Focus for School Health Improvement" (Diane DeMuth Allensworth); (2) "Setting the Stage for Continuous Improvement in School Health" (Diane DeMuth Allensworth); (3) "Working Together for Continuous Improvement of the School Health Program: A Total Quality Management Approach" (John Allensworth and Jeanine Ray); (4) "Alcohol and Other Drug Use Prevention" (Diane DeMuth Allensworth, Cynthia Wolford Symons, and R. Scott Olds); (5) "Chronic Disease Prevention" (R. Scott Olds, Diane DeMuth Allensworth, and Cynthia Wolford Symons); (6) "Intentional Injury Prevention" (Julia M. Haidet and Diane DeMuth Allensworth); (7) "Unintentional Injury Prevention" (Diane DeMuth Allensworth and Julia M. Haidet); (8) "Adolescent Pregnancy Prevention and Management" (Diane DeMuth Allensworth, Cynthia Wolford Symons, and R. Scott Olds); (9) "A Theoretical Approach to School-Based HIV Prevention" (Diane DeMuth Allensworth and Cynthia Wolford Symons); and (10) "Healthy People 2000: An Agenda for Schoolsite Health Promotion Programming" (Cynthia Wolford Symons, Carol DiMarco Cummings, and R. Scott Olds). Four appendixes focus on the eight component assessment, 1994 national health observances, the Youth Risk Behavior Survey, and comprehensive school health education worksheets. (Chapters contain references.) (SM)

HEALTHY STUDENTS 2000

An Agenda for Continuous Improvement in America's Schools



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Preface

In 1989, the U.S. Department of Education, through the Fund for the Improvement and Reform of Schools and Teaching, awarded to the American School Health Association a contract to work in collaboration with teams of school-based professionals in three secondary schools within the Cleveland (Ohio) School District. The focus of the multi-year project was to develop a process that united the diverse resources in the school and the community to improve the health of students through a comprehensive interdisciplinary approach. The Cleveland Foundation provided funding for the third year of the project.

Consistent with the project proposal, the project began by introducing our Cleveland colleagues to the multidisciplinary model of the comprehensive school health program proposed by Kolbe. This was followed by an assessment of the eight components of school health programming within the three project and experimental schools. Although Kolbe's model of a comprehensive school health program was well-received, it was not until the context of child and adolescent health risk behaviors was introduced that the school-based professionals were able to apply the eight-component model to their daily interactions with students. We learned that the framework for the comprehensive school health program was valuable only to the extent that it could be applied by local practitioners to respond to their needs.

An assessment of student knowledge, attitudes, and behavior, using the National Adolescent Student Health Survey, revealed Cleveland students, like students across the nation, engaged in many behaviors that put them at risk for premature disease and death. As in many school districts, faculty and staff in the project schools were overwhelmed by both the variety of health risk behaviors exhibited by their students and the implications of these demands on student learning. These professionals, who were often held accountable by parents and the media to solve the complex health problems of students in their community, were able through this project to appreciate that the responsibility is a shared one. Preventing alcohol abuse or teen pregnancy, for example, was not the responsibility of just the guidance counselor, the school nurse, or the health teacher, but the collective responsibility of all staff members, as well as parents, peers, and community professionals.

In this case, the comprehensive school health program model provided a foundation for school-based practitioners to evaluate all resource persons and programs at their disposal within the school and from the community at large. The project did not limit their exploration to the eight programs recommended by Kolbe, but freed them to include a variety of people across the school and community who could bring talent and energy to the process. While individuals from the expanded school health model were utilized, other individuals from diverse programs were identified as vital links in providing health messages to students. For example, the in-school suspension officer, the study hall supervisor, and the librarian, as well as others from the community, such as the outreach worker from Alcoholism Services, became allies in programs to reduce or eliminate health-debilitating behaviors. Instead of looking only at the programmatic components identified by Kolbe, the school-based personnel looked for individuals with talent and commitment to address the complex health needs of their students.

While trying to translate the state-of-the-art of comprehensive school health programs into an idealized practice, it became apparent that school-based practitioners' knowledge of the school health program was on a continuum that ranged from a poor conceptualization of the state-of-the-art of their respective discipline to a sophisticated appreciation of not only the state-of-the-art of their respective discipline, but also the collaborative programming needed of all components within the comprehensive school health model. Bridging this range of experience was accomplished by providing practitioners the opportunity to assess the various components of the school health program in relation to the *Healthy People 2000* priority areas. Using the national *Healthy People 2000* initiative provided the necessary link to behaviors of students that legitimized the project for the practitioners as well as provided a framework, which elevated the initiative from a small isolated project within the Cleveland district to an initiative responding to a national challenge. Regardless of the level of sophistication about the program in their own discipline or the total school health program, the practitioners discovered deficiencies when comparing what was happening in their school with what was suggested by the *Healthy People 2000* initiative. They also discovered the total scope of programming vital to a health-promoting school included a variety of interventions in addition to instruction. While instruction is the organizational focus for activity within the school, complex health problems will not be solved by instruction alone. Complementing an instruction program are interventions such as policy mandates, facility modification, environmental change, direct intervention (screening, referral, treatment, and follow-up), social support, role modeling, and media initiatives.

After practitioners identified areas of need within their respective programs as well as the total school health program, they began to develop programming priorities. At a summer workshop, participants received instruction on the total school health program as well as programming that addressed specific health priority areas: prevention of substance abuse; intentional injury and unintentional injury; adolescent pregnancy; HIV and other STD infections; and promotion of nutrition, fitness, and worksite

health promotion programs for faculty and staff. For three years, each school team developed an action plan designed specifically for their schools. While similarities existed, each school developed unique action plans. During the school year, the respective teams met monthly to work on implementing their action plans. As activities were completed, teams assessed their value in motivating student and staff health-related behaviors. Each year, the action plans became more sophisticated as teams kept interventions that worked from the previous year, while adding new interventions to address the teams' original priority areas or activities to address new priority areas. (Ideally, a comprehensive school health program would address all problem areas; however, for schools just beginning to address student health concerns via an interdisciplinary approach, we found that a categorical approach was easier for teams to conceptualize and implement.)

Because of the district emphasis on preventing alcohol and other drug abuse, which included the organization of teams from the OHIO Network: Training and Assistance for Schools and Committees, Inc., (ON TASC), the initial programming within the area of substance abuse was clearly the priority area most developed in all three schools. Over the three years of the project, programming for this priority area continually improved. Initial interventions focused on raising student awareness. By the end of the second year, two schools were trying -- with mixed success -- to implement a student assistance program.

Because project staff believed faculty and staff would be more likely to address health issues if they felt health was important in their own lives and that faculty and staff could serve as role models, the project included worksite health promotion strategies. Initially, the activities were exclusively for faculty and staff, but over the duration of the grant, various projects such as weight reduction and smoking cessation simultaneously targeted students as well as staff members.

Successful types of programming interventions designed for one priority area were employed in programming developed for other areas. The project assisted practitioners in implementing a process by which they could assess problems and solutions, design and implement interventions that used the resources of both the school and community, and judge the value of each intervention in motivating health-enhancing behaviors among students, faculty, and staff. Thus, the project became one of continuous improvement of the school health program. Multiple disciplines provided multiple health-related interventions to improve the health of students, faculty, and staff. These interventions improved quantitatively and qualitatively each year.

This publication, divided in two parts, is provided as a project replication kit. Chapters one through three describe the comprehensive school health program. Chapters four through 10 describe the priority areas that school health teams might want to address. The information in this document evolved from the collaborative efforts of higher education health promotion professionals and their school-based counterparts who were committed to improving the health of students, faculty, and staff in three secondary schools within a large urban school district.

The publication is a workbook for practitioners who would like a road map to improving their school health program. While the book is based on the *Healthy People 2000* initiative, it does not address each priority area identified by that initiative. This project concentrated on the six priority behaviors identified by the Division of Adolescent and School Health, Centers for Disease Control and Prevention as critical in reducing premature illness and death in adolescents: nutrition, physical activity, smoking, alcohol and other drug use, intentional and unintentional injury, and reproductive behaviors.

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Chapter 1
Understanding the Focus for School Health Improvement

Diane DeMuth Allensworth

Children and youth are our nation's greatest resource. Their care and nurture today will provide future economic and social dividends. However, a cursory review of their lifestyles does not foretell a bright future for the nation. According to the American Medical Association:[1,2]

* Three in 10 adolescent deaths result from motor vehicle accidents, half of which involve alcohol.
* More than one in 20 children ages 12-17 consume alcohol daily, 4% use marijuana daily, and 0.5% use cocaine daily.
* By age 18, two-thirds of all males and one-half of all females have had sexual intercourse.
* One in four sexually active adolescents will have a sexually transmitted disease before graduating from high school.
* Approximately one in 10 adolescent women will give birth by the time she is 18.
* One in 10 adolescents smokes at least 10 cigarettes daily.
* One in four adolescents is overweight; one in 20 is classified as obese.
* Six in 10 eighth and 10th graders report feeling depressed and hopeless; one in three have considered committing suicide, and 14% have attempted suicide.
* More than half of adolescents do not use seat belts, and four in 10 report riding with a driver who has been drinking or using drugs.

Given that medical scientists[3] have concluded that at least 50% of all premature illness and death is related to an unhealthy lifestyle, the debilitating behaviors chosen by many children and youth put them at increased risk.

From 1989-1992, approximately 25 major studies and reports addressed the health and educational needs of children and youth (Figure 1.1). An analysis of these reports by the Harvard School of Public Health[4] revealed "a growing consensus about the critical issues, the urgency of these concerns and the potential strategies for action." Several themes emerged:[4]

* Education and health are interrelated. Children who are unhealthy are children whose learning is impaired. Therefore, a child's health status is a major determinant of educational achievement.
* The biggest threats to health are "social morbidities." Many health problems, which are largely preventable, are influenced by specific behaviors established during youth and extending into adulthood.
* A more comprehensive, integrated approach is needed. Collaborative programs addressing underlying causes of problems instead of categorical symptoms will be more effective.
* Health promotion and education efforts should be centered in and around schools. Schools can play a larger role in addressing the health and social problems that limit academic achievement by providing a comprehensive program. Such a program consists of K-12 health instruction; health services; a healthful, safe, nurturing environment; food services; guidance and counseling; integration of school and community programs, including parent involvement; and a worksite health promotion program for faculty.
* Prevention efforts are cost-effective, while the social and economic costs of inaction are intolerable. School failure, underachievement, and related health problems have serious repercussions for students, their families, and ultimately the economic health of the nation.

The Healthy People 2000 Initiative

The priority health needs of Americans, including children and youth, were delineated with release of *Healthy People 2000: National Health Promotion and Disease Prevention Objectives.*[5] *Healthy People 2000* identifies 300 measurable objectives that will guide health promotion and disease prevention policy and programs at federal, state, and local levels throughout the '90s.

This initiative builds on an earlier set of goals and objectives released in 1979 with publication of the nation's first report on health promotion and disease prevention. *Healthy People: The U.S. Surgeon General's Report on Health Promotion and Disease Prevention*[3] was a landmark initiative that united public and private efforts to improve the health of all Americans.

Planning for the year 2000 objectives began in 1987. The principles underlying the 1990 and the 2000 objectives were the same: to establish specific national, measurable health promotion and disease prevention objectives. The year 2000 process placed greater emphasis on building partnerships to achieve the objectives. Perhaps the most profound lesson learned during the 1980s was the need to emphasize public and professional participation at local, state, and national levels. According to McGinnis and DeGraw,[6] greater emphasis was given to the requirement that the initiative be a national effort, not merely a federal one. Therefore, a broad representation of professionals and organizations were involved from the earliest stages in the planning process. Participants committed the nation to the attainment of three broad goals:

* Increase the span of healthy life for Americans.
* Reduce health disparities among Americans.
* Achieve access to preventive services for all Americans.

An effective, comprehensive school health program represents one of the keys to attaining the *Healthy People 2000* objectives. Approximately one-third of the objectives target children and youth and cannot be accomplished without the cooperation of professionals within schools. Schools reach more than 46 million students through 5 million instructional and non-instructional staff each year in approximately 15,000 school districts nationwide. Schools offer the most systematic and efficient means available to provide programming for children and youth that enables them to avoid health risks.

The initiative outlines objectives in 22 priority areas (Figure 1.2). For children and youth, specific areas of interest include objectives to improve nutrition, physical fitness, cardiovascular health, and maternal and infant health; and to reduce HIV and other sexually transmitted diseases, intentional and unintentional injuries, as well as the use of alcohol, other drugs, and tobacco. Many of the specific objectives within target priority areas for children and youth are provided in chapters four through nine of this document, along with the worksite health promotion objectives for adults listed in chapter 10.

One of the most important objectives in the *Healthy People 2000* initiative was to improve high school graduation rates. According to McGinnis and DeGraw,[6] "this objective is of major importance because it recognizes that health and education are inextricably related. . . . the interrelationship between health and education goes in both directions -- children need to be healthy to learn, and they need to be well-educated to stay healthy."

Figure 1.1

Organizations Issuing Reports Supporting School-Based Health Promotion Programs, 1989-1992

American Association of School Administrators
American Medical Association
American School Health Association
Carnegie Council on Adolescent Development
Children's Defense Fund
Council of Chief State School Officers
Massachusetts Department of Health
Michigan departments of Education, Mental Health, Public Health, Social Services, State Police
National Commission for Drug-Free Schools
National Commission on Children
National Association of State Boards of Education
National Education Goals Panel
National School Boards Association
U.S. Department of Education
U.S. Department of Health and Human Services, Public Health Service
West Virginia Task Force on School Health

Education 2000 Goals

Education goals for the nation were established in 1990, and for the first time in the nation's history, specific goals were adopted by the nation's governors to be achieved by the year 2000. Six goals were designed to provide students with the knowledge and skills to be productive citizens:[7]

Goal 1: Readiness

By the year 2000, all children in America will start school ready to learn.

Goal 2: School Completion

By the year 2000, the high school graduation rate will increase to at least 90%.

Goal 3: Student Achievement and Citizenship

By the year 2000, American students will leave grades four, eight, and 12 having demonstrated competence in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

Goal 4: Mathematics and Science

By the year 2000, U.S. students will be the first in the world in mathematics and science achievement.

Goal 5: Adult Literacy and Lifelong Learning

By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

Goal 6: Safe, Disciplined, and Drug-Free Schools

By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

School health programs can specifically address Goals 1 and 6. One objective under the first goal is that "children will receive the nutrition and health care needed to arrive at school with healthy minds and bodies."[7] The Surgeon General[8] has defined the readiness objective as one that focuses not only on admission to kindergarten, but also on daily attendance throughout the K-12 school career of children:

> *"While being healthy and ready to learn is especially true for young children, it is also crucial that children of all ages move toward the same goal. Every child, throughout their school career, should have the opportunity to arrive at school healthy and ready to learn each day. School programs need to recognize the bi-directional connection between health and education -- children must be healthy in order to be educated and children must be educated in order to stay healthy. This connection should be fostered through educational curriculums and by the provision of a safe and healthy school environment conducive to learning."*[8]

Goal 6 states that all schools will develop a compre-

Figure 1.2

Healthy People 2000 Priority Areas

Health Promotion
1. Physical Activity and Fitness
2. Nutrition
3. Tobacco
4. Alcohol and Other Drugs
5. Family Planning
6. Mental Health and Mental Disorder
7. Violent and Abusive Behavior
8. Educational and Community-Based Programs

Health Protection
9. Unintentional Injuries
10. Occupational Safety and Health
11. Environmental Health
12. Food and Drug Safety
13. Oral Health

Prevention Services
14. Maternal and Infant Health
15. Heart Disease and Stroke
16. Cancer
17. Diabetes and Chronic Disabling Conditions
18. HIV Infection
19. Sexually Transmitted Disease
20. Immunization and Infectious Diseases
21. Clinical Preventive Services

Surveillance and Data Systems
22. Surveillance and Data Systems

hensive K-12 drug and alcohol prevention education program taught as an integral part of health education. In addition, community-based teams should be organized to provide students and teachers with needed support.[7] Two other objectives under this goal call for schools to implement an alcohol and other drug use prevention policy and for parents and community agencies to work together to ensure that schools are safe havens for children.

Because the national health promotion and disease prevention objectives and the national educational goals are interrelated, neither will be achieved unless both are addressed simultaneously. The director of the Office of Disease Prevention and Health Promotion has said:

> *"What is very clear is that education and health for children are inextricably intertwined. A student who is not healthy, who suffers from undetected vision or hearing deficits or who is hungry, or who is impaired by drugs and alcohol, is not a student who will profit optimally from the educational process. Likewise an individual who has not been provided assistance in the shaping of healthy attitudes, beliefs, and habits early in life will be more likely to suffer the consequences of reduced productivity in later years."*[9]

Both sets of national goals provide "a road map for change and an impetus toward improvement."[8] To achieve these goals, national, state, and local health and educational agencies must collaborate. The goals are too large to be addressed by a single sector. To realize these goals, local schools and community health agencies must commit their staff to working cooperatively with concerned parents, students, and individuals in the community. This book, partially funded by the U.S. Department of Education, is part of the collaborative effort. It challenges schools to form interdisciplinary and interagency teams to improve school health programs as a means to achieve both the national health and education goals.

The New School Health Program

> *"Traditional school health education seems to result in poor behavior effects. Therefore, from a public health point of view, traditional school health education is quite useless."*[10]

School-based health education programs are evolving; they are changing to meet the needs of a changing society, changing priorities, and changing knowledge of which methods are effective in promoting adoption of health-enhancing behaviors. School health programs have developed beyond all recognition from those existing 20 years ago.[10] Schools that still can recognize their health education program as an extension of the physical educator's activity or as an isolated strand within the curriculum need to consider the potential of a different approach. Characteristics of the new school health program in the health-promoting school contrast greatly with characteristics of the traditional school health program (Figure 1.3).

The new school health program:[11]

* Focuses on the priority behaviors that interfere with learning and long-term well-being.
* Expands the scope of the school health program from three to eight components.
* Replaces the health instruction model with a health promotion model that uses multiple strategies to elicit healthy behaviors.
* Uses methods of instruction that match teaching strategies with instructional goals.
* Teaches the many common skills needed to address a variety of health problems and issues.
* Views students as resources and solicits their active participation in program development and implementation.
* Considers family involvement with health lessons and the school health programs vital.
* Coordinates the efforts of all faculty, staff, and administrators to enhance programming.
* Links health and learning, assuring each child has access to needed services.

Figure 1.3

Comparison of the Traditional Health Education Program and the Health-Promoting School

Traditional health education:	The health-promoting school:
1. Takes limited account of the factors related to premature morbidity and mortality.	Focuses on the priority factors that interfere with learning and long-term well-being.
2. Views the school health in terms of instruction, services, and a healthful school environment.	Expands the scope of the school health program from three to eight components.
3. Lacks a coherent, coordinated approach that addresses the variety of psychological, social, and environmental influences on students.	Replaces the health instruction model with a health promotion model using multiple strategies to elicit the adoption of health-enhancing behaviors.
4. Concentrates on didactic, teacher-led health instruction and acquisition of facts.	Uses methods of instruction that match teaching techniques with instructional goals.
5. Tends to respond to a series of problems or crises one-by-one.	Teaches the many common skills needed to address various health problems and issues.
6. Views students as recipients of instruction.	Views students as a resource soliciting their active involvement in program implementation.
7. Does not involve families actively in the school health program.	Solicits family support and involvement with health lessons and the school health program.
8. Considers health education only in terms of classroom instruction.	Coordinates the efforts of all faculty, staff, and administration to enhance the school health program.
9. Views the role of health services in terms of screening and disease prevention.	Links health and learning, assuring all students have access to needed services.
10. Focuses on changes of individual knowledge, activities, and behaviors.	Addresses structural and environmental changes as well as lifestyle changes.
11. Organizes a school health advisory council.	Coordinates school and community programming via interagency and interdisciplinary work groups.
12. Develops a health education curriculum.	Accomplishes health promotion goals via program planning process.
13. Assumes competence with attainment of professional degree.	Provides staff development to enhance professional skills.

Adapted from Young IM. Encouraging parental involvement in school. In: Nutbeam D, Haglund B, Farley P, Tillgren P, (eds.) *Youth Health Promotion: From Theory to Practice in School and Community*. London, England: Forbes Publications Ltd; 1991:218-232.

* Addresses structural and environmental changes as well as lifestyle changes.
* Coordinates the resources of the school health program via interagency and interdisciplinary work groups.
* Accomplishes health promotion goals via program planning process.
* Provides staff development.

The new school health program focuses on priority behaviors that interfere with learning and long-term well-being.

In 1979 the Public Health Service[3] identified the degree to which four major factors contributed to premature illness and death: heredity (20%), environment (20%), health care delivery system (10%), and an unhealthy lifestyle (50%). While the school health program cannot change the influence of heredity, the concept of heredity as a major determinant of longevity is useful to explain why certain individuals who have adopted a health-debilitating lifestyle have not experienced disease. The school health program, however, can influence more directly the other three factors. A safe, psychologically healthy school environment free from asbestos, radon, or other noxious elements that adheres to established environmental standards for heating, lighting, ventilation, and sanitation can be promoted within a community that also addresses environmental issues.

Although the health care delivery system and the education system traditionally have not intersected, more schools are exploring the possibility of providing primary health care at the school site. Because one in five children come from impoverished families and one in six children do not have health insurance, there is much schools will be asked to do to assure that a child is healthy and ready to learn.[12] Providing primary health care at school is being promoted to assure student health care needs are met.[13,14]

Of the factors causing premature illness and death, the one factor school health programs should address most aggressively is promotion of a health-enhancing lifestyle. Habits established in childhood are enduring. Further, during this critical developmental period, children are a captive audience within the school. The Centers for Disease Control and Prevention has identified behaviors in six areas as critical to reducing premature illness and death: nutrition; physical activity; intentional injury; unintentional injury; alcohol, tobacco, and other drug prevention; and reproductive health.[15] Structuring the school social and physical environment to complement, supplement, and extend the health instructional program should facilitate adoption of health-enhancing behaviors.

The new school health program expands the scope of the school health program from three to eight components.

Traditionally, the school health program consisted of three basic components: health instruction, health services, and a healthful school environment. Kolbe[15] enlarged the program to include physical education, school food services, guidance and psychology programs, worksite health promotion for faculty and staff, and the integration of community and school health programs. Allensworth and Kolbe described this expanded concept of school health programs:[16]

Health Instruction. The comprehensive health instruction curriculum is a planned, sequential, pre-K-12 program addressing the physical, mental, emotional, and social dimensions of health. The curriculum focuses on more than disease prevention. It is designed to encourage students to maintain and improve their health through opportunities to attain and demonstrate increasingly sophisticated health-related knowledge, behaviors, skills, and practices.[16] The 10 content areas most often included are community health, consumer health, environmental health, family life, mental and emotional health, injury prevention and safety, nutrition, personal health, prevention and control of disease, and substance use and abuse.[17] Fifty hours of health instruction are needed annually to maximize the influence on student health knowledge, attitudes, and practices.[18]

Health Services. Health services programs which promote the health of students through prevention, case finding, early intervention, and remediation of specific health problems, range from those providing only first aid and basic screening services, to those which provide comprehensive primary care through a school-based or school-linked clinic. Programs available in those schools with even minimal services usually include provision of first aid and triage of illness and injuries; provision of direct services for handicapped students; and provision of health counseling and health instruction for faculty, staff, and students. Professionally prepared school nurses most often coordinate the basic health services program. However, other professionals also provide specific services to promote the health and well-being of the school-age child, particularly in those schools with primary health care clinics. These include school physicians, nurse practitioners, dentists, social workers, and speech pathologists.[16]

School Health Environment. Both the psychological and physical environment in which students and school personnel are expected to work must be addressed. The physical environment includes the school building and ground. Conditions of the physical plant, such as temperature, humidity, electromagnetic radiation, mechanical vibration, noise, lighting, and heat, along with biological or chemical agents that may be detrimental to health, must be monitored. The psychological environment focuses on the interrelated physical, emotional, and social conditions that affect the health and productivity of students and staff. Formal and informal administrative policies shape the school environment. While the board and administration are responsible for policy; faculty, staff, and students have a responsibility to promote 1) safety by reducing potential hazards, 2) social needs through establishing positive relationships, and 3) esteem needs by recognizing the value of all individuals working and learning in schools.[16]

Physical Education. Physical education provides meaning to movement in the lives of students and promotes cardiovascular and respiratory efficiency, self-expression, social development, and relief from stress. Specifically, it can enhance motor performance (endurance, strength, agility, balance, speed and possibly flexibility), physiologic and metabolic functions, aerobic capacity, and cognitive performance.[16]

School Counseling/Psychology. Though the school counseling program was developed to provide vocational guidance for students, the program now includes developmental guidance. Since the mid-1960s, counselors have initiated interventions that promote the physical and emotional well-being of students, including life skills training, peer-led discussions, and problem-solving, as well as programs to address esteem, loss of control, peer pressure, and adolescent rebellion.[16]

The school psychologist improves the performance and adjustment of students via assessments, consultations, and interventions. Although the role and function of the psychologist varies greatly among states and among schools within states, the school psychologist often conducts psycho-educational evaluations for students with perceived learning, behavioral, or emotional problems. The school psychologist devotes considerable time to implementing Public Law 92-142, which requires and educational prescription for all handicaped children.[16]

School Food Service. The national food service program currently provides 27 million lunches and three million breakfasts daily. In addition to providing one-third to one-half of the daily nutritional intake for many American students, the school food services program also supports a nutrition education program to help students select nutritionally appropriate foods.[16]

Worksite Health Promotion. The benefits of a worksite health promotion program accrue to the staff and students. Faculty and staff who become active in improving and maintaining their own health serve as powerful role models for students and other faculty. As faculty become more interested in their own health, they often become more interested in improving the health of students. Moreover, schoolsite health promotion programs reap economic benefits, as the productivity of school personnel increases. Worksite health promotion programs have decreased absenteeism, health care claim costs, and the need for substitute teachers. They also have improved teacher morale and productivity.[16] Schools have the facilities and professional resources required to develop and implement worksite health promotion programs, as well. Professionals already employed by the schools that are capable of providing these programs include school nurses, counselors, psychologists, physical educators, home economics teachers, food service directors, and health educators.

Integrated School and Community. Coordinating school and community programs is being rediscovered as an effective means of improving the well-being of children and youth. Collaborative efforts among students, families, health professionals, and school staff take many forms: school health advisory councils, coalitions, and interagency networks that coordinate and advocate programs for improving school health, such as supporting the implementation of specific health curricula and/or the initiation of a school-based primary health care clinic.[16]

Appendix A contains instruments to assess the comprehensiveness of each component of the comprehensive school health program. The assessment tools, based on the *Healthy People 2000* objectives, can assist school personnel in identifying strengths and weaknesses in their school health program.

The new school health program, recognizing that a variety of factors influence health, replaces the health instruction model with a health promotion model, using multiple strategies to more effectively elicit healthy behaviors.

At one time it was thought that providing students with facts would result in behavior change. As health scientists probed for antecedents of various behaviors, they found lack of knowledge was only one of many factors that influenced a decision -- and often it was not the most important factor. Although many different models have been developed to explain behavior, none can account for explaining all behaviors. The International Union of Health Education suggests that no single theory is sufficient to guide program development. The complementary application of social, behavior, educational, biomedical, and organizational models for change is encouraged.[19] Critical elements common to several health behavior models include perceived threat of illness, accessibility of health services, attitude toward health care, social interactions and norms, demographic characteristics, and knowledge about the disease.[20]

A meta-evaluation of educational research[21] revealed that cognitive, affective, and psychomotor learning are influenced by three major factors: aptitude, instruction, and environment. Aptitude was a function of ability, developmental level, motivation, and self-concept. Instruction was modified by both the quantity and quality of instruction. Those variables that contributed to explaining environmental influences included the home, classroom, peers, and television. The amount of time spent watching television was time not available for learning or completing homework. (For those promoting health, not only is the time watching television a concern, but also the latent messages provided within the content of television programming. For example, it is estimated that there are 55 instances of sexual innuendo during prime time television each evening.[22] According to an analysis by Harris,[23] for each message of responsibility and caution for safer sex, there are 84 messages urging no such restraints.)

Given that writers from both health and education have identified a variety of factors that influence learning and behavior, it seems prudent to replace the health instruction model with a health promotion model that uses

a variety of strategies, in addition to instruction, to foster adoption of health-enhancing behaviors among children and youth. Additional strategies recognized as complementary to providing quality classroom instruction are policy mandates,[24-26] environmental changes,[25-28] direct intervention,[25,26] social support and role modeling,[25-28] and media.[26,29]

According to Dryfoos,[30] no one solution exists to any problem. A variety of interventions that address the antecedents of the behavior are needed. In her review of prevention programming for adolescents at risk for substance abuse, pregnancy, delinquency, and school dropout, she identified elements common to successful intervention programs:

* locus in schools,
* community-wide multi-agency collaborative approaches,
* early identification and intervention,
* intensified individualized attention,
* social skills training,
* engagement of peers in interventions,
* involvement of parents,
* training of staff,
* collaborative administration of specific school programs by community agencies,
* utilization of programs outside the school, and
* linkage to the world of work.

The new school health program uses methods of instruction that match teaching strategies with instructional goals.

Traditional health instruction models have emphasized acquisition of knowledge in the hopes that sufficient facts and figures would lead to attitude and behavior change. Ewles and Simnett[31] developed a model (Figure 1.4) which asks the teacher to identify instructional goals and to use strategies known to be effective in the attainment of those goals. For example, if the instructional goal is to raise awareness, then lecture, media, and exhibitions are used; if the goal is to increase knowledge, then lecture, media, exhibitions, and small and large group discussions are used. If the goal is decision-making, then values clarification, ranking, role-playing, simulations, and problem-solving are used; and if the goal is behavior change, then monitoring, contracting, incentives, and self-help groups are used.

Other researchers have identified additional strategies to change behavior: peer instruction,[30,32,33] social skill building,[30,33] and parental involvement.[30,34-37] Peer instruction has been used to encourage students to remain non-smokers[33] and to avoid alcohol and other drugs.[30-32] Parental involvement has been used successfully to promote tooth-brushing,[36] to promote eating nutritious foods,[27] to prevent pregnancy,[35] and to avoid alcohol and other drugs.[34] A number of researchers have identified specific social skills that are important generic skills in preventing tobacco and alcohol abuse. These behavior change strategies are described further in the next three sections.

Focusing on social action as the final instructional goal facilitates students' recognition of the broader structural, environmental, and social changes needed in addition to personal lifestyle changes to promote health. Accepting personal responsibility for making the social and environmental context conducive to the adoption of health-enhancing behaviors empowers students to promote health for all.

The new school health program teaches the many common skills needed to address health issues and problems.

While most federal funding is categorical and focuses, for example, on AIDS or substance abuse prevention, evidence exists that a comprehensive school health program works. A survey[38] of 4,738 students in grades three to 12 from 199 public schools revealed students' health-related knowledge, positive attitudes, and healthy habits increased as the years of health education increased. For example, 43% of those students with one year of health education drank alcohol "sometimes or more often," compared with only 33% of those students who had three years of health education. Thirteen percent of those with one year of health education had taken drugs, compared with only 6% of those who had three years of health education. Only 72% of those with one year of health education exercised outside of school, compared with 80% of those who had three years of health education.[38] The following generic personal and social skills have been identified as effective in promoting the adoption of health-enhancing behaviors: general social skills,[39] refusal skills, problem-solving, decision-making, assertive skills, and coping strategies for stress.[39,40] Fetro[40] suggests there are several reasons why planners should incorporate these generic personal and social skills into the health education curriculum: research has documented their effectiveness; the skills may not be as emotionally charged as the content area; the generic skills focus on the positive activities that individuals can do, not what they should not be doing; and in-depth learning of the skills provides students with more practice and opportunities to examine the inter-relationship of the skills.

Botvin and Botvin[39] note evaluation studies that typically use two or more of these generic strategies generally have reported relatively large effects in regard to substance abuse prevention. Data from two studies demonstrated reductions in the number of new smokers from 56% to 67% without a one-year follow-up booster session. With a booster session, the reduction was as high as 87%. According to Fetro,[40] by incorporating generic skills into health education and guidance programs, students learn techniques that can be useful in addressing a variety of health issues. In addition to teaching about each of the skills, students need information on how they can develop the skill, practice using the skill, and feedback on using the skill. Modeling and demonstrating the skills in class helps students learn how the individual skills are

useful in all aspects of life.

Elder[41] extends this view of using common skills by suggesting the concept of generalization be used by school health planners to increase effectiveness of their interventions. Students who learn new behavior skills in the classroom could change that behavior in other situations as well. Further, the individual may get others to change some or related behaviors. Elder suggests that for maximum effectiveness, "all intervention programs should include an outreach component whereby the student initially targeted in the intervention is, in turn, encouraged to act as a change agent with friends and relatives."[41]

Viewing students as a resource, the new school health program solicits their active participation in program development and implementation.

Benard[42] states that the loadstone of prevention is using peers as a resource. Students can be used in peer instruction, peer tutoring, cross-age mentoring, peer helping, peer theater, cooperative learning, and youth services. The youth are provided the opportunity to be a resource. As such, their active involvement creates "an environment of mutual ownership in a program attaining the desired educational outcome." Participants actively involved in the program are least likely to drop out,

Figure 1.4

Educational Strategies for Health Instruction Goals

Instructional Goal	Description	Strategy/Methods
Health consciousness	Raise awareness	Lectures Group work Mass media Displays Exhibitions
Knowledge	Understanding specific information	Lectures One-on-one teaching Displays Exhibitions Written material
Self-awareness Attitude change Decision-making	Clarifying values about health	Group work Ranking Role playing Simulations Categorizing Decision-making Problem-solving
Behavior change	Implementing a decision	Group work Self-monitoring Identifying costs and benefits Setting targets; evaluating process Devising coping strategies Self-help groups
Social action	Changing the environment to facilitate health behaviors	All above strategies plus: Lobbying Pressure groups Collective health action

Adapted from Ewles I, Simnett I. *Promoting Health: A Practical Guide to Health Education.* New York, NY: John Wiley & Sons; 1985.

increasing the likelihood of the program attaining the desired educational outcome.[42]

Successful peer programs encourage face-to-face interaction, positive interdependence, heterogenous composition, helping roles for each child, training in social skills, individual accountability, time for processing, and involvement in implementation.[42] Programming empowers students to become more self-directed as they assume responsibility for the health of self and others.

The new school health program solicits family involvement with health lessons as well as the total school health program.

Research on family involvement consistently shows parents can make a difference in the quality of their children's general education if schools actively involve parents in the education process.[43] Families also can promote the adoption of health-enhancing behaviors. Regardless of whether the health behavior is flossing,[36] preventing pregnancy,[35] refusing alcohol and other drugs,[34] or choosing appropriate nutrients,[27,44] research documents the value of involving families.

California[43] convened a task force that outlined opportunities for family involvement to:

* Help parents develop parenting skills and foster conditions at home that support learning.
* Provide parents with the knowledge of techniques designed to assist children in learning at home.
* Provide access to and coordinate community and support services for children and families.
* Promote clear two-way communication between the school and the family regarding the school programs and children's progress.
* Involve parents in instructional and support roles at school.
* Support parents as decision-makers and develop leadership in governance, advisory, and advocacy roles.

Teachers can involve parents in health lessons in a variety of ways: by asking parents to serve as the support person for a behavioral contract that their child has signed, by assigning students to interview parents about various health issues to facilitate communication, by inviting parents to assist the child with a health project, or by asking parents to provide supplemental instruction on a specific topic being discussed in health class.

Benard[45] suggests families also promote the well-being of their children by providing a caring and supportive environment, having high expectations for the child, and encouraging the child's participation in productive, responsible activities. Children from disadvantaged communities who have a family member exhibiting these three factors have reduced involvement with substance abuse.

The new school health program coordinates the efforts of all faculty, staff, and administrators to enhance school health programs.

By recognizing the various influences that impact the health of children and youth, the school health programmer will realize that to promote health-enhancing habits, it takes more than a health instruction curriculum delivered one hour a week in elementary school or half a semester in secondary school. Given that most major health problems facing students have a multifactorial etiology, one can assume that a single health message delivered by one teacher each year will not be sufficient to change behavior. Consistent and repeated messages delivered by several teachers, school staff, peers, and parents can more effectively change behavior.

All school staff can look for opportunities to deliver health messages. Because of their unique roles, the school nurse, the guidance counselor, and the school psychologist have an opportunity to provide specific health messages during their formal interaction with students. Other staff, such as the librarian, in-school suspension officer, secretary, janitor, and bus driver also can provide specific health messages during their interaction with students. The cafeteria is an obvious choice as a nutritional learning laboratory, but home rooms and study halls also could be structured to provide health messages. While some messages could be developed by the health educator, school nurse, or guidance counselor, many of the messages could be developed by students in home economics, art, science, and health classes.

Integrating curricula is one way to help students make sense of the multitude of learning experiences at school. An interdisciplinary approach requests that teachers of language arts, science, mathematics, history, geography, art, music, business, and drama address health themes within the content of their respective disciplines. Findings from studies of neuropsychology and education methodology suggest interdisciplinary education and thematic teaching are techniques that can immerse students in knowledge and bring it to life.[46]

Faculty from Howard County, Maryland,[47] used planning wheels to create interdisciplinary curricula that makes learning more meaningful. Teacher-writers working with curriculum supervisors met in cross-disciplinary groups to develop the connections. The model allowed for each discipline's core content to remain central while the integration of the curriculum flowed in a logical manner (Figure 1.5). Coordinating instruction is but one strategy. The efforts of all faculty and staff need to be coordinated in regard to all strategies used in a comprehensive school health program: enforcement of school policies; diligent vigilance for students exhibiting signs and symptoms of problems that may affect learning, and prompt referral to screening and treatment programs; role modeling; social support; and environmental changes that promote a safe, nurturing, aesthetically pleasing atmosphere conducive to learning and the adoption of health-enhancing behaviors.

The new school health program links health and learning, assuring all students have access to needed services.

"To expect a single community worker to master the whole array of available resources that relate to potential youth needs may seem overwhelming. However, to expect a youth-in-crisis or his or her often-stressed parents to negotiate without assistance the maze of agencies, programs and eligibility roles in order to get the help they need is truly to ask the impossible."[48]

The challenge for schools and human service agencies is to reorganize the way they do business, with each section coordinating their respective roles and responsibilities for the health, well-being, and academic success of students. According to the Council of Chief State School Officers, the school must not view itself as an isolated institution within the community, separate from family and community services, especially now that child poverty is at record levels.

"One mechanism that holds great potential for the large-scale delivery of comprehensive services is interagency partnerships. Interagency networking can bring together a broad range of professional expertise and agency services on behalf of children and families. These networks have the capacity to secure the financial resources available within the various institutional budgets. Further, these initiatives can tap into other funding sources more effectively when they apply as a partnership. Even without additional financial resources, the agencies can reorganize available resources to create more effective prevention, treatment, and support services."[48]

Comprehensive service delivery systems are likely to involve various collaborating agencies when they take concerted action at both the service delivery and system levels. At the service delivery level, interagency initiatives are designed to improve access, availability, and the quality of services that participating organizations provide to their clients. At the system level, a set of policies and practices that can help to build a community-wide network of comprehensive service delivery needs to be developed. Figure 1.6 presents a guide for community agencies considering joining forces to create partnerships. Some essential elements of comprehensive service delivery include:

* School-based or school-linked access to a wide array of health prevention and treatment services, mental health and family counseling services, social services, employment services, etc.
* Techniques to ensure appropriate services are received and adjusted to meet the changing needs of children and families.
* A focus on the whole family.
* Agency efforts to empower families within an atmosphere of mutual respect.
* An emphasis on improved outcomes for children and families.[48]

New Jersey initiated in 29 sites the concept of "one-stop shopping" centers, which provide primary health care, mental health and family counseling, and employment services. These services are offered year-round during and after school and on weekends. This initiative promotes collaboration among all local agencies, allowing the agencies the flexibility to design the program to meet local needs. While all sites are located near or at participating schools, more than half are managed by a variety of non-school agencies chosen by the community. In addition to the core services, many sites offer childcare, family planning, recreation, and transportation. Services are available to all students regardless of ability to pay.[48]

Using the school as a principal health care setting for children and youth is a concept gaining popularity nationwide. The serious nature of the health problems facing students, combined with lack of access to regular medical care as a result of parents either lacking medical insurance or having difficulty obtaining care for the children during the day, have emerged as major factors promoting the interest in schoolsite health care. School-based or school-linked clinics that provide comprehensive health services may be established by the school system, the health department, or another outside agency. The clinics usually offer comprehensive medical care including diagnosis and treatment of minor illnesses, physical examinations, and specialized care such as social and mental health services.[49]

The new school health program addresses structural and environmental changes as well as lifestyle changes.

"The field of prevention, both research and practice, came a long way in the 1980s from short-term, even one-shot individual-focused interventions in the school classroom to a growing awareness and beginning implementation of long-term, comprehensive, environmentally focused interventions expanding beyond the school to include the community."[50]

While health promotion often focuses on lifestyle change, an alternate vision emerged during the 1980s. Minkler[51] suggests the Canadian health promotion initiative issued in 1986 captures this vision. The Canadian government recognized three health challenges: reducing inequities, increasing prevention, and enhancing coping abilities. These challenges were to be met by three health promotion mechanisms: self-care, mutual aid, and the promotion of healthy environments. Finally, three strategies were identified as necessary in the implementation of this initiative: fostering public participation, strengthening community health services, and coordinating healthy public policy.

The initiative attempts to balance personal lifestyle change within the context of broader structural changes. Individual responsibility is balanced with societal responsibility for the health of all through broad economic,

institutional, social, and environmental change. Minkler[51] includes students as participants in this process, citing the "Kids Place Project" in Seattle as an example of a project in which students were given a key role in identifying those changes necessary to make Seattle a more healthy, safe, and vibrant city for both younger and future generations.

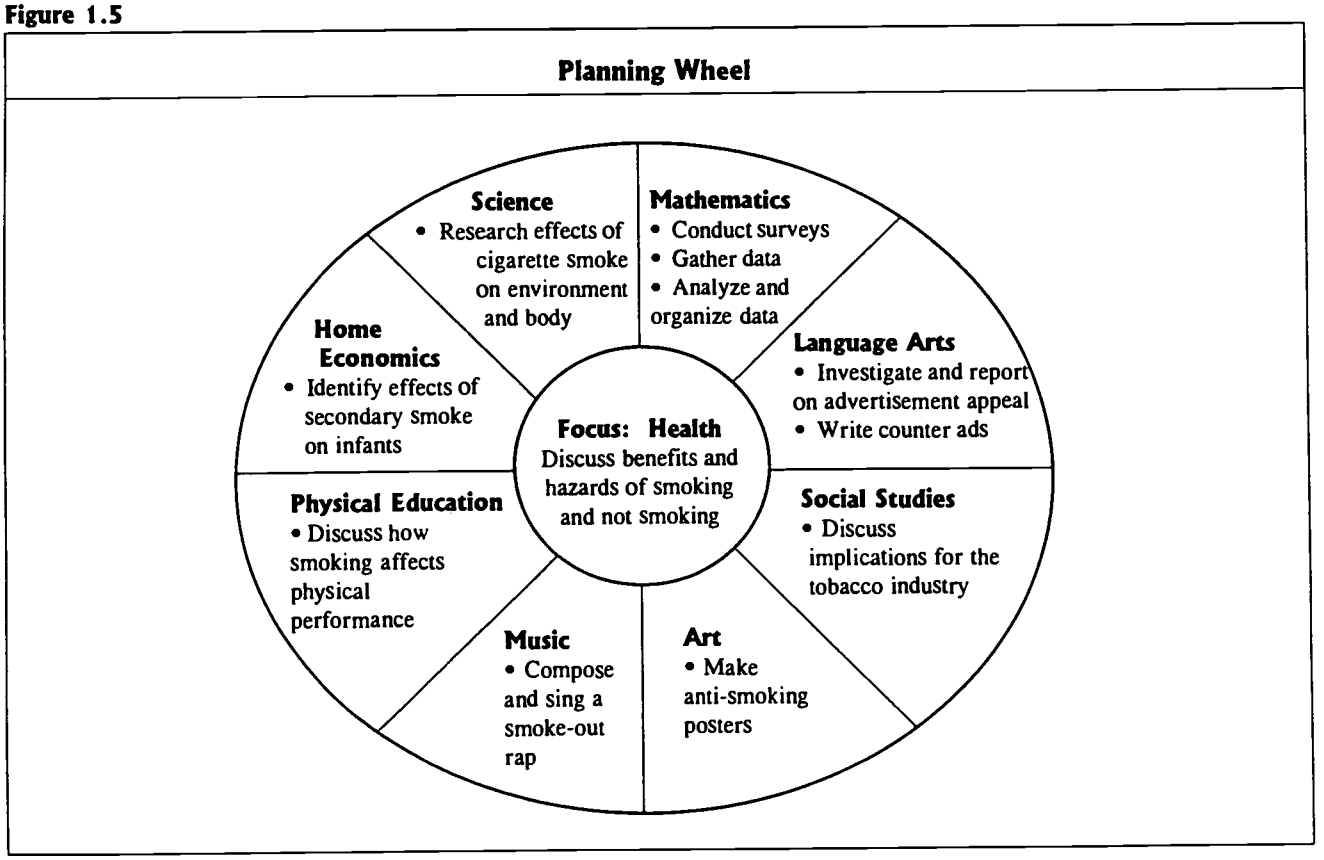
Benard[50] concurs with the need to involve the community with problems facing adolescents, because the etiology of alcohol and other drug abuse, delinquency, child abuse, and adolescent pregnancy are all rooted in the community. Therefore, the solution lies within the community. Benard[50] suggests community-based programs be organized around three themes: multiple systems using multiple intervention strategies, collaboration among the multiple systems, and use of a program planning model to assess, plan, implement, and evaluate interventions. Benard[50] suggests a schematic for organizing a community intervention initiative that asks each major system (families, schools, work places, media, government, and community) to identify an appropriate prevention activity for each of these intervention strategies: involving and training impactors, providing information, developing life skills, creating alternatives, and influencing policy.

The need for this broad outlook also can be found in the literature on resiliency. Benard[45] found in addition to personal characteristics of students that favored a positive outcome, three common characteristics of schools, communities, and families provided a protective shield for students in disadvantaged situations: caring and supportive environments, high expectations, and encouragement of active student participation. Teachers or parents with high expectations for their students appear to bolster the internalization of a "can-do" attitude. Further, actively involving students in meaningful roles within the school can be as powerful a factor as social support.[52] Schools that created a variety of opportunities to assure meaningful student participation tap into "the fundamental human need to bond -- to participate, to belong, to have some power or control over one's life."[45] Sarason[53] summarizes the students' view:

> *"When one has no stake in the way things are, when one's needs or opinions are provided no forum, when one sees oneself as an object of unilateral actions, it takes no particular wisdom to suggest that one would rather be elsewhere."*

Dryfoos[30] suggests that academic success may be one prerequisite to the adoption of health-enhancing behaviors. In her research into the etiology and prevention of delinquency, substance abuse, adolescent pregnancy, and school dropouts, she found that the prevention of delinquency appeared to be embedded in the prevention of school failure. She suggested this may be true for the prevention of substance abuse and teen pregnancy as well.

Figure 1.5



Adapted from Palmer JM. Planning wheels turn curriculum around. *Educational Leadership*. 1991; 49(2):58.

For those planning school health programs to promote the health of children, there is a need to plan beyond the health class or the health promotion event. It is necessary to devote time and resources to assure that all staff contribute to a caring, supportive environment that promotes active participation of students while conveying the message that they can succeed.

The new school health program coordinates school and community programming via interagency and interdisciplinary work groups.

Teams of school and community agency personnel in partnership with parents and students are needed because of the complexity of the health and educational issues that must be addressed to improve the health of students. Sujansky[54] suggests that there are three essential ingredients in a partnership:

* A vision of what partners want to accomplish and how partnerships will help accomplish the goal.
* A commitment to the goal and to the partnership.
* A plan of action detailing project responsibilities, project resources, and project deadlines.

Building partnerships internally within the school, (interdisciplinary activities) as well as with external agencies and individuals (interagency activities), can maximize human resources in both the school and community.[54]

Interagency Partnerships. There are numerous ways school and community programs can be integrated (Figure 1.7). Models proposed to systematically integrate school and community programs include advisory boards, coalitions, networks, consortiums, and an interagency systems management model. Depending on the school and community, any one or a combination of models might be chosen as the appropriate framework to integrate school and community programs.

Joint planning initiatives offer the most effective means for integrating school and community. Killip et al[49] identified a myriad of potential activities in which community and school resources may be joined in mutually beneficial relationships. Planning initiatives can vary from informal to formal, minimally structured to highly structured, reactive to proactive, and short-term to long-term initiatives.

Furthermore, the nature of the linkage may be one-way, two-way, or multidirectional as the information, services, and resources are provided or exchanged among agencies. The Institute for Responsive Education developed a nine-part classification scheme that identified the functions of citizen participation in educational decision-making. The nine categories, which are not mutually exclusive, are information, service, advising and decision-making, planning and development, research and evaluation, monitoring and reporting, training, advocacy, and legislative and electoral actions.[55]

Linkages in which the exchange is one-way tend to be informal, minimally structured, and short-term. For example, community dentists and dental hygienists can screen students for dental disease. Multidimensional exchanges that occur with the formation of network coalitions and consortiums tend to be formal, highly structured, long-term initiatives.[49] They also have the most potential to mobilize and integrate all health and educational resources within the school and community.

The potential for initiating cooperative programming with community agencies resides with all practitioners within the various school health component areas. While practitioners may tend to initiate contact with agencies that have similar responsibilities, such as the food service director working with the Dairy and Nutrition Council or the school nurse working with the public health agency, there are no limits to the contacts and projects a practitioner may initiate once they have been cleared by the central administration. Conversely, a practitioner within the community who desires to initiate school and community program activity must first approach the chief school officer.

Interdisciplinary Partnerships. Schools need to establish working partnerships among school staff.

> *"Principals and teachers have been isolated from one another. Teachers have rarely been asked to work with peers. Principals have usually not been asked to support team work. Educators have learned to work alone rather than collectively. Leadership often has been assumed to be the prerogative of only those in formal roles, not as a set of functions that could be shared by a variety of people."*[56]

Interdisciplinary work teams (committees) that focus on a specific health promotion issue have used a team approach to successfully implement all-school programming targeting that health issue.[57,58] The newest innovation in education, total quality management,[59-61] is easily adopted using school health teams to further continuous improvement in school health programs. Undoubtedly, there may be several teams working simultaneously. Gurevitsch[58] suggests two types of teams might be formed: professional groups that focus on their component of the school health program, and cross-discipline groups that address those issues confronting students such as unintended pregnancy, substance abuse, and intentional injury. Involving cross-discipline groups in developing an action plan allows for greater dissemination of the plan when team members share with their professional group the activities developed by the cross-discipline team. Interdisciplinary teams also might be organized to address specific issues of one or more component areas, such as implementation of referrals to health services or infusion of health instruction throughout the curriculum.

According to Thompson,[57] several key concepts enhance change in the school health program:

* The key for educational change is the individual school with its teachers, principal, students, parents, and community members.
* Any school improvement program must begin with

Figure 1.6

Guidelines for New Partners

Involve All Key Players

Commitment to change must be broad-based and include all key players. In both service delivery and system level efforts, participation that involves representatives from appropriate levels of all the sectors and services necessary to achieve the initiative's goals and objectives is essential. Participants should include not only those with the power to negotiate change, but also representatives of the children and families whose lives will be affected by the results.

Choose a Realistic Strategy

Partners need to choose an interagency strategy that accurately reflects the priorities of service providers, the public, and key policymakers, the availability of adequate resources, and local needs. In situations where potential partners are not yet ready to undertake the financial commitment and degree of change inherent in collaboration, a cooperative strategy to coordinate existing services is a realistic starting point. Down the road, the trust and sense of accomplishment built up in these initial efforts will make it easier for agencies to accept the greater risks and more ambitious goals of collaboration. By the same token, when conditions already bode well for change, partners who never move beyond cooperation toward collaboration waste resources and pass by an important window of opportunity.

Establish a Shared Vision

Cooperative ventures are based on a recognition of shared clients. Collaborative partnerships must create a shared vision of better outcomes for the children and families they both serve. It will be far easier to agree on common goals and objectives if participants work to understand the issues, priorities, and perspectives that partners bring to the table and demonstrate a willingness to incorporate as many of these as possible.

Agree to Disagree in the Process

Participants need to establish a communication process that gives them permission to disagree and uses conflict and its resolution as a constructive means of moving forward. Interagency initiatives that circumvent issues about how, where, why, and by whom services should be delivered and resources allocated are likely to result in innocuous objectives that do little to improve the status quo.

Make Promises You Can Keep

Setting attainable objectives, especially in the beginning, is necessary to create momentum and a sense of accomplishment. At the same time, sufficiently ambitious long-term goals will ensure that momentum is maintained.

"Keep Your Eyes on the Prize"

It is easy for collaborative initiatives to become bogged down in the difficulty of day-by-day operations and disagreements that they lose sight of the ultimate goal. Particularly in system-level efforts, a leader from outside the direct service community who is committed to the goals of the initiative and able to attract the attention of key players, policymakers, and potential funders can ensure that a sufficiently ambitious agenda is devised and stays on track.

Build Ownership at All Levels

The commitment to change must extend throughout the organizational structure of each participating agency. Include staff representatives in planning from the earliest possible moment and keep all staff members informed. In-service training should allow staff time to air feelings about proposed changes and identify the advantages that changes are likely to bring. Cross-agency training is essential to provide staff with the specific information, technical skills, and abilities necessary to meet new expectations.

Avoid "Red Herrings"

Partners should delay the resolution of the "technical difficulties" that impede the delivery of comprehensive services to shared clients until partners have developed a shared vision and assessed whether specific impediments result from policies and operating procedures that can be changed or from statutory regulations that must be maintained. The bulk of the differences that emerge usually result from misunderstandings or from policies that can be changed or otherwise accommodated. They should not be allowed to become "red herrings" that provide convenient excuses for partners who are not fully committed to working together.

Institutionalize Change

The net effect is minimal of interagency initiatives that are here today but gone tomorrow, no matter how useful or well-designed. If changes are to endure in programming, referral arrangements, co-location agreements, and other initiatives, service delivery and system level efforts will need facilities, staff, and a continuing source of financial support. To keep joint efforts up and running, participants must incorporate partnership objectives into their own institutional mandates and budgets, and earmark the permanent flow of adequate resources.

Publicize Your Success

Interagency partnerships are a promising conduit for the large-scale creation and delivery of comprehensive services to children and families, but even when resources are reconfigured and used more wisely, current funding levels are insufficient to meet the level of need. Partnerships must demonstrate the ability to improve outcomes for children and families, and express their success in future dollars saved and taxpayer costs avoided. Well-publicized results that consistently meet reasonable objectives will go far to attract the funding necessary to replicate and expand innovation.

Melaville AI, Blank MJ. *What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services.* Washington, DC: Education and Human Services Consortium; 1991.

the concerns of the school.

* Teams of teachers are more effective than individuals in bringing about change.
* Individuals are more committed when part of the decision-making process.
* School teams working on shared concerns soon become a visible entity within the school and community, increasing the potential for change.
* The small team approach is more effective than the unwieldy whole-school approach.
* A school team has the potential to generate its own ideas, develop problem-solving capabilities, solicit technical assistance, and disseminate its program improvement approach.
* Problems and solutions differ with each location.
* The school team should be prepared for resistance to change from colleagues.

As schools organize various work teams to address specific health issues, they might consider organizing a steering committee (school health coordinating council) that can coordinate the activities of the various work teams. The coordinating council would include representatives from each of the eight comprehensive school health program components, as well as staff from other disciplines. Each school should have a school health council to coordinate the work teams within the school.

As the number of schools increase in a district, the district may convene a representative from each school's council at a district school health coordinating council. The coordinating councils (school and district) could oversee coordination of programming that addresses the many divergent health problems facing students. Further, councils could assume responsibility for evaluating the school health program and coordinating the interagency network. Ideally, each school would employ a school health coordinator to provide leadership and service to everyone working on some aspect of the school health program.

The Nebraska Department of Education,[62] as part of the "Toward a Drug-Free Nebraska School Community" initiative, trained 240 teams that developed action plans to reduce substance abuse among students. Program evaluation revealed school/community teams that met 15 or more times during the school year, compared to teams that met less than two times, had more students who refrained from drinking alcohol (61% vs. 36%), and from smoking marijuana (89% vs. 85%). Abstinence from alcohol and marijuana was correlated with the number of team projects completed. Teams that completed nine or more team projects had 56% of their students who reported never drinking and 87% who never smoked marijuana. In comparison, schools that completed less than two projects had 49% of their students refrain from drinking alcohol and 83% refrain from smoking marijuana.

Needed: A Supportive Administration. To successfully implement both interagency and interdisciplinary activities, support from administrators is needed. A partnership between school administrators and staff can happen only if administrators create and support a participatory culture. A participatory culture emerges when administrators believe that staff are the most valuable resource, that each staff member possesses unique skills, and that each needs and deserves to be involved in decisions that affect them.[60] Sujansky[54] suggests administrators who want to manage partnerships must assume the following roles:

* a coach when encouraging excellence,
* a trainer when developing skills,
* a model when demonstrating appropriate behaviors,
* a facilitator when guiding the process,
* a leader when providing vision and direction, and
* an evaluator when appraising results.

Administrators need to move in and out of these roles as they interact with school staff in supporting the partnership. Involving staff in decision-making facilitates team building and empowerment of individuals, thus promoting continuous improvement of the school health program. Fullan[63] suggests leadership must provide a structure for any classroom or school improvement project. Specifically, the structural changes needed include time for joint planning and joint teaching arrangements, new roles such as mentors, formal policies, and organization arrangements conducive to school improvement.[64]

Leaders in education[57-61] and business[65-68] have voiced the value of teams working together to improve the organization. Innovative techniques and programs have been successful when educators collaborate on issues of common concern. School teams increase the likelihood of programs being initiated, disseminated, and maintained.[69]

The new school health program accomplishes health promotion goals via the program planning process.

Continuous improvement in the school health program can be achieved by following a program planning process: assessing the problem; planning goals, objectives, and strategies to ameliorate or eliminate the problem; implementing the plan; and evaluating the results. The evaluation becomes the assessment for a new cycle of planning for continuous improvement. Instrumental to the process is the need to identify root causes of problems and collect meaningful baseline data. Fact-based decision-making requires that appropriate assessment methods be used to identify knowledge, attitudes, and behaviors of students and staff, the positive and negative forces affecting health actions, and deficiencies or gaps in services and programs. A thorough understanding of the problem provides the rationale for selecting the target goals.

The plan is developed by knowing what changes are needed and what the ultimate goal should be. After identifying the goal, substeps (objectives) needed to achieve the goal are identified along with strategies, activities, and resources. Before implementation, approval for the plan, funding, staff facilities, and supplies must be assured. Evaluation consists of analyzing the extent to which

activities and strategies were faithfully executed as planned and the extent to which objectives and sub-objectives were achieved. Additional evaluation includes impact of the program on changing knowledge, attitudes, behaviors and/or services; strengths and weaknesses of program design; any favorable or unfavorable side effects; and effectiveness and efficiency of the program in comparison with other programs. Chapters 2 and 3 detail how the planning process may be implemented in school.

The new school health program provides staff development.

School health professionals need to be well-grounded in their respective professions. Most professionals working within the school health program must hold a bachelor's degree at a minimum. Many require additional graduate hours and certification as specialists.[70]

Many individuals practicing in a school setting received training when little attention was paid to health, social, and psychological factors that may interfere with learning. During the 1970s, health problems such as substance abuse and teenage pregnancy emerged as problems that could interfere with learning. HIV and AIDS were not addressed in public schools until the late 1980s, nor was violence defined as a public health problem until recently. Today, all of these health problems present obstacles to learning.

Because school faculty and staff probably received minimal preservice training, if any, in strategies to prevent the occurrence of health problems that interfere with learning, staff development programs that address these issues are needed. Staff development is a necessary step when implementing health education programs that result in behavior change. A meta-analysis of 133 studies by Johnson and Johnson[71] that evaluated various models of inservice programs, including "competitive," "individualistic," or "collegial" models, concluded that "collegial" staff development promoted achievement, positive interpersonal relationships, social support, and self-esteem among faculty. Another meta-analysis[72] of staff development training practices revealed utilization of theory, demonstration, practice, and feedback produced meaningful differences in teachers' acquisition of attitudes, knowledge, and skills. However, it was not until peer coaching was incorporated that meaningful differences occurred in the transfer of learning to the classroom. Coaching as a training component is essential if teachers are to transfer the training to the classroom. The meta-analysis found peer coaching in the classroom resulted in effect sizes that were 1.3 standard deviations higher than when coaching was not provided. Distributed practice was found to be more effective than condensed practices. Without follow-up peer coaching in the classroom after training, the transfer effects are negative to minimal. Given that the goal of most training programs is to have the content of the training transfer, peer coaching is vital to the transfer of training to the classroom.[72]

Summary

A variety of factors impinge on the health and learning of youth: poverty, increased number of mothers in the work force, divorce, and chronic disease. Further, many students have adopted behaviors that ultimately will compromise their health and productivity as learned members of our society.

The school health program has evolved to meet these challenges. The traditional school health program included health instruction, health services, and a healthful school environment. The new school health program added to these components physical education, food service, guidance, counseling and psychology, worksite health promotion for faculty and staff, and integration of school and community programming. Just as the structure of the comprehensive school health program has evolved, so has the process.

The new school health program actively links the efforts of students, families, and school and community professionals to focus on behaviors interfering with health and learning, using a broad range of health and educational strategies. Students and families are viewed as resources in planning and implementing programs, instructional methods are linked to educational goals, and students are provided opportunities to practice the many common skills needed to address the health decisions confronting them. In addition to changing lifestyles, the new school health program addresses structural and environmental change. In particular, the new school health program assures students have access to needed services. Further, the new school health program coordinates school and community resources through interagency and interdisciplinary activities using a program planning process. Staff development programs focusing on recognizing, referring, and treating students with health problems or unhealthy behaviors are provided to all staff.

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Figure 1.7

Integrating School Community Programs

Functions	Exchanges		
	One-way	**Two-way**	**Multiple**
Information	Distribution of materials produced by voluntary health agencies.	Utilization of parents as partners in specific instructional strategies.	Distribution to multiple agencies, newsletters, calendars of events, and directories of services.
Services	Screening for health problems by volunteer community layperson or health professional.	Cooperative venture utilizing school setting for training of medical students, nursing students, etc.	Collaborative venture by school and community agencies to provide school-based clinics.
Advising and Decision-Making	Formation of school health advisory council.	Collaboration by physician and teacher to improve health status and educational attainment.	Formation of an inter-agency coalition to advise policy-makers.
Planning and Development	Opening school recreation facilities to fitness activities for community.	Development of plan to improve child health between the local education education agencies and the health department.	Development of a consortium to purchase validated curriculum.
Research and Evaluation	Providing access for researchers from higher educational institutions.	Cooperative submission of a grant proposal by schools and community agency.	Utilization of multi-agency task force to gather epidemiological and social data on student health problems.
Monitoring and Reporting	Citizen monitoring of school desegregation.	Monitoring referrals of students between health and social service agencies to assure continued treatment.	Development of Adolescent Services Network to monitor health/educational needs and interagency referrals.
Training	Utilization of parents as consultants for inservice or instructional programs.	Utilization of community agencies as learning laboratories for students who serve as volunteers in service or instructional capacity.	Utilization of personnel in health service network to provide inservice programs for respective members.
Advocacy	Utilization of parents as fund raisers.	Initiation and development of regional school health education coalition by a state school health education advocacy network.	Formation of a coalition to publicize the benefits of comprehensive school health.
Electoral/ Legislative	Citizen campaigning for individuals running for school board.	Coordination of policy between city council and school health council.	Formation of a coalition to promote a legislative mandate.

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Chapter 2
Setting the Stage for Continuous Improvement in School Health

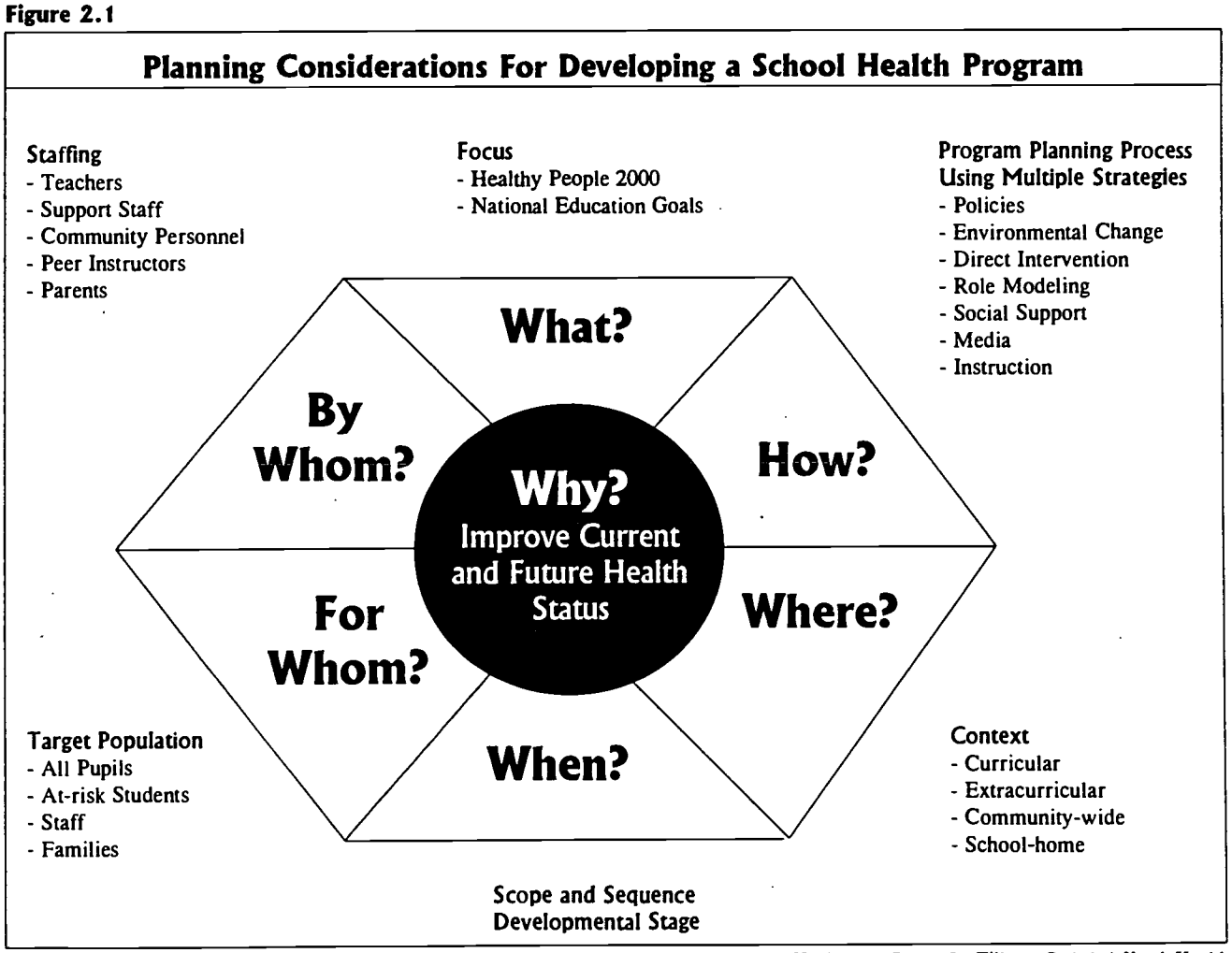
Diane DeMuth Allensworth

A variety of events could be the stimulus for initiating a project to improve the school health program: the announcement that a student or staff member is HIV positive, a report of increased substance abuse among students, finding students bringing weapons to school, a suicide, availability of grant money, or interest from parents or community professionals. Whatever the stimulus, the temptation is to initiate something quickly in response to the crisis or the offer for help. However, a more deliberate approach probably will have greater chance of success. Change is difficult both on the personal and organizational level; therefore, it is necessary to use a program planning process to improve the school health program. Setting the stage by choosing the appropriate players is critical. A team with the right mixture of responsibility, knowledge, and experience can lead the school in an improvement project that will make a difference for students and staff. According to Farley,[1] factors that must be addressed in any school health improvement project include identifying the staff and target population and choosing the timing, context, focus of the intervention, and strategies to support organizational and individual change (Figure 2.1).

Choosing the Staff

Kolbe[2] expanded the traditional school health program from health education, health services, and a healthy school environment to one that added physical education,

Figure 2.1



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guidance and counseling, school psychology, school food service, school site health promotion programs for faculty and students, and an integration of school and community interventions. Programmatically, the staff responsible for all of these components contributes to the well-being of the school-aged child. While there is the temptation to ascribe specific players within the school to each component along with responsibilities that are exclusively the domain of that component, in reality, no clear-cut division of labor exists. While health services may be considered by many to be the domain of the school nurse, school nurse practitioner, or school physician, every staff member has the responsibility of referring to treatment students who exhibit symptoms of vision and hearing disorders or substance abuse. The healthy school environment component often is assigned to administrators. While the superintendent and the principal set the tone for the school, without the cooperation of all staff, efforts to make the school environmentally sound, aesthetically pleasing, and psychologically safe will fall short.

At the secondary and middle school levels, health education is usually a specific class taught by a health educator. However, instruction on health topics also is provided by school nurses, guidance counselors, home economics teachers, and food service directors. Using a variety of individuals who each bring specific attributes to a task strengthens the school health improvement team. The following list identifies potential team members and describes attributes they may bring to the team.

School Administrators: Set the tone for the school environment and can facilitate implementation of the plan.

School Nurses, School Physicians, Nurse Practitioners, and Aides: Understand student health needs, can link school and community programs, can provide case management for student health needs, and can serve as a health resource for all staff.

Health Educators: Can coordinate supplemental health instruction with the health curriculum and provide access to a variety of health resources.

Physical Educators, Coaches, Trainers: Can coordinate the physical education program with special fitness programs, as well as implement special fitness events.

Food Service Directors, Food Service Managers: Can organize supplemental nutrition education programs.

Guidance Counselors, School Psychologists, Social Workers: Can direct peer instructional programs, small group process, and support groups, as well as teach within the guidance program the generic skills needed to address a variety of health problems.

Worksite Health Promotion Directors: Can organize health promotion activities and coordinate community health promotion resources.

Community Professionals, Parents, and Community Leaders: Have access to human and material resources and leverage within the community to assure implementation of projects.

While this list represents the major players with some responsibility for the school health program, other individuals can facilitate attainment of program goals because of their unique role in the school or with students. Other individuals who could assist in health-promoting initiatives include:

In-School Suspension Officers: Supervise students at risk and can facilitate individualized health education programming.

Librarians: Have access to school media resources and can prepare exhibits for students.

Special Education Teachers: Teach students at risk.

Home Economics Teachers, Science Teachers: Can provide significant health programming within their respective discipline.

English Teachers: Can assign homework with health themes.

Office Secretaries: Are aware of available school resources and have contact with students waiting in office for professional staff.

Music Teachers, Art Teachers, Drama Teachers: Can use a variety of channels to provide health messages. In reality, any teacher or school staff member who works with students could be valuable in this endeavor.

Students: Although students routinely have not been placed on committees to improve school health programs, it is appropriate to consider their value. Students have the attention of their peer group, the idealism and energy to complete projects, and the need to engage in meaningful activity. They also can promote behavioral change among students more effectively than adults.

Consultants: Outside consultants, who are trained health education specialists and understand the theories of individual and organizational change and the process of program implementation, can facilitate institutionalization of an interdisciplinary approach to school health programming. Consultants may be based at the district office, secured from a local university, or hired through a consulting firm. Saxl et al[3] suggested characteristics of an effective consultant include interpersonal ease in relating to and directing others, understanding group dynamics, skill at training and directing workshops, being a master teacher and an effective organizer, skills in managing conflict and diagnosing the needs of individuals and organizations, being supportive and strengthening the clients' belief in self, and being able to provide clients with new information, materials, and practices. University-based, district-based, or independent consultants can provide expertise on process and school health programming, facilitate team-building, instruct the team in new techniques and strategies, and facilitate the use of community resources.

Health promotion work teams that select members from the various disciplines allow for greater dissemination of information and innovations as team members share activities of the team with their respective professional groups. Team members can request assistance from their professional groups in implementing germane portions of

the action plan. Gurevitsch[4] suggests two types of teams might be formed: professional groups and cross-discipline work groups, each providing a different focus. Programming for both groups can be aided by keeping open communication channels and a school health council that coordinates activities of the various teams addressing specific health issues (Figure 2.2).

In addition to selecting players because of their professional role within the school, Thompson[5] suggests teams should include individuals with particular personal strengths. Effective teams need the following players:

Coordinator: Someone to provide leadership by managing or directing team members' activities.

Originator: Someone to serve as the "ideas person" of the team.

Monitor: Someone to play devil's advocate and force the team to evaluate activities.

Resource Investigator: Someone who has contacts and networks within the school and community.

Finisher: Someone to follow through on project details.

Implementer: Someone to turn concepts into practical working procedures.

Supporters: Someone to maintain harmony and promote member satisfaction and team spirit.

To assure this variety of characteristics on a team, a systematic way to assign team members is to have potential team members complete a DISC Inventory analysis[6] or a Myers Briggs analysis.[7] These tests can identify working styles.

Choosing the Target Population

Students at risk are a prime target for intervention. However, valid reasons exist for including all students, parents, faculty, and staff as targets for the intervention. Any school health improvement project may focus on one, two, or all of the following target groups. Planners must consider the advantages of including each group with the costs in time and resources needed to provide effective programming. A brief rationale for choosing various target groups follows:

Students at Risk: Focuses limited resources on students in need and is cost-effective.

All Students: Ensures that all who need the program are included, provides easier programming through established classes, and eliminates stigmatization.

Faculty and Staff: Promotes staff as role models and promotes camaraderie among staff and students when both are engaged in a health improvement project.

Parents: Facilitates behavior change among their children and improves school and home relationships.

Choosing the Timing of the Interventions

Organizing the order in which material is taught (sequence) and the depth or difficulty of the material at various levels (scope) is based on 1) health needs, 2) student interest and community values,[8,9] 3) range of subject areas taught,[9] 4) relationship of the health content to other subjects (science, language arts, social studies),[9] 5) availability of instructional materials,[9] and 6) state legal requirements.[9]

Health beliefs and behaviors of children will change with age and experience. Natapoff[10] developed a schematic outlining children's ideas of health within a Piagetian framework (Figure 2.3). For young children, the intervention would center on maintaining health or the short-term effects of health-debilitating behaviors. For example, instruction on the consequences of smoking should only include activities that emphasize the immediate, short-term effects of smoking. Older children who can focus on the future can consider the abstraction of disease if health-debilitating behaviors become part of the lifestyle. However, even with older children, there is a need to assist students at risk in visualizing a future in which a healthy body would be an asset.

Traditionally, organizing the scope and sequence has referred to the organizational units, lessons, and concepts across the K-12 curriculum that will be presented in the classroom. In addition to the formal curriculum, the health promotion team also should coordinate timing school-wide health promotion initiatives with national observances or local events. Operation Prom and Project Graduation are two effective school/community initiatives organized by some communities to reduce drinking and driving during two significant events in seniors' lives. The American Heart Association's Save a Sweetheart Campaign (February) or the American Cancer Society's Great American Smokeout (November) are examples of national health observances used by many schools. Although these campaigns have been used throughout junior and senior high school, planners should target programs for the developmental stage when most students initiate smoking (grades 6-9). Coordinating health promotion initiatives with national health observances at the appropriate developmental time for students provides benefits for all. Students who receive similar messages in the classroom and the media will link classroom activities with personal practices. Teachers can use the many resources developed by health organizations to promote the national observances. Appendix B lists some of the national health observances.

Choosing the Context

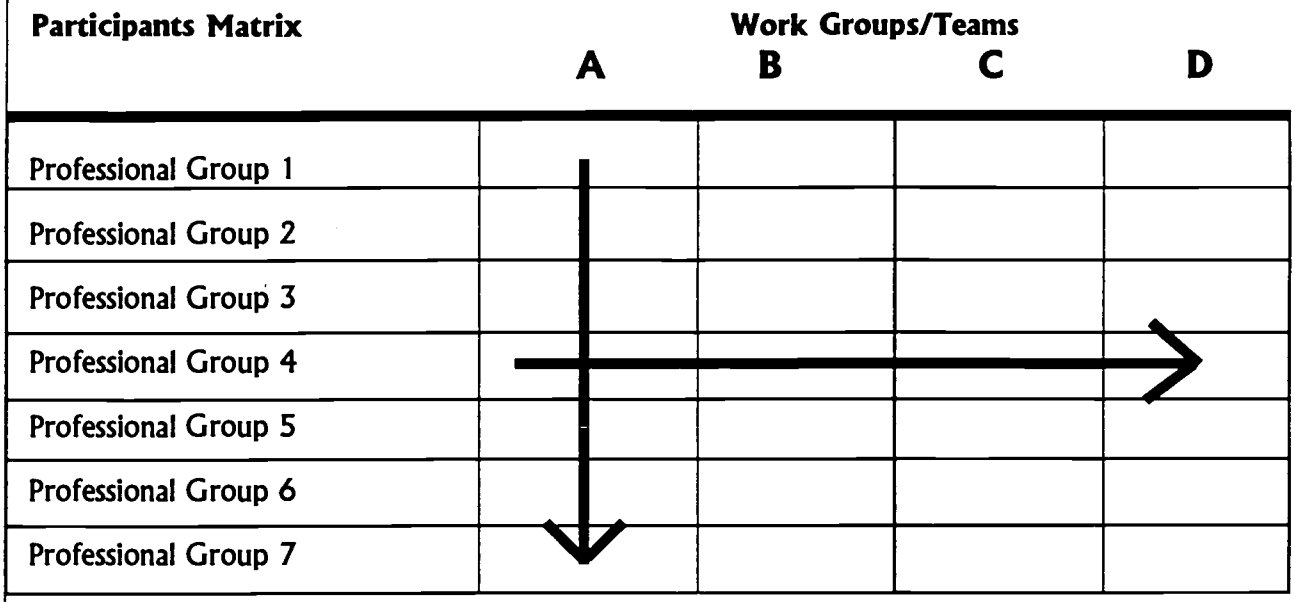
Research on the effectiveness of behavior change strategies among children and youth suggests that multiple interventions are more effective than single interventions.[11-13] Four basic contextual options offer different benefits:

Curricular Interventions: Whether programming focuses exclusively on the health curriculum, infuses health instruction across various subject areas, or combines both techniques, using the formal curriculum ensures all students receive programming, although it may be provided sequentially.

Extracurricular Interventions: Providing supple-

Figure 2.2

Interdisciplinary Teams Within the School



- A work group/team has an interdisciplinary membership.
- A professional group consists of participants with the same job function or the same range of work.
- Interdisciplinary team members communicate interventions and new techniques developed by the interdisciplinary work team to professional colleagues in their discipline.

The work groups/teams might focus on the following issues:

Work Group A: Promoting cardiovascular health
Work Group B: Reducing substance abuse
Work Group C: Improving health services
Work Group D: Reducing violence

The professional groups might have the following composition:

Professional Group 1: School administrators
Professional Group 2: School nurses
Professional Group 3: Health teachers
Professional Group 4: Guidance counselors
Professional Group 5: Physical education teachers
Professional Group 6: Psychologists
Professional Group 7: Science teachers

Adapted from Gurevitsch G. A model for the development of a health-promoting school in Denmark. In: Nutbeam D, Haglund B, Farley P, Tillgren P, (eds.) *Youth Health Promotion: From Theory to Practice in School and Community*. London, England: Forbes Publications; 1991:163.

mental programming through clubs and organizations facilitates social support and role modeling.

Home Interventions: Extending classroom instruction by using families as partners in instruction facilitates behavior change via role modeling and social support. The basic health curriculum also can be extended by using families to provide supplemental instruction. Researchers have documented the effectiveness of having families complete health activities with their children as part of health lessons. Figure 2.4 provides a series of parental newsletters developed by the American School Health Association to supplement and extend classroom instruction at the upper elementary school.

Community-wide Interventions: Using community-wide health promotion events, the media or community health programs allows health messages to be heard and repeated through a variety of channels and facilitates social support and role modeling.

Using all options in various combinations extends the amount of instructional programming students receive. A sequential K-12 health instruction curriculum can be supplemented by infusing health content into other areas. The state of Texas developed the *Education for Self-Responsibility* curriculum, which provides health lessons for K-12 teachers of language arts, science, social studies, mathematics, home economics, and health in four different content areas: nutrition, substance abuse prevention, sexually transmitted diseases, and pregnancy prevention.[14]

Choosing the Focus

While the specific focus of the school health program must relate to local needs, the Public Health Service, in collaboration with more than 2,500 public and private organizations, has assisted local programmers by identifying national health goals described in *Healthy People 2000*.[15] Three hundred health objectives divided into 22

Figure 2.3

A Comparison of Cognitive Development and Concept of Health by Age

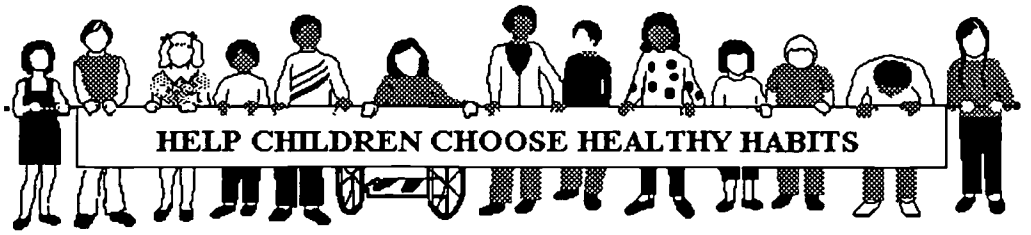
Age[1]	Cognitive Development[2]	Concept of Health
Below 7 or 8	*Preoperational* - Egocentric - Intuitive - Cannot consider whole and part simultaneously - Present-oriented	- Health is doing desired activities and feeling good. - Concrete and sometimes unrelated practices are considered part of health. - Many do not see health and sickness as related. - Cause and effect are not considered.
8-10	*Concrete Operational* - Cause and effect considered - Can consider original and changed state - Reversibility develops (thinking processes can take place in opposite directions) - Can think through a chain of events - Classifies objects and concrete ideas into a hierarchical arrangement	- Health is performing desired activities. - Cause and effect are understood. - Action and health status are related. - Believe it is possible to be part healthy and part not healthy. - Can reverse from health to sickness and back to health.
Above 10-11	*Formal Operational* - Future-oriented - Can formulate hypotheses - Can consider abstraction - Deductive reasoning develops	- Health is performing desired activities. - Mental health is considered by many. - Health is long-term, sickness is short-term. - Future health is considered.

1 Ages vary but sequence is invariant
2 Based on the theories of Jean Piaget

Adapted from Thompson R. *Primary School Drug Education Evaluation*. Canberra, Australia: CPP Communications; 1988:11.

Figure 2.4

Using Parental Newsletters to Supplement Classroom Instruction



Message to Parent/Guardian:

Your child is learning important health knowledge, attitudes, and practices at school through the health education program.

In addition to the lessons your child's teacher will provide, parents need to take an active role in the health education of their children, and provide additional health instruction that can help improve the health of the entire family.

Please help your child complete the activities on the back of this flier. After your child has completed an activity, make a star or check mark in the box next to it saying "I did this."

Join the Great American Smokeout on the third Thursday of November. Millions of smokers across the country will take a break and try not to smoke for 24 hours. How about you? Or, if you don't smoke, adopt a smoker for the day and promise to help that friend get through the day without a cigarette!

Cigarette smoking can cause lung cancer and other serious health problems such as emphysema and heart disease! Smoke in a room is also harmful to others not actively smoking. Many people are sensitive to secondhand smoke.

I encouraged my child to complete this number of activities this week. _____ Date _____

Comments _____

_____

Parent/Guardian Signature _____

I will not smoke cigarettes.

Student Signature _____

Figure 2.4, continued

Goal: I will not smoke cigarettes.

I will name reasons for my decision not to smoke.

Activities to reinforce goal:

I did this!

1. The Law and Smoking

There are many places where smoking is not allowed and many reasons why smoking is not allowed. On the chart below in the left column, list three places where smoking is not allowed. In the righthand column, write why smoking is not allowed in those places.

Where smoking is not allowed	Why smoking is not allowed
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

I did this!

2. Cigarette Ads

Cigarette makers can no longer advertise on radio or TV, but they still can advertise in newspapers and magazines. Look for some of these advertisements. What reasons are suggested for smoking a certain brand of cigarettes? What important health information is not mentioned in the ads?

_____

_____

_____

I did this!

Choose one magazine and search for cigarette ads. Answer the following questions:

1. How many cigarette ads did you find? _____
2. How many ads had people in them? _____
3. What health risks were mentioned? _____
4. What reason did the ad give to try that brand?

_____

I did this!

3. Scrapbook

Start a scrapbook of current articles about tobacco. Be sure to read each article carefully before putting it in your scrapbook. Share your scrapbook with your family and classmates.

priority areas were delineated. About one-third of the objectives relate directly or indirectly to children and youth. Figure 2.5 contains resources describing the *Healthy People 2000* initiative. Without cooperation of the nation's schools, these health goals will not be achieved. The national educational goals[16] also provide direction for improving the local school health program. By linking local programming with national initiatives, programmers can establish credibility, generate increased enthusiasm and acceptance, utilize federally-prepared resources, and compare local outcomes to national outcomes.

While most priority areas in the *Healthy People 2000* initiative have objectives targeting children and youth, school health improvement teams should focus on only one to three priority areas at a time. Successful implementation of a new program requires time and energy. To avoid overextending the staff, programming should focus on goals that can be reasonably attained. When the new program becomes established within the school culture, it is time to identify additional problems to be addressed and organize a team to address those problems.

The *Healthy People 2000* objectives that focus on children and youth for the following priority areas are identified in chapters four through nine. They include:

Physical Activity and Fitness
Nutrition
Tobacco
Heart Disease and Stroke
Cancer
Maternal and Infant Health
Family Planning
HIV Infection
Sexually Transmitted Diseases
Alcohol and Other Drugs
Unintentional Injuries
Violent and Abusive Behavior
Mental Health and Mental Disorders

In this document, several related priority areas from *Healthy People 2000* are combined into one. For example, objectives found in the priority areas of Nutrition, Physical Fitness, Cardiovascular Disease, and Cancer are addressed in chapter five on health promotion and disease prevention. This publication also identifies worksite health promotion objectives for adults. Establishing a worksite health promotion program for faculty and staff promotes increased interest in health and allows faculty and staff to become role models by exhibiting health-enhancing behaviors.

Using the Program Planning Process

The six basic steps in planning a school health improvement project are (Figure 2.6):[17]

* involve people,
* define the problem from a local perspective (assessment),
* set goals and objectives,
* identify strategies to be used in the action plan,
* implement the plan, and
* evaluate results.

Involve People. Successful school health improvement projects link professionals within the school and integrate school activities with the community. Teachers, nurses, counselors, psychologists, and administrators can work with parents, community agency personnel, and students to devise a multi-faceted program that is delivered through both curricular and extracurricular efforts. Teams organized to address specific health problems can be coordinated by a school-wide interdisciplinary school health coordinating council.

Assembling team members can be accomplished as part of an inservice workshop held during or after school, on a weekend, or during the summer. While assessment activities can be completed without major blocks of time, development of action plans will require teams to have longer blocks of available time. Ideally, a summer inservice program is provided in which planning is interspersed with exposure to effective interventions that other schools have completed.

The work of the school health team is enhanced if the community has mounted a similar campaign, and if there is a link integrating the programming in the community with that occurring in the school. Various options are available for school-community partnerships. Schools may solicit community agency professionals and parents to work on school health improvement teams. Schools or community agencies may organize more formal task forces, coalitions, networks, or consortiums. As the organizational unit becomes more formal and complex, the roles and responsibilities of participating individuals and agencies must be clarified. Several resources describing the needs of coalitions and interagency networks are available (Figure 2.7).

Define Problems. An assessment is the first activity in the planning process to discover the needs and wants of the target populations. Assessment activities use data to answer questions such as:

* What are the major health problems?
* What is the current status of programming that addresses these health problems?
* What are the gaps in needed programming?
* What health problems should be addressed first?

Data collected during the assessment process from students, faculty, parents, health professionals, and health and social service agencies enables a planning committee to establish priorities. A variety of assessments may be completed. These include a survey of:

* students' knowledge, attitudes, and behaviors about health in general or in any priority area,
* school health programming in the eight component areas,
* community resources,
* programming within the school and community that addresses specific priority areas,
* epidemiological data (mortality/morbidity), and

Figure 2.5

Resources Describing the Healthy People 2000 Initiative

Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: US Public Health Service; 1991.

Healthy Kids for the Year 2000: An Action Plan for Schools. Arlington, Va: American Association of School Administrators; 1991.

Promoting Health/Preventing Disease: Health Objectives for the Nation. Washington, DC: US Public Health Service; 1980.

The 1990 Health Objectives for the Nation: A Midcourse Review. Washington, DC: US Public Health Service; 1986.

* social indicator data (crimes, DUI arrests, etc.).

One of the most useful survey instruments to assess adolescent behavior is the Youth Risk Behavior Survey developed by the Centers for Disease Control and Prevention. The survey focuses on behaviors in six priority areas: physical fitness, nutrition, intentional injuries, unintentional injuries, reproductive health, and substance abuse. Local programmers could compare their students' behavior with the behavior of students at the national or state level. Appendix C contains a copy of the survey.

Surveys to analyze the school's response to the *Healthy Youth 2000* initiative can ascertain deficiencies in health services, health instruction, healthy environment, physical education, nutrition services, guidance and counseling, and worksite school health promotion. Appendix A contains specific surveys for each component of a comprehensive school health program.

In addition to assessing students' knowledge and behavior, as well as the health promotion programming provided by the school, an assessment of community resources should be completed. Several community agencies share parallel goals in regard to the health and well-being of children and youth. Identification of health-related programs for children and youth within the various health, recreation, religious, social services, juvenile justice, and youth agencies facilitates networking as well as the sharing of resources and information.

Epidemiological and social indicator data can be obtained through records from the offices of public health, police, and social services. Useful questions that could be answered by local officials include:

* What are the leading causes of death for children ages six to 18?
* How many adolescents gave birth last year?
* How many adolescents were arrested for driving while intoxicated?
* How many adolescents were arrested for using illegal drugs?
* How many students are from impoverished families?

Upon completion of the various needs assessments and retrieval of local and state epidemiological and social indicator data, programmers can use the exercise titled "Identification of Local Needs" in Figure 2.8 to clarify which priority areas will be the initial focus of the school health improvement project.

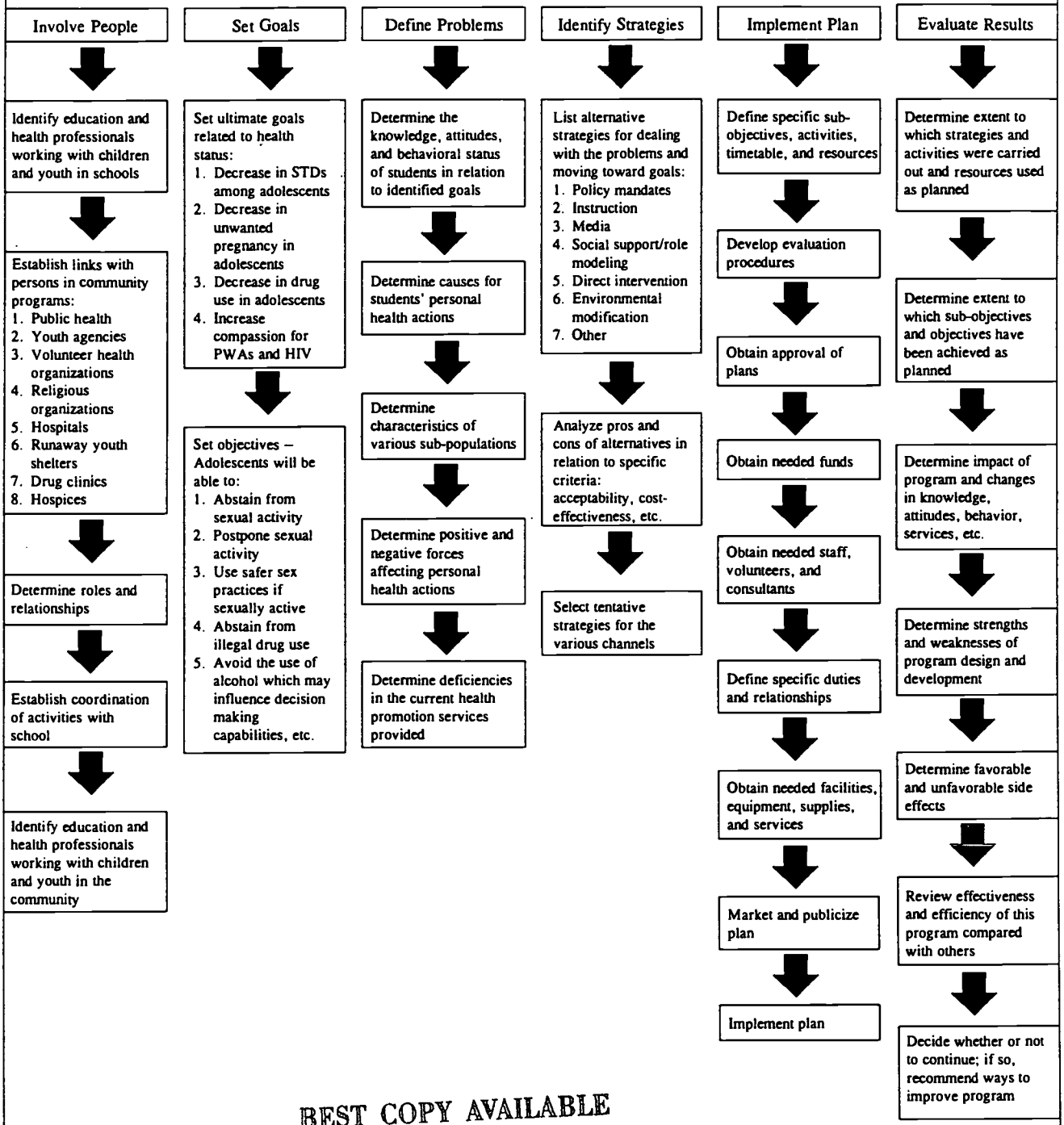
Set Goals and Objectives. Goals are broad statements that identify long-term outcomes the school health program wants to achieve. For each priority area identified as the initial focus of the school's effort, the health objectives of the nation for that priority area could become the goals of the action plan. The school health council could, however, decide to choose goals that improve the quantity and quality of programming in one or all eight components of the school health program.

After goals have been identified, specific objectives that describe the necessary outcomes will help facilitate attainment of established goals. Objectives are the incremental steps that must be accomplished before the goal can be attained, identifying the action to be performed by the target audience under certain conditions and, like goals, should be stated in specific measurable terms. Objectives formulated for the action plan are specific outcomes that will define changes in the students' or staff's knowledge, attitude, and behavior. Specific objectives or outcomes also are important because they will become the focus of the evaluation plan that will be developed.

It may be somewhat confusing to ask the reader to formulate objectives, given that *Healthy People 2000* lists more than 300 objectives needed to attain the goal of increased life span. Further, each of the six educational goals have objectives. It must be acknowledged that one set of objectives can serve as goals for another set of objectives. For example, to achieve the goal of increased life span in the *Healthy People 2000* initiative, health scientists developed objectives in 22 priority areas. These objectives can serve as goals for local programs. For example, the first objective in the Family Planning priority area reads: *Reduce pregnancies among girls ages 17 and younger to no more than 50 per 1000 adolescents by the year 2000.*[15] Attaining this objective (along with the other objectives in *Healthy People 2000)* would contribute to increasing life span because infants born to young girls have increased rates of mortality and morbidity. This "objective" thus can become a "goal" at the local area for the additional sub-objectives, which must be attained before there will be a reduction in pregnancy rates. Examples of sub-objectives for the "goal" of reducing pregnancies among girls ages 17

Figure 2.6

Steps in Program Planning
Example - Preventing the Spread of HIV Infection



Adapted from Sullivan D. Model for systematic program development in health education. *Health Education Reports*, 1973;1(1): 4-5.

and younger might include:

* By year 2000, 50% of adolescents will abstain from sexual activity until married.
* By year 2000, 30% of adolescents will postpone sexual activity until graduating from high school/ college.
* By year 2000, 90% of sexually active adolescents will use effective and consistent contraceptives to prevent pregnancy.
* By year 2000, all adolescents will evaluate the social, economic, and health consequences of teen pregnancy as undesirable for both mother and child.

Further confusion about goals and objectives arises because some authors discuss programmatic objectives as well as behavioral objectives. For example, *Healthy People 2000* lists the following as the eighth objective in the Family Planning priority area:

> *By the year 2000, increase to at least 85% the proportion of people ages 10 through 18 who have discussed human sexuality, including values surrounding sexuality, with their parents and/or have received information through another parentally endorsed source, such as youth, school, or religious programs.*[15]

To achieve this objective, the planner must not only develop strategies to facilitate communication, but also assure that information programs are available in schools and religious institutions for students as well as parents. Although baseline data shows some discussions between parents and children have occurred, nationwide studies show almost 80% of parents feel they need help teaching children about sexual issues;[18] further, 86% support sexuality education in schools.[19]

This "objective" in *Healthy People 2000* can become a "goal" for the local school health improvement team. To facilitate this "goal" of increased sex education by parents, schools, youth, and religious organizations, the following "objectives" might be chosen by the school health improvement team:

* By the year 1996, all health, home economics, and biology teachers at the secondary level will receive training on providing a human sexuality class based on the standards established by the Sexuality Education and Information Council of the United States (SEICUS.)
* By the year 1996, all elementary teachers will have attended an inservice training program to effectively provide students age-appropriate instruction on human sexuality.
* By the year 1996, the school will routinely solicit parents' involvement in the homework lessons on human sexuality assigned to students.
* By the year 1997, the school will offer classes to parents on how to facilitate age-appropriate discussions on human sexuality.
* By the year 1997, a coalition of parents, community agency personnel, and school staff will develop a program to increase the amount of instruction on sexual issues that parents provide their children.
* By the year 2000, the school will adopt a K-12 human sexuality curriculum within the K-12 comprehensive health education program.

Worksheets to assist in the development of goals and objectives to facilitate the improvement of health status goals are provided at the end of chapters that address *Healthy People 2000* issues.

The school health improvement team may decide the initial goal will be to improve various components of the comprehensive school health program. As Green and Krueter[20] noted, the health promotion process must address the organizational and environmental supports necessary to enable health status changes of the target population. The health promotion process links ultimate outcomes with appropriate interventions and environmental supports (Figure 2.9). To achieve the ultimate outcomes of reduced illness, extended longevity, and improved quality of life, a number of health promotion interventions must be instituted — some that target behavior of individuals and others that target improvement in resources and services. Enhanced environmental supports are needed and useful, such as legislation mandating services or regulating credentials of providers, advocacy coalitions, and co-location of health services at school sites.

While most school health improvement efforts will focus on the school or district level, it may be appropriate to expand the focus if addressing improvement of resources in any of the eight component areas. For example, if a school health improvement team wants to improve the health services component, it may be asked to identify through a brainstorming exercise the resources and the political, regulatory, and organizational supports needed to improve the school health program. At the end of the

Figure 2.7

Coalition-Building Resources

Allensworth DD, Patton W. *Promoting School Health Through Coalition Building*. Muncie, Ind: Eta Sigma Gamma; 1990.

Gilroy NT, Swan J. *Building Networks: Cooperation as a Strategy for Success in a Changing World*. Dubuque, Iowa: Kendall Hunt; 1984.

Hagebok BK. *Getting Local Agencies to Cooperate*. Baltimore, Md: University Park Press; 1982.

Smith M. *Organize*. Leicester, England: National Association Of Youth Clubs; 1984.

Figure 2.8

Identification of Local Needs

A. Compare the health status and health risks of schoolchildren in the local district with state and national epidemiological data, social indicator data, and local surveys of student knowledge, attitudes, and behavior.

Rank the priority needs from the most to least important in your district:

1.
2.
3.
4.
5.

B. List the major health problems that your school should address initially:

1.
2.
3.

C. After completing the surveys which assess the school's programmatic response to achieving the Healthy People 2000 and the Education 2000 goals, list five strengths and five weaknesses of the local school health program in regard to attaining the priorities of the planning team. Consider all components of the school health program: Healthful School Environment, Health Services, Health Instruction, Physical Education, Food Service, Guidance and Psychology, Schoolsite Health Promotion Program, and Integration of Community and School Health Programs.

Strengths	Weaknesses
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

D. List programming improvements needed in one or all of the school health component areas:

1.
2.
3.
4.
5.

After the team has identified the priority health issues and the programmatic gaps, use the specific action plan worksheets for those specific areas (health issues and/or the school health component areas) that will become the focus of this year's goals for the school health improvement.

brainstorming session, the list may contain the following: By the year 2000:

* Increase the number of practitioners.
* Increase by (X%) the number of *certified* practitioners.
* Increase by (X%) the number of state and district mandated services.
* Increase access to services.
* Increase by (X%) the number of practitioners who institute all interventions identified in *Healthy People 2000* as appropriate for the school health program.
* Increase by (X%) funding for this component.
* Increase the competency and skill of current or preservice providers via staff development to deliver existing programs and to develop and deliver new programs.
* Increase by (X%) the interagency networking of providers who share information, resources, and services.
* Increase by (X%) the interdisciplinary collaboration to identify and refer students at risk for visual, hearing, or skeletal disorders, substance abuse, COAs, etc. and develop and deliver all school programming for specific priority areas.
* Increase by (X%) the number of general public, parents, administrators, and school staff who can enthusiastically describe the contributions of this component to the school health program and student educational achievement.

Many of these ideas, which range from increasing the number of competent practitioners to mandating additional programs, could be accomplished through interventions at the state and district levels. For example, if increasing the number of certified practitioners in the health services program was the target objective, strategies launched to achieve that objective would differ depending upon the solution being sought (Figure 2.10).

At the state level, a coalition of health and educational professional organizations might be formed to advocate legislation that 1) mandates that each school provide school nurses in the ratio of 1 for each 750 students and 2) provides funding for local education agencies to employ the practitioners. To convince legislators, a survey documenting student health problems and programming gaps might be conducted. In addition to launching these state-level strategies, the school health team could petition the school board to consider hiring more practitioners. Again, a survey that documents student health problems and programming gaps strengthens arguments for additional personnel. Additionally, the number of providers may be increased through interagency agreements with hospitals, public health agencies, and community health clinics to provide co-location of services. At both the district and school, arrangements with local medical, dental, and nursing schools could allow student interns (under supervision) to staff health services programs. Professionals with nursing, medical, or dental credentials might be willing to volunteer their services for specific screening programs. Finally, at the clinic level, the health services personnel may be able to train students or staff to perform some tasks.

Identify Strategies. The team must formulate specific strategies to attain each objective. A strategy is any concerted set of activities designed to bring about change in people. Nelson[21] suggests strategies appropriate to changing health status can take the form of a policy mandate, formal instruction, informal modeling of behavior, social support, facility modification, or direct intervention. Using media has been added to Nelson's list because of Walberg's work in identifying the impact of television on learning,[22] and the work of Flynn[23] and others,[24,25] who demonstrated the efficacy of using mass media campaigns to change behavior.

The context, to some degree, will determine the type of methods that can best be used. However, as the school moves to adopt a health promotion model, it should begin to explore a variety of strategies to supplement and enhance the health instruction students receive.

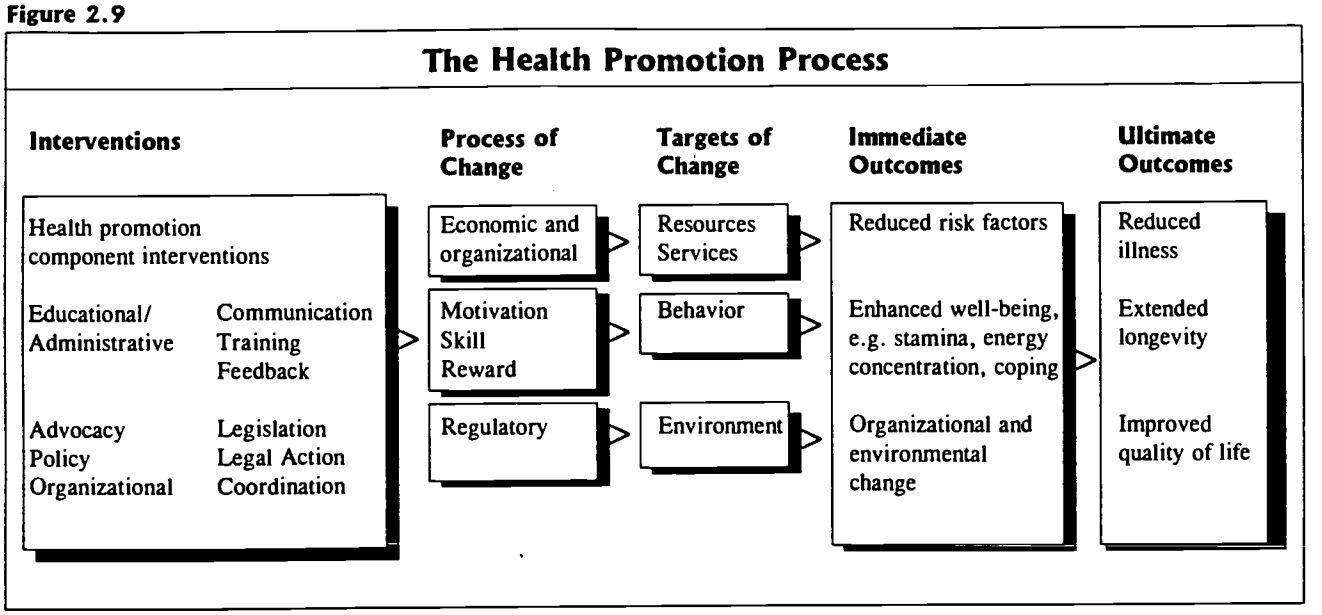
Planners can use policy mandates as a strategy to attain an objective. School boards and administrators can develop specific rules (policies) governing student conduct, academic offerings, teacher-staff development programming, pupil support services, and health promotion programs for faculty and staff. Further, schools can work with city hall and police to establish drug-free zones and other city-wide ordinances to provide bike and running trails. Community coalitions could be formed to advocate state laws that will legislate a tax on cigarettes to be used for school health programming, or that would require helmet laws for cyclists.

The strategy of direct intervention includes: screening; referral to treatment, support groups, or remedial work; treatment; rehabilitation; and follow-up to referrals. Traditionally, schools have screened and referred students for hearing and vision problems. These services could be expanded to include assessment and referrals for students at risk for alcohol and other drugs, obesity, high blood pressure, high cholesterol, child abuse, and other problems.

Changing the environment or modifying the school facility can promote adoption of health-enhancing behaviors. Ideas include providing on-site primary health care, implementing a student assistance program, installing a large clock on the playground so students can monitor their pulse, constructing walking trails or par courses, scheduling free periods to allow for more support groups, providing day care centers for children of teen mothers, developing programs for latchkey children, opening gymnasiums for parent and student fitness activities in the evening, and organizing community-wide coalitions to prevent substance abuse and teen pregnancy.

Committee members should plan on utilizing media available in the school and community. Use of all-school channels, such as bulletin boards, display cases, school

Figure 2.9



Adapted from Green LW, Kreuter MW. *Health Promotion Planning: An Educational and Environmental Approach.* Mountain View, Calif: Mayfield Publishing; 1991.

newspapers, public address systems, Channel One TV, cafeteria and library table tents, and homeroom announcements could complement the use of community channels to provide health-enhancing messages. Community coalitions could advocate broadcasting more public service announcements on the major community media channels.

Particularly powerful is the social support and modeling of behaviors by significant others, including peers, colleagues, parents, mentors, youth leaders, friends, teachers, and school staff. While individuals understand new information that experts provide, research has shown that behavior change takes place more often when a significant other provides a similar message to engage in the behavior.[26] Using significant others to provide formal and informal peer instruction has been effective in changing behavior.

It is appropriate to be very clear about desired instruction goals for students so that methods are chosen that can facilitate attainment of those goals. Ewles and Simnett[27] identified teaching methods that correspond with instructional goals. Social skills training, peer instruction, and parental involvement in instruction are techniques that have been successful in encouraging children and youth to adopt health-enhancing behaviors. Further, staff development programs are critical to continuous improvement in school health. New innovations in prevention must be provided to staff, as well as recognition of health problems and new innovations in programming and treatment. While a variety of methods need to be employed in staff development, a meta-evaluation[28] revealed peer coaching is the one technique that should always be included if transfer of a new behavior to the classroom is desired.

A number of other strategies might be employed by a school health improvement team working with a school-coalition to improve the school health program. These include interagency coordination, marketing, advocacy, fundraising, and promoting taxation, legislation, and regulation. These strategies are most often used to improve the quality and quantity of school health programming. Changing the environmental, economic, organizational, and regulatory culture requires an additional set of strategies beyond those employed to maintain and adopt health-enhancing behaviors. Strategies that can be used to secure economic, organizational, and regulatory resources include legislation, taxation, marketing, fund-raising, training, coordination, advocacy, and monitoring (Figure 2. 11).

It is likely that several strategies will be formulated for each objective. Attention to the pros and cons of the various strategies in relation to costs, resources, and community acceptability will help the school health improvement team delineate the most effective strategies.

After strategies are chosen, specific activities to implement the strategies must be formulated. The activities outline the tasks necessary to complete the strategy and include resources to be organized for each activity, personnel who will oversee the accomplishments of that activity, and the time frame needed to accomplish each specific activity. An example of an action plan to improve physical activity is provided in Figure 2.12.

Implementing the Plan. To ensure cooperation and personal ownership of the program, input from consumers (students, school employees, agency personnel, and parents) is needed during the planning stage. Furthermore, publicizing and marketing the program before its initiation will help build enthusiasm and increase participation. A marketing resource titled *A Healthy Child: The Key to the Basics* is available from the American School Health

Association. This school health advocacy kit was designed to increase awareness about the need for and the benefits of a comprehensive school health program.

As the action plan is implemented, attention to the reception and the progress of the program is paramount. If the plan is not proceeding according to schedule or if unexpected outcomes are discovered, revision and restructuring of the action plan are warranted. At a minimum, monthly meetings of each health promotion team are suggested, as well as of the school health coordinating council. Techniques to facilitate implementation of the action plan are provided in Chapter 3.

Evaluate the Results. The final component of any planning process is evaluation. The purpose of the evaluation is to make judgments about both the program planning process and the program's effectiveness. Evaluation of the program planning process is conducted to determine if the goals, objectives, strategies, activities, personnel, and time frame chosen were appropriate, attainable, comprehensive, congruent, and acceptable to community standards. Evaluation of the program's effectiveness focuses on planned and unplanned outcomes and the degree to which established goals were realized. The basic steps in the evaluation process include 1) formulating the questions that should be asked, 2) identifying the techniques and personnel to answer the questions, 3) soliciting the information, 4) analyzing and interpreting the data, and 5) using evaluation results to plan successive efforts.

Examples of questions that may be asked with regard to evaluating the program planning process include:

Goals

* Are the chosen goals congruent with needs identified in the needs assessment?
* Are the chosen goals capable of being attained?

Objectives and Outcomes

* Are the objectives and outcomes comprehensive?
* Are the objectives and outcomes attainable?
* Are the objectives and outcomes measurable?
* Are the objectives and outcomes congruent with goals and strategies?

Strategies

* Are the chosen strategies congruent to the attainment of goals?
* Are the chosen strategies comprehensive?
* Are the chosen strategies attainable? (Resources available? Amenable to student developmental levels?)
* Are the chosen strategies acceptable to community standards and values?

Activities

* Are the activities attainable (Resources available? Developmentally appropriate?)
* Are the activities comprehensive?
* Are the activities congruent with strategies and goals?

Personnel

* Are the individuals in charge of each activity or strategy competent, well-organized, interesting, and effective?
* Is the staff acceptable to community standards?

Time Frame

* Is the time frame reasonable?

Evaluate the Outcome. Examples of questions that may be asked when evaluating the outcome of the action plan include the following:

* How effective were the specific health promotion strategies that were implemented by the various components of the school health program (health services, health instruction, counseling, etc.) in changing behavior? knowledge? attitudes?
* Have new policies been implemented?
* Has there been a change in knowledge, attitudes, or behaviors?
* Has health status improved?

Figure 2.10

Strategies to Increase the Number of Practitioners

Objective: Increase by (X%) the school health programs administered by a professionally prepared school nurse in the ratio established by the standards of school nursing. (1:750)

State-Level Strategies

Monitor needs to demonstrate:
- a. Student problems,
- b. Programming gaps, and
- c. Personnel gaps.

Organize an advocacy coalition.
Develop model legislation for consideration.
Lobby for passage of model legislation

District-Level Strategies

Conduct survey to demonstrate:
- a. Student problems,
- b. Programming gaps, and
- c. Personnel gaps.

Petition school board.
Change the environment:
- a. Co-location of services and
- b. Interagency agreement.

Petition medical and nursing schools for student training at school site.

School-Level Strategies

Use district strategies.
Solicit community volunteers.

Clinic-Level Strategies

Use school and district strategies.
Train student, staff, parent volunteers.

Figure 2.11

Selecting Strategies for Different Planning Levels

Levels	*Roles and Responsibilities*	*Selected Strategies to Improve School Health Programs*
NATIONAL	Legislation Federal Guidelines Funding Standards of Practice by Professional Organizations Resources	Legislation Regulation Legal Action Taxation Monitoring Technical Assistance Fund-Raising Assessment of Programs Petitions Networking Coalition-Building Advocacy Marketing Mass Media Soliciting Volunteers Inservice Training Policy Mandates Environmental Change Facility Modification Direct Intervention Role Modeling Social Support Mentoring Instruction
STATE	Legislative Guidelines Mandated Programs Credentialing Technical Assistance Funding Monitoring and Assessment	
DISTRICT	School Board Policy Resources and Textbooks Funding Technical Assistance Inservice Training School-Community Coalition, Council, Network	
SCHOOL	Program Coordination Staff Inservice School Health Improvement Committee(s) School Health Council	
CLINIC/ CLASSROOM/ CAFETERIA	Instruction Health Services Counseling Food Services	

* Has absenteeism been reduced?
* Has there been a decrease in disease or specific problems, such as teenage pregnancy, drug use and abuse, violence?
* Were health care costs reduced?
* Has morale improved?
* Were health promotion efforts viewed as interesting, comprehensive, attainable, and effective?
* Were specific health objectives for the nation attained?

The committee that developed the action plan should use the objectives of the action plan to formulate evaluation questions. In addition to identifying the questions, the committee also must identify personnel to answer questions and the evaluation techniques to be used. Evaluation techniques will vary depending upon the type of strategy being evaluated. Ewles and Simnett[27] identified specific evaluation techniques appropriate for the various types of health instruction strategies used (Figure 2.13).

A partial evaluation plan using generic questions is provided in Figure 2.14. The magnitude of the evaluation is guided by the information needed to assess program effectiveness and to provide information to plan successive efforts to improve the school health program. At a minimum, the following elements should be a part of the evaluation plan:

* What are the questions to be answered?
* Who will supply data to answer these questions?
* What data is needed to answer these questions?
* When will the data be collected?
* With whom will the data be shared?

Action Plan Development

Writing the action plan may seem an awesome task. It is, however, less complicated than developing a curriculum or planning lessons for a year. As a blueprint for building a more responsive school health program, it is an outline constructed by team members who understand the current needs and problems and who have a vision for a better future. The action plan answers the question of what can be done to resolve this problem. The worksheets will assist the team in focusing on analysis of the problem, setting priorities for goals and objectives, identifying the strategies to facilitate attainment of the objectives and goals, delineating the specific activities needed to complete each strategy, establishing timelines, and identifying evaluation procedures.

Priority Health Issues

The suggested goals on the worksheets that follow chapters four through 10 address priority areas identified in *Healthy People 2000*. They were written in general terms with no specific measurement to allow local planners to identify what is meant by "quantity and quality." Further, the suggested objectives do not cover the wide range of possibilities, but are presented as selected examples to aid health promotion teams in beginning their deliberations.

Several strategies may need to be selected to attain the identified objectives. While the team will have a tendency to want to focus on instruction, using other strategies that can reinforce the classroom instruction will be beneficial. Policy mandates, environmental change, facility modification, media, role modeling, and social support are appropriate strategies to effectively promote health-enhancing behaviors. When the strategy is instruction, it is important to choose teaching techniques that have as their goal decision-making, behavior change, and social action. Figure 2.15 provides some generic programming ideas that can be used in any health promotion campaign.

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Figure 2.12

Sample Action Plan - Physical Activity

Goals: Healthy People 2000 - Objectives for the Nation

Physical Fitness and Activity

1. Reduce overweight to a prevalence of no more than 15% among adolescents ages 12 through 19. (Baseline: 15% for adolescents ages 12 through 19 in 1976-80.)
2. Increase to at least 30% the proportion of people ages 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day. (Baseline: 22% of people ages 18 and older were active for at least 30 minutes five or more times per week, and 12% were active 7 or more times per week in 1985.)
3. Increase to at least 20% the proportion of people ages 18 and older and at least to 75% the proportion of children and adolescents ages 6 through 17 who engage in vigorous physical activity that promotes the development and maintenance or cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion. (Baseline: 12% for people ages 18 and older in 1985; 66% for youth ages 10 through 17 in 1984.)
4. Reduce to no more than 15% the proportion of people ages 6 and older who engage in no leisure-time physical activity. (Baseline: 24% for people ages 18 and older in 1985.)
5. Increase to at least 40% the proportion of people ages six and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility. (Baseline data available in 1991.)
6. Increase to at least 50% the proportion of overweight people ages 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate bodyweight. (Baseline: 30% of overweight women and 25% of overweight men for people ages 18 and older in 1985.)
7. Increase to at least 50% the proportion of children and adolescents in 1st through 12th grade who participate in daily school physical education. (Baseline: 36% in 1984-86.)
8. Increase to at least 50% the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities. (Baseline: Students spent an estimated 27% of class time being physically active in 1984.)

Strategies	Activities	Personnel	Time Frame
Health Instruction:			
Elementary			
1. Implement within the curriculum a unit on physical fitness several times during K-8.	1.1 Review, enhance, and disseminate a unit on physical fitness. 1.2 Orient staff in the use of the unit. 1.3 Implement the unit. 1.4 Evaluate impact of unit on knowledge, attitudes, and behaviors.	Elementary Curriculum Committee	
Secondary			
1. Implement within the health curriculum a unit on physical fitness.	1.1 Review, enhance, and disseminate a unit on physical fitness. 1.2 Orient staff in the use of the unit. 1.3 Implement the unit. 1.4 Evaluate impact of unit on knowledge, attitudes, and behaviors.	Secondary Health Education Curriculum Committee	
Physical Education			
1. Implement a physical education curriculum that focuses on fitness development that ensures students receive a minimum of 20 minutes of vigorous exercise three times weekly.	1.1 Develop/adopt and disseminate a curricular unit on physical fitness. 1.2 Orient staff in the use of the curricular unit. 1.3 Implement the curricular unit. 1.4 Evaluate impact of unit on knowledge, attitudes, and behaviors.	Physical Education Staff	
2. Implement a periodic assessment of the physical fitness of all students, which is followed by the prescription of individualized enhancement program.	2.1 Establish testing protocol for health-related fitness screenings: frequency, procedures for cardiorespiratory, muscular strength, muscular endurance, flexibility, body composition, assessment, etc.	Physical Educators	

Figure 2.12, continued

Sample Action Plan - Physical Fitness

Strategies	Activities	Personnel	Time Frame
	2.2 Establish protocol for reporting the data to students and recording on the permanent record. 2.3 Establish protocol for prescribing fitness-enhancement exercises. 2.4 Prepare handouts for students (fliers describing results, potential activities, behavior contract form). 2.5 Secure space, equipment forms, and personnel to administer text. 2.6 Design follow-up programming to track student progress and motivation with personalized fitness contract. 2.7 Alert school and community newspaper of upcoming fitness testing, requesting feature article. 2.8 Implement test using criteria-referenced standards. 2.9 Interpret test results promptly but ensure privacy. 2.10 Help students to complete fitness contract. 2.11 Apprise parents of results. 2.12 Conduct follow-up programming to monitor student progress and provide continual motivation. 2.13 Develop protocol for recording child's fitness assessment and fitness prescription on permanent record and letter to parent. 2.14 Develop handout with strategies parents can use to encourage children to engage in fitness activities. 2.15 Conduct follow-up with parents for those students in need of intervention.		
Healthful School Environment 1. Establish a daily physical education program for all students.	1.1 Assess school curriculum. 1.2 Ask physical education staff to prepare rationale for daily physical education. 1.3 Revise curriculum to accommodate daily physical education. 1.4 Prepare report for teachers' meeting discussing innovations. 1.5 Implement a daily physical education program for all students.	Administrator Physical Educator Administrator	
2. Promote National Running and Fitness Day (October).	2.1 Secure promotional material for National Running and Fitness Day. 2.2 Ask all faculty to prepare 15-20 minutes of class time on activities that focus on fitness one day during fitness month. 2.3 Secure cooperation of art department to develop posters to decorate school during fitness month. 2.4 Secure cooperation of health education department to provide a fitness festival during fitness month. 2.5 Secure the cooperation of the physical education department to hold a fun run or walk during fitness month.	Administrator/ Art Teacher Administrator/ Health Educator Administrator/ Physical Educator	

Figure 2.12, continued

Sample Action Plan - Physical Fitness

Strategies	Activities	Personnel	Time Frame
	2.6 Secure the cooperation of physical education department to provide mini-lectures on fitness and self-motivational techniques.	Administrator/ Physical Educator	
	2.7 Secure the cooperation of the counseling department to provide mini-lectures on fitness and self-motivational techniques.	Administrator/ Guidance Counselor	
	2.8 Secure the cooperation of the food service department to provide posters on fitness during fitness month.	Administrator/ Food Service Director	
	2.9 Secure the cooperation of the nursing staff to provide mini-lectures on first aid for sports injuries.	Administrator/ School Nurse	
	2.10 Organize fitness challenge between classes and/or students and faculty (See #5 under Physical Education).	Physical Educator	
	2.11 Coordinate events on a calendar for the month.	Administrator	
	2.12 Prepare press releases for fitness month for school and community papers.	Physical Educator	
	2.13 Implement fitness month.		
3. Operate a noontime and after-school fitness club.	3.1 Develop student interest inventory.	Physical Educator	
	3.2 Assess student interest in participating in various fitness activities.		
	3.3 Secure personnel to advise/instruct fitness program.		
	3.4 Secure space to meet.		
	3.5 Design and develop promotional material regarding fitness program.		
	3.6 Disseminate promotional material.		
	3.7 Implement program		
	3.8 Evaluate impact.		
4. Promote a fitness competition between faculty and students to participate in aerobic activities for one month at the individual's appropriate level.	4.1 Develop rules for fitness challenge.	Interdisciplinary Committee	
	4.2 Develop record-keeping form for fitness challenge.		
	4.3 Secure prizes for fitness challenge		
	4.4 Develop promotional material for fitness challenge.		
	4.5 Choose dates for challenge.		
	4.6 Disseminate promotional material.		
	4.7 Implement program.		
	4.8 Evaluate results.		
5. Identify and mark walking/ jogging trails around the school with the mileage of each trail indicated.	5.1 Identify safe and aesthetically pleasing walking trails of various lengths that start at the school.	Physical Education Staff or School Health Council	
	5.2 Measure potential trails to assess length.		
	5.3 Develop a logo to mark trails.		
	5.4 Secure permission from appropriate officials to spray paint logo on sidewalk cement.		
	5.5 Construct stencil for logo mark..		
	5.6 Mark each trail a different color using stencil logo.		
	5.7 Develop brochure/flier with a map of various trails.		
	5.8 Develop promotional material to inform and motivate both students and faculty/staff to use trails.		
	5.9 Develop evaluation plan to monitor use of fitness trails.		
	5.10 Disseminate promotional material to teachers to inform them of fitness trail.		

Figure 2.12, continued

Sample Action Plan - Physical Fitness

Strategies	Activities	Personnel	Time Frame
	5.11 Prepare press releases for fitness trail initiation. 5.12 Disseminate promotional material to students and school and community newspapers. 5.13 Conduct special program to initiate fitness trails. 5.14 Evaluate use of the fitness trails.		
Health Services 1. Implement individual counseling on health value of maintaining one's physical fitness. (Coordinate counseling with periodic fitness assessments conducted in P.E. classes.)	1.1 Identify individuals whose fitness screening suggests a sedentary lifestyle. 1.2 Provide individual counseling. 1.3 Develop Individualized Health Plan that involves both students and parents in enhancement activities.		
School Counseling 1. Promote the psychological benefits of aerobic exercise and techniques on motivation enhancement and positive reinforcement techniques that will facilitate continual involvement in fitness activities.	1.1 Identify messages that should be communicated on the psychological benefits of exercise, motivation techniques, and positive reinforcement. 1.2 Identify appropriate vehicles for messages to be communicated (bulletin boards, school newspaper, physical education classes, health education classes, mini-lectures at noon, etc.) 1.3 Design messages. 1.4 Arrange to send message. 1.5 Design an evaluation plan to assess effectiveness of message. 1.6 Disseminate messages. 1.7 Evaluate message reception.	School Counseling Staff	
School Food Service 1. Provide information on the optimal diet for exercise and sport, diet and endurance performance, and energy value of food and physical activity.	1.1 Design bulletin boards to convey the various nutrition and fitness messages. 1.2 Solicit artistic and graphic assistance from art department to develop bulletin boards. 1.3 Change bulletin boards weekly. 1.4 Prepare mini-message on nutrition and fitness to be published in school and community newspapers along with weekly luncheon menus. 1.5 Distribute weekly mini-message on nutrition and fitness to be read with the school day's announcements. 1.6 Provide daily copy on nutrition and fitness to be delivered for one month.	School Food Staff	

Figure 2.12, continued

Sample Action Plan - Physical Fitness

Strategies	Activities	Personnel	Time Frame
School Site Health Promotion for Faculty and Staff			
1. Conduct periodic fitness screenings and prescribed personalized fitness enhancement program.	1.1 Establish testing protocol for health-related screening; frequency, procedures for cardiorespiratory, muscular strength, muscular endurance, flexibility, body composition, assessment, etc. 1.2 Establish protocol for recording and reporting the data to faculty/staff. 1.3 Establish protocol for prescribing fitness enhancement exercises. 1.4 Prepare handouts for faculty/staff (fliers describing results, potential activities, behavior contract form). 1.5 Secure space, equipment, forms, and personnel to administer test. 1.6 Design follow-up programming to track faculty/staff progress and motivation with personalized fitness contract. 1.7 Alert school/community newspaper of upcoming fitness testing, requesting a feature article. 1.8 Implement test using criteria-referenced standards. 1.9 Interpret test results promptly but insure privacy. 1.10 Help faculty/staff to complete fitness contract. 1.11 Conduct follow-up programming to monitor progress and provide continual motivation.	Committee which includes Physical Educators, School Nurse, Health Educators, Administration	
2. Organize an exercise support group.	2.1 Assess the interests of faculty/staff in regard to the type of activity and the time of day to conduct activity. 2.2 Match faculty/staff who are similar in exercise need together. 2.3 Identify motivational materials to promote fitness activities. 2.4 Identify a leader within each support group. 2.5 Provide group leader with information on mechanisms to facilitate group process and fitness-enhancement activities. 2.6 Develop an evaluation plan. 2.7 Organize support groups. 2.8 Evaluate support group's progress.		
3. Promote a fitness challenge/ competition between faculty and students to participate in an aerobic exercise for one month at the individual's appropriate level.	3.1 Develop rules for fitness challenge. 3.2 Develop record-keeping form for fitness challenge. 3.3 Secure prizes for fitness challenge. 3.4 Develop promotional material for fitness challenge. 3.5 Choose dates for challenge. 3.6 Disseminate promotional material. 3.7 Implement program. 3.8 Evaluate results.	Physical Education Staff	

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Figure 2.13

Evaluation Techniques for Specific Health Instruction Strategies

Strategy	Potential Evaluation Method
Increasing health consciousness	* Measurement of requests for information * Analysis of media coverage * Pre- and post-interest survey * Unobtrusive measurement of conversation, use of library acquisitions, etc.
Knowledge	* Pre- and post-cognitive assessment via interviews, questionnaires, phone surveys, written and oral tests
Self-awareness Attitude change Decision-making Behavior change	* Pre- and post-observation of behavior * Self-report logs or records of behavior * Third person documentation of behavior * Comparison of behavior of target group to national and state patterns
Social change	* Assessment of policy and legislative changes * Assessment of interaction with social networks; availability and accessibility of services

Adapted from Ewles L, Simnett I. *Promoting Health: A Practical Guide to Health Education.* London, England: Scutari Press; 1985.

Figure 2.14

Evaluation Grid for Nutrition Enhancement Program			
Questions to be asked:	**Who will supply the data?**	**When will it be collected?**	**Examples of questions:**
Has health status improved?	Program participants	Completion of program and six months later	Have you lost weight and maintained weight loss? Is cholesterol level satisfactory?
Has health knowledge increased?	Program participants	Beginning and completion of program	What are nutrient-dense foods? How can fat intake be reduced?
Have specific behaviors increased?	Faculty	Week six of program	Were behavior contracts to reduce fat completed?
	Program participants	Pre/post	Which of the following are a part of your daily diet? * Eating five fruits and vegetables, * Drinking eight glasses of water, etc.
	Food service staff	Yearly	How many students selected or ate a balanced diet?
Was the health promotion program interesting, attainable, and comprehensive?	Program participants	End of program	Did program motivate you to begin new behaviors? Did the program provide information you needed? Were instructors competent?

Figure 2.15

Generic Extracurricular Educational Strategies

Media to Raise Awareness
Public address announcements
Bulletin boards
Display cases
T-shirts
Buttons
Table tents
Channel one TV
Film festival
School newspaper articles
School newspaper advertisements
Movie, hotel, business marquees

Activities to Change Behavior
Peer counseling
Peer instruction
Cross-age mentors
Self-monitoring
Behavioral contracting
Self-help groups
Social action (lobbying, pressure groups, etc.)
Parental involvement in health lessons

Contests to Raise Awareness
Photographic essays
Rap
Videos
Essays
Banner
Poster
Trivia
Music
Advertisements
Short stories

Special Events to Raise Awareness
Guest speakers
Health fairs
School rallies
Fun runs
Fitness days
Special screenings
Crisis hot line
Pledge walks
Great American Smokeout
Fund-raisers
Street theater
Performance art

Chapter 3
Working Together for Continuous Improvement of the School Health Program: A Total Quality Management Approach

John Allensworth, Jeanine Ray

The techniques of Total Quality Management (TQM) are well-suited for improving school health programs. This innovative approach has emerged from the quality revolution sweeping through manufacturing and service industries. TQM is a process that requires examination of every critical system within an organization. Its guiding principles are a customer focus, fact-based decision-making, team problem-solving, process control, and continuous improvement. TQM has been responsible for recent improvements in the quality of products and services in manufacturing, retailing, transportation, and health care and is being adopted by the armed forces and government agencies. It is no surprise that educators also are seriously looking at the TQM approach to improve the effectiveness and efficiency of the educational system.[1-6]

The quality revolution was launched in 1950 when statistician Dr. W. Edwards Deming was invited to Japan to discuss ways in which statistical methods might be applied to assure product quality and maximize productivity. A critical part of the TQM approach is having the problem-solving team incorporate not just decision-makers, but all individuals involved in producing the product or service. TQM practitioners believe the most efficient way to solve a problem is to give the people who actually work with the process the responsibility and power to recommend and implement changes.

Deming's philosophy, including what are known as Deming's 14 points, has been adapted by Allensworth[7] for education:

1. Create a constancy of purpose by identifying goals and allocating resources to provide for long-range needs rather than superficial short-term objectives.
2. Adopt a new philosophy of accountability for student performance.
3. Cease dependence on endpoint standardized exams and tests that do not predict success and generally discriminate among students. Instead, assure testing is used to identify students' needs and assess whether desired performance is achieved progressively throughout the school experience.
4. When acquiring human and material resources, do not make choices based on cost alone. The cheapest items could have long-term negative consequences that will more than offset the initial savings.
5. Search continually for ways to improve the learning process by eliminating root problems or barriers that interfere with learning. (This includes health, social, and psychological elements as well as the adoption of health-debilitating behaviors.)
6. Institute a vigorous program of education and self-improvement for everyone. Encourage faculty, staff, and administrators to participate in their professional organizations. Continuous professional involvement, education, and retraining are necessary to keep up with changes in philosophy, methods, curricula, tools, and equipment.
7. Focus administrative efforts on helping students, teachers, and staff to do their jobs.
8. Encourage effective communication throughout the system to drive out fear.
9. Break down barriers between disciplines, faculty and staff, schools and parents, schools and communities, and schools and students by encouraging problem-solving through teamwork. Involve individuals who are most familiar with selected problems and issues. (This includes having students and former students serve as members of educational improvement and problem-solving teams along with staff, parents, and individuals from the community.)
10. Eliminate the use of posters, slogans, and the setting of numerical expectations of achievement without providing intervention strategies and the resources of time, money, and space to achieve these goals.
11. Use problem-solving tools and statistical methods to identify issues, analyze relationships, and evaluate results. Data-based decision-making should be the rule.
12. Remove barriers that rob students, teachers, administrators, and staff of their right to pride in achievement.
13. Provide a clean, safe, accessible, caring, and nurturing physical and social environment for learning.
14. Put everyone in the school to work in teams to accomplish this transformation.

The goal is continuous improvement in both product and service. The ultimate product for the team is the graduation of healthy, productive students capable of attaining their potential. The services are instruction, guidance, counseling, psychological, health and food services, along with the social, physical, and emotional support provided by all school staff, parents, and community agency personnel to achieve the product.

To help students attain their potential, schools need

to institute teams that use the scientific method to analyze, plan, implement, and evaluate interventions that lead to continuous improvement in schools. Aubrey and Felkins[8] define improvement teams as small groups who do similar work, meet regularly to identify and analyze causes of problems, recommend solutions to administrative offices, and, if possible, implement solutions. They suggest these teams or groups are not programs with a designated end, nor a cure-all, but part of a continuous process of improvement and development.

The basic concepts of continuous improvement teams as described by Aubrey and Felkins[8] include:

* Voluntary membership on the team.
* Development of team spirit and group effort as the team works together at problem-solving and developing new skills.
* A non-threatening environment that encourages creativity and innovation.
* A focus on an area that relates to the team member's immediate work.
* Practical training in using the scientific method in problem-solving.
* An emphasis on quality awareness and improvement that fosters an attitude of problem prevention and problem-solving.
* Development of team member's individual capabilities as one of the objectives.
* Open and unreserved support and involvement of the administration in the team's effort.

Problem-solving teams (in this case, school health improvement teams) should be formed with approximately six to 10 members per team. Teams should include a) students or former students who are close to the issue or problem, b) teachers, c) support staff, such as a school nurse, counselor, psychologist, food service director, d) administrators and school board members, e) interested agency personnel, and f) parents. When creating a comprehensive school health program, it would be appropriate to include team members who represent the eight component areas of a comprehensive school health program: principal, school nurse, health educator, guidance counselor, school food service director, physical educator, parent, and community members with a vested interest in the mission generated by each individual team.

Several teams may be formed in each school. Ideally, teams would be formed to improve different areas of concern.[9] The school health program could be divided into various priority areas such as reproductive health, drug and alcohol prevention, cardiovascular health promotion, and intentional injury prevention. Teams also could be developed to improve a specific component of a comprehensive school health program, such as health services, health instruction, a healthful environment, and school food service. Each team would study one area of concern.

A coordinating council composed of one representative from each of the smaller teams could supervise the efforts of the individual teams. This approach would strengthen output of each smaller team. The coordinating team can oversee coordination of programming within the school, as well as coordination with interagency networks. Further, the coordinating committee could assume responsibility for evaluating the activities of each work group.

Development of an action plan for improving the comprehensive school health program or a specific component or priority area is the culmination of considerable activity by a team. Often the action plan is written during a one-week workshop convened in the summer. The summer workshop often has been preceded by a number of meetings to assess needs of students, faculty, staff, and parents; knowledge, attitudes, and behaviors of students, parents, and teachers; and programming gaps of schools, homes, and community agencies. Although development of an action plan often is celebrated as a culminating event, it is only an initial step.

Facilitating implementation of the action plan requires molding into a functioning team school personnel, parents, community representatives, and students, many of whom are not accustomed to working together on a functioning team. Further, it requires a change in orientation of developing a product -- the action plan -- to the process. Completing one action plan should provide the background and experience to design and implement a more effective one the succeeding year.

Administrative Participation

To change the school's culture to focus on continuous improvement will require support and sanction of the administration. Not only must they approve the creation of continuous improvement teams, a representative of the administration should participate on each team.

Aubrey and Felkins[8] defined administrative responsibilities in the total quality management process as:

* Forming teams to focus on continuous improvement.
* Authorizing periodic meetings and encouraging members to attend.
* Providing adequate meeting areas, equipment, and supplies.
* Allowing team members to attend meetings of other groups when working on joint projects.
* Authorizing group leader candidates to participate in leadership training.
* Consulting with the leader and facilitator on a quarterly basis to monitor progress of the teams.
* Determining the effectiveness of the leader and offering appropriate support.
* Authorizing selective leader or member involvement at outside conferences.
* Supporting team activities in speeches and presentations.
* Including team activities as part of divisional goals and including team issues in divisional activity reports.
* Respecting the autonomy of various teams.
* Encouraging administrative presentations as a vital aspect of group activities and providing communica-

Figure 3.1

Team Meeting Record

Meeting Number _____ Date _____ Time _____

Location _____

Project Name _____

Team Name _____ Chairperson _____

Project Goals:

Members Present:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Agenda: Enter key words indicating agenda topics and check off items as completed.

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

Items for future consideration but not for next meeting:

Next Meeting: _____ Date: _____ Time: _____

Location _____

Signature of Recorder _____

continued on next page

Figure 3.1 (continued)

Suggested Project Team Meeting Record (back of form)

Instructions: The left column, which should be completed before the meeting, will serve as the agenda. Take notes during the meeting, focusing and summarizing the main ideas associated with each topic discussed. Action can range from minutes to actual assignments.

Topic: Individual Reporting:	Summary/Action to be Taken	Individual Responsible

Topic: Individual Reporting:	Summary/Action to be Taken	Individual Responsible

Topic: Individual Reporting:	Summary/Action to be Taken	Individual Responsible

Topic: Individual Reporting:	Summary/Action to be Taken	Individual Responsible

Topic: Individual Reporting:	Summary /Action to be Taken	Individual Responsible

tion, motivation, and recognition.

* Responding expeditiously to team requests with detailed explanations for recommendations that cannot be implemented.
* Implementing approved team recommendations with minimum delay.
* Encouraging continuous improvement teams.

School-wide Participation

While a school health improvement team has the responsibility of developing a specific action plan, the project will require cooperation of all staff to have maximum impact. Marketing the plan to school staff, students, and parents requires using a variety of activities. School staff can be reached through inservice programs; presentations at faculty, staff, and departmental meetings; articles in faculty and staff newsletters; meetings with teacher union leaders; fliers in faculty and staff mailboxes; and fliers posted in faculty lounges.

Students can be reached through specific classes, the school newspaper, public address system, homeroom announcements, and specific school clubs, organizations, and activities. Parents can be reached through the parent-teacher association, open house events, and school communications.

Messages to communicate to these groups include:

* The results of the assessments that underscore the severity of the problems.
* The need for a concerted effort to improve the school health program, health status, or health behavior of students.
* The action plan.
* The specific role of faculty, staff, students, and parents in attaining the action plan.

Implementing an action plan requires sustained cooperation and coordination of the school staff as well as the team. What was developed during the enthusiasm of a workshop retreat will spring to life if team members have

Figure 3.2

Warm-ups to Begin Team Meetings

Warm-ups at the beginning of the meeting prepare the group to work together. They should be spontaneous, honest, and fun. These short exercises allow members to shed inhibitions and relax with each other. One warm-up should be built into the beginning of each agenda to loosen up the team members before beginning to work.

The "Check-In"

Going around the room, have each member say a few words about how they are and what concerns or distractions they brought into the meeting. This will let the team know what may influence the participation of each member. For example: "The baby was up all night with an ear infection and I'm exhausted;" "We're trying to get a rush job out and everyone in my unit is giving me the business about cutting out for this meeting, so I'm kind of distracted;" "I'm fine today;" "Glad to be here. It's a zoo down there today!"

Team Name

Ask each person to write down several possible team names. Have team members read their lists while the team leader writes them on a flip chart. Informally, vote on the team name at this meeting or defer the decision until the next meeting.

Common Denominators

Pair up members who don't know each other well. Have them search for common traits that make them *unique* from other team members. (For example, both can wiggle their ears, have sons born on the same day, etc. However, saying they are both human beings or participants in this training are not acceptable since these traits are not *unique* to just these two members). The answers may not be stated negatively; they cannot say, for example, that neither has ever broken a leg.

Touring Each Other's Workplace

Use part of a weekly meeting or time between meetings to allow team members to discuss their role in contributing to comprehensive school health. They could invite team members to sit in on classroom presentations or lectures to get a firsthand look at how other team members do their jobs. This allows members a greater sense of the big picture.

time to systematically address each activity and involve the rest of the school staff. Holding an inservice for all faculty and staff to explain goals, objectives, strategies, and activities of the action plan for the school year would be ideal -- especially if it could be held before school started or early in the academic year. If an inservice day or half-day is impossible, time at the first faculty meeting is crucial. While the plan can be explained by team members, administrative support should be evident.

After this initial introduction to the action plan, individual team members can further explain the project to colleagues as the various professionals hold departmental meetings. For example, the school counselor on the team can solicit support from all counselors for the plan, while the physical educator needs to convince other physical educators to participate in the implementation.

Team Building

To maintain momentum for implementing the action plan, the team should hold periodic meetings. Holding meetings monthly or more frequently provides the infrastructure, social support, and time needed to implement the action plan. Team members can meet after school and be paid overtime for the meeting, or substitutes could be arranged for team members so the entire day is free to plan and execute various activities. (Usually three substitutes can rotate through the classes of the eight to nine team members, because support staff team members will not require a substitute.) Having the entire day to work on action plan projects provides the time to collect and construct the resources required to execute the various interventions. Effective team meetings require a competent leader, active members, and a planned, structured meeting.

Team Leader Skills. The team leader, either selected or allowed to emerge naturally from the group, should be interested in implementing a school health program and reasonably good at working with individuals and groups. Team leader responsibilities include:[10]

* Serving as contact point for communication between the team and the rest of the school.
* Becoming official keeper of team records, including copies of correspondence, records, presentations, meeting minutes, and agendas.
* Coordinating meetings and sharing in the team's work, but refraining from dominating discussion so that team members take ownership.
* Managing the team.
* Calling and facilitating meetings.
* Assigning administrative details.
* Coordinating team activities.
* Overseeing preparation of reports and presentations.
* Creating and maintaining channels that enable team members to do their work.

During the team meetings, the team leader should:

* Avoid dominating the group.
* Leave "rank" outside the meeting room.
* Facilitate discussion and only participate occasionally.
* Share responsibilities with other team members.
* Trust the team to arrive at the best answer.
* Give team members a chance to succeed or make mistakes on their own.

To maximize meeting effectiveness and avoid wasting time, the team leader should set clear objectives for each meeting, such as facilitating implementation of the action plan, taking advantage of new opportunities, and confronting any crisis.

Team Member Skills. Team members have been chosen because of their potential to contribute to the school health program. They should not view this added responsibility as an intrusion on an already busy schedule. It should be seen as an opportunity to improve their program and the school culture, as well as improve the health and academic performance of students. Scholtes[10] suggests team members are responsible for sharing knowledge and experience, carrying out assignments between meetings, gathering data and resources, writing and constructing materials, and participating in all meetings and discussion.

Effective Team Meetings. The action plan identifies the various activities for which each team member has accepted responsibility. While most activities will be completed individually by team members, it is important for the team to meet regularly to assess the progress of the project, plan for upcoming events, and analyze and interpret feedback from completed activities and events. At a minimum, monthly meetings are recommended.

An agenda should be prepared and distributed a week before each meeting. The agenda will list each upcoming health promotion event and each activity to be discussed. By distributing the agenda in advance, the team should understand what is to be accomplished in the meeting and should be prepared to discuss those activities for which they are responsible. Each strategy and activity scheduled for the upcoming month should be reviewed by the team member responsible for the activity.[10] Further, a debriefing on strategies and activities conducted the previous month also should be on the agenda. Lessons learned and ideas to try next year should be shared with the group and recorded so the intervention will be better the following year, or eliminated as ineffective or too demanding. Figure 3.1 provides a sample form that can be used as both the agenda and the minutes.

Share Objectives, Expectations, and Purpose. To fully participate, team members must know background information and any available history about issues and problems. The team leader should share any new information that the others may not have heard. Even when no new information has been added, it is best that the team leader restate all the information that "everybody knows." Reviewing this information will ensure that everyone understands the situation in the same way. Clarifying all the available information at the beginning of the meeting eliminates misunderstandings and miscommunications that

Figure 3.3

Types of Problems Encountered in School Improvement Efforts

Problem Type	Examples
The Program	
Program process	* Delays, lack of coordination, planning failures
Program content	* Bad fit to school, lack of understanding of the change
Target population	* Involved students or parents unresponsive or hard to reach
The People	
Attitudes	* Resistance, skepticism, lack of hope
Lack of skill	* Poor group decision-making and planning * Inadequate classroom methods
The Setting	
Normal crises	* Snow days, heart attacks, fires, and other unanticipated events
Competing demands	* District required tests or curriculums, state requirements
Powerlessness	* Lack of control over hiring, budget, and change programs
Physical setting	* Inadequate facilities, lack of space
Resources	* Lack of time, overload, no funds

Adapted from Miles MB. Improving the urban high school: Some preliminary news from five cases. In: Saxl ER, Miles MB, Leiberman A, (eds.) *Assisting Change in Education*. Alexandria, Va: Association for Supervision and Curriculum Development; 1989.

may occur from disparate interpretations.

The meeting is started by describing the expectations or purpose of the meeting. Once the team understands what is to be accomplished, the leader is responsible for ensuring the group stays on track. If a team member has additional personal objectives such as wanting the meeting to be brief, it is appropriate to share those personal objectives with the group. This will facilitate communication and minimize misunderstanding.

Build Rapport. Building team spirit and cameraderie is important to successful implementation of the action plan. The extra work demanded by the action plan project should be balanced by the satisfaction of personal growth, fun, and friendship. Beginning each meeting with a short activity that helps team members know and better appreciate their colleagues will stimulate the building of team spirit (Figure 3.2).[10]

Generate Participation. As topics on the agenda are addressed, the team leader should encourage everyone to participate for three reasons:

* Everyone's perception is valuable.
* The more team members are permitted to participate in any decision that affects them, the more committed they will be in implementing the decision.
* The act of jointly making a decision will draw group members together, creating a team.

Group participation is encouraged when the leader:

* Is aware of what's going on, is quiet, looks, and listens. By sitting back and playing a minimal role during the meeting, the team leader will be better able to observe what others are doing. In addition, it is in the best interest of the group if the team leader tries to identify who the natural leaders are and which participants will have to be encouraged to speak.
* Asks questions. Asking questions encourages participation while making statements does not. Open-ended questions are preferential to those requiring a yes or no answer.
* Calls on people. People have names. Learn and use them. Ask team members to summarize and restate key comments. Use silence. Wait for answers.
* Gives people special roles. For people who might be reticent to participate in a discussion, it is best to assign specific fact-finding roles. At the next meeting

their contribution will be assured, and the feeling of importance might make them more comfortable participating in the future.

Redirect the Meeting That Goes Astray. Inevitably, in a meeting in which several people are encouraged to participate, the meeting will at times run off course. One observation leads to another, and soon the topic of discussion has been altered. The leader must correct alterations in course as soon as it is realized that the discussion will not achieve the desired outcomes. The leader has several options to bring the meeting back on task:[11]

* Restate the specific objectives of the meeting.
* Ask task-related questions.
* Express feelings about staying on task.
* Ignore off-task remarks -- don't reinforce.
* Reinforce on-task remarks.
* Make summarizing statements when someone starts to get off track, and then ask someone else to comment.
* Check with the group to see if there is a consensus that the subject is on task.
* Focus attention on the person who is off task so that other group members can help get the person back on track.
* Ask the person to help relate his or her statement to the task at hand.
* Use a hand gesture to indicate to the person to hold on.
* Ask closed-ended questions (requires a yes or no response) to the person, then redirect an open-ended question (requires more information) to someone else.
* Tactfully ask the person to stop and allow others to discuss the topic at hand.

List and Summarize Decisions. Intermittently during the meeting and definitely at the end of the meeting, restate any decisions that have been made. By writing decisions on a blackboard or chart for all to see, everyone in the group will understand the decisions. The recorder should use the form in Figure 3.1 to document action steps and conclusions about improving programs the next time they are offered. If no decisions have been reached in the meeting, the summary should take the form of restating where the group is in its pursuit of a decision. Frequent summarizing will provide structure for the meeting.

Delegate Tasks and Authority. The Association for Supervision and Curriculum Development,[12] in its training manual on accepting change in education, stated:

> *"Orchestrating the work appropriately means delegating authority and responsibility to others -- a mode of operating likely to generate enthusiasm as well as widespread accountability. Delegation is also a crucial factor in building school staff members' capacity to carry on school improvement work independently."*

Turner[13] viewed delegation as a four-step process:

* Define it. What do you want done? How well do you want it done? When do you want it done?
* Assign it. Set the parameters of authority. Give all pertinent information. If assigning a task to a group, hold one person accountable for convening the group and reporting progress.
* Get commitment. Never assume the task will get done until someone commits to it.
* Follow up. Set up a communications network for reports and meetings.

Always Follow Up. After all the focusing, balancing, and clarifying, it may seem that once a decision has been reached, the hard part is done. Unfortunately, this is not true. One of the most difficult parts of any decision-making process is turning those decisions into action. A plan is needed. While the group is still together, decide what will make the decision a reality. By breaking any job into small tasks and assigning specific people to each task, the load is lightened. Discuss completion dates. Again, write it down. At the end of the meeting in which the decisions have been made, assess how these decisions will be implemented:

* What are we trying to achieve?
* How will we achieve it?
* Who is responsible for each step?
* When does each step have to be completed?

Proactive Orientation

Educators often are reactive in response to state mandates, community demands, curriculum, or teaching innovations. This project asks team members to model proactive behaviors by acting as catalysts, conductors, or what Kanter[14] calls "prime movers," by designing and implementing new programs. Instead of managing the status quo or responding to outside stimuli, the school health team should work to change the school environment to one of school-wide health promotion.

Successful change agents demonstrate these behaviors:[4]

* Possess clear, decisive long-range goals that transcend but include implementation of current school health innovations.
* Maintain strong beliefs about what good schools and teaching should be.
* Work intensely to attain their vision.
* Make decisions on goals for the school and in terms of what they believe to be best for students.
* Possess strong expectations for students, teachers, and themselves.
* Seek changes in district programs or policies if it is in the best interest of the school and students.
* Solicit input from other staff and then make decisions in terms of goals.

Counter Resistance. Any serious effort to improve the school health program will be accompanied by a natural resistance to change. Therefore, school health improvement teams need to recognize the problems experienced when change is introduced and develop coping skills to

address resistance. Miles[15] categorized problems that are typical in school improvement efforts as problems with the program, the people, or the setting (Figure 3.3). There may be a problem coordinating the program. For example, the process may not have been well-defined or the content was not of interest to the target population. Even a well-conceived program that has input from the target audience may meet resistance from some members of the target audience, parents, or community members. Finally, there are the recurring problems of inadequate resources, time, and competing demands that may impede program implementation.

To diffuse opposition and potential problems, several options may be pursued. The team might consider becoming adept in the art of AIKIDO,[11] the oriental martial art. AIKIDO is a technique for harnessing resistance to change and re-channeling it. Using AIKIDO, the team can transform opposition into driving forces in support of their objectives. The eight principles of AIKIDO are:

* *Be Prepared*. Anticipate probable objections. What are the concerns that could cause resistance?
* *Clarify Purpose*. State the purpose of the activity and why you are involving the particular individuals, group, or resources. Focus on the needs of children and the benefits of the activity to meet those needs.
* *Explore Concerns*. Test assumptions. Ask individuals or groups to share any concerns or objections. Get the objections out on the table. Take notes to demonstrate interest.
* *Legitimize Concerns*. Acknowledge that concerns are "realistic," or are ideas that should be discussed. CAUTION: Do not minimize others' concerns or attack their points of view.
* *Reflect Statements*. Let people know you're listening. Recap, paraphrase, or summarize.
* *Respond Actively*. Respond to concerns and suggestions by demonstrating a willingness to follow up and pursue issues. Suggest that a committee be formed to find credible resources substantiating the position.
* *Get Closure*. Check your notes. Summarize concerns and the steps needed to remedy them. Ask if your notes are complete. Restate the agreed course of action. Thank participants.
* *Establish Follow-up*. Determine what should be done next.

Miles[15] provided another perspective for coping with opposition. In a 1986 study, Miles noted nine major coping styles for dealing with resistance. These styles vary in depth from the more shallow, "soft," and informal to the deeper, more deliberate, and structurally oriented (Figure 3.4).

Maintain Momentum. Scholtes[10] identified five crucial concepts that should help guide the efforts of school health improvement teams: 1) maintain communications, 2) correct obvious problems, 3) seek root causes of problems, 4) document progress and problems, and 5) monitor changes. The cyclic task of school health improvement teams includes using a scientific approach of collecting meaningful needs assessment data, identifying the cause of problems, planning and implementing intervention strategies that will solve the identified problems, and evaluating the process and the outcomes.

Shoop[16] delineated the need for teams to use the techniques of total quality management. An educator, statistician, and consultant in quality management, he maintains that TQM techniques are founded on five basic truths:

* No individual in the system has complete knowledge of the problems associated with implementing an effective comprehensive program.
* No individual in the system possesses sufficient technical expertise to solve these problems.
* Few individuals have adequate authority to implement all changes necessary to solve these problems.
* Collectively, the system's work force possesses the knowledge, technical expertise, and authority to solve these problems, but lacks the requisite organizational structure to optimally tap these latent resources.
* Total quality management provides the necessary tools for obtaining, analyzing, and interpreting the information needed for valid decision-making, and affords a managerial infrastructure that serves to organize and focus the system's resources.

This rigorous and systematic approach to problem-solving has "a family of tools" to analyze data, solve problems, and promote continuous improvement. The school system's limited resources then can be focused or concentrated on well-defined goals. Most of the tools that are the cornerstone of total quality management are familiar to educators: brainstorming, priority setting, nominal group process, cause-and-effect diagrams (Fishbone charts), frequency charts (Pareto Charts), data collection, designed experiments and statistical analysis, pilot projects, monitoring of results (histogram, frequency distributions, control charts), and use of group process techniques.

Educators are developing manuals and guidelines to assist local planning teams to implement total quality management techniques in schools.[17] There are, however, several manuals already developed that can provide local teams with tools to use the scientific process to address and solve problems, to use group process to maintain momentum and confront resistance, and to change the culture of the school to one in which continuous improvement in health promotion is viewed as a necessary component for academic achievement (Figure 3.5).

Total quality management techniques and tools, while new to business and industry, are familiar to educators, particularly those at universities and colleges of education. Teamwork that focuses on continuous improvement asks schools to organize both interdisciplinary and interagency teams. While departmental teams are necessary to improve the curriculum, interdisciplinary and interagency partnerships are needed to unite students, parents, and

Figure 3.4

Coping Styles for Dealing with Resistance

Do nothing

* No coping, either deliberately or through inaction

Do it later

* Delay, avoid, put it off, move slowly

Do it the usual way

* Short-term coping: improvising, stopgap solutions, doing it on the fly
* Use existing roles and meetings: bring it to the team meeting, hand it to the leader
* Take action, follow up, check to see that prior decisions were carried out
* Shuffle people around, appoint a new team leader

Ease off

* Modify the program: simplify or eliminate the difficult parts of the innovative program

Do it harder

* Give symbolic support: urge people to cooperate, stress the importance of the project
* Provide rewards and incentives: offer mini-grants, visits, released time, special conferences, recognition
* Negotiate: bargain, compromise on use of time or resources
* Pressure: exert influence demand or require participation

Build personal capacity

* Train or develop people: skill training, coaching, practice, clinical supervision, workshops

Build system capacity

* Define a new structure: create coordinator, manager, or group with direct responsibility for managing change
* Create new interaction arenas: set up cross-role groups to share different perspectives (parent/student/teacher, cross-department)
* Build and share visions: articulate and discuss a meaningful image of where the school is going and how it will get there
* Monitor, track implementation efforts systematically
* Strategic planning: plan steadily, revise plans based on problems and successes
* Offer ongoing assistance: use regular external help to diagnose problems and support coping efforts via consulting, training, and planning

Restaff

* Move large numbers of people in, out, or across jobs to make large changes in the mix of attitudes, skills, and knowledge

Redesign the system

* Increase resource control: gain power over allocation of people, time, and money to the school
* Empower: give more influence to roles or groups in the school; bottom-up planning
* Redesign roles: change or restructure people's responsibilities (team teaching, department heads responsible for planning)
* Redesign the organization: formulate new schedule, select grade level or house plan, introduce mentoring setup, or guidance groups for students

Adapted from Saxl ER, Miles MB, Leiberman A, (eds.) *Assisting Change in Education.* Alexandria, Va: Association for Supervision and Curriculum Development; 1989.

Figure 3.5

Total Quality Management Resource List

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teaching and agency staff to address the holistic goal of healthy, productive students capable of attaining their full potential.

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Chapter 4
Alcohol and Other Drug Use Prevention

Diane DeMuth Allensworth, Cynthia Wolford Symons, R. Scott Olds

School personnel and community residents find it difficult to identify an issue of greater concern than use of alcohol and other drugs by school-aged children and youth. Beginning in 1986 and in each year since, respondents to the Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools identified the "use of drugs" as the "...biggest problem with which the public schools in this community must deal."[1] While school-based officials attribute these problems to changes in social values and family structures, the taxpaying public often perceives schools as responsible for providing a solution.

Evidence suggests the most successful prevention programs do not happen exclusively in either the school or the community setting. Successful programs grow out of cooperative ventures and include a variety of integrated and comprehensive strategies.[2-4] Although schools provide a centralized location, programs are most likely to be successful when school personnel work to foster a collaborative relationship with parents, other community residents, and agencies.

This chapter reviews students at risk for alcohol and other drug use behaviors, examines prevention and intervention initiatives, and provides rationale for cooperatively developed multidisciplinary approaches to alcohol and other drug prevention.

Students At Risk

The behavior of children and youth is a reflection of a national problem with alcohol and other drugs:

* One in 10 female students and slightly more males report using marijuana in the past month.[5]
* One in three sixth graders report experiencing peer pressure to use marijuana.[6]
* One in 20 eighth graders report having tried cocaine.[5]
* One in two sixth graders report experiencing peer pressure to drink beer, wine, or liquor.[6]
* Four in 10 sophomores rode with a driver who had used drugs or alcohol during the past month.[5]
* Three in 20 seniors practice very high-risk behavior, either smoking cigarettes or marijuana daily, drinking heavily, or using drugs.[4]
* One in four eighth graders and almost four in 10 sophomores report having five or more drinks on at least one occasion during the past two weeks.[5]

Several studies have identified factors that put adolescents at risk for alcohol and other drug abuse. Irwin and Millstein[7] identified biopsychosocial, psychosocial, and environmental factors that precipitate both use and abuse in the adolescent population (Figure 4.1). Dryfoos[4] suggested additional factors that increase the likelihood of drug abuse: physical and sexual abuse, homelessness, and attempted suicide. According to Dryfoos, a significant and positive correlation exists between delinquency, teen pregnancy, school failure and dropping out, and substance abuse. Dryfoos estimated approximately 10% of adolescents are at very high risk because of these multiple problem behaviors. Another 15% of youth fall into the high-risk category, 25% are at moderate risk, and the remaining 50% of adolescents are at low risk.

The National Commission on Drug-Free Schools[8] identified both "high risk" and "protective" factors that increase or inhibit the threat of alcohol and other drug problems in adolescence (Figure 4.2). The interrelationship of these "risk" and "protective" factors have critical implications for program developers.

In response to the problems associated with alcohol and other drug use, the Anti-Drug Abuse Act of 1986 (Public Law 99-570) mandated that schools and communities develop strategies for nine general categories of youth presumed at risk for substance abuse involvement. Among these are children of alcohol and other drug abusers; victims of physical, sexual, or psychological abuse; school dropouts; pregnant teenagers; economically disadvantaged youth; delinquents; youth with mental health problems; suicidal students; and disabled youth.[9]

Focus for Intervention: The Year 2000 Health Objectives for the Nation

The national health promotion disease prevention objectives identified in *Healthy People 2000*[10] focus on reducing morbidity and mortality in 22 priority areas. Approximately one-third of the objectives target children and youth and, as such, provide a framework for school-based programs. Eleven objectives focus on prevention of alcohol and other drug abuse (Figure 4.3), providing prevention planners a focus for their efforts.

The *Healthy People 2000* initiative was reinforced in *Healthy Youth 2000*, a project sponsored by the American Medical Association (AMA). The AMA, which is coordinating a National Coalition on Adolescent Health, has established the National Health Promotion Network (NAHPNet) to serve as a conduit for information and consultation on adolescent health.[11] Additional support has come from the American Association of School Administrators (AASA), who published *Healthy Kids for the Year 2000: An Action Plan for Schools*.[12] All these documents address the issue of substance abuse in youth.

Figure 4.1

Principal Factors in Substance Use

Biopsychosocial Factors	Environmental Factors
Predisposing Factors	**Predisposing Factors**
Lack of awareness of risks	Ineffective drug education
Need to explore	Increased advertising promoting benefits
Poor role models	Lack of advertising regarding risks and dangers
Use of substance abuse to increase self-esteem	Parental use
Gender	Inadequate legislation
	Parental denial or lack of knowledge
Precipitating Factors	**Precipitating Factors**
Psycho-endocrinological changes	Social pressures and peer onset
Lack of experience and knowledge	Availability of substance
Multiple substance abuse	

Need for a Multidisciplinary Approach

Early alcohol and other drug prevention efforts, which tended to focus on single strategies, have given way to the "thousand flowers approach" -- a multidisciplinary approach that combines school, community, and home interventions. Alcohol and other drug use is related to a complex set of factors; consequently, a comprehensive program including multiple agents that addresses the diverse, related risk factors now is considered superior.[2]

Benard[3] echoed the need for integrated, community-wide prevention programs that provide sustained, highly integrated programs that simultaneously target and involve diverse populations. As part of the larger social system of the community, schools provide an effective organizational foundation for comprehensive, community-wide programs. Effective alcohol and other drug prevention programs target families, schools, workplaces, religious organizations, media, recreation systems, and community organizations with diverse strategies. In this way, effective programs include and train diverse personnel, provide information, develop life skills, create alternatives, and influence policy.[2]

An analysis of how students learn further reinforces the need for multiple interventions. A meta-analysis by Walberg[13] reveals that ability, development, motivation and self-concept, amount of instruction, quality of instruction, home environment, classroom environment, peers, and television are related to achievement. Given the variety of factors that influence learning and the complex etiology of alcohol and other drug abuse, it becomes clear why prevention programmers must tap both the school and the community resources.

These coordinated programs, according to Kumpfer,[2] are best viewed not as specific programs, but as a planning and implementation process that encompasses: 1) creating a coordinating committee, 2) conducting needs assessments, 3) developing local goals and objectives along with plans to implement activities that will reach high- and low-risk students, 4) implementing plans while monitoring progress and impact, 5) evaluating the impact, and 6) refining and continuing elements of the program that are working best.

Consistent Messages Through Multiple Channels

A model developed by Allensworth and Symons[14] to prevent the spread of HIV infection was adapted to focus on prevention of alcohol and other drug use. A variety of strategies can be used: policy and legislative mandates, environmental change and facility modification, media utilization, direct intervention, role modeling and social support, and instruction (Figure 4.4). The following discussion defines the roles and responsibilities of the interdisciplinary and interagency prevention team that has the school as the organizational focus for coordinated prevention efforts. In practical application, the responsibilities listed on the grid can be shifted to respond to local staffing configurations. This model provides a practical vehicle for sending consistent messages about alcohol and other drug use behavior among school-age children and youth through multiple channels.[14]

Administrators. Policies adopted by school boards and administrators, legal agents representing the school

Figure 4.2

Protective and High-Risk Factors for Alcohol and Other Drug Use

High-Risk Factors for Alcohol and Other Drug Problems in Adolescence

The following risk factors are important at different developmental periods, but the more of them present in a student's life, the greater the threat of adolescent drug use.

Community Risk Factors:

* Economic and social deprivation.
* Low neighborhood attachment and high community disorganization.
* Community laws and norms favorable toward drug use.
* Availability of drugs, including alcohol and tobacco.

Family Risk Factors:

* Family management problems.
* Family history of alcoholism.
* Parental drug use and positive attitudes toward use.
* Low expectations for children's success.

School Risk Factors:

* Academic failure.
* Transitions from elementary school to middle school to high school to college.
* Little commitment to school.
* Lack of enforcement of school policies.

Individual and Peer Risk Factors:

* Early anti-social behavior and peer rejection.
* Alienation, rebelliousness, and lack of social bonding.
* Anti-social behavior in late childhood and early adolescence.
* Friends who use drugs or sanction use.
* Favorable attitudes toward drug use.
* Early first use (before age 15).
* Physiological factors.

Protective Factors for Alcohol and Other Drug Problems in Adolescence

A home-school-community partnership can protect students, reduce risk, and increase resistance to drugs by employing the following measures.

Protective Factors:

* Clear norms and standards of behavior in the home, school, and community.
* Skills to resist social influences, solve problems, and make decisions.
* Bonds with family, school, and community that can be promoted by active participation in group activities, learning skills for working with others, and recognition for skillful individual and group performance.

General Principles of Prevention:

* Focus on reducing risk factors.
* Early intervention before behavior stabilizes.
* Targeting of high-risk persons and high-risk communities, but avoidance of "labeling" students and setting up negative expectations for behavior.
* Employment of a comprehensive, multicomponent prevention effort.

Cavazos LF, Bennett WJ. *Toward a Drug-Free Generation: A Nation's Responsibility*. National Commission on Drug-Free Schools: Final Report; 1990.

Figure 4.3

Healthy People 2000 Objectives: Alcohol and Other Drugs

4.1 Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 8.5 per 100,000 people. (Age-adjusted baseline: 9.8 per 100,000 in 1987.)

4.5 Increase by at least one year the average first use of cigarettes, alcohol, and marijuana by adolescents ages 12 through 17. (Baseline: Age 11.6 for cigarettes, age 13.1 for alcohol, and 13.4 for marijuana in 1988.)

4.6 Reduce the proportion of young people who have used alcohol, marijuana, and cocaine in the past month, as follows:

Substance/Age	Baseline 1988	Target 2000
Alcohol/ages 12-17	25.2%	12.6%
Marijuana/ages 12-17	6.4%	3.2%
Cocaine/ages 12-17	1.1%	0.6%

4.7 Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28% of high school seniors and 32% of college students. (Baseline: 33% of high school seniors and 41.7% of college students in 1989.)

4.8 Reduce alcohol consumption by people ages 14 and older to an annual average of no more than 2 gallons of alcohol per person. (Baseline: 2.54 gallons of alcohol in 1987.)

4.9 Increase the proportion of high school seniors who perceive social disapproval associated with the heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, as follows:

Behavior	Baseline 1989	Target 2000
Heavy use of alcohol	56.4%	70%
Occasional use of marijuana	71.1%	85%
Trying cocaine once or twice	88.9%	95%

(Note: Heavy drinking is defined as having five or more drinks once or twice each weekend.)

4.10 Increase the proportion of high school seniors who associate risk of physical or psychological harm with the heavy use of alcohol, regular use of marijuana, and experimentation with cocaine, as follows:

Behavior	Baseline 1989	Target 2000
Heavy use of alcohol	44%	70%
Regular use of marijuana	77.5%	90%
Trying cocaine once or twice	54.9%	80%

4.11 Reduce to no more than 3% the proportion of male high school seniors who use anabolic steroids. (Baseline: 4.7% in 1989.)

4.13 Provide to children in all school districts and private schools primary and secondary school educational programs on alcohol and other drugs, preferably as part of quality school health education. (Baseline: 63% provided some instruction, 39% provided counseling, and 23% referred students for clinical assessments in 1987.)

4.19 Increase to at least 75% the proportion of primary care providers who screen for alcohol and other drug use problems and provide counseling and referral as needed. (Baseline data available in 1992.)

district, form the foundation for drug prevention. Critical to the success of any prevention program are the development and enforcement of school-based policies that assess, prevent, and reduce alcohol and other drug abuse among students, faculty, and staff. Establishing a drug education and prevention task force composed of students, school staff, board, and community members from the medical, judicial, civic, recreational, and social service arena is a means to oversee implementation of board-adopted policies. The National Commission on Drug-Free Schools[8] suggested the task force be comprised of members who understand dependency issues, can develop drug education and prevention goals linking schools with law enforcement and community services, and can assess the implementation and evaluation of prevention and intervention strategies.

Instruction. Tobler[6,15] evaluated 143 different drug abuse prevention programs for students in grades six through 12. The strategies in the 98 studies were collapsed into five broad categories: 1) knowledge only, 2) affective only, 3) peer programs and life skills, 4) knowledge plus affective, and 5) alternative activities more appealing than drug use. This study resulted in key recommendations for instruction: 1) discontinue knowledge-only and affective-only programs, 2) implement peer programs which focus on refusal, communications, and decision-making skills, and 3) provide youth identified to be at risk with peer programming supplemented with alternative programs. The analysis clarifies that for the average adolescent, peer programs were "dramatically more effective than all other programs."[6,15] For students at high risk, programs that helped students to find appealing alternatives were most likely to increase skills and influence behaviors. Tobler identified two programs that seem to be more successful than others: the life skills training program and student assistance program.[4,15]

Dryfoos, in a comprehensive review of drug abuse prevention programs, reached similar conclusions.[4] There is sufficient evidence that information or cognitive approaches alone, attitude change alone, self-esteem enhancement or affective methods, scare tactics and "Just Say No" campaigns simply do not work. According to Dryfoos,[4] more effective approaches include: using school systems as the central agency with a K-12 instructional program, providing booster or supplemental programming, directing community-wide efforts at all channels, providing teacher training programs, providing social skills training in the drug prevention program, utilizing peer-led programs, and focusing individual attention and counseling on populations at high risk.

Health Services. School health services personnel, who may include physicians, nurse practitioners, nurses, and social workers, are critical in the implementation of screening and educational programs. Because of their training and experience, health services personnel also can identify and assess high-risk students, serve as case managers for students identified and referred for suspected substance use, and initiate support groups for students in need. Further, any visit to the school clinic is an opportunity for identification, referral, or supplemental instruction about alcohol and other drug use. Additionally, these individuals may be called upon to provide staff development programs and serve as the link between community services and school-based prevention efforts.

Health Counseling. School-based health counseling personnel may include guidance counselors, social workers, or psychologists. Included in their repertoire of skills are: life skills training, peer counseling, assertiveness training, problem solving, and strategies to promote self-esteem and reduce adolescent rebellion or peer pressure.[17] These skills are effective when applied to alcohol and other drug issues. Further, student assistance programs can provide needed intervention and referral for those with an alcohol or other drug problem. School-based support groups for recovering youth completes a comprehensive program.

Children and youth experience many health problems that may be related to alcohol and other drug use. Whether students are abusing alcohol or other drugs or are residing in a family with a history of alcohol or drug abuse, school counselors could provide needed assistance. Unfortunately, overwhelming workloads leave these professionals little time to provide students effective help when necessary. Further, many school districts, particularly at the elementary level, do not have the resources to support hiring enough school counselors. Only 14 states mandate a specific counselor-to-student ratio. These range from 1:340 to 1:500.[16]

Two recommendations are offered to cope with the health counseling needs of students using alcohol and other drugs. First, the school health improvement team should establish networks with existing school counselors and community counseling programs that will permit referral of children who need help. Second, the team should provide staff development programs that develop the capacity of the total school staff to perceive when a student is using alcohol and other drugs and needs help so that appropriate referrals are made for those at risk.[17]

Physical Education. Physical educators, coaches, and athletic trainers are in a unique position to serve as advocates for students about alcohol and other drug issues. The nature of the physical education environment may expedite communication and opportunities for observation and referral as well as for supplemental instruction. Given the impact of scholastic athletic programs on the school community, it is critical to develop school policies that can respond to athletes' non-use of alcohol and other drugs. Included should be the development of an athletic code of behavior and provision of educational workshops for coaches, trainers, athletes, and their parents specifically focusing on non-use of alcohol and other drugs. Further, athletes, who often are perceived as school leaders, can be valuable participants in peer education or cross-age tutoring programs.

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Figure 4.4

A Multidisciplinary Approach to Alcohol and Other Drug Prevention

	Total School Environment *Superintendents, Principals*	Classroom Instruction *Health Educator, Elementary Teachers, Librarians*	Health Services *Nurses, Nurse Practitioners, Physicians*	Counseling *Guidance Counselors, Psychologists, Social Workers*
Policy	**Develop** policies for drug abuse prevention and intervention. **Initiate** multidisciplinary school health council. **Initiate** school and community council or task force. **Initiate** a comprehensive K-12 health education curriculum.	**Facilitate** understanding of school policies.	**Facilitate** understanding of school policies.	**Facilitate** understanding of school policies.
Environmental Change	**Promote** skills training for students, parents, and school staff. **Enhance** early schooling to prevent school failure. **Enforce** policies to ensure alcohol and drug-free environment. **Open** school for after school day care for latch-key children. **Establish** COA support group, EAP and Student Assistance Program.	Use teachable moments to reinforce drug prevention messages. **Display** books prominently in the library promoting the prevention of drug and alcohol abuse. **Encourage** theater groups to perform skits and plays with anti-abuse themes during lunch. **Organize** alternative to drug groups (SADD, etc.)	**Display** prominently literature on alcohol and drugs as well as information about treatment facilities. **Create** supplemental learning experiences using microcomputers.	**Prominently** display in offices, literature on alcohol and drugs as well as information about treatment facilities. **Create** supplemental learning experiences using microcomputers. **Organize** a student assistance program.
Media Utilization	**Communicate** to staff, students, and parents school policy regarding alcohol and other drug abuse prevention. **Promote** use of bulletin boards and display cases to increase awareness about drugs and alcohol. **Promote** use of homeroom news to provide anti-abuse messages.	**Organize** student theater, musical and video productions. Use school newspaper and bulletin boards to deliver information on drug treatment availability, etc. **Organize** a film festival on alcohol and other drug abuse prevention. **Provide** public address announcements, face-to-face workshops, campaigns, and videotapes on alcohol and drug abuse prevention.	**Publicize** a listing of telephone numbers and hotlines for drug and alcohol abuse referral agencies. **Provide** pamphlets and fliers on alcohol and drug abuse prevention treatment.	**Publicize** a listing of telephone numbers and hotlines for drug and alcohol abuse referral agencies. **Provide** pamphlets and fliers on alcohol and drug abuse prevention treatment. **Initiate** family skills training for parents.
Direct Intervention	**Support** and enforce intervention programs. **Identify** in student handbooks the intervention and program referral options which are available in the school and community.	**Assess** drug and alcohol use prevalence. **Identify and refer** high-risk/abusing students for interventions. **Organize** alternative to drug groups (SADD, Just Say No, Operation Prom, drug-free parties).	**Identify** and refer high-risk/abusing students for intervention programs. **Provide** referral to community agencies as needed. **Assist** in assessing students referred for alcohol and drug abuse. **Organize** a student assistance program. **Coordinate** referral networks between school and community.	**Assess** drug and alcohol abuse prevalence. **Identify** and refer high-risk/abusing students for intervention programs. **Assist** in assessing students referred for alcohol and drug abuse. **Coordinate** referral networks between school and community. **Initiate** recovering students' support groups.
Role Modeling/ Social Support	**Promote** support for peer intervention via Operation Prom/ Graduation. **Promote** initiation of a local SADD chapter and support groups (COA, etc).	**Provide** students assistance in developing social competence, coping, and life survival skills. **Model** empathy and support for drug-dependent individuals and those in support groups.	**Model** empathy and support for drug-dependent individuals and those in support groups.	**Model** empathy and support for drug-dependent individuals and those in support groups.
Instruction	**Initiate** inservice programs for staff and faculty on drug abuse recognition, prevention, and treatment. **Identify** one week in school year as alcohol and drug prevention week. **Involve** all areas of instruction and student service areas in initiative. **Participate** in observance of: 1) National Drunk and Drugged Driving Week (December), 2) Prevention of Birth Defects Month (January). **Promote** adoption of effective programs.	**Develop and implement** sequential drug education instruction into the health curriculum in grades K-12. **Provide** skill development in problem solving and for interpreting and understanding life experiences. **Integrate** alcohol and other drug abuse prevention content into curriculum of most academic areas. **Develop** instructional strategies which utilize parental involvement and peer instruction.	**Cooperate** with teachers and counselors in developing an information exchange between school or community. **Initiate, support, conduct** support groups for high-risk students and children of substance abusers. **Relay** to faculty and staff advancements in alcohol and other drug abuse treatment or prevention programs via newsletters, inservice programs, etc.	**Initiate** within guidance program an instructional sequence focusing on alcohol and drug abuse prevention. **Initiate, support, conduct** support groups for high-risk students and children of substance abusers. **Develop** peer instruction and counseling programs targeting specific subpopulations. **Provide** school staff and parents needed educational programs.

Figure 4.4, cont.

A Multidisciplinary Approach to Alcohol and Other Drug Prevention

	Physical Educators *Content Specialists, Coaches, Trainers*	Parents	Peers	Professionals Within Community
Policy	**Facilitate** understanding of school policy. **Enforce** policy for athletes strictly.	**Aid** in the development of school board policy with sanctions and support of school or community council. **Initiate** task force on school/ community council for policy development if not present.	Comply with policies.	**Increase** sales tax on alcohol and tobacco products; use revenues for educational programming. **Enforce** minimum age for purchasing tobacco and alcohol. **Revoke** licenses of establishments serving underage youth. **Advocate** stiff fines and penalties for those drinking and driving.
Environmental Change	**Display** prominently literature on alcohol and drug abuse (including steroids), prevention, and treatment.	**Advocate** an additional excise tax on alcohol sold in community to underwrite educational programs. **Reduce** the number of outlets selling alcoholic beverages for off-premise consumption. **Restrict** sale of alcohol at public events. **Organize** Operation Prom/ Graduation events. Initiate a SADD and MADD chapter.	**Participate** in the organization and implementation of Operation Prom, SADD.	
Media Utilization		**Regulate** the content of alcoholic beverage advertising on local TV, radio, and billboards. **Increase** the accuracy of the media's portrayals of the consequences of alcohol and drug use. **Prohibit** alcohol and smoking advertising using lifestyle themes. **Participate** in theater development, troupes, musicals, and video presentations.	**Participate** in theater development, troupes, musicals, and interactive presentations.	Use local celebrities and sports stars in prevention programs. **Initiate** a local media program on prevention. **Coordinate** media programming for smoking cessation, drug-free prom night with classroom lessons and home assignments.
Direct Intervention	**Provide** non-judgmental referral for those seeking drug-related information or treatment. **Identify** and refer high-risk/ abusing students for intervention programs.	**Provide** consistent and loving discipline. **Facilitate** positive family relationships, involvement, and attachment. **Advocate** stiff fines for driving under the influence of alcohol and drugs. **Participate** if needed in Family Skills Training.	**Encourage** friends who need assistance to self-refer.	**Coordinate** school/community referral and support networks. **Initiate** peer counseling, facilitating, helping programs-- helping with family and school programs.
Role Modeling/ Social Support	**Model** empathy and support for drug-dependent individuals and those in support groups. **Utilize** teen athletes as teachers and role models for students in elementary school.	**Provide** youth with more time and involvement with caring, competent, interested adults. **Model** non-use of tobacco and illegal drugs and moderate to non-use of alcohol.	**Participate** in peer counseling, peer instruction, and peer tutorial programs. **Model** abstinence behavior in regard to nicotine, steroids, alcohol, and other illegal drugs.	**Encourage** designated driver programs for people of all ages.
Instruction	**Provide** planned instruction on on the relationship between fitness and substance abuse. **Utilize** teachable moments to provide supplemental instruction on alcohol and drug abuse.	**Develop** parent/family skills training programs. **Participate** as needed in family self-help groups – AL-ANON, ALAFAM, AA. **Solicit** parent participation in homework assignments. **Initiate** parent training programs to prevent and recognize drug abuse.	**Participate** in national and local observances: National Drunk and Drugged Driving Week; Prevention of Birth Defects Month, Great American Smokeout.	**Train** bartenders and servers to identify underage youth. **Organize** parental education programs at social and religious organizations which provide skills in building strong bonds, parenting skills, and drug and alcohol prevention strategies. **Form** parent support groups. Initiate a Safe Homes program.

Health Promotion Programming for Faculty and Staff. Health promotion includes those initiatives that begin "... with people who are basically healthy and seeks to develop community and individual measures..." to maintain and enhance that health.[18] Schools employ a large number of people whose behaviors and health status mirror that of the general public. Focusing on the risks associated with alcohol and other drugs, it is estimated that one in 10 of a school district's employees has a substance abuse problem.[19] Employee assistance programs, which have provided such services as on-site counseling for family, marital, financial, legal, alcohol, and other drug problems in business and industry, can fulfill similar functions at the school site.

Health promotion programming for faculty and staff is attractive for several financial and non-financial reasons. These programs have reduced health insurance premiums, absenteeism, and frequency of accidents.[19] Consequently, a great potential exists for savings to the taxpaying public and better continuity of instruction and time on task for students. Perhaps even more significant is the potential for modeling. The behaviors of faculty and staff, and the ways in which their employer, the school, helps them deal with problems are observed. These can send powerful messages to students during the years when attitudes and habits are being formed. When a school and community collaboratively demonstrate a commitment to alcohol and other drug use prevention and intervention in faculty and staff, it can be a powerful model for students. Moralistic or punitive perspectives then give way to consistent prevention messages and intervention protocols relevant for all citizens of the school community.

Peers. Programs that combine positive peer influence with specific skills training are an effective means to reduce alcohol and other drug abuse. Peer programs show a significant positive effect on reducing drug use behaviors.[4,9,20] Although there is great diversity among peer instructional programs, several commonalities exist: 1) they provide a meaningful role and opportunity for youth to participate in decisions which affect their lives, 2) they channel peer pressure toward constructive ends, and 3) they provide needed social, interpersonal, and organizational skills. Types of peer programs include positive peer influence, peer teaching, peer counseling, and peer participation. Further information on peer programming is available in *Adolescent Peer Pressure: Theory Correlates and Program Implications for Drug Abuse Prevention.*[21] Cross-age tutors and mentors also can be used as role models to provide prevention messages.

Community. A task force or coalition needs to be established within the community to assess, plan, implement, and evaluate ongoing programs to prevent and treat substance abuse. Coalition or task force members may include individuals representing health, education, social services, judicial, recreation, and youth-serving agencies. In addressing problems as complex as drug abuse, schools or communities must link ongoing prevention, intervention, and treatment programming. Further, a multidisciplinary task force can implement initiatives that would be beyond the scope of any single individual or agency. Task force activities may include supporting legislation or taxes on alcohol and tobacco for local prevention programming, advocating for initiatives in the media, coordinating educational programming across the community, advocating stiffer penalties for those drinking and driving or selling alcohol or tobacco to youth, and organizing citizen groups to more effectively control drug trafficking within their neighborhoods.

Parents. Prevention research documents the value of parental involvement in both formal and informal instruction.[2,4] Invite parents to participate as full partners in any drug prevention programming at the school site. Parents can provide input on policy, intervene if they suspect their children of alcohol and other drug use, provide supportive environments for the adoption of health-enhancing behaviors, model appropriate behaviors, and provide instruction to children on hazards associated with related risk behaviors.

Summary

No one solution exists to the problem of alcohol and other drugs. High-risk behaviors are interrelated and a package of services is required within each community to address these complex issues. Continuity of efforts must be maintained, including the acquisition of basic academic skills. Timing of interventions also is critical. One should consider the critical transition points that occur from elementary to middle school.

In summary, Kumpfer[2] outlined some specific challenges for schools in designing programs to reduce alcohol and other drug use: 1) develop programs for the students at high risk as well as the general population of students, 2) maximize program impact by tailoring it to the needs of local students, and 3) base programs on criteria identified in effective programs. No single curricula or discipline can address all alcohol and drug abuse prevention needs. Collaborative programming by professionals, parents, peers, and community residents is needed to focus on multiple strategies. In this way, school and community efforts become one in addressing this complex problem.

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Prevention of Alcohol and Other Drug Abuse

Action Plan Development

Team members should complete questions 1 through 7 individually. The team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behaviors in regard to the abuse of alcohol and other drugs.**

2. **Review the *Healthy People 2000* objectives for Alcohol and Other Drugs, and for Tobacco.**

3. **Read suggested goals and objectives.**

   Suggested goal: Reduce (name substance) abuse among students from ___ to ___ by the year 2000.

   Selected objectives for the goal of reducing substance abuse: By the year 2000, (x%) of students:
   * will refrain from using alcohol and other illegal drugs
   * will report that their friends do not use alcohol and other drugs
   * will refuse to ride with someone using alcohol or other drugs
   * will not allow friends to drive if under the influence of alcohol or other drugs
   * will cease using tobacco products
   * will continue not using tobacco products

4. **List potential objectives for reducing alcohol and other drugs at your school.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the chart *A Multidisciplinary Approach to Alcohol and Other Drug Use Prevention.***
   * Underline the interventions that your school already has initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances your school should recognize in relation to the prevention of substance abuse.

7. **Identify initially by month the strategies or interventions that need implemented during the school year to reduce the use of alcohol and other drugs.**

Month	**Intervention(s):**
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to prevent abuse of tobacco, alcohol, and other drugs. Place the group ideas for goals and objectives on the action planning form.

9. **Complete the action planning sheet for alcohol and other drug prevention by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the "Strategies" column. For each strategy (intervention), ask what needs to be done to complete the intervention, then decide who will be responsible for each activity and the date by when it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	**Individual Responsible:**

School Year 19 ___ - _____
Action Plan for _____
_____ Priority Area

Goal: _____
Objective(s): _____
_____
_____
_____
_____
_____

Strategies: What will facilitate attainment of the chosen goals of *Healthy People 2000*?	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

Chapter 5
Chronic Disease Prevention

R. Scott Olds, Diane DeMuth Allensworth, Cynthia Wolford Symons

Preventable chronic disease continues to burden our nation. Heart disease, cancer, and stroke remain the leading causes of death in the United States, and each year there are seven million individuals with coronary artery disease, one million new cases of cancer, and 600,000 strokes.[1]

Cardiovascular Disease

While a cardiovascular disease-related death occurs every 32 seconds, overall death rates from heart attack, stroke, and other cardiovascular disease have declined in the last 15 years.[2] Major contributors to the 35% decline for all cardiovascular disease, the 40% decline for coronary heart disease, and the more than 50% decline for stroke were changes in lifestyle and risk factor reduction.[1]

Despite these encouraging figures, cardiovascular disease remains the number one cause of death in the United States, killing nearly as many Americans as all other diseases combined.[1] Of the current U.S. population of about 246 million, more than 68 million (29%) suffer from some form of cardiovascular disease.[2]

Many factors contribute to this development: genetic predisposition, lifestyle (behavior), environment, and aging. The major modifiable risk factors, which are the primary contributors to cardiovascular disease,[3,4] include cigarette smoking, high blood cholesterol, and hypertension. Secondary risk factors include excessive body weight and long-term physical inactivity.[4]

The major risk factors for cardiovascular disease originate in childhood[5] when eating patterns are established, cigarette smoking is initiated,[6] and exercise habits are established.[7,8] Moreover, childhood body weight is a strong predictor of adult body composition. McGill labeled atherosclerosis, a major cause of myocardial infarction and congestive heart failure in adults, a pediatric health problem.[9] Cigarette smoking, high-fat and high-sodium diets, and lack of physical activity in childhood may lead to adult onset of cardiovascular disease.[10] In addition, the atherosclerotic process, a major contributor to cardiovascular disease etiology, is well-established by young adulthood.[4,11] One report estimates 36-60% of U.S. children exhibit at least one modifiable risk factor for cardiovascular heart disease by age 12.[12] Surveillance of blood pressure, avoidance of cigarette smoking, appropriate weight, and regular physical exercise are prudent recommendations for all children.[4]

Given the extent of cardiovascular disease and the fact that these diseases are not an inevitable part of life for most Americans, intervention should begin early in life. Schools represent an important community resource where many children spend a significant amount of time. Moreover, school food services supply 20% or more of the total daily caloric intake for children who select the school lunch program.[13] This "captive" audience is particularly amenable at the elementary level to education programs that promote healthy attitudes and practices. As such, health promotion and disease prevention initiatives tailored to risk factors associated with children and youth should be an important component of comprehensive programming efforts to reduce cardiovascular disease.

Cancer

One of every five deaths in the United States is cancer-related. Trends from 1973 through 1985 indicate the incidence for all cancers has increased. However, there has been a more rapid increase for blacks than whites and for men rather than women. Estimates forecast one in three Americans now living eventually will have cancer.[1]

The potential exists to reduce both cancer incidence and mortality by promoting prevention and early detection. Early detection includes screening procedures at age-appropriate levels: mammography, clinical breast examinations, Pap tests, fecal occult blood testing, sigmoidoscopy, and oral, skin, and rectal examinations.

For children and youth, the focus is on promoting health-enhancing behaviors. One behavior, cigarette smoking, accounts for 30% of all cancers. It is estimated from cross-cultural data and epidemiological studies that another 35% of cancer deaths may be related to diet, although corroborative intervention data are not yet available. Specifically, a high-fat intake appears to promote some types of cancer while a high intake of fiber-containing foods is associated with a lower risk for colon and rectal cancer. Skin cancer, the most common form of cancer, has as its chief risk factor exposure to nonionizing solar radiation. Limiting sun exposure, using sunscreens, and wearing protective clothing when exposed to sunlight contributes significantly to preventing skin cancer. Abstaining from tobacco use and eating the USDA-recommended diet would limit risk for other types of cancer.

This chapter identifies students at risk and provides examples of health promotion programs effective in reducing the risk factors associated with premature illness and death. Diffusion of such programs to health and education professionals, as well as other stakeholders in organizational and political positions, can improve the current and future health status of children.[14] In this chapter, examples will focus on integrated efforts directed at tobacco, nutrition, physical fitness, and exercise that can be implemented as part of a comprehensive school health program.

Students at Risk

Tobacco. The U.S. Surgeon General has identified cigarette smoking as the chief, single, avoidable cause of death in our society and the most important public health problem of our time.[6] Each day, 3,000 American youth start smoking, which is the most preventable cause of morbidity and mortality. Delaying onset and preventing initiation of tobacco use will have a significant effect on reducing cardiovascular disease and cancer in this nation.

Although cigarette smoking has declined among adolescent males, it has not among adolescent females. In addition:

* Almost 16% of 12th graders report smoking 20 or more cigarettes in the past 30 days,[15]
* More than half the eighth grade students (51%) and nearly two-thirds of the 10th grade students (63%) report having tried cigarettes,[16] and
* About one of every six eighth graders (16%) and one of four 10th graders (26%) report having smoked a cigarette during the past month.[16]

Family and peers are the most influential variables affecting adolescent cigarette smoking. Children of smoking parents are more likely to smoke than those of nonsmoking parents, and children whose friends smoke are more likely to smoke. Advertisements also depict smoking as an alluring behavior to this age group.[6] Tobacco advertisements implicate thinness with cigarette smoking. Adolescent females are more likely than males to believe cigarette smoking controls weight.[12]

Adolescent personality traits that increase the likelihood of smoking include cognitions and beliefs about smoking, anticipated results of this practice, and unconventionality. Adolescent smokers believe smoking is an important aspect of their lives.[18] Children who are risk-taking, rebellious, and socially precocious are likely to become smokers.[19] Further, behavioral risk factors that accurately predict cigarette smoking among youth include low academic performance, poor social skills to resist peer pressure, and future intentions to smoke.[19,20] Unquestionably, cigarette smoking prevention efforts are a critical aspect of any effective health promotion and chronic disease prevention program.

Nutrition. Food, a source of considerable pleasure and a reflection of our rich social fabric and cultural heritage, adds valued dimensions to our lives. Yet, what we eat puts many of us at risk for coronary heart disease, stroke, atherosclerosis, diabetes, and some types of cancer. These disorders together now account for more than two-thirds of all deaths in the United States.[21]

Diet is of special concern relative to disease causation because eating is a necessary daily activity.[22] School-age children and youth consume foods that reflect their culture.[23] As a result, children receive approximately one-third of their calories from fat.[24] The 1988 Surgeon General's Report on Nutrition and Health suggested dietary patterns of youth are an important precursor to chronic disease development, particularly noting their potential contribution to development of cardiovascular disease.[21]

* Nearly four out of every 10 students (39%) eat fried foods four or more times a week.[16]
* On average, students eat three snacks a day. More than half these snacks (59%) are foods high in fat or sugar.[16]
* Approximately three-fourths of the students (73%) know eating foods high in saturated fats may be related to heart problems.[16]
* About eight of every 10 students (79%) know eating too much salt may be related to high blood pressure.[16]
* About 13% of 9-12 graders ate five or more servings of fruits and vegetables the day preceding the survey.[15]
* Approximately 65% of 9-12 graders ate two or more servings of high-fat foods the day preceding the survey.[15]

Parental involvement and influence represent important variables in the acquisition and maintenance of healthful eating patterns and exercise habits. Parents' influence in the development of eating patterns of children is pivotal, even more than for cigarette smoking.[25,26] Since food is essential to life itself, creating learning opportunities and environmental conditions that increase healthy consumption patterns will do much to reduce the risk for cardiovascular diseases and cancer.

Physical Fitness and Exercise. The decline in children's physical fitness represents an important national concern.[8] It is safe to suggest that Americans' physical activity levels have diminished steadily in this century, with technological advances and a personal preference for public or private transportation often mentioned as the principal reasons. Today's children are less fit than their parents.

Lack of physical activity is related to obesity, hypertension, and high blood fat levels.[27] Those with high fitness levels present an improved cardiovascular risk profile. Further, adolescents with higher levels of cardiovascular fitness also have more positive physiological profiles.[28] The World Health Organization has recommended the reintroduction of daily physical activity, focusing on students' involvement in regular vigorous activities.[29]

Unfortunately, only one state, Illinois, has daily K-12 physical education.[1] The de-emphasis of school physical education by many school districts, combined with the rapidly increasing and competing community sport programs, threatens the very existence of this traditional curricular offering. Further, physical education programming is jeopardized by tightening school budgets and programs that insist on teaching group games that do not build cardiovascular endurance. Guidelines recommend that a daily physical education program focus on lifelong aerobic activities and promote health fitness, rather than competition.[7] If not, physical education programs may become a lost resource to address health promotion in general and cardiovascular disease risk reduction in particular.

Focus for Intervention:

The Healthy People 2000 Objectives for the Nation

Healthy People 2000 includes priority areas of tobacco, nutrition, physical activity and fitness, and heart disease and stroke that are directly related to cardiovascular disease reduction.[1] Cancer reduction also is related to tobacco and nutrition priority areas. Figure 5.1 presents the specific objectives school personnel should address in a comprehensive program to assure healthy outcomes for children and youth.

In cooperation with parents and community agencies, school personnel need to develop programs that increase physical activity (Objectives 1.3 - 1.6), increase the proportion of children who participate in daily physical education (Objectives 1.8, 1.9), reduce overweight (Objectives 2.3, 2.7), reduce intake of dietary fat (Objective 2.5) and salt and sodium consumption (Objective 2.9), and improve school lunch programs and breakfast services using recommended guidelines (Objective 2.17). Programs should increase the proportion of schoolchildren receiving nutrition education as part of high-quality school health education (Objective 2.19); reduce cigarette smoking prevalence (Objective 3.4) and initiation (Objective 3.5); reduce exposure to tobacco smoke at home (Objective 3.8); reduce smokeless tobacco use (Objective 3.9); establish tobacco-free environments and include tobacco use prevention in the curricula of all elementary, middle, and secondary schools as part of high-quality school health education (Objective 3.10); and increase the proportion of individuals who limit sun exposure, use sun screens and protective clothing when exposed to the sun's rays (Objective 16.9).

Attributes of Successful Programs

Since multiple factors contribute to chronic disease, programs using a variety of strategies are necessary to reduce the potential for premature illness and death. The paradigm Allensworth and Symons[30] provided for health promotion in schools recommends using a variety of professionals to provide multiple strategies. Figure 5.2 delineates the roles and responsibilities that various individuals could assume in order to reduce disease risk. While the model assigns specific roles, the design is flexible enough to allow shifting of responsibilities to respond to local staffing configuration, interest, experience, and ability. Eight strategies have been identified as important elements of successful school-based disease reduction programs:

* Multiple interventions,
* Environmental changes (eg, school lunch programs and smoking policies),
* Instruction about tobacco, nutrition, and physical fitness,
* Parental and family education,
* Teacher preparation and staff development,
* Administrative support,
* Emphasis on social influences, skill-building, and behavioral competencies related to particular health-related behaviors, and
* Multiple years of instruction.[31-35]

The last decade has seen a shift from programming driven by medical and educational models to social psychological prevention models that focus on nutrition, smoking, and exercise in school health program development.[36] Risk reduction programs with children and youth should focus on individual behaviors including eating, exercising, and cigarette smoking. Moreover, programs that enlist a multiple approach strategy that addresses individual behavior, environmental influences on that behavior, and the environment itself as a health risk are most likely to be effective in promoting health and reducing the risk for disease.[37]

Examples of Successful Programs

School-based health promotion programs must do more than increase knowledge. Learning opportunities and environments need to be created that increase the likelihood of practicing health-enhancing behaviors. For example, a myriad of nutrition, tobacco, and fitness education studies have reported changes in students' knowledge. Studies regarding programs that have influenced and maintained healthy behaviors are more illusive. The programs that have been successful in reducing the risk of disease are those which focus predominantly on tobacco use, dietary changes, and physical fitness. It is important to note the literature is more well-established with school-based research interventions on youth cigarette smoking patterns than on diet or physical activity.[38]

Programs that have focused on the risk factors associated with cigarette smoking, as opposed to the traditional approach of long-term consequences, have resulted in more promising outcomes.[26,39] Students can better relate to issues that are real and relevant as opposed to long-term repercussions, which often seem a lifetime away.

After a review of effective smoking prevention programs,[18,38,40-44] Glynn[40] identified the most essential elements of school-based smoking prevention programs for children. Smoking prevention approaches focus either on social influences believed to promote substance use or on coping skills training designed to enhance personal and social competence.[41,42] Schinke et al[43] reported that sixth grade students receiving both health information and skills training had fewer intentions to smoke cigarettes and actual cigarette use than students who received information alone. Perry reported peer-led models which focus on social skill building effectively reduced the initiation and use of cigarettes by students in grades six and seven.[18,32,44]

Perry et al,[36] using a multi-component intervention design, developed the Child and Adolescent Trial for Cardiovascular Health (CATCH) initiative. Using a social-psychological model, which provides consistent messages in the curriculum, CATCH encouraged environmental change and family involvement programs. The authors suggested:

Figure 5.1

Healthy People 2000 Objectives: Physical Fitness and Activity, Nutrition, Tobacco, Heart Disease and Stroke, and Cancer

Physical Fitness and Activity

1.2 Reduce overweight to a prevalence of no more than 15% among adolescents ages 12 through 19. (Baseline: 15% for adolescents ages 12 through 19 in 1976-80.)

1.3 Increase to at least 30% the proportion of people ages six and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day. (Baseline: 22% of people ages 18 and older were active for at least 30 minutes five or more times per week and 12% were active seven or more times per week in 1985.)

1.4 Increase to at least 20% the proportion of people ages 18 and older and at least to 75% the proportion of children and adolescents ages six through 17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion. (Baseline: 12% for people ages 18 and older in 1985; 66% for youth ages 10 through 17 in 1984.)

1.5 Reduce to no more than 15% the proportion of people ages six and older who engage in no leisure-time physical activity. (Baseline: 24% for people ages 18 and older in 1985.)

1.6 Increase to at least 40% the proportion of people ages six and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility. (Baseline data available in 1991.)

1.7 Increase to at least 50% the proportion of overweight people ages 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight. (Baseline: 30% of overweight women and 25% of overweight men for people ages 18 and older in 1985.)

1.8 Increase to at least 50% the proportion of children and adolescents in 1st through 12th grades who participate in daily school physical education. (Baseline: 36% in 1984-86.)

1.9 Increase to at least 50% the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities. (Baseline: Students spent an estimated 27% of class time being physically active in 1983.)

Nutrition

2.3 Reduce overweight to a prevalence of no more than 20% among people ages 20 and older and no more than 15% among adolescents ages 12 through 19. (Baseline: 26% for people ages 20 through 74 in 1976-80, 24% for men and 27% for women; 15% for adolescents ages 12 through 19 in 1976-80.)

2.5 Reduce dietary fat intake to an average of 30% of calories or less, and average saturated fat intake to less than 10% of calories among people ages two and older. (Baseline: 36% of calories from total fat and 13% from saturated fat for people ages 20 through 74 in 1976-80; 36% and 13% for women ages 19 through 50 in 1985.)

continued on next page

Figure 5.1, continued

2.6 Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products. (Baseline: 2 1/2 servings of vegetables and fruits and three servings of grain products for women ages 19 through 50 in 1985.)

2.7 Increase to at least 50% the proportion of overweight people ages 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight. (Baseline: 30% of overweight women and 25% of overweight men for people ages 18 and older in 1985.)

2.8 Increase calcium intake so at least 50% of youth ages 12 through 24 and 50% of pregnant and lactating women consume three or more servings daily of foods rich in calcium, and at least 50% of people ages 25 and older consume two or more servings daily. (Baseline: 7% of women and 14 of men ages 19 through 24 and 24% of pregnant and lactating women consumed three or more servings, and 15% of women and 23% of men ages 25 through 50 consumed two or more servings in 1985-86.)

2.17 Increase to at least 90% the proportion of school lunch and breakfast services and child care food services with menus that are consistent with the nutrition principles in the *Dietary Guidelines for Americans*. (Baseline data available in 1993.)

2.19 Increase to at least 75% the proportion of the nation's schools that provide nutrition education from preschool through 12th grade, preferably as part of quality school health education. (Baseline data available in 1991.)

2.21 Increase to at least 75% the proportion of primary care providers who provide nutrition assessment and counseling and/or referral to qualified nutritionists or dieticians. (Baseline: Physicians provided diet counseling for 40-50% of patients in 1988.)

Tobacco

3.4 Reduce cigarette smoking to a prevalence of no more than 15% among people ages 20 and older. (Baseline: 29% in 1987; 32% for men and 27% for women.)

3.5 Reduce the initiation of cigarette smoking by children and youth so that no more than 15% have become regular cigarette smokers by age 20. (Baseline: 30% of youth had become regular cigarette smokers by ages 20 through 24 in 1987.)

3.7 Increase smoking cessation during pregnancy so that at least 60% of women who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy. (Baseline: 39% of white women ages 20 through 44 quit at any time during pregnancy in 1985.)

3.8 Reduce to no more than 20% the proportion of children ages six and younger who are regularly exposed to tobacco smoke at home. (Baseline: More than 39% in 1986, as 39 percent of households with one or more children ages six or younger had a cigarette smoker in the household.)

3.9 Reduce smokeless tobacco use by males ages 12 through 24 to a prevalence of no more than 4%. (Baseline: 6.6% among males ages 12 through 17 in 1988; 8.9% among males ages 18 through 24 in 1987.)

continued on next page

Figure 5.1, continued

3.10 Establish tobacco-free environments and include tobacco use prevention in the curricula of all elementary, middle, and secondary schools, preferably as part of quality school health education. (Baseline: 17% of school districts totally banned smoking on school premises or at school functions in 1988; anti-smoking education was provided by 78% of school districts at the high school level, 81% at the middle school level, and 75% at the elementary school level in 1988.)

3.16 Increase to at least 75% the proportion of primary care and oral health providers who routinely advise cessation and provide assistance and follow up for all their tobacco-using patients. (Baseline: About 52% of internists reported counseling more than 75% of their smoking patients about smoking cessation in 1986; about 35% of dentists reported counseling at least 75% of their smoking patients about smoking in 1986.)

Heart Disease and Stroke

15.4 Increase to at least 50% the proportion of people with high blood pressure whose blood pressure is under control. (Baseline: 11% controlled among people ages 18 through 74 in 1976-80.)

15.6 Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL. (Baseline: 213 mg/dL among people ages 20 through 74 in 1976-80.)

15.9 Reduce dietary fat intake to an average of 30% of calories or less and average saturated fat intake to less than 10% of calories among people ages two and older. (Baseline: 36% of calories from total fat and 13% from saturated fat for people ages 20 through 74 in 1976-80; 36% and 13% for women ages 19 through 50 in 1985.)

15.10 Reduce overweight to a prevalence of no more than 20% among people ages 20 and older and no more than 15% among adolescents ages 12 through 19. (Baseline: 26% for people ages 20 through 74 in 1976-80, 24% for men and 27% for women; 15% for adolescents ages 12 through 19 in 1976-80.)

Cancer

16.9 Increase to at least 60% the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light (eg, sun lamps, tanning booths.) (Baseline data available in 1992.)

16.10 Increase to at least 75% the proportion of primary care providers who routinely counsel patients about tobacco use cessation, diet modification, and cancer screening recommendations. (Baseline: About 52% of internists report counseling more than 75% of their smoking patients about smoking cessation in 1986.)

"The synergism of these theoretically consistent program components, over multiple preadolescent years, and involving changes in the classroom, home, and school environments, provides the potential for primary prevention and sustained behavior changes."

The CATCH program provides skills training in healthful eating, physical activity, and nonsmoking patterns. These behavior changes are anticipated to positively affect blood pressure and physical fitness. Results are not yet available from these interventions with a range of socioeconomically and racially diverse students in third through fifth grades in Minnesota, Texas, California, and Louisiana. However, it is anticipated that the multiple-component model will serve as the prototype for cardiovascular disease risk reduction. Further, the design and the behaviors it addresses will be generalized to other health problems of children and youth.[31]

Stone and colleagues[4] provided a compendium of National Heart, Lung, and Blood Institute funded studies on cardiovascular behavior research for youth health

promotion. The studies, addressing single and multiple behaviors, included elementary school children representing multiple ethnic and racial groups. A variety of combinations of curriculum, parental involvement, and environmental changes were tested.[4] Perry et al[32] examined the effects of the *Healthy Heart Home Team* on middle socioeconomic class White and Asian third grade students' eating patterns. The 15-session, five-week curriculum and five-week home team intervention called for both classroom instructors and mailing of materials to parents. Results from this combination school curriculum and parental participation program revealed improvements in nutrition knowledge, total fat, saturated fat, and complex carbohydrates in the treatment group.[32,44]

Parcel et al[14] measured the effects of the *Go For Health* program on low and middle socioeconomic class White, Hispanic, and Black third graders' eating and exercise patterns. This 12-session, 30-minute program, which has 48 10-minute follow-up sessions per year, combined health education and physical education curricula and an environmental change in the food service program to promote heart healthy behaviors. Results indicated improved knowledge, self-efficacy (competence), behavioral expectations, lower fat and saturated fat consumption, and moderately improved vigorous physical activity.

Bush et al[45] reported the effects of the *Know Your Body* program on the eating, exercising, and smoking patterns of diverse socioeconomic Black students in grades four through nine. Utilizing both a school curriculum and home involvement component with two 45-minute lessons per week over the school year for four years, Bush et al[45] found that treatment subjects had improved knowledge, reduced total fat consumption, lowered cholesterol levels, and reduced the initiation of cigarette smoking.

Nader et al[33] developed a *Family Health Project* that studied eating and exercise patterns of low and middle socioeconomic class Hispanic and White students in grades five and six. This home-intervention only program of 12 1 1/2 hour sessions with six booster sessions over nine months positively affected the treatment subjects' diet, cholesterol level, blood pressure, and knowledge. Interventions were more pronounced with White subjects than Hispanic subjects, suggesting the need to develop culturally sensitive materials.

Cohen et al[46] found their *Cardiovascular Risk Reduction* program, conducted for two weeks using four 45-minute sessions, produced positive changes in White middle class subjects' knowledge and smoking initiation patterns. Further, they reported that peers were equally or more effective in delivering the program than teachers. The program utilized both a school curriculum and a home component to promote heart healthy eating, smoking practices, and blood pressure readings.

Fors et al[47] studied low and middle socioeconomic class White and Black sixth grade students who participated in the *Three R's and High Blood Pressure Program.* Focusing on high blood pressure, intervention strategies involved teachers and students who presented a school curriculum and a parental involvement module in 10 40-minute sessions over a two-week time period. Results indicated improved knowledge and blood pressure readings in the treatment group.

Ellison et al[34] developed a *Food Service Project* intervention that exclusively was focused on school food services. Middle and high socioeconomic White, Black, and Asian ninth graders participated in the 24-week study that examined the effect of changing the food service program on subjects' blood pressure and eating patterns. Results showed positive changes in blood pressure, cholesterol, and food service programming were obtained.

Weinberg et al[48] conducted the *Cardiovascular Curriculum/Family Tree* intervention to measure the effects of the combined school curriculum and home program on low and middle class White, Hispanic, and Black ninth and 10th grades students' eating and exercise behaviors and blood pressure readings. Employing teachers as the principal provider of the three-week, 15-class period program, positive results were obtained in treatment group subjects' knowledge, attitudes, and self-reported behaviors. Further, parental participation in smoking, weight reduction, and exercise programs increased with concomitant positive results.

Killen et al[49] examined middle class White, Hispanic, and Asian 10th grade students' eating, exercising, and smoking behaviors and blood pressure readings. The *Cardiovascular Risk Reduction* program provided 20 50-minute sessions over eight weeks. Results indicated improved changes in knowledge, exercise, smoking, resting heart rate, and skinfolds.

Coates, Jeffrey, and Slinkard[50] reported improved eating and exercise behaviors in a study of school-age children. Coates et al[51] and Perry, Mullis, and Maile[52] reported similar changes in eating behaviors of children. These programs utilized Social Learning Theory as the foundation for promoting healthy eating and exercise patterns in children. Examples of such activities included goal-setting, behavior rehearsal, modeling, communication skills, self-regulation skills, decision-making, contracting, and social support.[53]

Evidence of effective physical fitness programs are not as available as the smoking prevention literature. Simons-Morton et al[54] reported significant improvements in third and fourth grade students' dietary fat and sodium intake and exercise patterns as a result of the *Go for Health* program. This consisted of a school-based program designed to change the school environment and instructional programs in physical education. Specifically, this program included a behaviorally-based health education curriculum, fitness-oriented physical education, and lower fat and sodium school lunches. This program was grounded in Social Learning Theory and utilized a skill-building approach that students could transfer learning to out-of-school environments. By modifying food preparation

Figure 5.2

A Multidisciplinary Approach to Promoting Health and Preventing Disease

	Total School Environment *Superintendents, Principals*	**Class Instruction** *Elementary and Secondary Teachers, Health Educators*	**Physical Education** *Content Specialists, Coaches, Trainers*	**Health Services** *Nurses, Nurse Practitioners, Physicians*
Policy	Develop policies which establish schoolsite wellness programs; establish daily PE; require periodic fitness assessments; ban use of low-nutrient foods as fund raisers; establish a smoke-free environment.	Comply with policies and assist in their development as requested.	Comply with policies and assist in their development as requested.	Comply with policies and assist in their development as requested.
Environmental Change	Establish fitness trails inside and outside school. Establish par course. Install large clock with second hand on playground to measure pulse rate. Institute a smoke-free policy.	Promote use of fitness trails through classroom assignments.	Measure/mark fitness trails indoors and outdoors; promote use of trails. Sponsor special fitness events: fun runs; bicycle rodeos; fitness day.	
Direct Intervention	Conduct a psychological inventory of school environment, eliminate adverse conditions. Promote fitness screening in faculty, staff, and students.	Encourage students to participate in fitness and nutritional screening and intervention programs.	Operate a noontime and after-school fitness and nutrition club. Encourage use of sunscreen or protective clothing when fitness activities are outside.	Conduct periodic screenings. Provide counseling and support groups for overweight, underweight, sedentary, and hypertensive students.
Media Utilization	Use PA system to broadcast messages on: 1) fitness and CV health during National Running and Fitness Month; Cholesterol Month; Nutrition Month; Heart Month; smoking cessation during Great American Smokeout. Promote use of school newspaper, bulletin boards, table tents in cafeteria with health promotion messages.	Celebrate with posters and displays; National Running and Fitness Month; National Physical Fitness and Sport Month; National Heart Month; Cholesterol Month; High Blood Pressure Month; Nutrition Month.	Celebrate with appropriate activities the national observances. Develop and distribute a directory that identifies community recreation and fitness opportunities for faculty, students and their families.	Disseminate basic information on fitness and nutrition to faculty, staff, students, and their families using a variety of media channels.
Role Modeling/ Social Support	Model fitness by having periodic assessments of blood pressure, cholesterol, lean body mass, fitness; maintaining appropriate weight; eating nutritiously; participating in aerobic activities; participating in self-help groups as needed to lower weight, exercise, etc. Promote a fitness competition between faculty and students.	Model fitness by having assessments of blood pressure, cholesterol, HDL, LDL, lean body mass, fitness; maintaining appropriate weight; eating nutritiously; participating in self-help groups as needed to lower weight, exercise, etc.	Model fitness by having assessments of blood pressure, cholesterol, lean body mass, fitness; maintaining appropriate weight; eating nutritiously; participating in self-help groups as needed. Conduct a fitness competition between faculty and students to participate in aerobic activities at the individuals' appropriate level.	Model fitness by having assessments of blood pressure, cholesterol, HDL, LDL, lean body mass, fitness; maintaining appropriate weight; eating nutritiously; participating in self-help groups as needed to lower weight, exercise, stop smoking, etc.
Instruction	Encourage all staff and students to celebrate national health observance months, Promote daily PE classes focusing on aerobic fitness and lifetime sports activities. Use cafeteria as a nutritional learning laboratory.	Within the comprehensive health curriculum implement units on physical fitness, nutrition, weight management, tobacco prevention. Integrate instruction into other content areas and with cafeteria. Create independent learning centers focusing on healthy lifestyles.	Emphasize aerobic activity and lifetime sports in PE. Conduct annual fitness screenings; create individualized exercise prescription. Provide parents with results of assessment and prescription and provide suggestion for their involvement in prescription.	Implement in conjunction with physical education, periodic fitness assessment working with physical educator to provide parents assessments; prescriptions and suggestions for their involvement. Provide supplemental instruction as needed to sedentary, overweight, or underweight students and staff.

Figure 5.2, cont.

A Multidisciplinary Approach to Promoting Health and Preventing Disease				
	Food Service *Food Service Directors, Managers, Cooks*	**Counseling and Guidance** *Counselors, Psychologists, Social Workers*	**Worksite Health Promotion** *Director, Staff*	**Integrated School and Community** *Peers, Parents, Professionals*
Policy	**Comply** with policies and assist in their development as requested.	**Comply** with policies and assist in their development as requested.	**Comply** with policies and assist in their development as requested.	**Encourage** development of needed policies.
Environmental Change	**Remove** salt shakers from tables; replace with salt packets located in remote area of the cafeteria.		**Promote** use of fitness trails and par course via special events and incentives.	**Organize** school and community fitness and recreational events.
Direct Intervention	**Offer and promote** a variety of nutritious food choices: fresh fruit and vegetables, whole grain breads, unsalted nuts and seeds, 100% juices, and salad bars. **Provide** selections lower in fat and cholesterol, moderate salt, sodium, and sugar.	**Provide** access to biofeedback machines to monitor relaxation. **Provide** group and individual counseling sessions or behavioral modification and imagery techniques to help students participate in exercise or weight management program.	**Provide** assessment opportunities; fitness, weight, hypertension, cholesterol, and stress. **Conduct** health hazard appraisal and provide intervention programming. **Encourage** use of sunscreen or protective clothing when participating in outdoor activities.	**Identify** high-risk groups within the community for programming. **Integrate** community-wide intervention and assessment programs for high blood pressure, cholesterol, and fitness for school staff, students, and parents.
Media Utilization	**Observe** Nutrition Month (March), World Food Day, School Breakfast Week, School Lunch Week as well as other national observances with posters and table tents.	**Promote** psychological benefits of exercise, stress management, and weight management via brochures. **Participate** in celebration of national observances.	**Provide** messages promoting all aspects of cardiovascular health via payroll stuffers and mail box fliers. **Use** staff lounge bulletin boards for educational messages and information on community opportunities.	**Conduct** community-wide screening campaigns for fitness, weight management, cholesterol, high blood pressure, and cancer. **Petition** media to use public service announcements promoting nutrition and fitness activities.
Role Modeling/ Social Support	**Organize** a Student Dietary Advisory Committee. **Model** cardiovascular fitness. **Promote** a fitness competition between faculty and students to participate in physical activity.	**Model** cardiovascular fitness. **Provide** noontime and inservice programming on stress reduction, time management, relaxation techniques, nutrition, weight management, and fitness.	**Encourage** staff to exercise together during free period. **Encourage** staff to organize noontime support groups for weight management, stress reduction, and smoking cessation. **Role model** fitness.	**Organize** peer instruction and support groups for hypertension, overweight, and stressed individuals. **Encourage** community to initiate health promotion campaigns.
Instruction	**Label** lower-calorie, cholesterol and salt dietary selections in cafeteria. **Provide** messages on nutrition to be read during daily school announcements. **Provide** daily nutrient information on cafeteria meals at the front of cafeteria line. **Change** weekly posters and table tents with nutritional messages.	**Explain** psychological benefits of exercise, provide motivational techniques. **Identify** the negative impact of obsessive exercise regimens. **Implement** lunch time inservice and student programming on stress reduction techniques (eg, time management, relaxation techniques, assertiveness training, etc.)	**Provide** faculty and staff opportunities for individualized instruction, support groups and group instruction on a variety of nutrition, fitness, and stress management topics.	**Use** parents as partners for health lessons. **Invite** representatives of national volunteer organizations to provide inservice and student programs. (American Heart Association, American Cancer Society, American Lung Association, National Dairy Council, etc.)

practices and recipes, the school lunch provided lower fat, lower sodium lunches within the context of the school lunch program. The physical education program was the *Children's Active Physical Education* program (CAPE), designed to encourage enjoyable moderately vigorous physical activity during PE classes.[54]

The *Know Your Body* (KYB) project[35] was developed to evaluate the effectiveness of a school-based, teacher-delivered program to reduce associated risk factors of coronary heart disease and cancer. The KYB program was grounded in several theoretical models including the PRECEDE, Social Learning Theory, and the Health Belief Model. The program combines the "population" (all children receive general intervention) and "individual" (high-risk children receive special intervention) strategies, utilizes the school (population strategy) and the medical care system (high-risk strategy) as delivery mechanisms, and targets primarily the classroom student as opposed to parents and the environment. Teacher training, a key program component, focuses on familiarizing teachers with curriculum rationale and content, motivating teachers to implement the program as intended, discussing and demonstrating Social Learning Theory-derived teaching strategies (eg, modeling, skills development, rehearsal, monitoring, contracting, reinforcement, cuing), and provides teachers an opportunity to discuss concerns and problems related to program implementation.[35] The prevention program included attention to diet, physical activity, and cigarette smoking. Results revealed significant gains in knowledge. More importantly, positive outcomes were identified in improvement changes in levels of blood total cholesterol and in the rate of initiation of cigarette smoking. The program had no effect on improving body mass, physical fitness, or blood pressure.

Changing the Course, a school nutrition and cancer education curriculum developed by the American Cancer Society and the National Cancer Institute, is being evaluated in four states. The curriculum uses a behavioral approach that provides background information, encourages evaluation of personal dietary behaviors, decision-making, goal-setting, and evaluation of goal attainment.

Summary

Health promotion programming can address the most alterable risk factors for premature illness and death: smoking, eating patterns, and exercise. School-age children, through individual strategies, organizational changes, and environmental approaches, can be encouraged to adopt health-enhancing behaviors.

The incidence of heart disease, stroke, and cancer can be reduced in the future if students adopt healthy lifestyles now. The purpose of this section was to share the most effective programming the current literature provides regarding the reduction of cardiovascular and cancer risk with children and youth. Health and educational professionals will continue to investigate effective techniques for improving health, but in the interim to replicate those programs determined to be effective based on the best evidence available.

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Prevention of Chronic Disease

Action Plan Development

Team members should complete questions 1 through 7 individually. The team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behaviors in regard to nutrition, physical activity, and tobacco.**

2. **Review the *Healthy People 2000* objectives for Nutrition, Physical Activity and Fitness, Tobacco, Heart Disease, and Stroke.**

3. **Read suggested goals and objectives.**

   Suggested Goal: Increase cardiovascular health among students as evidenced by (resting heart rate, lower blood pressure, HDL/LDL ratio, fitness level, or percentage of body fat) from ___ to ___ by the year 2000.

   Selected objectives for the goal of improving cardiovascular health: By the year 2000, (x%) of students:
   * will exercise briskly three times per week for 20 minutes
   * will cease smoking cigarettes
   * will continue not to smoke
   * will begin/maintain a diet which is only ___% fat
   * will begin/maintain a diet which is high carbohydrate, low fat, low salt, high fiber
   * will eat five servings of fruits and vegetables daily
   * will not eat high-caloric snacks between meals
   * will balance caloric intake with caloric expenditure
   * will lose two pounds a week until appropriate weight is attained
   * will be able to describe how to manage the various risk factors for cardiovascular disease
   * will not skip meals to lose weight
   * will not take diet pills to lose weight

4. **List potential objectives for improving cardiovascular health.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the chart *A Multidisciplinary Approach to Preventing Disease/Promoting Health.***
   * Underline the interventions that your school already has initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances your school should recognize in relation to the cardiovascular health of students.

7. **Identify initially by month the strategies or interventions that need to be implemented during the school year to improve the cardiovascular health of the students.**

Month	Intervention(s):
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to improve cardiovascular health. Place the group ideas for goals and objectives on the action planning form.

9. **Complete the action planning sheet for cardiovascular health by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the column marked "Strategies." For each strategy (intervention), ask what needs to be done in order to complete the intervention. Then decide who will be responsible for each activity and the date it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact the local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	Individual Responsible:

School Year 19___ - ___

Action Plan for _____

_____ **Priority Area**

Goal: _____

Objective(s): _____

_____

_____

_____

_____

_____

Strategies: What will facilitate attainment of the chosen goals of *Healthy People 2000*?	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

Chapter 6
Intentional Injury Prevention

Julia M. Haidet, Diane DeMuth Allensworth

Intentional injury in the form of physical abuse, homicide, suicide, and other forms of violence has become a serious threat to the health and well-being of Americans. The United States ranks first among industrialized nations in violent death rates, with at least 2.2 million people per year being victims of violent injury.[1] U.S. deaths resulting from the intentional use and unintentional misuse of firearms are greater in number than the combined total of the next 17 nations.[1] In addition, as many as one million children are victims of child abuse each year.[2] Violence has become so much a part of life in the inner cities that youth are becoming immune to its devastating effects. This "culture of violence" is a major contributor to the increase of homicide and overall violence.[3]

The school, described as a microcosm of society, is not exempt from the consequences of the violent and abusive behavior prevalent in today's society. A survey of 70 universities found schools and universities were the third most crisis-prone institutions.[4] This same survey revealed violent crime and accidents were the second and third most frequent crises occurring within schools. In 1987, nearly three million crimes, mostly against teenagers, occurred in schools or on school property. Approximately 465,000 of these crimes were violent acts, including 72,000 armed assaults or armed robberies.[5] Teenagers, in fact, are victims of violent crime at twice the rate of the general population.[6]

Suicide is second only to accidents as the leading cause of death among adolescents ages 15 to 19; suicides among this age group have tripled in the past 30 years.[7] The turmoil related to adolescent development is one of many factors associated with violent behavior and intentional injury. The confusion resulting from the rapid transition from childhood to adulthood, coupled with a host of developmental tasks, places adolescents at high risk for violence.[8] Spivak et al[8] also identified peer pressure and strong feelings of self-consciousness as additional contributing factors that place adolescents at high risk of experiencing violent behavior.

Dryfoos,[9] who completed a major study of adolescents at risk for delinquency, school drop-out, pregnancy, and substance abuse, identified the antecedents (Figure 6.1) and consequences (Figure 6.2) of delinquency. These variables, according to Dryfoos,[4] have not necessarily been proven to be causes of delinquency, but they are highly correlated with delinquency in repeated studies. Further, she noted the earlier antisocial behavior begins and the more frequent the occurrences, the more likely serious offenses will occur during adolescence.

Students At Risk

The following statistics illustrate the problem of violence and intentional injury among American youth:

Assault

* While at school or on a school bus during the past year, more than one-third of the students (34%) reported that someone threatened to hurt them and 16% reported being attacked.[6]
* More than six of every 10 students (63%) reported going to places during the past year that are known to be dangerous.[6]
* Nearly 15% of students reported carrying a knife to school during the past year.[6]
* One-third (33%) of students reported that they could get a handgun if they wanted one.[6]
* Nearly four of every 10 students (39%) reported involvement in at least one physical fight during the past year.[6]
* More than seven out of 10 students believed they should fight if someone hit them (78%) or hurt someone they cared about (72%).[6]

Rape

* It is estimated only 1% of date rapes are reported to authorities.[10]
* A recent report on date and acquaintance rape conducted among more than 6,100 students found 84% of the women knew their attackers and 57% of the rapes happened on dates.[10]
* Nearly one in five girls (18%) reported that during the past year, while outside of school, someone tried to force them to have sex.[6]

Suicide

* Approximately one-third of the students reported they have "seriously thought" about committing suicide and 14% reported having "actually tried" to commit suicide.[6]
* More than half the students (53%) reported they have known someone who tried to commit suicide.[6]
* Eight of 10 (80%) of all adolescents think about suicide at some time; 50% of these make some plan or seriously consider suicide as a means of solving their problems.[11]
* More than half the students (56%) report they would find it hard to tell a teacher or school counselor about a potentially suicidal friend.[6]

Homicide

* One-fifth of all deaths among U.S. teenagers in 1988 were the result of gunshot wounds.[12]
* The largest cause of all firearm-related deaths in 1988 was homicide.[12]
* Black males are at most risk for firearm-related deaths.[12]

Child Abuse

* It is estimated only one in five cases of child abuse ever gets reported.[13]
* Young adolescent parents are more prone to commit child abuse.[14]
* In 1990, approximately 2,508,000 children were victims of child abuse or neglect. This represents a 31% increase in reports between 1985 and 1990.[15]
* In 1986, an estimated 1,100 U.S. children died as a result of child maltreatment.[16]
* It is estimated that more than 820,000 children suffered from non-fatal injuries related to child maltreatment in 1986.[16]

Figure 6.1

Antecedents of Delinquency

Antecedent	Association with Delinquency
Demographic	
Age	**Early initiation
Sex	**Males
Race/ethnicity	Conflicting and incomplete data
Personal	
Expectations for education	**Low expectations, little commitment *Low participation in school activities
School grades	**Low achievement in early grades, poor verbal ability
Conduct, general behavior, misconduct	**Truancy, "acting out," early stealing, lying
Religiosity	**Low attendance at church
Peer influence	**Heavy influence, low resistance
Conformity-rebelliousness	**Nonconformity, independence
Involvement in other high-risk behaviors	**Early, heavy substance use
Psychological factors	**Hyperactivity, anxiety, aggressive behavior
Congenital defects	* Handicapping conditions
Family	
Household composition	* Inconsistent data
Income, poverty status	**Low socioeconomic status
Parent role	**Lack of bonding, repression, abuse, low communication
Parental practice of high-risk behavior	* Family history of criminality, violence, mental illness, alcoholism
Community	
Neighborhood quality	* Urban, high crime, high mobility
School quality	* Repressive environment * Tracking ability * Ineffective school management

* = Several sources agree factor is a major predictor.
** = Most sources agree factor is a major predictor.

Adapted from: Dryfoos JG. *Adolescents at Risk: Prevalence and Prevention*. New York, NY: Oxford Press; 1990.

Figure 6.2

Consequences of Delinquent Behavior

Behavior	Consequences	
	Short-term	Long-term
Conduct disorders, such as aggression and truancy	Anti-social behavior School behavior problem Psychiatric problems Heavy drinking Smoking More delinquency Suspension from school	Delinquency/arrests School failure Low occupational status Poor mental health Alcoholism Poor health Violence Poor marital adjustment Impaired offspring
Delinquency, such as index offenses (burglary, theft)	Early substance abuse Violence School dropout Involvement with judicial system Detention	Drug abuse Adult criminality Prison Marital instability Unemployment Out-of-wedlock parenting Low status job Low income Reliance on welfare

Adapted from Dryfoos JG. *Adolescents at Risk: Prevalence and Prevention*. New York, NY: Oxford Press; 1990:33.

Healthy People 2000: Creating Partnerships to Reduce Violent and Abusive Behavior

Of the 22 priority areas in *Healthy People 2000*, two directly address prevention of intentional injuries: Violent and Abusive Behavior and Mental Health and Mental Disorders. Of the 32 objectives in these two priority areas, 13 cannot be attained either directly or indirectly without the cooperation and participation of the nation's schools (Figure 6.3). These include reducing homicides (Objectives 7.1, 7.3), suicides and suicide attempts (Objectives 7.2, 7.8), child abuse (Objective 7.4), injury and assault (Objective 7.6), rape (Objective 7.7), fighting (Objective 7.9), carrying of weapons (Objective 7.10), mental disorders and stress (Objectives 6.3), and increasing the number of schools that teach non-violent conflict resolution skills (Objective 7.16).

A Focus on Prevention and Collaboration

Very few prevention programs specifically target violent behavior and intentional injury. Most intentional injury intervention efforts have focused on the criminal justice aspect in relation to violent behavior, which largely emphasizes punitive, post-offense measures in reaction to violent events.[8] This after-the-fact approach apparently has done little to prevent the problem of violence in this country. Law-and-order approaches also appear to be among the most popular within schools. However, tighter security measures and stricter rule enforcement may only displace the greater amount of criminal behavior and violence from the school to the community.[17] This is not to say such efforts at crime prevention are not necessary; on the contrary, such efforts are important, but probably best combined with school and community interventions that target the source of the problem as well as the effects.

Further, alcohol and other drug use is frequently associated with intentional injury as well as unintentional injury.[18] Therefore, strategies to reduce death and disability associated with intentional injury must also consider objectives related to the use and abuse of alcohol and other drugs.

Consistent Messages Through Multiple Channels

Comprehensive prevention efforts involve multiple strategies delivered through the collaborative efforts of schools, communities, families, and peers. The following are suggestions for providing consistent messages about intentional injury prevention through multiple channels. Figure 6.4 provides a summary of these suggestions.

Administrators. The effectiveness of any health promotion programming within the school requires the support and cooperation of the school's upper echelon -- the administration. First, administrators should emphasize the need for all students to achieve academic success. There should be a strong emphasis on acquiring basic skills, along with high teacher expectations for student achievement. Frequent review and assessment of progress along with remediation are required to assure students achieve academic success. A safe, orderly, and drug-free climate also is necessary before academic excellence goals can be achieved.[19]

In addition, school superintendents and principals need to take the initiative in developing policies related to intentional injury prevention and intervention, such as initiating a violence prevention program within a comprehensive K-12 health education curriculum. Further, specific policies need to be developed including 1) mandatory counseling for students exhibiting violent or aggressive behavior; 2) required classes on conflict mediation and stress management; and 3) banning graffiti, gang symbols, and the carrying of weapons to school.

The organization of a multidisciplinary school health work team that addresses violence prevention could aid the administration in the development and implementation of board-adopted policies. Work team members can include outside agency personnel, experts from nearby institutions of higher learning, and professionals within the school and community who have experience with issues relating to prevention and intervention of intentional injury.

Administrators also can promote the establishment of a student assistance program (SAP) within the school. A SAP is a cooperative venture between the school and community that addresses a variety of behaviors and factors associated with intentional injury, including substance use and abuse, delinquency, suicidal behavior, and other health concerns. SAPs provide a range of services and can assist students via individual assessment and counseling, crisis intervention, support groups, and referral and follow-up.[20]

Instruction. In addition to recognizing signs of physical abuse among students, teachers also must recognize suicidal behavior, violent and aggressive behavior, and behavior indicative of mental and emotional problems. School personnel have a legal responsibility to report suspected incidences of child abuse, but they also have a moral responsibility to refer students who exhibit problem behaviors to appropriate personnel. To this end, inservice workshops are needed that focus on child abuse, children of alcoholics and substance abusers, conflict mediation, suicide prevention, and other related issues.

Teachers can play an important role in preventing intentional injury among students by providing life skills training and sequential health instruction that includes such topics as stress and anger management, conflict resolution, suicide, and child abuse. Specific instructional programs to reduce violence and intentional injury have been developed, including *Aggressors, Victims, and Bystanders: Middle School Violence Prevention Curriculum,*[21] *The Friendly Classroom for a Small Planet,*[22] *Manual on Nonviolence and Children,*[23] and *Kids and Guns: A Deadly Education.*[24]

Emotional health issues can be integrated into the curriculum of most academic areas. The following are just a few examples. Students in art class can construct masks depicting various emotions or research the role of art therapy in the management of emotional disorders. Students in English class can prepare reports on the effects of gang violence or create pamphlets on stress management techniques. Math students can construct pie-graphs of personal stressors or calculate their stressful life events' score from a standard scale. Social studies students can research legislation and social policy regarding the management of violent behavior or identify cross-cultural perspectives on stress management. Science students can identify the chemical effects of stressful life events on both a short-term and long-term basis or conduct biofeedback experiments.[25]

Educators need to be aware of the relationship between school failure and delinquency. Educational programs for delinquent youth need to emphasize:

* establishing a personal relationship with a caring adult who fosters the youth's positive self-esteem and academic achievement.
* providing vocational preparation and practical work experience to assist youth in achieving their employment potential.[19]

Health Services. School health personnel can discuss emotional health issues with students who voluntarily visit the clinic or are referred for medical concerns. School nurses, nurse practitioners, and physicians can display literature on suicide, physical abuse, substance abuse, and emotional health. School health personnel also can conduct stress appraisal screenings and stress management follow-up activities for faculty, staff, and students.

In addition, school health personnel are in a unique position to identify youth at high risk of intentional injury. Screening youth for a history of problems such as violence, substance abuse, depression, and other mental disorders can lead to identification of youth who may be helped by referral and earlier intervention from mental health and other related services. Appropriate referral and intervention services also must be developed and made available for students who need them.

Health Counseling. Perhaps one of the most important roles of school guidance counselors, social workers, and psychologists regarding intentional injury prevention

Figure 6.3

Healthy People 2000 Objectives: Intentional Injury Prevention

Violent and Abusive Behavior

7.1 Reduce homicides to no more than 7.2 per 100,000 people. (Age-adjusted baseline: 8.5 per 100,000 in 1987.)

7.2 Reduce suicides to no more than 10.5 per 100,000 people. (Age-adjusted baseline: 11.7 per 100,000 in 1987.)

Special Population Targets
Suicides per 100,000 among youth ages 15-19
1987 Baseline: 10.3
2000 Target: 8.2

7.3 Reduce weapon-related violent deaths to no more than 12.6 per 100,000 people from major causes. (Age-adjusted baseline: 12.9 per 100,000 by firearms; 1.9 per 100,000 by knives in 1987.)

7.4 Reverse to less than 25.2 per 1,000 children the rising incidence of maltreatment of children younger than age 18. (Baseline: 25.2 per 1,000 in 1986.)

Type-Specific Targets

Types of Maltreatment per 1,000	1986 Baseline	2000 Target
Physical abuse	5.7	<5.7
Sexual abuse	2.5	<2.5
Emotional abuse	3.4	<3.4
Neglect	15.9	<15.9

7.6 Reduce assault injuries among people ages 12 and older to no more than 10 per 1,000 people. (Baseline: 11.1 per 1,000 in 1986.)

7.7 Reduce rape and attempted rape of women ages 12 and older to no more than 108 per 100,000 women. (Baseline: 120 per 100,000 in 1986.)

7.8 Reduce by 15% the incidence of injurious suicide attempts among adolescents ages 14 through 17. (Baseline data available in 1991.)

7.9 Reduce by 20% the incidence of physical fighting among adolescents ages 14 through 17. (Baseline data available in 1991.)

7.10 Reduce by 20% the incidence of weapon-carrying by adolescents ages 14 through 17. (Baseline data available in 1991.)

7.16 Increase to at least 50% the proportion of elementary and secondary schools that teach non-violent conflict resolution skills, preferably as a part of quality school health education. (Baseline data available in 1991.)

continued on next page

Figure 6.3, continued

Healthy People 2000 Objectives: Intentional Injury Prevention

Mental Health and Mental Disorders

6.1 Reduce suicides to no more than 10.5 per 100,000 people. (Age-adjusted baseline: 11.7 per 100,000 in 1987.)

Special Population Targets
Suicides per 100,000 among youth ages 15-19
1987 Baseline: 10.3
2000 Target: 8.2

6.2 Reduce by 15% the incidence of injurious suicide attempts among adolescents ages 14 through 17. (Baseline data available in 1991.)

6.3 Reduce to less than 10% the prevalence of mental disorders among children and adolescents. (Baseline: An estimated 12% among youth younger than age 18 in 1989.)

among children and youth is to ensure appropriate referral of students needing counseling or treatment. Adolescent emotional disorders need to be addressed to prevent potential violent behavior, such as suicide, aggressive behavior, vandalism, or homicide. Student assistance programs can address the social and emotional needs of youth along with issues surrounding the abuse of alcohol and other drugs.

The guidance program needs to intervene early in helping school staff recognize and report child abuse. There is a relationship between child abuse and neglect and delinquency. Although most abused children do not become delinquent, research findings suggest delinquents who were abused and neglected are involved in violent offenses more frequently than those who were not.[20] Moreover, more than two-thirds of juveniles arrested for violent delinquent acts report a history of abuse or neglect.[26] Abused and neglected children are not likely to learn appropriate coping skills, and they are also more likely to perpetuate the abuse cycle. Nearly one-third of abused children who receive no help will grow up to become an abusive parent or spouse.[26]

As part of the guidance program, counselors, psychologists, and social workers need to teach social skills, conflict resolution, non-violent problem-solving, peer conflict management, and skills promoting racial harmony and respect for all socioeconomic levels. School-based counseling personnel also can provide stress management, substance abuse prevention, and suicide prevention programming. Counseling personnel can organize or promote the use of a crisis hotline for students, utilizing trained student peer instructors, community volunteers, and community agency personnel to staff the hotline. Studies have shown most adolescent suicide attempts are "impulsive, precipitated by a crisis, and accompanied by serious ambivalence in the wish to die."[20] A hotline could provide an immediate response to a crisis situation. Moreover, a crisis management program should be developed to manage a tragedy and minimize the consequences to other students. Confusion, inaction, and possible harm to other students can result if no plan has been established.

Physical Education. In a country that emphasizes winning at all costs and glorifies violence and aggression, it is not surprising that there is a virtual "epidemic of violence in sports today."[27] Physical educators and coaches have a unique opportunity to foster positive attitudes and behaviors in relation to sports activities. The ERIC Clearinghouse on Teacher Education publication titled *Violence in Sports*[29] suggested physical educators and coaches emphasize enjoyment and skill development over winning, stress participation, present positive role models, solicit parental involvement, and promote realistic expectations for performance. Physical educators and coaches must be careful when providing feedback and reinforcement not to reinforce unnecessary aggressive and violent behavior. A physical fitness plan that has stress management as an objective can be created and implemented. In addition, sequential instruction on managing stress and violent behavior should be part of the physical education curriculum. Students exhibiting violent, aggressive, or suicidal behaviors, and students seeking help for emotional problems or physical abuse should be referred for appropriate intervention programs or counseling.

Health Promotion Programming for Faculty and Staff. According to *Healthy People*, health promotion includes those initiatives which begin "...with people who

are basically healthy and seeks to develop community and individual measures.." to maintain and enhance that health.[30] One of the many benefits of such health promotion activities is the potential to reduce risk of intentional injury. For example, health promotion programming via employee assistance programs can provide counseling for substance abuse problems, stress, and other factors that increase one's risk for becoming the victim of an intentional injury.

Faculty, staff, and students can benefit from worksite health promotion programming relative to intentional injury. Faculty and staff receive the benefits of stress management and counseling, while students benefit indirectly because they are provided with positive role models. By participating in employee assistance programming, faculty and staff place a high priority on health promotion.

Peers. Peer relationships are very powerful in the lives of adolescents. It is through these peer relationships that "children directly learn attitudes, values, and skills through peer modeling and reinforcement."[31] Peers can become directly involved in reducing death and disability due to intentional injury by becoming peer mediators, and joining or organizing a SADD chapter or Operation Prom/ Graduation initiative to promote abstinence from alcohol and other drugs. With proper training, peers also can participate in the organization and operation of a crisis hotline or crisis center. Further, students can encourage friends to seek help and can serve as positive role models for other students by modeling stress management techniques, refusing to carry a weapon, and resolving conflict through mediation.

Community. Community members can form coalitions or task forces designed to combat intentional injury and violence. An excellent example of this type of community coalition is described in *Rising Above Gangs and Violence*, a U.S. Dept. of Justice publication.[32] A detailed description of a community reclamation project is provided with practical tips on organization and implementation of the community initiative. The publication emphasizes the importance of integrating all community components such as schools, churches, businesses, and law enforcement.

Community members also can use local celebrities and sports stars to give public service announcements on emotional health issues, suicide prevention, stress management, and conflict resolution. The media can promote community programming on intentional injury and violence prevention issues. Further, specially trained community members can volunteer to staff crisis hotlines or crisis centers. A broad coalition can advocate handgun control and storage laws, suicide crisis centers, safe off-street play areas for children and youth, organized recreation, reduced television violence,[16] increased public awareness of the relationship between child abuse and delinquency, family skills training, and sexuality and child abuse prevention education.[33]

Parents. Because violence in the home has been associated with adolescent violent behavior,[34,35] parents who frequently exhibit such behavior need to know the impact this behavior has on their children. Marriage or family counseling, along with parenting classes, may be beneficial for parents and families who have trouble communicating in a non-violent manner.

Further, evidence supports the association between observed violence on television and violent behavior in children and youth.[36-38] However, studies have shown children can also learn non-violent strategies for managing conflict from television.[36,39] Parents, therefore, may have a profound impact on their children's behavior by simply monitoring their children's television viewing. Parents also can discuss with their children violent behavior observed on television and communicate possible alternative solutions to conflicts.

Parents also should learn the signs of suicidal behavior to take action if their children display such behavior. Depressive and suicidal behavior are often dismissed as signs of a passing adolescent phase and are ignored until it is too late.

Summary

The Children's Defense Fund[40] calls for a blueprint for action to help children and youth avoid such self-defeating behaviors as substance abuse, crime, and violence. Suggestions include:

* Education and strong basic skills including the chance to experience academic success.
* A range of non-academic opportunities for success in recreational, social, and community service programs.
* Links to caring adults who provide positive role models and support for the belief that there is a successful future awaiting.
* Family life education and life options planning that assist youth in taking responsibility.
* Access to comprehensive health services that are responsive to the physical and psychological needs of youth.
* A basic standard of living for all teens and their families, including adequate nutrition, housing, services to meet special needs, and access to jobs.

Death and injury related to violent and intentional behavior have become serious problems in the United States, and it will take more than one curriculum or one lesson presented in one health class to begin to solve them. Violence is a problem caused by multiple factors. A combined effort on the part of teachers, schools, parents, and communities is necessary to provide a more comprehensive and preventive approach to stemming the tide of violence.

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Figure 6.4

A Multidisciplinary Approach to Intentional Injury Prevention

	Total School Environment *Superintendents, Principals, School Boards*	**Classroom Instruction** *Elementary and Secondary Teachers, Health Educators*	**Physical Education** *Content Specialists, Coaches, Trainers*	**Health Services** *Nurses, Nurse Practitioners, Physicians*
Policy	**Develop, review** policies (eg. ban on weapons, graffiti or other gang symbols), classes on conflict mediation, mandatory counseling for aggressive students, crisis management. **Establish** interagency network of law, health, social services agencies.	**Facilitate** understanding of school policies.	**Facilitate** understanding of school policies. **Enforce** policy for athletes strictly.	**Facilitate** understanding of school policies.
Environmental Change	**Enforce** policies on drug-free environment. **Open** school for latchkey children and evening recreation program. **Promote** graffiti paint-outs to improve school/community appearance.	**Use** bulletin boards to deliver information on stress management, resources available for mental health concerns, suicide prevention. **Use** teachable moments to reinforce intentional injury prevention messages, conflict resolution.	**Assess** safety of playground equipment and advocate for adjustments as necessary. **Provide** breakaway bases for softball.	**Coordinate** referral networks between school and community. **Participate** in providing a student assistance program.
Media Utilization	**Communicate** to staff, students, and parents school policy regarding the prevention of intentional injury. **Promote** use of bulletin boards, display cases, and homeroom news to increase awareness about factors related to intentional injury.	**Display** books in library on suicide prevention, conflict resolution, physical abuse, and emotional health. **Organize** student theater, film festival, school newspaper, bulletin boards to deliver information on stress management, community mental health resources.	**Display** information on community resources, conflict mediation, stress management.	**Distribute** a listing of community agencies providing counseling, suicide prevention, and physical abuse and substance abuse services. **Provide** literature on suicide, physical abuse, substance abuse, and emotional health.
Direct Intervention	**Identify** in student handbooks options available in school and community for suicide/violent behavior prevention. **Enhance** early schooling to prevent school failure. **Assess** school's psychological climate, security, and racial harmony.	**Refer** to intervention programs high-risk students exhibiting suicidal or violent and aggressive behaviors and those with apparent emotional problems. **Report** child abuse. **Institute** mentoring and tutorial program for those at risk of academic failure.	**Refer** high-risk students exhibiting suicidal or violent and aggressive behaviors to intervention programs. **Implement** a physical fitness program with stress management as an objective. **Report** child abuse.	**Initiate, conduct, support** stress appraisal screenings and stress management follow-up activities. **Serve** as resource person to students and staff. **Report** child abuse.
Role Modeling/ Social Support	**Support** peer intervention programs, eg, Operation Prom/ Graduation, SADD. **Promote** initiation of conflict mediation program.	**Model** empathy and support for those individuals in counseling for mental/emotional health problems. **Encourage** theater groups to perform skits and plays with suicide/child abuse prevention and mental health themes during lunch.	**Model** empathy and support for those individuals in counseling for mental/emotional health problems. **Utilize** teen athletes as teachers and role models for elementary school students.	**Model** empathy and support for those individuals in counseling for mental/emotional health problems.
Instruction	**Initiate** inservice programs for faculty/staff on recognition of suicidal behavior, child abuse, and intervention and referral processes. **Initiate** inservice programs for violent and aggressive behavior interventions. **Promote** effective parenting programs. **Identify** one week as Suicide/ Violence Prevention Week. **Involve** all areas of instruction and student service areas in initiative.	**Implement** emotional health instruction, including conflict resolution, stress management, and social competence skills into K-12 health curriculum. **Integrate** emotional health issues into curriculum of most academic areas. **Develop** instructional strategies which utilize parental involvement and peer instruction.	**Implement** sequential instruction on managing stress and violent behavior through physical exercise. **Promote** development of skills through various relaxation techniques.	**Cooperate** with teachers and counselors in the development of an information exchange between school/community. **Coordinate** supplemental schoolsite health promotion activities to reduce stress and violent behavior. **Initiate, conduct** support groups for high-risk students.

Figure 6.4, cont.

A Multidisciplinary Approach to Intentional Injury Prevention				
	Peers	**Counseling and Guidance** *Counselors, Psychologists, Social Workers*	**Worksite Health Promotion** *Director, Faculty*	**School Community Integration** *Parents, Professionals Within Community*
Policy	Comply with all policies.	**Facilitate** understanding of school policies.	Comply with all policies.	**Aid** in the development of school board policy. **Advocate** to suspend license of all DWI offenders, to increase sales tax on alcohol and use revenues for educational programming, to enforce minimum age for purchasing alcohol, and to restrict access to guns.
Environmental Change	**Participate** in Operation Prom/ Graduation, SADD, crisis hotline, or crisis center. **Advocate** legislation requiring tighter gun control laws.	**Implement** a student assistance program. **Implement** program for students exhibiting violent or aggressive behavior. **Implement** a conflict mediation program.	**Establish** an employee assistance program.	**Participate** in Operation Prom/ Graduation events. **Promote** drug-free zones, safe homes, graffiti removal programs, sports and recreation programs, vocational training programs, tutorial programs.
Media Utilization	**Participate** in theater troupes, musicals, and interactive presentations dealing with such topics as suicide prevention, physical abuse, violence, conflict resolution, and stress management. **Construct** articles for the school newspaper, table tents, posters on issues surrounding intentional injury.	**Distribute** a listing of community agencies providing counseling, suicide prevention, physical abuse, and substance abuse services. **Provide** literature on suicide, physical abuse, substance abuse, and emotional health.	**Distribute** information on emotional health issues, stress management, suicide prevention, etc., via pay envelope stuffers.	**Solicit** local celebrities to give PSAs relative to emotional health issues. **Advocate** to eliminate violence in television programming.
Direct Intervention	**Encourage** friends who need assistance to self-refer. **Encourage** friends to use conflict mediation to solve differences.	**Initiate, conduct** stress appraisal screenings and stress management follow-up. **Organize, promote** the use of a crisis hotline. **Assess** students referred for problematic behaviors. **Report** child abuse.	**Conduct** stress management screenings and institute appropriate stress management follow-up activities.	**Facilitate** positive family relationships, involvement, and attachment. **Participate** if needed in Family Skills Training.
Role Modeling/ Social Support	**Model** stress management/ relaxation techniques and assertiveness skills. **Model** abstinence in regard to nicotine, steroids, alcohol, and other illegal drugs.	**Model** empathy and support for those individuals in counseling for mental/emotional health problems.	**Become** role models in the use of stress-management techniques. **Model** support for those individuals in counseling for mental/emotional health problems.	**Model** stress management/ relaxation techniques and assertive behavior. **Provide** youth more time with caring, competent, supportive adults. **Model** abstinence from tobacco and illegal drugs.
Instruction	**Assist** in organizing special events that promote the prevention of intentional injury.	**Initiate** within guidance program focus on emotional health issues, conflict resolution, anger management, stress management. **Conduct** support programs for victims of physical and sexual abuse, crime, and violence. **Develop** peer instruction and counseling programs targeting specific subpopulations. **Promote** skill development of various relaxation techniques.	**Provide** instruction in the variety of techniques used for stress management, relaxation, time management, social engineering, etc.	**Organize** parental education programs at social and religious organizations.

Intentional Injury Prevention

Action Plan Development

Team members should complete questions 1 through 7 individually. The team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behavior in regard to intentional injury.**

2. **Review the Healthy People 2000 objectives in regard to intentional injuries.**

3. **Read suggested goals and objectives.**

   Suggested Goal: Reduce intentional injuries from ___ to ___ by the year 2000.

   Selected Objectives: By the year 2000, (x%) of students:
   * will participate in conflict mediation
   * will use problem solving process
   * will practice stress management techniques

4. **List potential goals and objectives for reducing intentional injury in your school.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the charts *A Multidisciplinary Approach to Intentional Injury Prevention.***
   * Underline the interventions that your school has already initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances your school should recognize in relation to intentional injury prevention.

7. **Identify initially by month the strategies or interventions that need to be implemented during the school year to prevent intentional injuries.**

Month	**Intervention(s):**
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to prevent intentional injury. Place the group ideas for goals and objectives on the action planning form.

9. **Complete the action planning sheet for intentional injury prevention by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the "Strategies" column. For each strategy (intervention), ask what needs to be done to complete the intervention. Then decide who will be responsible for each activity and the date by when it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	**Individual Responsible:**

School Year 19 ___ -___
Action Plan for _____
_____ Priority Area

Goal: _____
Objective(s): _____
_____
_____
_____
_____
_____

Strategies: What will facilitate attainment of the chosen goals for *Healthy People 2000?*	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

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Chapter 7
Unintentional Injury Prevention

Diane DeMuth Allensworth, Julia M. Haidet

Unintentional injury is the leading cause of death and disability among youth ages 5-24.[1] In 1988, more than 22,400 children under age 19 died as a result of injury; many more suffered lifelong disabilities that generate serious problems due to lost productivity and continuing medical costs. The direct and immediate health care costs of non-fatal injuries were estimated at $5.1 billion annually (in 1987 dollars).[2] Further, the total lifetime costs of all unintentional injuries were estimated in 1985 at an excess of $158 billion.[3]

Former Surgeon General C. Everett Koop has said, "If a disease were killing our children in the proportions that injuries are, people would be outraged and demand that the killer be stopped."[2] The leading cause of death due to injury is vehicular accidents involving automobiles, motorcycles, mopeds, snowmobiles, and all-terrain vehicles. Other causes of death include pedestrian accidents, drowning, unintentional discharge of firearms, poisonings, bicycle accidents, fires/burns, and falls (Figure 7.1). The magnitude of death due to injury is shocking, but this is only a fraction of the total picture. A study in Massachusetts compared injury deaths with emergency treatment for intentional and unintentional injury. It was estimated that for each death, there were 42 individuals hospitalized and 1,120 emergency room visits.[2]

Youth and the elderly are more likely than the general population to be victims of unintentional injury.[3] Although some risk-taking behavior is necessary for normal adolescent development and successful completion of developmental tasks, a greater degree of such behavior increases one's risk for unintentional injury. Certain characteristics of adolescent development and behavior put them at high risk for accidental injury. Jessor and Jessor[4] have described problem-behavior theory linking the interaction of the adolescent's environment, personality, and other behaviors with susceptibility of engaging in certain deviant behaviors. Other researchers[5,6] include the interactions of peers and family with the onset of risk-taking behavior in adolescents.

According to Irwin and Millstein,[7] changes in adoles-

Figure 7.1

Injury Mortality Rates

Mortality Rates per 100,000 Population by Injury Type and Age Group, 1988.

	Age Group		
Category of Injury	**5-9**	**10-14**	**15-19**
All injury deaths	12.8	16.1	70.5
Motor vehicle occupant	2.2	3.3	23.8
Homicide	1.0	1.7	11.7
Other motor vehicle	0.6	1.3	10.5
Suicide	NA	1.4	11.3
Drowning	1.6	1.4	2.7
Motor vehicle/pedestrian	2.9	1.8	2.2
Fire/burns	1.6	0.8	0.7
Unintentional firearms	0.3	1.1	1.5
Motor vehicle/bicycle	0.8	1.1	0.7
Poisoning	0.1	0.2	1.0
Falls	0.1	0.2	0.6

Adapted from Children's Safety Network. *A Data Book of Child and Adolescent Injury*. Washington, DC: National Center for Education, Maternal and Child Health;1991:68.

cent cognitive functioning often lead to feelings of invulnerability to harm, which can have negative consequences. Moreover, the adolescent's "inexperienced cognition," or lack of real world experiences related to cause-and-effect relationships, may hinder the adolescent's ability to even conceptualize possible negative outcomes resulting from risk-taking actions. Additional biosocial and environmental factors also are associated with accidental injury (Figure 7.2).

Further, in America, risk-taking behavior is basically desirable[8] and is glorified in the movies, on television, and in advertising. Alcohol and other drug use is associated frequently with unintentional injury, just as it is with intentional injury.[8] Many factors that cause unintentional injuries also are related to violent and abusive behaviors. Therefore, strategies to reduce death and disability associated with accidental injuries also must consider objectives related to the prevention of alcohol and other drug abuse as well as intentional injuries.

Students At Risk

A cursory review of statistics profiles the unique risk of adolescents for unintentional injury:

* Only four of 10 (41%) students reported wearing a seatbelt the last time they rode in a car, truck, or van.[9]
* Only 35% of students reported they usually cross at the corner when they need to cross a busy street.[9]
* Of those students who reported riding a bicycle, 92% indicate they never wear a helmet.[9]
* Nearly four of 10 students (39%) reported during the past month they rode with a driver who had used drugs or had been drinking before driving.[9]
* More than one-quarter of students (27%) reported taking medicine prescribed for someone else during the past year.[9]
* Twenty-one percent of students reported an absence of smoke detectors at home.[9]
* Of those students who play sports or exercise outside of school, only 32% reported they always warm up before exercise.[9]
* Eighteen percent of students reported they dove into water of unknown depth.[9]
* Vehicle-related (motor and non-motor vehicle) accidents account for almost three-quarters of accidental deaths among persons ages 10-19.[10]
* Approximately half the motor vehicle crash fatalities among adolescents are related to alcohol.[10]

Healthy People 2000

Unintentional injury is one of the 22 priority areas of *Healthy People 2000*. Six objectives can be directly or indirectly influenced by the school health program: reduc-

Figure 7.2

Principal Factors in Vehicular Accidents

Biosocial	Environmental
Predisposing Factors	***Predisposing Factors***
Unawareness of risk	Use of two-wheeled vehicles
Need to explore	No body protection
Poor role models	Increased advertising of dangerous vehicles
Use of vehicle to increase self-esteem	Inadequate age-specific driving regulations
Gender	Transportation to school or work
	Lack of public transportation
Precipitating Factors	***Precipitating Factors***
Psychoendocrinological changes	Social pressure
Lack of experience/knowledge	Use of poorly maintained vehicles
Substance abuse	Special traffic conditions

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ing deaths caused by motor vehicle crashes among children and youth (Objective 9.3); increasing use of occupant protection systems (Objective 9.12) and use of helmets by all cyclists (Objective 9.13); requiring head, face, eye, and mouth protection for sporting and recreation events that pose injury risks (Objective 9.19); providing academic instruction on injury prevention and control (Objective 9.18); and increasing to at least 50% the proportion of primary care providers who routinely provide age-appropriate counseling on safety precautions to prevent unintentional injury (Objective 9.21).

Consistent Messages Through Multiple Channels

Since multiple interventions are more effective than singular interventions, a coordinated effort by school staff, parents, community agency personnel, and students is needed to reduce the number of accidents children and youth experience (Figure 7.4).

Administrators. School boards and administrators need to develop policies for the prevention and intervention of unintentional injuries. To this end, a school health work team should oversee the development and implementation of board-adopted policies. The legal agents representing the school district need to serve as role models by emphasizing injury prevention. Administrators should develop a written, detailed safety manual that includes policies requiring safety instruction, accident reporting using a standard accident report form, and training of faculty and staff in disaster preparedness. The manual also should include policies requiring the establishment and implementation of fire and tornado drills, as well as bus and building evacuations, school safety inspections, traffic control, bus transportation, and security.[11] Administrators also should highly recommend, if not require, the certification of faculty and staff in first aid and cardiopulmonary resuscitation.

Planned safety inspections of buildings, grounds, and equipment can identify, eliminate, or reduce hazards. Equipment in science labs and industrial arts rooms must adhere to standards established by the Occupational Safety and Health Administration (OSHA). State and local fire and building codes must be observed. Further, administrators need to ensure a safe playground environment by having periodic playground inspections and by making necessary improvements. This is particularly critical at the elementary level as nearly 100,000 children under age 10 annually require treatment in the emergency room for playground injuries.[11] The Consumer Product Safety Commission (CPSC) has developed guidelines for creating a safe playground in *A Handbook for Public Playground Safety Volume 1: General Guidelines for New and Existing Playgrounds*.[12]

The safety education module within the comprehensive school health curriculum should include elements pertaining specifically to unintentional injuries and lessons on substance abuse, which is considered a high-risk factor for accidental injuries. Because many unintentional injuries among adolescents are related to using alcohol and other drugs, the recommendations for substance abuse prevention would be applicable to injury prevention and should be considered when planning interventions.

Instruction. Educators can contribute to safety promotion by assuring sequential safety education instruction in the health curriculum in grades K-12, by providing safety and first aid skills training to students, and by integrating safety education and unintentional injury prevention into the curriculum of various academic areas. There are countless ways of infusing safety lessons into the various academic areas. English teachers can assign reports on safety topics, health educators can provide instruction on cardiopulmonary resuscitation and the Heimlich maneuver, and art teachers can have students create posters endorsing seat belt use. Mathematics teachers can have students calculate, for example, the force of impact on an individual thrown from a car traveling 55 miles per hour, and science teachers can have students evaluate potential hazards in the science laboratory.[1]

According to Bever,[11] teachers represent the front line of the school safety program. In addition to having responsibility for instruction in safety and accident prevention, they are frequently the first responders in case of an accident, and they often are first to recognize a potential hazard within the building. By alerting administration and maintenance, potential accidents can be averted.

Although education and persuasion are less effective in preventing unintentional injury than laws, regulations, and automatic protection (airbags in cars, helmets for football players, mouthguards for those engaging in contact sports, etc.), programs combining education and incentives (distributing free or discounted bicycle helmets along with community-wide education programs to promote helmet use) have been effective.[10]

Ideally, interdisciplinary efforts would be coordinated and would focus on a specific initiative. Particularly effective in reducing injury and death have been campaigns which target a reduction in child-pedestrian injuries through reducing dart-out behavior, increasing motorcycle and bicycle helmet use, and increasing use of seat belts. Examples include:

1) Willie Whistle campaign to reduce dart-out injuries to pedestrians under age 12. The initiative achieved a 12% reduction in such injuries.[13]
2) A campaign using a film titled *And Keep on Looking* achieved a 20% reduction in child pedestrian injuries.[14]
3) An initiative to increase use of bicycle helmets in Australia reduced head injuries to bicyclists by 20%.[15]
4) A community-wide education campaign in Seattle increased parental awareness, reduced financial barriers to purchase helmets, distributed educational materials through physicians and other community agencies, enlisted the media to provide public service announcements, and provided instruction to elementary school children. This campaign increased helmet

Figure 7.2

Healthy People 2000: Unintentional Injuries

9.3 Reduce deaths caused by motor vehicle crashes to no more than 1.9 per 100 million vehicle miles traveled and 16.8 per 100,000 people. (Age-adjusted baseline: 2.4 per 100 million vehicle miles traveled (VMT) and 18.8 per 100,000 people in 1987.)

Special Population Targets

Deaths caused by motor vehicle accidents (per 100,000)	1987 Baseline	2000 Target
Children age 14 and younger	6.2	5.5
Youth ages 15-24	36.9	33

9.5 Reduce drowning deaths to no more than 1.3 per 100,000 people. (Age-adjusted baseline: 2.1 per 100,000 in 1987.)

9.12 Increase use of occupant protection systems, such as safety belts, inflatable safety restraints, and child safety seats, to at least 85% of motor vehicle occupants. (Baseline: 42% in 1988.)

9.13 Increase use of helmets to at least 80% of motorcyclists and at least 50% of bicyclists. (Baseline: 60% of motorcyclists in 1988 and an estimated 8% of bicyclists in 1984.)

9.18 Provide academic instruction on injury prevention and control, preferably as part of quality school health education, in at least 50% of public school systems (grades K-12). (Baseline data available in 1991.)

9.19 Extend requirements of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury. (Baseline: Only National Collegiate Athletic Association football, hockey, and lacrosse; high school football; amateur boxing; and amateur ice hockey in 1988.)

use by 10% over the 16-month campaign.[16]

5) A program which randomly paid cash incentives to adolescents who increased voluntary use of safety belts increased such use by 19-23%.[17]

Health Services. School health service personnel are in a unique position to coordinate an accidental injury reporting and recording system. At a minimum, an annual report of all accidents and measures to prevent a reoccurrence should be provided to the administration. The value of accident reporting is:

* obtaining data on the cause of accidents to be used in planning curriculum,[18]
* identifying physical, environmental hazards for the purpose of modifying construction, use, and maintenance of facilities and supplies,[18]
* noting underlying causes and circumstances of accidents,[18]
* evaluating the safety program,[18]
* supplying information for parental, pupil, and teacher action,[18] and
* protecting the school from liability suits.[11]

Florio et al[19] and other authorities define a reportable accident as any accident that results in: pupil injury severe enough to cause the loss of one-half day or more of school time, pupil injury severe enough to cause the loss of one-half day or more of pupil activity during non-school time, and any property damage as a result of a school jurisdictional accident.

School nurses and physicians also have an opportunity to teach students about safety practices via educational programming and discussions with students who visit them for health care needs. Moreover, school health personnel, due to their training and background, can teach classes on first aid procedures. School health personnel also can serve

as the link between community services and school-based injury prevention efforts.

Further, health services personnel are critical links in the communication of disabilities that might place students at risk for an accident. Teachers need to be notified of prior histories of allergic reactions, diabetes, epilepsy, or any disability that might require a modification of activities. For example, a child with cerebral palsy or muscular dystrophy might need special assistance when using some school equipment, or an adapted physical education program might be necessary to assure safe performance of fitness activities.[11]

Health Counseling. Besides providing programming to prevent substance abuse, which is a risk factor for accidental injury, school-based counseling personnel can incorporate programming on stress management, smoking cessation, and other high-risk behaviors that contribute to accident risk. Counseling personnel can provide programming that teaches children emergency telephone call techniques and personal safety. Counselors also may be involved with the development and implementation of specific safety programs for latchkey children.

Physical Education. There is an obvious risk of injury associated with participation in sports activities. Available data concerning sports-related injuries has revealed "most drownings, a large number of firearm fatalities, 10% of brain injuries, 7% of spinal cord injuries, and 13% of facial injuries treated in hospitals are related to sports."[20] The same report documents that proper training of coaches and trainers in injury prevention and management can influence the incidence and severity of injury.[20]

Physical educators, coaches, and athletic trainers can provide students with information on safety procedures related to athletic activities. They also can describe safety rules for specific sports activities, evaluate the value of using protective gear, such as helmets and mouth guards during contact sports, and identify common accidents related to sports and various means of minimizing the related risks.

School Food Service. At a minimum, the food service director should provide displays and table tents on how to save a choking victim. For students assisting in the cafeteria, safety instructions on handling equipment need to be repeated periodically.

Health Promotion Programming for Faculty and Staff. Health promotion, those initiatives which maintain and enhance health,[21] is beneficial for a number of financial and non-financial reasons. Faculty and staff health promotion programming via employee assistance programs can provide counseling for substance abuse problems, stress, and other factors that increase the risk of unintentional injury. Health promotion programs, moreover, have been demonstrated to reduce health insurance premiums, absenteeism, and the frequency of accidents.[22]

Faculty, staff, and students can benefit from worksite health promotion programming relative to safety education. Fewer accidents and injuries to the school staff translate into increased time-on-task and continuity for students. Perhaps even more important, faculty and staff can serve as positive role models for students by promoting the practice of first aid skills training and safety education. Furthermore, students who suffer from illness or injury while at school or school functions may benefit directly from first aid skills learned by faculty and staff members.

Peers. Programs that focus on reducing alcohol and other drug abuse are perhaps the most important peer-based initiative with regard to preventing unintentional injuries. Alcohol is involved in more than half the motor vehicle crash fatalities among adolescents,[10] and motor vehicle accidents are the leading cause of accidental death among 15-24 year-olds.[1]

Like faculty and staff, peers can serve as positive role models by helping to organize and by participating in classes on first aid skills training, cardiopulmonary resuscitation, and other safety courses. Peers also can serve as role models by abstaining from nicotine, alcohol, and other drugs, and by always wearing seat belts, bicycle helmets, and other safety gear.

Integration of School and Community Programming. Community members can form a safety task force or committee to assess, plan, implement, and evaluate safety education programming within the community. Task force members may include individuals representing health, education, social services, judicial, recreation, and youth-serving agencies, as well as emergency medical service personnel such as paramedics and firefighters. Community members can not only organize successful programs, but professionals within the community also can become directly involved in safety education programs. Firefighters, for example, can discuss fire safety with school children, and medical professionals can teach poison control. Two pharmaceutical students at the University of Kentucky developed a highly successful poison control program for young children that involved puppets.[23] A coalition of school and community professionals also can advocate city ordinances and state laws that require fencing around swimming pools, smoke detectors in the home, automatic license suspension and jail sentence for first-time DWI offenders, and motorcycle and bicycle helmet laws.[2]

Parents. In general, parents must be included in health promotion programming. They can provide input on policy, intervene if they suspect their children of alcohol and other drug use, provide supportive environments for the adoption of health-enhancing behaviors, and provide instruction to children on hazards associated with related risk factors. Parents also can be positive role models relative to safety practices. For example, modeling appropriate behaviors such as seat belt use has been shown to have a positive effect on children's behavior.[24]

Summary

Automatic devices, legal mandates, and education are tools used to fight the thousands of needless deaths due to accidental injuries each year. Education may be the most

Figure 7.4

A Multidisciplinary Approach to Unintentional Injury Prevention

	Total School Environment *Superintendents, Principals, School Boards*	**Classroom Instruction** *Elementary and Secondary Teachers, Health Educators*	**Physical Education** *Content Specialists, Coaches, Trainers*	**Health Services** *Nurses, Nurse Practitioners, Physicians*
Policy	**Develop**, review policies for disaster/emergency procedures, accident reporting, safety precautions, playground safety, inspections of school grounds, providing certified first aid specialists, safety education, and security. **Initiate** multidisciplinary school health council to address injury prevention, management, and safety.	**Facilitate** understanding of school policies.	**Facilitate** understanding of school policies. **Enforce** policies for athletes and use of mouth guards for contact sports.	**Facilitate** understanding of school policies.
Environmental Change	**Enforce** policies to ensure a physically safe environment. **Open** school for after-school day care for latchkey children. **Establish** a school-based clinic capable of first aid. **Establish** drug-free school zones.	**Prominently** display books in the library promoting the prevention of unintentional injury. **Utilize** student assignments to find hazards in school and home to present to principal/parents.	**Prominently** display literature on safety procedures, first aid skills, and proper warm-up exercises. Use teachable moments to reinforce safety precautions and first aid skills.	**Coordinate** an accidental injury reporting system. **Analyze** data yearly, providing appropriate educational and environmental programming to reduce hazards and increase safety.
Media Utilization	**Communicate** to staff, students and parents school policy regarding injury prevention and management. **Promote** use of media to increase awareness about injury, prevention, and management.	**Organize** student theater, musical and video productions, school newspaper, bulletin boards, PA system to deliver safety and first aid messages.	**Publicize** a listing of emergency phone numbers in locker room, gym, office, etc. **Organize** students to develop and deliver via various media channels safety messages for playground and sporting activities.	**Distribute** a listing of emergency phone numbers (police, fire, poison control, etc.) to students, faculty, and staff. **Provide** pamphlets and fliers on safety procedures and first aid skills to faculty, students, staff, and parents.
Direct Intervention	**Support** and enforce safety programs.	**Assess** student involvement regarding safety precautions and knowledge of first aid skills; organize safety education and first aid skills training programs to provide needed skills.	**Reinforce** safety precautions and first aid skills.	**Maintain** a file of students with specific medical problems that increase risk of injury; notify teachers of problems and management. **Provide** first aid and emergency care for injured.
Role Modeling/ Social Support	**Promote** trained peer instructors in safety and first aid. **Promote** organization of Operation Prom/Graduation, SADD. **Model** use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices.	**Become** certified in first aid. **Model** use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices. **Organize** Operation Prom/ Graduation, SADD.	**Model** use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices. **Become** certified in first aid.	**Model** use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices.
Instruction	**Initiate** inservice programs for faculty and staff safety and first aid issues. **Promote** campaigns to reduce child pedestrian injuries, increase bicycle/motorcycle helmet use. **Identify** one week in school year as safety week. **Involve** all areas of instruction in initiative.	**Develop** and implement sequential safety education into K-12 health curriculum; solicit parental involvement and peer instruction. **Provide** first aid skills training. **Integrate** safety education and unintentional injury prevention into curriculum of most academic areas.	**Identify** common accidents for each sporting activity and discuss safety. **Teach** swimming and water safety.	**Relate** to faculty and staff advancements in safety precautions and first aid skills. **Coordinate** schoolsite health promotion, accident prevention, and injury control activities for faculty and staff. **Initiate, conduct** classes in CPR, first aid, and safety.

Figure 7.4, cont.

A Multidisciplinary Approach to Unintentional Injury Prevention

	Students	Counseling and Guidance *Counselors, Psychologists, Social Workers*	Worksite Health Promotion *Director, Faculty*	School Community Integration *Parents, Professionals Within Community*
Policy	Comply with all policies.	Facilitate understanding of school policies.	Comply with all policies.	Advocate increasing sales tax on alcohol and tobacco, using revenues for educational programming, enforcing minimum age for purchasing alcohol, stiff penalties for drinking and driving, and helmet laws.
Environmental Change	Participate in organization and implementation of CPR, first aid, and other safety classes. Participate in organization and implementation of Operation Prom/Graduation, SADD, Safety Town.	Create supplemental learning experiences in guidance offices.		Provide children off-street play areas, bike trails, and sidewalks. Encourage regulations for smoke detectors, pool fences, and restricting sale of alcohol at public places.
Media Utilization	Participate in theater development, troupes, musicals, and interactive presentations that focus on injury prevention.	Distribute a listing of emergency phone numbers (police, fire, poison control, etc.) to students, faculty, and staff. Prominently display in offices literature on safety procedures and first aid skills.	Distribute information on safety procedures and first aid via pay envelope stuffers. Display safety and first aid materials in teacher's lounge.	Solicit local celebrities and sports stars in promoting safety and first aid. Advocate regulating content of alcoholic beverage advertising in local media.
Direct Intervention		Assess accident-prone child for underlying stress.	Conduct a school-wide campaign to wear safety belts/restraints and helmets when cycling. Organize a MADD chapter.	Discourage high-risk behaviors by: - facilitating positive family relationships. - coordinating school/ community referral and support networks.
Role Modeling/ Social Support	Encourage friends to take first aid and CPR and to remain abstinent in regard to alcohol and other drugs. Model use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices. Participate in Operation Prom/ Graduation, SADD, etc.	Model use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices. Organize Operation Prom/ Graduation, SADD.	Model use of seat belt/shoulder strap, bicycle/motorcycle helmet, and other safety practices. Become certified in first aid.	Organize parental education programs on injury prevention and first aid. Initiate a Safe Homes Program.
Instruction	Participate in peer instruction, counseling, and tutoring programs on injury prevention and safety.	Conduct programs that facilitate management of stress, cigarette smoking cessation, and other high-risk behaviors that contribute to accident risk. Provide programming that teaches emergency telephone call training, self-defense training, and personal safety. Provide school staff and parents educational programs promoting safety.	Organize classes in CPR, first aid, general safety, and prevention of back injuries.	

important of these three tools, for it is only through education that changes in an individual's knowledge, attitudes, and behavior can occur, allowing the individual to perform safely and enjoy maximum success with minimum risk.[11] Education, however, will be most effective when delivered through multiple channels in a comprehensive, focused, and consistent manner. This requires teamwork and commitment on the part of everyone who influences the health of our nation's youth.

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Unintentional Injury

Action Plan Development

Team members should complete questions 1 through 7 individually. The team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behavior in regard to unintentional injury.**

2. **Review the Healthy People 2000 objectives for unintentional injuries.**

3. **Read suggested goals and objectives.**

   Suggested Goal: Reduce unintentional injuries from ___ to ___ by the year 2000.

   Selected Objectives: By the year 2000, (x%) of students:
   * will wear a safety belt when riding in a car or truck
   * will wear a helmet when bicycling or motorcycling
   * will only swim in areas supervised by a lifeguard
   * will not ride with someone who has been drinking
   * will not drink and drive
   * will abstain from drinking alcohol
   * will learn CPR and first aid
   * will check home safety

4. **List potential goals and objectives for reducing unintentional injury in your school.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the charts *A Multidisciplinary Approach to Unintentional Injury Prevention.***
   * Underline the interventions that your school already has initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances that your school should recognize in relation to unintentional injury prevention.

7. **Identify initially by month the strategies or interventions that need implemented during the school year to prevent unintentional injuries.**

Month	Intervention(s):
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to prevent unintentional injury. Place the group ideas for goals and objectives on the action planning form.

9. **Complete the action planning sheet for unintentional injury prevention by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the "Strategies" column. For each strategy (intervention), ask what needs to be done to complete the intervention, then decide who will be responsible for each activity and the date by when it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact the local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	Individual Responsible:

School Year 19___ - ___

Action Plan for _____

_____ **Priority Area**

Goal: _____

Objective(s): _____

_____

_____

_____

_____

Strategies: What will facilitate attainment of the chosen goals of *Healthy People 2000?*	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

Chapter 8
Adolescent Pregnancy Prevention and Management

Diane DeMuth Allensworth, Cynthia Wolford Symons, R. Scott Olds

More than one million teenagers become pregnant annually, and approximately half will give birth. While the birth rate is declining somewhat, pregnancy rates have continued to increase.[1] It is estimated that one of every nine females has conceived each year for the last decade.[2]

The health, social, and economic costs of teenage pregnancy are staggering:

* Teenagers are at greater risk of receiving late or no prenatal care.[3,4] Experts project that one more baby a day might live if its mother received adequate prenatal care.
* Pregnant teenagers experience higher rates of toxemia, anemia, and complications during delivery. Their infants are more likely to be low birthweight babies, to become ill, or to die than infants of women who give birth in their twenties.[2,3] (These higher morbidity and mortality rates may be due to differences in socioeconomic status rather than biological constraints.)[5,6]
* Teenage pregnancy often interrupts education. Approximately half of teenage mothers will not graduate.[1,3,4]
* Women who give birth in their teen years are more likely to support themselves and their children on a low income or on welfare assistance.[8] Fifty-three percent of Aid for Dependent Children (AFDC) payments are given to support families begun when the mother was in her teens.[4]
* Women who have their first child as teenagers earn lower incomes than women who delay childbearing until their twenties.[3-5]
* More than one-fourth of teen mothers become pregnant again within a year or two after their first delivery.[9,10]
* Teen marriages are more likely to be unstable and end in divorce.[2,8]
* The effects of teenage pregnancy may be perpetuated from generation to generation in a cycle of failure: failure of fertility control, failure to graduate, financial failure, marital failure, and failure in child rearing, which renews the cycle.[6,8]

The National Research Council estimates it costs $18,130 a year to support a 15-year-old mother and her baby.[11] However, every dollar spent on maternity care reduces medical and hospital costs $3 in the first year alone of the baby's life. Every dollar spent saves more than $11 when the savings are pro-rated over the lifetime of the child. Yet, 23% of pregnant adolescents do not receive early prenatal care.[12]

Premarital intercourse is the norm. Sixty-nine percent of 19-year-old females living in metropolitan areas are sexually active. However, teenagers have not been prepared to handle sexual responsibility -- they usually delay seeking contraceptives for a year after first having intercourse.[13,14] One report estimates that 15% of sexually active unmarried women ages 15-19 never use contraceptives, and about 37% sometimes use contraceptives.[4] Utilization of family planning methods could substantially reduce teen pregnancies. Experts estimate that premarital pregnancies would decline by more than 300,000 if sexually active young people used an effective contraceptive method.[13]

Several studies have identified factors that seem to put adolescents at risk for teen pregnancy. Irwin and Millstein[15] suggest a variety of biopsychosocial factors and environmental factors increase the vulnerability of adolescents to premature sexual activity. Factors include early physical development, lack of access to reproductive health care, ineffective sex education, lack of experience and knowledge, substance abuse, low self-esteem, and the promotion of sexuality via the media (Figure 8.1). Dryfoos,[2] in her review of antecedents of high-risk behavior related to adolescent pregnancy, identified students at risk: students with low expectations for school achievement who do not engage in school activities, those with uneducated parents who are not supportive or communicative, and those who lack employment opportunities because they live in poor and segregated neighborhoods. Dryfoos,[2] quoting Marion Wright Edelman, president of the Children's Defense Fund, suggested that, "The best contraceptive is a real future."

Focus for Intervention: The Healthy People 2000 Initiative

Healthy People 2000: National Health Promotion and Disease Prevention Objectives[16] contains two areas with objectives focusing on preventing adolescent pregnancy and ensuring healthy infants: Family Planning and Maternal and Infant Health. School personnel should address these specific priority areas in a comprehensive program to assure healthy outcomes for adolescents and infants (Figure 8.2). School personnel, in conjunction with parents and community agencies, need to develop programs that reduce sexual activity (Objectives 5.3 and 5.4); increase contraception practices among the sexually active (Objective 5.5); reduce pregnancies (Objectives 5.1 and 5.2); increase the number of students receiving sex education instruction from parents, churches, and schools (Objective 5.8); increase the number of primary health care

Figure 8.1

Principal Factors in Premature Sexual Activity

Biopsychosocial	Environmental
Predisposing Factors	**Predisposing Factors**
Early physical development	Ineffective sex education
Lack of awareness of risks	Lack of access to health care
Need to explore	Increased advertising promoting sexuality
Use of sex to increase self-esteem	Parental denial, lack of knowledge
Poor role models	Family structure
Precipitating Factors	**Precipitating Factors**
Psychoendocrinological changes	Social pressure/peer onset
Lack of experience/knowledge	Use of ineffective contraceptives
Substance abuse	

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providers providing age-appropriate reproductive health counseling (Objective 5.10); and reduce the number of infants exposed prenatally to tobacco, alcohol, and other drugs (Objectives 14.4 and 14.10).

School Health Programming

Given the multiple factors contributing to premature sexuality and adolescent pregnancy, single-focus programs, which rely only on instruction or access to contraceptives, will not be as successful as multiple-component programs, which use a variety of strategies delivered by multiple individuals. Although much is yet to be learned and documented about adolescent pregnancy and management programs, some key factors have been identified in successful programs:[4]

* *Early Intervention:* Whether the goal is abstinence, effective use of contraception, appropriate prenatal care, or improved maternal and child health, the earlier the interventions, the greater the likelihood of successful outcomes.
* *Accessibility and Acceptability*: Services need to be near or on a school campus, affordable, culturally sensitive, and psychologically acceptable to the user.
* *Continuity:* Long-term follow-up and continued tracking are the most successful, especially combined with social and financial support for adolescents in need.
* *Targeting:* Health care service and instruction sensitive to age groups, gender, and socioeconomic and cultural backgrounds increase program effectiveness.
* *Institutionalization:* School districts, medical care providers, parents, community groups, government, and private agencies must integrate prevention and treatment strategies into ongoing efforts.

Allensworth and Symons[17] developed a health promotion model for schools in which multiple professionals, parents, and students use multiple strategies to address HIV prevention among students. Adapting this model, the various components of the school health program are assigned roles and responsibilities to reduce adolescent pregnancy and improve infant health (Figure 8.3). The model assigns specific individuals to complete specific strategies such as policy development, instruction, role modeling and social support, media, environmental change, and direct intervention. However, in practical application these responsibilities can be shifted to respond to local staffing configurations, interest, experience, and ability. Further, the authors realize the conceptualization provided here omits three components of the comprehensive school health program: physical activity, food service, and schoolsite health promotion programs. The professionals who work in these areas can contribute significantly to the pregnancy prevention and well-baby program by assuming or replicating some of the responsibilities with students in their respective programs that are listed for other components.

School Environment. School administrators and the school board could establish programs that would help prevent adolescent pregnancies. Sex education classes could be established as mandatory within the context of the comprehensive health education program and as a separate elective course in junior and senior high school. To facilitate access to health services, the board could establish a primary health clinic within the school or, as an alternative, subcontract with a public health agency to keep

Figure 8.2

Healthy People 2000 Objectives: Reproductive Health

Family Planning

5.1 Reduce pregnancies among girls ages 17 and younger to no more than 50 per 1,000 adolescents. (Baseline: 71.1 pregnancies per 1,000 girls ages 15 through 17 in 1985.)

5.2 Reduce to no more than 30% the proportion of all pregnancies that are unintended. (Baseline: 56% of pregnancies in the previous five years were unintended, either unwanted or earlier than desired, in 1988.)

5.4 Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15% by age 15 and no more than 40% by age 17. (Baseline: 27% of girls and 33% of boys by age 15; 50% of girls and 66% of boys by age 17; reported in 1988.)

5.5 Increase to at least 40% the proportion of ever sexually active adolescents ages 17 and younger who have abstained from sexual activity for the previous three months. (Baseline: 24% of sexually active girls ages 15 through 17 in 1988.)

5.6 Increase to at least 90% the proportion of sexually active, unmarried people ages 19 and younger who use contraception, especially combined method contraception that effectively prevents pregnancy and provides barrier protection against disease. (Baseline: 78% at most recent intercourse and 63% at first intercourse; 2% used oral contraceptives and the condom at the most recent intercourse; among young women ages 15 through 19 reporting in 1988.)

5.8 Increase to at least 85% the proportion of people ages 10 through 18 who have discussed human sexuality, including values surrounding sexuality, with their parents and/or have received information through another parentally-endorsed source, such as youth, school, or religious programs. (Baseline: 66% of people ages 13 through 18 have discussed sexuality with their parents; reported in 1986.)

5.10 Increase to at least 60% the proportion of primary care providers who provide age-appropriate preconception care and counseling. (Baseline: data available in 1992.)

Maternal and Infant Health

14.4 Reduced the incidence of fetal alcohol syndrome to no more than 0.12 per 1,000 live births. (Baseline: .22 per 1,000 live births in 1987.)

14.5 Reduce low birth weight to an incidence of no more than 5% of live births and very low birth weight to no more than 1% of live births. (Baseline: 6.9% and 1.2%, respectively, in 1987.)

14.10 Increase abstinence from tobacco use by pregnant women to at least 90% and increase abstinence from alcohol, cocaine, and marijuana by pregnant women by at least 20%. (Baseline: 75% of pregnant women abstained from tobacco use in 1985.)

the traditional school clinic open for two hours after school each week for reproductive health care services. (A primary health care clinic that provides comprehensive care is preferable to one that only specializes in reproductive care). If the school has no primary care unit or cannot secure after-school services, local community agencies that specialize in reproductive services could be identified in the student handbook.

Further, wallet-size cards describing school and community services could be distributed to students. Annual observances of Family Health Month and Family Sexuality Education Month could be initiated. Teachers could be encouraged to provide appropriate theme-related instruction during these annual observances. Inservice education

programs for faculty focusing on issues of adolescent development and sexuality would be appropriate. Some districts have begun condom distribution through schools to prevent the spread of HIV. This strategy also could be used to prevent adolescent pregnancy, but school board approval would be required.

Health Instruction. Only 15 states (30%) mandate sex education be a part of the health education curriculum.[18] Sonenstein and Pittman[19] studied 180 school districts in cities with a population of 100,000 or more and found 75% of the schools provided some instruction in sexuality education. This does not mean that all schools in the district offered a formal course. Typically, the sex education instruction was integrated into other courses and consisted of 6-10 hours of instruction. Research suggests 40-50 classroom hours of exposure to health education materials are needed to produce measurable changes in knowledge, attitudes, and self-reported practices.[20]

While the "evidence that sex education leads to a reduction in teen pregnancies is not compelling . . . there is also *no* evidence that sex education is connected with an increase in teen pregnancies."[21] Perhaps the lack of evidence supporting the value of sex education in preventing teenage pregnancy results from the fact that most instructional programs last less than 40-50 hours.

An interstate analysis of factors associated with adolescent pregnancy was completed using a series of multivariate analyses that controlled for the percentage of the black, poor, and metropolitan state population.[22] The results showed that social factors, along with instruction, tended to be more important determinants of differences in teenage pregnancy, birth, and abortion levels than were policy-related variables. The higher the proportion of students receiving sex education, the lower the pregnancy rate, particularly among white teenagers. A state in which 10% or more of teenagers received sex education had a teenage pregnancy rate for whites that was five percentage points lower than other states. Mandated school-based sex education has not been pursued as aggressively as needed because of possible controversy surrounding the content and the timing for sex education.[23] However, more than 75% of the adult population approve of this course work.[7]

Health Services. Different models of pregnancy prevention programs have been effective in reducing teenage pregnancy, including school-based clinics, school-linked clinics, and programs that offer a combination of school-based and community-based services.

The Support Center for School-Based Clinics[24] noted that several studies have found significant public support for primary health care at school-based clinics. The need for these services is a result of a dramatic increase in the number of single-parent households, a large increase in the number of children from impoverished families, a rapid increase in health care cost when many families have no health insurance, and an increase in the concern about high adolescent pregnancy rates.

Evaluation of the St. Paul school-based clinic demonstrated the effectiveness of the clinics in reducing teen pregnancies. For those attending the clinics for reproductive purposes, the 12-month and 24-month contraceptive continuation rates were 93% and 82% (based on 1982 data); birth rates in the first school with a clinic dropped by about half, and birth rates in four schools that later opened clinics dropped by more than 40%. About 80% of adolescent mothers remained in school, and only 1.4% of adolescent mothers who remained in school had a repeat pregnancy within two years until graduation.[25]

Zabin et al[26] reported on a program that linked clinic services with an education program for students attending a junior or senior high school. These school-linked clinic services included sexuality and contraceptive education, individual and group counseling, and medical and contraceptive services at a facility located near the school. The program changed behavior. Although there appears to have been an increase in pregnancies of 13% after 16 months among students exposed to the program; among non-program students, the equivalent increase in the same time period was 50%. The pregnancy rate declined by 30.1% in the program schools after 28 months, whereas it increased by 57.6% in the schools that had no pregnancy prevention program.

Counseling. Several schools have instituted special programs to help pregnant adolescents handle the demands of school and pregnancy. Kenney,[21] writing in the *Phi Delta Kappan*, reported on a study of schools in 127 cities, 90 of which had at least one program for pregnant teens. More than 80% of the programs offered counseling services, special education, nutrition education, family life, and sexuality education. Vocational assistance was offered by 65%, 53% offered contraception to prevent a repeat pregnancy, 35% provided day care for infants, and 34% offered programs for young fathers. Kenney indicated one of the best programs is the New Futures School in Albuquerque, New Mexico, which offers academic classes required for high school graduation, GED preparation classes, special education classes, classes in parenting and child development, day care during school hours, on-site health services, and a job training and placement program.

Weatherley et al[27] studied how and why local comprehensive programs were developed and maintained in some localities, but not in others. During the field research, 229 people were interviewed in 10 localities. Findings demonstrated considerable appeal for school-based comprehensive programs. The evaluation, however, revealed significant obstacles were encountered because public school culture and tradition mitigate against activities that fall outside the realm of academic instruction. Administrators vulnerable to outside pressure generally seek to avoid controversy. The experience of some schools, however, demonstrated these barriers can be overcome. Schools have undertaken many activities that fall outside the normal curriculum such as day care for infants, education of the handicapped, special enrichment and nutrition

programs for the poor, and vocational and adult education. However, such programs require funds and legal sanction. Comprehensive programs, despite their many virtues, will not solve all problems associated with unintended teenage pregnancy and parenthood.[27] Pregnancy prevention is the preferable option.

A number of programs have been effective in preventing adolescent pregnancy: Teen Choice,[2,28,29] Teen Outreach Project,[2,30] Mantalk,[2,31] and Fifth Ward Enrichment Program.[32] Teen Choice,[2,28,29] initiated by a social service agency, operates in New York City Public Schools. Strategies include classroom presentation, group discussion, individual counseling, and referrals. The small group sessions convene weekly for a semester to discuss sexual and interpersonal issues. Teen Outreach,[2,30] cosponsored by the American Association of School Administrators, provides an after-school program of group, classroom, and counseling sessions and a weekly community service assignment. The focus is on self-esteem, self-awareness, life planning, and goal setting. The Fifth Ward Enrichment Program,[2,32] a school-based program for 11-13 year-old males, assists inner city boys in acquiring the skills and motivation to become healthy and socially responsible young men. Strategies include the use of volunteer tutors to improve reading and math skills, sex education classes in the summer, life management skills classes during the school year which focus on decision-making, communication, and interpersonal relationships, a physical exam and interview with a clinician, use of a health clinic, recreation, field trips, and community service projects. Mantalk,[2,31] a program for adolescent males established by the county health department in Winston-Salem, North Carolina, was offered at two alternative schools and two community sites. This program promoted positive lifestyles and responsible sexual behavior through skills training, career development, job marketing, and academic instruction including sexuality education.

Integrated School and Community Programs. Vincent, Clearie, and Schluchter[33] described a program to reduce unintended pregnancies among adolescents. Intervention messages were provided for parents, teachers, ministers and representatives of churches, community leaders, and students enrolled in public schools. The messages emphasized development of decision-making and communication skills, self-esteem enhancement, and understanding of reproductive anatomy, physiology, and contraception. Analysis comparing the intervention area with three similar adjacent areas showed a reduction in the estimated pregnancy rate (EPR). (The EPR equals live births plus fetal deaths plus induced abortions per 1,000 female population.) In the intervention area the average EPR was 60.6 at the beginning of the study; it was 25.1 two years later. The two control sites had an EPR baseline of 66.8 and 52.9 respectively; two years later, their respective EPR was 52.4 and 58.3.

Brindis[4] suggests a community-wide pregnancy prevention initiative be coordinated by a broad-based, coalition of community agencies. After the coalition has been organized, the steps in program planning should be followed to provide adolescents with sex education, contraceptive services, and life options programming (Figure 8.4). Programming that instills confidence in students and inspires them to pursue a variety of opportunities as adults gives them compelling reasons to want to delay pregnancy.[2,4]

Peer Instruction. Peer involvement in pregnancy prevention programs is appropriate. Although few pregnancy prevention programs utilize peer instruction exclusively, it has been a component of some effective programs. Given that a major predictor of whether an adolescent female will engage in sexual intercourse is the sexual activity of her friends, it seems logical to pursue peer instruction. Dryfoos[2] suggests the most successful peer approaches use older peers to influence or help younger adolescents via classroom instruction or as tutors.

In addition to providing peer instruction and peer counseling, adolescents can advocate with school boards for policies to provide reproductive services, sex education, and life options programming in schools. Teen theater, another avenue for teen involvement, has focused successfully on pregnancy prevention in some communities.[32]

Parental Involvement. Parents are children's first sexuality educators. The messages often are provided only informally through the terms used for sexual organs and through the way parents display affection and love for each other. Moreover, children often are treated differently according to their gender. While most parents would like to provide more formal sexuality instruction to their children, 80% feel a need for assistance.[32] In addition to becoming "askable" parents, fathers, and mothers also should become involved in supporting comprehensive school health programs, which could provide family life instruction as well as primary health care services.

Summary

Dryfoos[2] suggests pregnancy prevention programs should be used "to promote responsible decision-making about the timing of sexual intercourse, the use of effective contraception, and the prevention of negative outcomes, particularly early unintended childbearing." Specific programming strategies for family life planning should include:

* Early intervention, no later than middle school years,
* Access to a package of services that includes both capacity-building and life-option components,
* A public commitment to pregnancy prevention by local officials and community leaders,
* Inclusion of males in pregnancy prevention efforts,
* Confidential access to contraception,
* Access to pregnancy testing and counseling,
* Involvement of parents,

Figure 8.3

A Multidisciplinary Approach to Pregnancy Prevention and Management

	Total School Environment *Superintendents, Principals, School Boards*	**Classroom Instruction** *Elementary and Secondary Teachers*	**Physical Education** *Content Specialists, Coaches, Trainers*	**Health Services** *Nurses, Nurse Practitioners, School Physicians*
Policy	**Develop** policies, family life education within K-12 health curriculum, elective junior high secondary classes, primary health care in school-based/ school-linked clinic.	Assist in the development of pregnancy prevention and management policies when requested.	Comply with policies.	Comply with policy to have school clinic staffed several times a week from 2:30 to 5 pm for individual counseling, group discussions or educational sessions on reproductive health.
Environmental Change	**Establish** a school-based clinic or open school clinic once a week for reproductive health instruction/services. **Implement** day care for teen mothers, tutoring, and remedial programs. **Organize** a Teen Pregnancy Prevention Coalition.	Use teachable moments to reinforce pregnancy prevention messages. **Offer** elective classes on family life education. **Implement** a lending video and print library for parents focusing on reproductive health and communication on sexual issues with children.		**Prominently** display in clinic pamphlets on puberty, talking to parents about sex, etc. **Implement** school-based/ school-linked primary care which includes reproductive services. **Participate** in Pregnancy Prevention Coalition.
Media Utilization	**Promote** use of school media to increase awareness of the consequences of unprotected sexual activity. **Identify** in student handbook directory local agencies providing reproductive health services.	Use in a variety of classes, movies, pamphlets, and fact sheets dealing with prevention, management, and consequences of premature sexuality. **Promote** student theater and music programs which provide pregnancy prevention messages.	**Use** gymnasium and locker room bulletin boards to provide information on consequences of premature sexuality and adolescent parenthood.	**Distribute** announcements advertising teen health clinics. **Write** a column in the school newspaper "Ask a Nurse" which focuses on sexual and other teen issues. **Distribute** list of agencies providing reproductive and parenting services.
Direct Intervention	**Provide** programming to pregnant students which encourages their completion of school. **Link** pregnancy prevention with education remediation, dropout prevention, and employment training programs.	**Identify** and refer high-risk students for intervention programming. **Develop** in conjunction with the counselor programs targeting specific high-risk populations.	**Initiate** dialogue with students on reproductive health issues as appropriate. **Identify** and refer high-risk students for intervention program.	**Initiate** questions about reproductive health when students come to clinic for routine care. **Ensure** all pregnant students receive early prenatal care and information on the effects of alcohol and drugs on developing fetus.
Role Modeling/ Social Support	**Institute** special programs to help pregnant girls/teen mothers complete school (tutors, infant day care, vocational training).	**Develop** instructional sequences for parental involvement with health lessons.	**Provide** nonjudgmental referral for those seeking pregnancy prevention/management information.	**Develop** specific programming for high-risk individuals, in conjunction with the counselor. **Provide** confidential, nonjudgmental referral for those seeking pregnancy prevention/ management information.
Instruction	**Celebrate** Family Health Month and Family Sexuality Education Month by encouraging all content areas to focus instruction on the topic. **Promote** inservice programs for faculty and staff on adolescent development and sexuality.	**Implement** family life education within K-12 health education. **Use** strategies which promote decision making, behavioral change, skill building, and social action. **Coordinate** extracurricular instruction on pregnancy prevention. **Create** independent learning centers which focus on pregnancy prevention.	**Provide** adapted physical education classes for pregnant students.	**Distribute** a listing of community agencies providing reproductive/parenting services. **Provide** supplemental family life instruction to students/ parents. **Facilitate** the development of an information exchange network between school and community.

Figure 8.3, cont.

A Multidisciplinary Approach to Pregnancy Prevention and Management

	Counseling and Guidance *Counselors, Psychologists, Social Workers*	**Integrated School and Community Programs**		
		Students	*Parents*	*Community Members Health Practitioners*
Policy	Comply with policies and assist in their development as requested.	Advocate just, reasonable, and relevant policies in regard to providing instruction, counseling, and health services to promote reproductive health. Advocate reproductive health services in school clinic.	Advocate the implementation of after-school and summer school life option programs, such as Teen Outreach, Fifth Ward Enrichment Program, and Summer Training and Education Program.	Initiate a Teen Pregnancy Prevention Coalition. Encourage county and private industry to give special attention to teenage parents in job training and employment placement services.
Environmental Change	Integrate counseling role into primary care clinic. Provide courses for students at risk, linking career planning, dropout prevention, employment training programs with pregnancy prevention and family life education.	Participate in a Teen Prevention Pregnancy Coalition. Initiate teenage reproductive health conferences. Staff reproductive health hotlines.	Encourage children to ask questions. Participate in a Teen Pregnancy Prevention Coalition.	Participate in a Teen Pregnancy Prevention Coalition. Conduct programs at teen centers. Assure community has easily accessed teen clinic(s); employment training, life options programs.
Media Utilization	Use counseling facilities to raise awareness of reproductive health issues. Provide easily accessed pamphlets on pregnancy prevention, consequences, testing and management, and parenting.	Design messages for school newspaper, bulletin boards, display cases, table tents in cafeteria, shirts, buttons, homeroom, classrooms, etc., on pregnancy prevention. Distribute messages at hairdressers and barber shops, laundromats, supermarkets, malls and other places teens meet.	Provide children with books and pamphlets on reproductive health.	Encourage community agencies to organize reproductive health hotlines. Use positive male and female role models to provide media messages/PSAs. Advertise reproductive health services within the community.
Direct Intervention	Develop specific intervention programs for individuals engaging in high-risk behaviors. Provide individual counseling on family planning issues. Initiate education remediation programs for students who are failing.	Organize peer tutoring for pregnancy prevention. Conduct community surveys to assess ease by which adolescents can purchase condoms and over-the-counter contraception.	Initiate discussions about reproductive health with your child.	Coordinate and improve reproductive services in the community to facilitate positive outcomes for pregnancy and teenage parents. Provide counseling (group, individual, family, marriage) for pregnant teens, teen parents, and their families.
Role Modeling/ Social Support	Develop peer instruction programs targeting all subpopulations within schools. Implement support groups for high-risk students and pregnant teen parents.	Model behaviors promoting reproductive health. Encourage self-referrals of students to appropriate services. Use behavioral contracts to encourage health-enhancing reproductive health behavior.	Become sexuality educators of children via PTA and community agency classes on parenting, communicating sexual issues, etc.	Develop peer instruction programs at community youth organizations, religious, health, and social service agencies.
Instruction	Implement inservice programs on reproductive health/pregnancy prevention. Implement programs to assist parents to become the primary sexuality educator of their children.	Participate in instruction and counseling program on reproductive health using materials such as The Grady Teen Services Program, "Postponing Sexual Involvement," and the play "Making Responsible Decisions." Organize teen theater productions which focus on sex education. Target males for programs.	Provide parenting classes for parents and pregnant teens. Send parents a list of community resources on parenting and pregnancy management.	Update materials in the school and community library related to teenage sexuality and parenthood. Implement programs to build self-esteem in "Choices/Challenges," "Changing Directions," and "Youth Leadership." Involve parents in instructional sequences on sex education. Target males for programs.

* Instruction for sexuality and family life education as well as social skills training, counseling, and educational enhancement,
* Encouragement of outside organizations to come into schools to offer sexuality education, general health and mental health services, individual and group counseling, and family planning,
* Establishment of crisis intervention and referral mechanisms, including a 24-hour hotline and formal arrangements to provide services in referral agencies, and
* Utilization of alternative schools, preparation for employment, job placement, and case management.

The Children's Defense Fund[34] has collapsed into six categories what must be done to prevent teen pregnancy: (Figure 8.5)

* Education and strong basic skills,
* Jobs, work-related skills building, and work exposure,
* A range of non-academic opportunities for success,
* Family life education and life planning,
* Comprehensive adolescent health services, and
* A national and community climate that makes teen pregnancy a leading priority.

Reducing adolescent pregnancy will require a concerted effort by school and community personnel working with students and their parents. Coordinated community-wide programming is a must.

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Figure 8.4

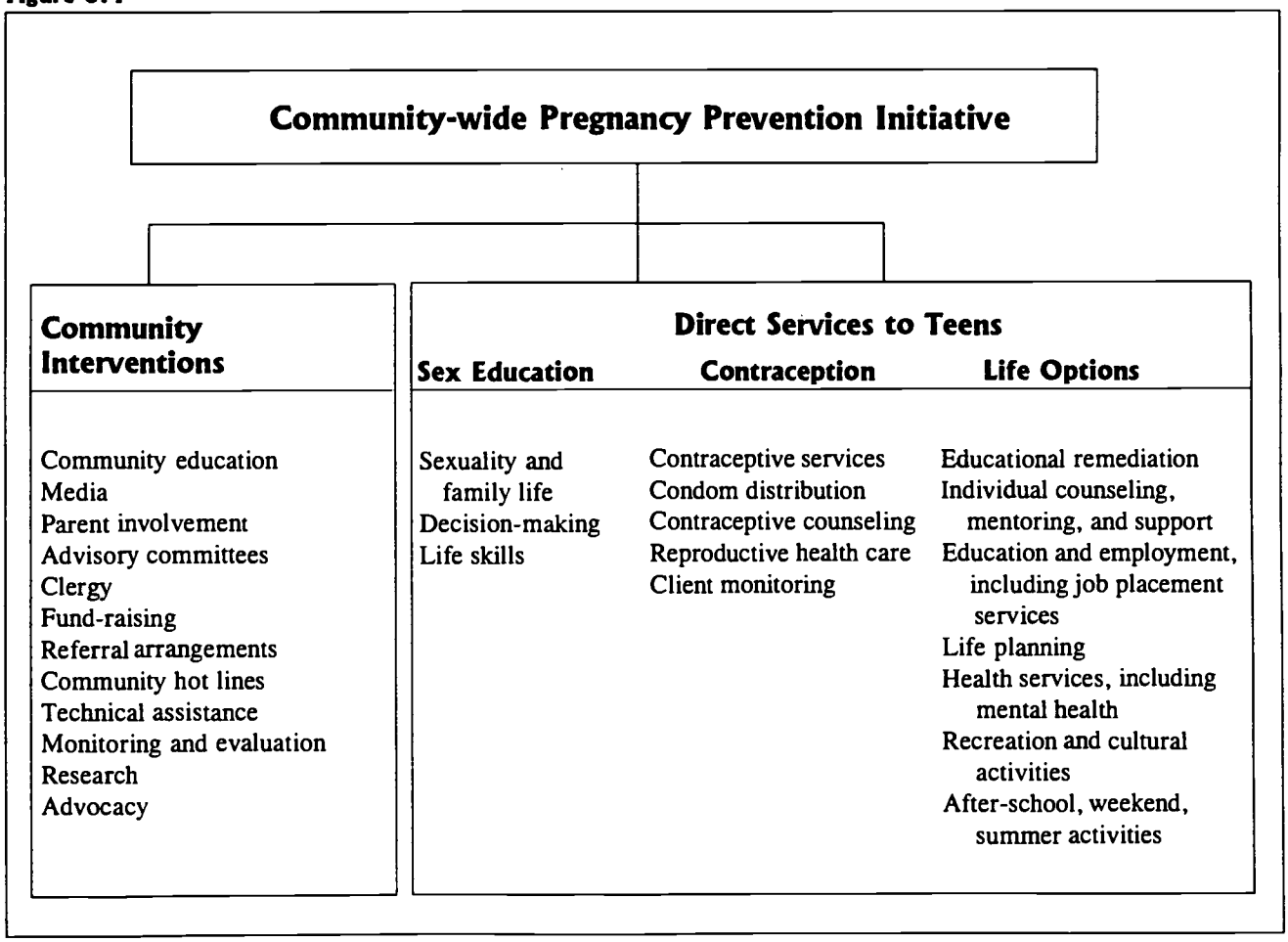

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Figure 8.5

Six Factors in Teen Pregnancy Prevention

Six areas are extremely important in bolstering the motivation and capacity of teens to prevent too-early pregnancy:

Education and strong basic skills.
Youths who are behind a grade or have poor basic skills or poor attendance are at high risk of early parenthood. Low-income and minority teens have higher rates of school failure.

Jobs, work-related skills building, and work exposure.
Teens who perform poorly in schools and become teen parents often have poor work-related skills and, because of lack of exposure to workplace norms, may have behavioral patterns mal-adapted to the employment market.

A range of non-academic opportunities for success.
Children and teens need to feel good about themselves. They need a clear vision of successful and self-sufficient futures. Self-sufficiency potential is related to self-esteem and self-perception. For youths who are not doing well in school, non-academic avenues are crucial for success.

Family life education and life planning.
All teens need sexuality and parenting education and help in integrating such information into their thoughts about themselves and their futures. Parents, schools, and religious institutions need to communicate more effectively with youths about sexuality.

Comprehensive adolescent health services.
A range of comprehensive and convenient services are needed for teens in a range of settings.

A national and community climate that makes teen pregnancy a leading priority is necessary, as well as caring adults who provide positive role models, values, and support for teens.

Prevention should be the principal focus, with efforts targeting five areas:

* Reduce the incidence of first teen pregnancies,
* Reduce the incidence of repeat teen pregnancies,
* Reduce the number of teen school dropouts as a result of pregnancy and parenting,
* Reduce the number of babies born to poor mothers who have not had comprehensive prenatal care, and
* Increase the number of young people with good basic skills and the chance to graduate from high school, go on to college or get a job, and form healthy families.

For some, the increased costs and consequences of early childbearing are as important as reproductive-related numbers. It is learning that half of all teen mothers fail to complete high school at a time when half of all high school graduates are going to college, or that 85% of the young children with 15-to-21-year-old single mothers and 36% of those in young two-parent families that head their own households are living below the poverty level, that gives the public and policymakers pause.

Teen Pregnancy: An Advocate's Guide to the Numbers. Washington, DC: Children's Defense Fund; 1988.

Reproductive Health
Adolescent Pregnancy and Management

Action Plan Development

Team members should complete questions 1 through 7 individually. The team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behaviors in regard to abstinence, contraceptive use, and other reproductive health issues.**

2. **Review the *Healthy People 2000* objectives for Family Planning, and Maternal and Infant Health.**

3. **Read suggested goals and objectives.**

   Suggested Goal: Reduce the number of students who become parents prematurely from ___ to ___ by the year 2000.

   Selected objectives for the goal of reducing adolescent pregnancy: By the year 2000, (x%) of students:
   * will abstain from intercourse
   * will postpone intercourse
   * will use a condom if sexually active
   * will use effective contraceptive to prevent pregnancy
   * will evaluate the social, economic, and health consequences of teen pregnancy as undesirable for both mother and child

4. **List potential objectives to reduce adolescent pregnancies.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the chart *A Multidisciplinary Approach to Pregnancy Prevention.***
   * Underline the interventions that your school already has initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances your school should recognize in relation to reproductive health.

7. **Identify initially by month the strategies or interventions that need to be implemented during the school year to improve the reproductive health of students.**

Month	Intervention(s):
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to improve the reproductive health of students. Place the group ideas for goals and objec tives on the action planning form.

9. **Complete the action planning sheet for pregnancy prevention by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the "Strategies" column. For each strategy (intervention), ask what needs to be done to complete the intervention, then decide who will be responsible for each activity and the date by when it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	Individual Responsible:

School Year 19__ - __
Action Plan for _____
_____Priority Area

Goal: _____
Objective(s): _____
_____
_____
_____
_____
_____

Strategies: What will facilitate attainment of the chosen goals of *Healthy People 2000*?	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

Chapter 9
A Theoretical Approach to School-Based HIV Prevention

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AIDS and the spectrum of Human Immunodeficiency Virus (HIV) infections present a monumental challenge to the health of the American public. In response to this special challenge, the U.S. Surgeon General[1] has cited public education and voluntary behavior changes as the most effective measures to fight the spread of the disease. The public school enterprise, given its organizational capacity to reach 45.5 million students annually, often is targeted as the focal social unit to inform school-age children and youth about factors that influence personal health status.[2]

Adolescents represent a critical risk group for prevention and intervention programming. While only 1% of AIDS cases are found among adolescents,[3] several factors indicate a need for immediate intervention strategies. Between 1971 and 1982, the proportion of sexually active adolescents increased from 28% to 42%.[4] Adolescents 15-19 years old have the highest overall rates for sexually transmitted diseases when reported rates are adjusted for frequency of sexual activity.[5] Of adolescents who use contraception, only 21% use condoms.[6] Research indicates about one-fourth of male adolescents have experienced orgasm through homosexual contact.[7] Further, about 29% of high school seniors have had experience with an illicit drug within the past month; 1.2% of these individuals used heroin.[8]

These characteristically adolescent risk-taking behaviors suggest the need for schools and communities to immediately mobilize intervention strategies. The potentially devastating impact of AIDS on the nation's youth is illustrated by the millions of dollars the federal government has earmarked for AIDS education.[9] However, several variables impede a rapid response by the educational community:

* Many teachers may not be prepared to teach about human sexuality or AIDS since human sexuality education courses are not included in the curricula of most teacher training colleges.[10]
* Many individuals associate AIDS with behavior regarded as immoral or illegal and therefore refuse to support educational programs.[11]
* Some consider frank discussion of preventive measures unacceptable to community standards.[11]
* A few teachers have refused to instruct HIV-infected students.[12]
* Some schools with HIV-infected students have experienced public hysteria in the form of student boycotts.[13]

These obstacles must be overcome if schools are to respond to the Surgeon General's request for specific AIDS education beginning early in the academic program of each student:

> "... *Our youth are not receiving information that is vital to their future health and well-being because of our reticence in dealing with the subjects of sex, sexual practices, and homosexuality. This silence must end.*"[14]

Educators, regardless of their content area, are well-grounded in learning theories. However, these tenets often are overlooked when planning primary prevention and intervention programs for a controversial subject such as AIDS. As a safe response to media attention and community outcry, school programmers frequently gravitate toward emotionally based or "band-aid" reactive approaches to the problem. A more proactive and educationally sound approach to health education, and specifically to AIDS, is needed if education is to intervene in the spread of this disease.

Implications of Learning Theory for AIDS Programs

Walberg[15] identified nine factors required to increase affective, behavioral, and cognitive learning (Figure 9.1). Three factors refer specifically to student aptitude: 1) ability or prior achievement, as measured by standardized testing, 2) development or maturation, and 3) motivation or self-concept, as indicated on personality tests or in tenacity with learning tasks. Two instructional variables, the amount of time-on-task and quality of the instructional experience, including both psychological and curricular aspects, also affect learning. Four environmental factors consistently affect learning: 1) the home, 2) classroom social group, 3) the peer group, and 4) television.

Aptitude Variables. Effective AIDS intervention and prevention programs should incorporate those factors identified in the context of general learning. Examination of the aptitude variables identified by Walberg[15] reveals that while education programmers have little impact on innate ability, they must consider developmental factors of chronological age, as well as social and psychological maturation. Elementary school children have different developmental values, social reference groups, and physical, psychological, and cognitive needs than their upper grade counterparts.

Developmental theorists[18] indicate that five- to seven-year-olds value a sense of duty, accomplishment, and an acceptance of rules. Eight- to 10-year-olds, while experiencing more intense peer influence, take strong cues about

acceptable behavior from adult role models. A transition from parental role model to conformity to rules assigned by peer groups occurs between ages 11 and 13. At this time youth have as a principle role developing and asserting their own value system in the context of a strong peer influence. While 14- to 16-year-olds need acceptance and security from parents, an intense peer group influence often results in conflict between peer and adult role models. Thus, the abstinence or "just say no" models used in health education curricula in the areas of human sexuality and drug education prove minimally effective in secondary schools.[17,18] Adolescents often experiment with sex and drugs specifically to rebel against authority figures such as parents, teachers, religious leaders, and police.[19]

Though Walberg[15] found motivation and self-concept to be weaker correlates than ability and development on learning, they affect the process. Research has demonstrated that students with low self-esteem are more likely to display dysfunctional behavior.[20] Health and education professionals maintain that a healthy self-concept is central to optimal well-being.[21]

Instructional Variables. In the context of instructional variables that focus on amount of time and quality of instruction, the optimal place to begin is in elementary school. The report of the Presidential Commission on the Human Immunodeficiency Virus Epidemic[22] explicitly expressed the long overdue need for the introduction of a mandatory, comprehensive K-12 health education curriculum. The Commission called for elimination of issue-by-issue stopgap measures to correct the problems of today's youth and to begin addressing the problems in total through a planned comprehensive health education program.

Research has demonstrated that 40-50 hours of instruction is necessary for health behavior change to occur.[23] Interestingly, 23 states do not mandate any health instruction in public schools.[10] Of 27 states that mandate some form of health instruction, the average number of hours required in the entire high school health experience covering all health education topics is only 25.8 hours.[10] A 1987 survey by the National Association of State Boards of Education[24] revealed 18 states and the District of Columbia specifically mandate AIDS education. While it is commendable to mandate both AIDS education and comprehensive health instruction, a discrepancy exists in the quantity of health instruction offered to most students and what is required to effectively influence health behavior. More time must be invested in AIDS education if health-enhancing behaviors are to be adopted because behavior change increases in direct proportion to the amount of instruction.[21,25]

While an abundance of research reinforces the concept of adequate time-on-task, educators also need to focus on the quality of instruction students receive. High-quality instruction is grounded in such fundamental principles as the need to structure learning activities in the cognitive, affective, and behavior domains, to attend to Bloom's taxonomy of the hierarchy of learning, and to respond to the heterogeneous nature of public school populations. However, much classroom time is spent on content mastery in the cognitive domain, which focuses principally on recognition and comprehension rather than on application and synthesis.

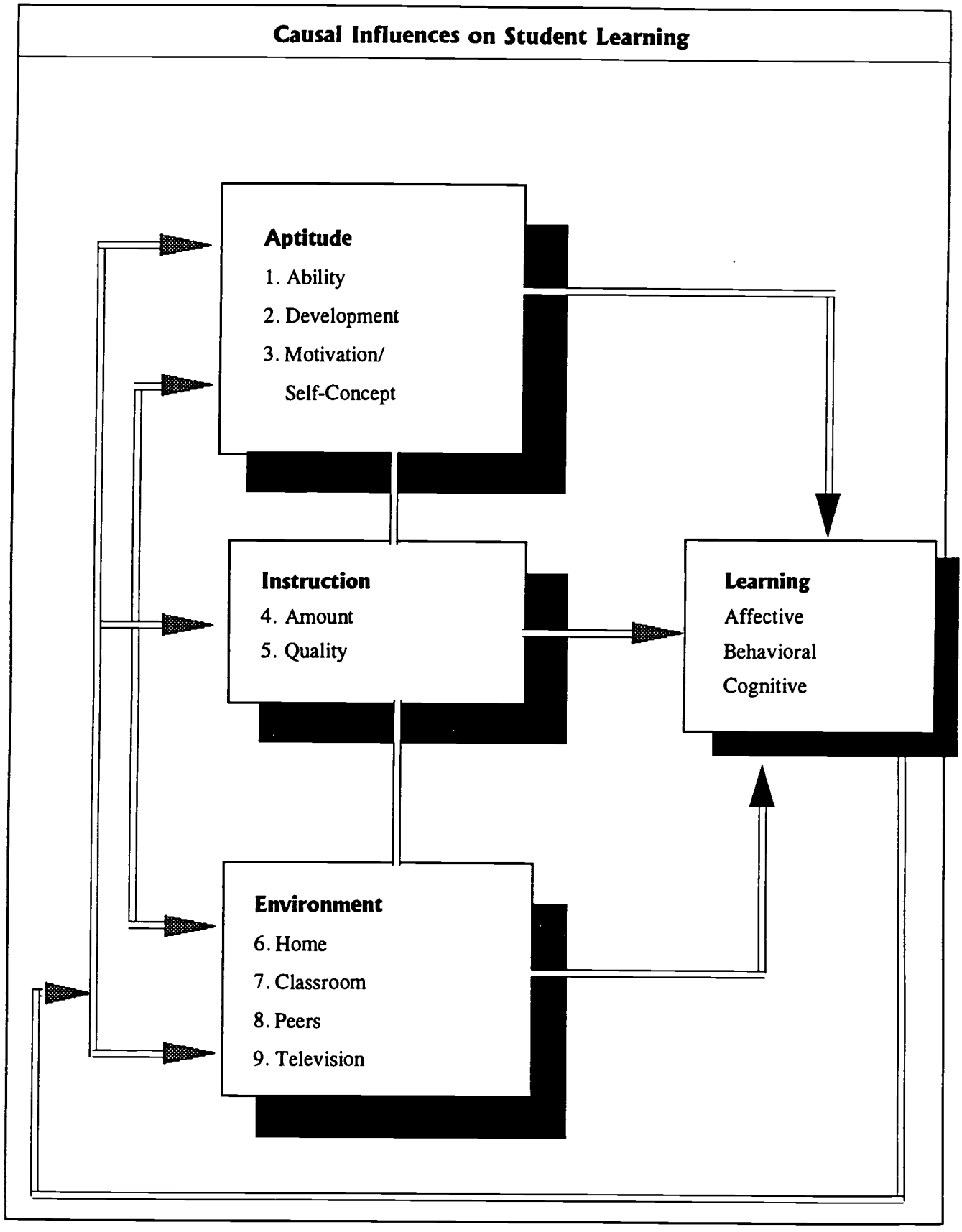
Further, curriculum personnel spend much time searching for the definitive textbook series or prepackaged curriculum. Consequently, curricula rarely are tailored to the needs of a specific group of students. When students do not respond to the model curriculum as expected, they often are categorized as less than model students. Certainly, prepared curriculum materials provide direction or, more aptly, a starting point for busy teachers. Nonetheless, complete reliance on such materials without considering the special needs of students is inappropriate.

In health education, planners must develop lessons that raise awareness of comprehension and that facilitate adoption of health-enhancing behavior. Because about 50% of the factors contributing to the 10 leading causes of death in the United States are related to unhealthy lifestyles,[26] health education is obligated to facilitate incorporation of health-enhancing behavior into personal practices. While other content areas in the school curriculum focus primarily on content mastery, health education also must address attitude and behavior. A review of literature[27] documenting effects of school-based human sexuality education, however, revealed such programs sometimes focus primarily in the cognitive domain. Some courses increased student knowledge and some facilitated attitude change, but the programs had little effect on sexual behavior.

A simplification of Bloom's Taxonomy of Learning was developed by Ewles and Simnett,[28] who suggested that instructional goals range from raising consciousness and increasing knowledge, which are fundamental to the decision-making process, to applying decision-making principles in the context of personal behavior management and social action. While factual information that raises students' awareness to the life-threatening nature of the disease is fundamental, specific information also is needed to understand the behaviors that will put one at risk for acquiring the disease. However, this information alone is not sufficient.[23,29] Instructional goals also must include skill development as a means to decision-making, behavior change, and social action. The complexity of the AIDS issue dictates that AIDS programmers move beyond didactic instruction and develop refusal, assertiveness, peer pressure management, communication, decision-making, and esteem enhancement skills.[23,29]

The concept of social action, which traditionally includes activities such as lobbying and participation in pressure groups, must be applied in context of the aforementioned child development factors. Given the importance of identifying with a peer group, it is critical to enable students to have social impact within the youth culture of which they are members. In addition, unless these skills of youth are reinforced by an enlightened community of powerful adults who are of age to vote and

Figure 9.1



Adapted from Walberg HJ. Improving the productivity of America's schools. *Educational Leadership*. 1984;41(8):19-30.

participate in policy-making, student social action efforts are undermined. Activities the community may undertake include support for comprehensive health education; demonstration of acceptance of AIDS patients; provision for easily accessed, quality, nonjudgmental health care, including reproductive health for adolescents; and social sanctioning and media reinforcement for responsible safe sexual behavior.

Support modeled by the community reinforces the educational messages received in the classroom. The significance of the relationship between schools and supportive communities must not be underestimated. Schools do not exist in isolation from the community which sanctions their existence through tax support.[30] Further, learning is not synonymous with schooling since most learning occurs outside the formal classroom setting,[31] thus, collaboration between school and community leaders that mutually supports health-enhancing behavior holds promise in AIDS prevention programs.

Environmental Variables. Walberg's research[15] reinforces the concept of schools and communities working collaboratively. The four environmental factors Walberg identified consistently affect learning: home, classroom, peer group outside of school, and use of out-of-school time (specifically those hours spent watching television). Children not only learn directly from parents, peers, and the media, but these groups have the ability to indirectly influence motivation and responsiveness to instruction.

The work of health scientists has reinforced the importance of considering these environmental variables when designing instructional programs. Parcel[32] summarized several reviews of models proposed to explain health behavior. The most powerful variables in explaining health behavior were: 1) accessibility of health services, 2) attitude toward health care, 3) perceived threat of illness, 4) knowledge about disease, 5) social interactions, norms, and structure, and 6) demographic characteristics. To maximize the success of an educational program to stop the spread of AIDS, attention to these factors is paramount. For example, groups who acknowledge they are at high risk for AIDS, such as homosexual/bisexual males and intravenous drug users, have demonstrated rapid and profound changes in behaviors.

Unfortunately, such behavior change among adolescents has not occurred at a similar rate.[33,34] Most adolescents do not perceive AIDS to be a personal threat. In a study of 250 Ohio youth,[35] 73% indicated they were not worried about contracting AIDS. In Massachusetts, 61% of 829 randomly selected adolescents did not think it likely they would get AIDS.[34] In San Francisco, though 79% of adolescents expressed fear of getting AIDS, 53% also felt they were less likely than most people to contract the disease.[23]

Consistent Messages Through Multiple Channels

AIDS programs should be meaningful and useful to school staff and the community. Realistic plans should be achievable and should not consume an inordinate amount of the school's resources or be so intensely focused that other school functions suffer.[36] Effective programs take advantage of the school system's existing human and programmatic resources. Human behavior and learning result from personal interpretation and assimilation of multiple stimuli, thus, the more frequently a specific message is disseminated through a variety of channels or settings, the more likely the internalization of that message will occur.

Many channels exist within the school system to reinforce AIDS prevention messages. Figure 9.2 lists specific settings and individuals to disseminate the message, including administrators, health educators, classroom teachers, librarians, school nurses, guidance counselors, school psychologists, physical educators, coaches, worksite health promotion staff, parents, peers, and community members. Haffner[29] asserted that AIDS education should not be the responsibility of any single sector of the community. She urges parents, schools, churches and synagogues, community agencies, youth-serving agencies, and health organizations to get involved.

While high quality health instruction occurring in schools and communities has promise for reducing the spread of AIDS, the potential risk to youth demands the use of a health promotion orientation. In the Surgeon General's report, *Healthy People,*[26] health promotion efforts begin with the development of community and individual measures that can help people develop lifestyles which maintain and enhance well-being. Consequently, a more broadly based concept incorporates educational efforts as well as social, economic, behavioral, and environmental efforts.[37] Nelson[36] identified five health promotion strategies: policy mandates, instruction, direct intervention, facility modification, and role modeling. The extensive literature[15,28] supporting the influence of media on human behavior also should be considered when developing health promotion strategies. Finally, use of the *Healthy People 2000*[37] objectives in the priority areas of HIV and Sexuality Transmitted Disease provide focus for the programmer (Figure 9.3).

Figure 9.2 contains examples for incorporating health promotion strategies in the context of resources available within schools and communities. The goal to expedite the adoption of health-enhancing behavior by youth is reinforced through multiple interventions provided via multiple channels (school, home, community, and media) and by multiple agents (parents, peers, and health and education professionals). The effectiveness of this multidisciplinary, multistrategy comprehensive school and community approach in AIDS prevention presented in Figure 9.2 is based in theoretical and research studies found in the educational and health literature.

Any one discipline within the school may be unfamiliar with the scope and complexity of variables associated with a particular condition and equally unaware of the potential of other professions to intervene. A multidisciplinary team of special service providers (nurses, psy-

chologists, and counselors) complements the instructional expertise of educators with expertise in behavioral management techniques, human relations, learning and development, personality, and psychopathology.[37,38] A coordinated proactive health promotion model that focuses on prevention by an interdisciplinary team is critical. A systematic collaborative effort to identify health promotion needs, to plan prevention and intervention programs, and to coordinate preventive service delivery allows resources to be used synergistically.[39] Jason[40] contends one discipline acting alone cannot yield sufficient interventions, and that multiple disciplines must merge efforts and act in concert for effective interventions to occur.

The Value of Multiple Interventions

Vincent et al[41] reported the success of a public health information and education intervention program designed to reduce unintended teen-age pregnancies. Educational messages were targeted at students, parents, teachers, religious leaders and practitioners, and community leaders. The program incorporated cognitive messages about reproductive anatomy, physiology, and contraception as well as emphasizing the development of decision-making, communication, and self-esteem enhancement skills. An evaluation comparing the intervention group with two similar control groups revealed a marked decline in the estimated pregnancy rate. Estimated pregnancy rate equals live births, plus fetal deaths, plus induced abortions per 1,000 female population. In the intervention group, the average estimated pregnancy rate of 60.6 at baseline declined to 25.1 two years later. Two control sites reported estimated pregnancy rate baselines of 66.8 and 52.9, respectively. Two years later, the respective estimated pregnancy rates were relatively unchanged at 52.4 and 58.3.

After conducting a national study of sexuality education programs, Zabin et al[42] found that unless education was combined with the provision of reproductive services, there was little likelihood of success. Zabin et al[43] reported on a program that provided junior and senior high school students with sexuality and contraceptive education, individual and group counseling, and medical and contraceptive services at a special clinic located a few blocks from school. Educational and medical services were free. The program demonstrated significant changes in knowledge and behavior. Student participants experienced a 13% increase in pregnancies during the 16 months in which the study was conducted. Among non-program participants, the increase was 50%. A longitudinal analysis after 28 months revealed a 30.1% decline in pregnancy rate at participant schools, and a 57.6% increase in the schools with no pregnancy prevention program.

Summary

Developing a multidisciplinary, multi-intervention approach to school and community AIDS prevention programs requires programmers to think of resources that historically have remained untapped. AIDS prevention programmers should consider all the factors that influence learning. In addition, the responsibility for developing quality AIDS education includes the obligation to consider the body of knowledge related to health behavior. Education literature clearly points in the direction of planning programs in all the learning domains and across Bloom's Taxonomy. Likewise, health education literature affirms the need to use social and environmental supports as well as instruction to promote the adoption of health-enhancing behavior.

School personnel should not attempt to confront this issue in isolation. Given the complexity of influencing adolescent sexual behavior, a multidisciplinary approach using multiple strategies is imperative. AIDS prevention involves a shared responsibility, with collaborative programming using a variety of health promotion strategies to help adolescents develop the knowledge, skills, behavior, and support to avoid behaviors associated with transmission of the virus. Further, AIDS education programs should not be conducted as separate entities, but as part of comprehensive health education programs. A multidisciplinary, multistrategy, comprehensive health education program has the potential to address simultaneously the constellation of problems associated with adolescence -- teenage pregnancy, sexually transmitted diseases, and substance abuse.

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Figure 9.2

HIV/AIDS Prevention Strategies

	Total School Environment *Superintendents, Principals, Administrators*	**Classroom Instruction** *Elementary and Secondary Teachers, Librarians*	**Health Services** *Nurses, Nurse Practitioners, Physicians*
Policy	**Develop** policies: 1) Admission of staff and students with HIV/AIDS. 2) Management of AIDS hysteria. 3) AIDS instructional mandate. 4) Confidentiality procedures for both students and staff. 5) Identification and referral procedures for high-risk students. 6) Primary health care clinic.	**Comply** with all HIV/AIDS policies and assist with their development if requested.	**Implement** body fluid management policy. **Comply** with all HIV/AIDS-related policies and assist with their development if requested.
Environmental Change	**Enforce** HIV/AIDS policies. **Establish** primary health care clinic with reproductive services. **Use** halls and display cases to raise HIV/AIDS awareness.	**Implement** policies regarding body fluids. **Use** teachable moment to reinforce HIV/AIDS education messages. **Demonstrate** acceptance of staff and students with HIV/AIDS. **Display** posters and exhibits on HIV/AIDS prevention and sexuality education.	**Implement** primary health care clinic with reproductive health care services. **Use** clinic areas to raise HIV/AIDS awareness.
Media Utilization	**Provide** HIV/AIDS prevention messages via school public address system. .	**Use** student newspaper to deliver HIV/AIDS prevention updates and sexuality education. **Use** HIV/AIDS prevention videos.	**Develop** and distribute infection control materials for faculty and staff. **Distribute** fact sheets on HIV, Hepatitis B, Cytomegalovirus (CMV), etc. **Provide** easily accessed pamphlets about the location of anonymous testing sites.
Direct Intervention	**Support** and enforce established intervention programs and policies. **Identify** local STD clinics and anonymous testing sites in student handbook directory.	**Facilitate** self-referral of high-risk students for intervention programming. **Create** an atmosphere sensitive to the esteem and social needs of the individuals with HIV/AIDS in the classroom. **Facilitate** home instruction for students with HIV/AIDS during periods of absenteeism.	**Develop** specific programming for self-referred individuals engaging in high-risk behavior. **Develop** individualized nursing care plans for students with HIV/AIDS. **Provide** confidential and nonjudgmental referral for those seeking HIV/AIDS information or treatment. **Facilitate** self-referral of high-risk students for intervention programming.
Role Modeling/ Social Support	**Model** support for individuals with HIV/AIDS.	**Develop** peer instruction programs, in conjunction with the counselor. **Develop** instructional sequences involving parents and community professionals. **Model** support for individuals with AIDS/HIV infection.	**Refer** students at risk to appropriate support networks. **Model** support for HIV-positive individuals. **Use** proper infection control procedures.
Instruction	**Institute** an HIV/AIDS Awareness Week, incorporating instruction in all content areas. **Institute** incidental HIV/AIDS instruction during other appropriate health promotion observances. **Reinforce and support** the implementation of instructional policies.	**Develop and implement** sequential K-12 HIV/AIDS instruction into the comprehensive health education curriculum. **Integrate** HIV/AIDS instruction into curriculum of other academic content areas. **Develop** instructional strategies which promote awareness, knowledge, decision-making, behavior change, and social action. **Coordinate** extra-curricular HIV/AIDS instruction within school programs. **Create** independent learning centers which focus on HIV/AIDS. **Develop** instructional strategies which incorporate an examination of social, ethnic, religious, and cultural mores regarding critical AIDS/HIV issues. **Provide** information and support regarding psychosocial and psychosexual needs of students.	**Coordinate** supplemental HIV/AIDS instruction. **Conduct** inservice programs on universal precautions. **Serve** as the liaison with public health workers in regard to HIV/AIDS management. **Facilitate** updating coworkers on AIDS developments and infection control procedures. **Cooperate** with health teachers and counselors in the development of an information exchange network between school and community.

Figure 9.2, cont.

HIV/AIDS Prevention Strategies

Physical Education *Content Specialists, Coaches, Trainers*	**Counseling and Guidance** *Counselors, Psychologists, Social Workers*	**Worksite Health Promotion** *Director, Faculty, Staff*	**Integrated School and Community** *Peers, Parents, Community Members*
Comply with all HIV/AIDS policies.	Comply with all policies and assist with their development if requested.	Comply with all HIV/AIDS policies.	**Develop** school board policies with sanction and support of school/community task force. **Develop** task force/coalition for HIV/AIDS policy development if not present.
Use the physical education and athletic facilities to raise HIV/AIDS awareness.	**Integrate** counseling role into primary health care clinic. Use the counseling facilities to raise HIV/AIDS awareness.	Use the faculty/staff room to raise HIV/AIDS awareness.	Use all community agencies to raise HIV/AIDS awareness via posters, displays, exhibitions, etc. **Display and openly promote** condom distribution in community clinics.
	Provide easily accessed pamphlets about the location of STD clinics and anonymous testing sites.	Use faculty/staff newspapers and paycheck envelope stuffers to deliver AIDS/HIV prevention updates. **Provide** easily accessed pamphlets about the location of STD clinics and anonymous testing sites.	**Develop** PSAs for radio, TV, and newspapers. **Develop** local TV/radio programs around teen sexuality and HIV/AIDS issues. Use local media to highlight school's programming on HIV/AIDS. **Organize** a parental task force to advocate the depiction of responsible sexual activity in the media.
Facilitate self-referral of high-risk students for intervention programming. Adapt physical activity programs for the student with AIDS as needed.	**Develop** specific programming for self-referred individuals engaging in high-risk behaviors. **Develop** crisis management procedures for students faced with HIV/AIDS issues in self, teachers or significant others, such as: HIV-positive test, death and dying, homophobia, and homosexuality. **Coordinate** referral networks between the school and community.		**Develop** community programs for in-school and drop-out populations. **Coordinate** school and community referral and support networks. **Provide** confidential or anonymous STD and HIV testing and counseling at local easily accessed clinics.
Model first aid and infection control precautions for bleeding. **Refer** students at risk to appropriate support network.	**Develop** peer instruction programs targeting specific subpopulations. **Develop** support groups for students in high-risk situations. **Develop** support groups for students or significant others with AIDS or HIV-positive test.	**Develop** support networks for faculty and staff with HIV/AIDS.	**Coordinate** support networks for staff and students with HIV/AIDS.
Use teachable moments to reinforce AIDS educational message: **Teach:** 1) relationship of physical fitness to healthy immune system. 2) the necessity for following policy guidelines for injuries involving blood.	**Cooperate** with health teachers and nurses in the development of an informational exchange network between school and community. **Cooperate** with health teachers and nurses in the development of parent training programs. **Provide** supplemental AIDS instruction via guidance program. **Provide** confidential counseling regarding psychosocial and psychosexual needs of students.	**Coordinate** inservice programming which examines: 1) HIV/AIDS from a personal and school-based perspective. 2) HIV/AIDS policies and implementation procedures. 3) Management of AIDS hysteria. 4) Universal precautions.	**Develop** proactive stand justifying HIV/AIDS instructional programming. **Develop** programming for PTA which outlines rationale for policy. **Develop** parent training programs in regard to HIV/AIDS issues. Use the school as an information broker for dissemination of HIV/AIDS information. Use the following community resources for instructional support: public health dept., local physicians, nurses, social workers, gay groups, and AIDS task forces. **Coordinate** HIV/AIDS instructional programs among religious and youth-serving organizations. **Organize** youth performing arts groups to carry HIV/AIDS prevention messages.

Figure 9.3

Healthy People 2000 Objectives: Prevention of HIV and Other Sexually Transmitted Diseases

19.1 Reduce gonorrhea among adolescents ages 15-19 to an incidence of no more than 750 cases per 100,000 people. (Baseline: 1,123 per 100,000 in 1989.)

19.2 Reduce Chlamydia trachomatis infections, as measured by a decrease in the incidence of non-gonococcal urethritis, to no more than 170 cases per 100,000 people. (Baseline: 215 per 100,000 in 1988.)

19.3 Reduce primary and secondary syphillis to an incidence of no more than 10 cases per 100,000 people. (Baseline: 18.1 per 100,000 in 1989.)

19.5 Reduce genital herpes and genital warts, as measured by a reduction to 142,000 and 385,000 respectively, in the annual number of first-time consultations with a physician for the conditions. (Baseline: 167,000 and 451,000 in 1988.)

19.6 Reduce hospitalizations for pelvic inflammatory disease to no more than 250 per 100,000 women ages 15 through 44. (Baseline: 311 per 100,000 in 1988.)

19.7 Reduce sexually transmitted hepatitis B infection to no more than 30,500 new cases. (Baseline: 58,300 cases in 1988.)

19.10 Increase to at least 50% the proportion of sexually active, unmarried people who used a condom at last sexual intercourse. (Baseline: 19% of sexually active, unmarried women ages 15 through 44 reported that their partners used a condom at last sexual intercourse in 1988.)

19.12 Include instruction in sexually transmitted disease prevention in the curricula of all middle and secondary schools, preferably as part of quality school health education. (Baseline: 95 % of schools reported offering at least one class on sexually transmitted diseases as part of their standard curricula in 1988.)

18.1 Confine annual incidence of diagnosed AIDS cases to no more than 98,000 cases. (Baseline: An estimated 44,000 to 50,000 diagnosed cases in 1989.)

18.2 Confine the prevalence of HIV infection to no more than 800 per 100,000 people. (Baseline: An estimated 400 per 100,000 in 1989.)

18.10 Increase to at least 95% the proportion of schools that have age-appropriate HIV education curricula for students in 4th through 12th grade, preferably as part of quality school health education. (Baseline: 66% of school districts required HIV education but only 5% required HIV education in each year for 7th through 12th grade in 1989.)

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Reproductive Health
Prevention of HIV and Other STDs

Action Plan Development

Participants should complete questions 1 through 7 individually. A work team should complete the rest of the worksheet and the action plan sheet by consensus.

1. **Review assessments of student behaviors in regard to abstinence, contraceptive use, and other reproductive health issues.**

2. **Review the *Healthy People 2000* objectives for Prevention of HIV and Other Sexually Transmitted Diseases.**

3. **Read suggested goals and objectives.**

   Suggested Goal: Reduce incidence of all STDs among students from ___ to ___ by the year 2000.

   Selected objectives for the goal to reduce STDs: By the year 2000, (x%) of students:
   * will abstain from intercourse
   * will postpone intercourse
   * will use a condom if sexually active
   * will use effective contraception to prevent pregnancy
   * will evaluate the social and health consequences of any STD as undesirable

4. **List potential goals and objectives to reduce sexually transmitted diseases.**
   Objective 1:

   Objective 2:

   Objective 3:

5. **Review the charts *A Multidisciplinary Approach to HIV and Other STD Prevention.***
   * Underline the interventions that your school already has initiated.
   * Place an "X" by those that should be continued.
   * Circle those that should be initiated.

6. **Review the national observances sheet.**
   Write down observances that your school should recognize in relation to reproductive health.

7. **Identify initially by month the strategies or interventions that need implemented during the school year to prevent sexually transmitted diseases.**

Month	**Intervention(s):**
September:	
October:	
November:	
December:	
January:	
February:	
March:	
April:	
May:	

8. **Compare your ideas with the rest of the team.**
Decide by consensus what goals, objectives, strategies, and interventions should be included in the action plan to prevent unintentional injury. Place the group ideas for goals and objectives on the action planning form.

9. **Complete the action planning sheet for unintentional injury prevention by identifying the strategies, activities, personnel, and time frame.**
Divide this task among the entire team. Begin by placing each intervention that the team has decided to implement under the "Strategies" column. For each strategy (intervention), ask what needs to be done to complete the intervention, then decide who will be responsible for each activity and the date by when it should be done.

10. **Review the resources sheet.**
List which agencies and organizations should be contacted for free and inexpensive materials. (Contact local offices of the national voluntary health associations for free and inexpensive materials.)

Agencies to be Contacted:	**Individual Responsible:**

School Year 19___ - ___

Action Plan for _____

_____ **Priority Area**

Goal: _____

Objective(s): _____

_____ _____

_____

_____

_____

_____

Strategies: What will facilitate attainment of the chosen goals of *Healthy People 2000*?	**Activities:** What needs to be done to complete the strategies?	**Personnel:** Who will be responsible for completing each activity?	**Time Frame:** By what date does each activity need to be completed?

Chapter 10
Healthy People 2000: An Agenda for Schoolsite Health Promotion Programming

Cynthia Wolford Symons, Carol DiMarco Cummings, R. Scott Olds

"School systems are not responsible for meeting every need of their students. But where the need directly affects learning, the school must meet the challenge."[1]

The *Report of the 1990 Joint Committee on Health Education Terminology* has defined the comprehensive school health program as: "... an organized set of policies, procedures, and activities designed to protect and promote the health and well-being of students and staff which has traditionally included health services, healthful school environment, and health education. It should also include, but not be limited to, guidance and counseling, physical education, food service, social work, psychological services, and employee health promotion."[2]

Including employee health promotion is consistent with *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. This document charges schools with "... a special role in enhancing and maintaining the health of their community's children, since roughly one-fourth of a child's time is spent in the school environment."[3] *Healthy People 2000* suggests that through partnerships "... with parents and other community groups, schools can help to create health promotion programs and enhance health education curricula."[3]

Along with the concern for the community's children, it is important to note that schools employ large numbers of Americans, whose health risks tend to mirror those of the general public.[4] This section will explain the rationale for health promotion initiatives based at the schoolsite targeting faculty and staff. Program strategies and resources are provided for each national health objective that has implications for the health of school-based employees.

Schoolsite Health Promotion

The workplace can be an excellent site for health promotion programming as more than 85% of adults spend much of the day there. Numerous studies cite the benefits of worksite health promotion programs in improving employee health, reducing insurance claims, improving morale, reducing absenteeism, and reducing employee turnover.[3]

Len Tritsch, initiator of Oregon's Seaside Conference, confirms that schools are often the biggest business in most communities.[5] However, the school is often overlooked or, perhaps for fiscal reasons, is perceived as an inappropriate workplace for employee health promotion. Ironically, by omitting programs for potentially significant adult models such as faculty, staff, and administrators, schools are not maximizing their potential to promote student health.

The Health Insurance Association of America has outlined compelling reasons for focusing health promotion efforts on faculty and staff employed in schools. In addition to the fundamental academic mission of schools, health promotion programs for school employees have the potential to:

Reduce national health care costs. Improving the health status of school employees would have a significant impact on health care costs.

Provide better use of taxpayer dollars and improve continuity of instruction for children. By reducing absenteeism and hiring fewer substitute teachers, time and continuity on academic tasks is improved. Activities that demonstrate a commitment to employees also can improve morale.

Promote a multiplier effect. The behaviors of significant adults can provide a positive and powerful model for students. Staff participation in a formal health promotion program at the schoolsite is an important part of a comprehensive program that can reinforce consistent health-enhancing messages.

Increase effective use of school-based facilities and resources. Schools have facilities and trained personnel to plan, implement, and evaluate health promotion programs for students, faculty, staff, and the community.

Support school and community partnerships. Schools can serve as a focal point for community-wide health promotion initiatives. Outreach programs can not only maximize use of facilities, but can effectively advance the central academic mission of the school by demonstrating an "open door" policy to the community.[4]

To advance the notion of schoolsite health promotion, the departments of Health or Education in many states now conduct annual summer conferences modeled after the successful Seaside Conference in Oregon.[5] Away from the school environment, school teams of teachers, administrators, parents, and community residents gather with resource experts to develop action plans to respond to locally identified needs. These conferences have become so prevalent that the National Network of State Conferences for School Workplace Wellness has been organized. State member representatives meet twice a year in conjunction

with the annual meetings of the Association for the Advancement of Health Education and the American School Health Association to enhance communication networks. This network has five specific goals: share information about workshops, topics, and programs; share organizational models regarding sponsors, funding, evaluation, and promotion processes; provide a clearinghouse for schoolsite health promotion information; support research that will benefit member states; and serve as an advocate for schoolsite health promotion activities.[7] In this way, state-level professionals are part of a national network to bridge the gap between state-of-the-art and state-of-the-practice in schoolsite health promotion programs.

The Nation's Health Objectives and Schoolsite Health Promotion

More than one-third of the objectives in *Healthy People 2000* can be directly attained or significantly supported by school involvement. The worksite health promotion objectives in *Healthy People 2000* were written in reference to worksites of a particular number of employees. Nevertheless, schools and school districts of all sizes are encouraged to adopt these objectives.[8,9] Examples of general health promotion programs that could be offered at a schoolsite include wellness programs, screenings, referrals, treatment and follow-up programs, safety and accident prevention programs, and employee assistance programs (Figure 10.1).

Following is a brief discussion of the 10 worksite health promotion objectives and a list of agencies and professional associations that can provide resources and technical assistance to support local school district efforts. An alphabetical list of resource agency locations that corresponds with identified agencies and organizations is provided (Figure 10.2). In all cases, districts are encouraged to refer to local offices of national agencies.

Objective 8.6. Increase to at least 85% the proportion of workplaces with 50 or more employees that offer health promotion activities for their employees, preferably as part of a comprehensive employee health promotion program.

Health promotion programs can take many forms. Successful planning, therefore, is based on identifying and assessing the needs and interests of various constituents in the school community. Health risks and target groups can be identified by conducting interest inventories, examining health risk appraisal group profiles, and reviewing health care utilization data. Involvement of all stakeholders in program planning, including family members and retirees, can help increase success. Participation can be enhanced by organizing activities for employees during planning periods, before or after school, or the lunch period; offering a variety of activities focusing on diverse health issues; organizing a campaign to increase visibility and recruitment; and providing incentives and awards for regular participation or achievement. In particular, smaller school districts may organize cooperatives of several districts to plan programs and purchase services including employee assistance programs, health insurance, and preventive and safety services.[3] Finally, it can be cost-effective to look to the following agencies and organizations for programming and technical assistance:

A. State and governmental agencies

Office of Disease Prevention and Health Promotion
State Health and Education departments

B. Professional organizations and private agencies

American School Health Association
American Alliance for Health, Physical Education, Recreation and Dance
National Education Association
National Center for Health Education
American Association of School Administrators
National Network of State Conferences on School Worksite Wellness

C. Local universities and colleges

Contact those that offer undergraduate and graduate programs in health education, worksite health promotion, public health, physical education, exercise physiology, or recreation.

Objective 1.10. Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs.

Schools are an ideal workplace for physical activity and fitness programs for faculty, staff, administrators, retirees, and family members. School programmers have on-site skilled professionals as well as facilities and equipment to reach large numbers of adults with physical fitness programs. Use of school facilities can be maximized further by opening facilities during non-school time for use by community residents and organizations. Activities that have shown promise in school-based fitness programming include on-site exercise classes, informal walking clubs, and formal fitness challenges and campaigns. Additionally, as purchasers of group health and life insurance plans, school district representatives could negotiate with insurers to provide premium reductions or rebates for faculty and staff who participate regularly in schoolsite programs or who can document regular physical activity.[3] In addition to the local faculty and staff with expertise in health-related fitness, the following agencies and organizations can offer programming support:

American Alliance for Health, Physical Education, Recreation and Dance
American Running and Fitness Association
Local Young Men's/Women's Christian Association
State Health and Education department offices of Health Promotion, Physical Education

Objective 2.20. Increase to at least 50% the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees.

Figure 10.1

General Types of Health Promotion Activities Offered at the Worksite

Wellness and Lifestyle Activities

- Physical fitness
- Nutrition
- Weight reduction
- Stress management
- Alcohol and other drug awareness
- Smoking cessation
- Medical self-care
- Support groups
- Women's health issues

Screening, Monitoring, and Follow up

- High blood pressure
- Glaucoma
- Diabetes
- Colo-rectal cancer
- Sickle cell anemia
- Health risk appraisals

Safety and Accident Prevention Education

- Defensive driving
- Lifting techniques
- CPR and choke saving techniques
- Instruction in first aid and emergency care
- On-the-job safety
- Seat belt usage
- Home safety and accident prevention

Employee Assistance Programming

- Counseling and referral
- Alcohol and other drug problems
- Marital problems
- Family problems
- On-site counseling

Adapted from Cinelli B, Rose-Colley M. An analysis of health promotion programs in Pennsylvania schools. *Eta Sigma Gamman*. 1988; Fall:27-30.

School-based programs provide a mechanism for developing activities that support adoption of dietary practices conducive to health including weight management classes, weight loss competitions, brown-bag seminars, self-help programs, cooking demonstrations and classes, healthy food service and vending machine selections, point-of-choice nutrition information programs, and flexible health benefits that include nutrition-related activities. Nutritional health promotion programs also are most effective when family members and retirees are included and when their development is part of an integrated comprehensive health promotion program.[3] Additional resources can be gathered from:

American Cancer Society
American Heart Association
American Red Cross
National Dairy Council
Society for Nutrition Education
State Health departments
Weight Watchers International, Inc.

Objective 3.11. Increase to at least 75% the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

Smoking in the workplace has become an important public health issue as the health effects of exposure to environmental tobacco smoke have been documented.[10,11] Studies have shown an increased risk of lung cancer in nonsmokers chronically exposed to tobacco smoke.[12] As a result, an increasing number of employers have instituted policies to control smoking in the workplace. Such policies have particular implications for school administrators and employees. While some school policies have been adopted voluntarily, others have resulted from legislative action.[3] Wisconsin, for example, has adopted a state law mandating that all school property will be smoke-free for both curricular and extracurricular activities. Several resources are available for programming support:

American Cancer Society
American Heart Association
American Lung Association

National School Boards Association
Office of Smoking and Health, Technical Information Center
State Health and Education departments

Objective 3.12. Enact in 50 states comprehensive laws on clean indoor air that prohibit or strictly limit smoking in the workplace and enclosed public places (including health care facilities, schools, and public transportation).

Restrictions on smoking in public places and at work are growing in number and comprehensiveness. Although their goal is to protect individuals from the consequences of involuntary tobacco smoke exposure, they may also help reduce smoking prevalence. As of October 1988, 42 states and Washington, D.C., had laws restricting smoking in public places. A public place usually is defined as any enclosed area to which the public is invited or in which the public is permitted.[13] This definition highlights schools among other locations.[3] Support for the development of such policies can be found in the agencies listed with the previous objective.

Objective 4.14. Extend adoption of alcohol and other drug policies for the work environment to at least 60% of worksites with 50 or more employees.

Alcohol and other drugs are abused by individuals in all occupations and professions. These behaviors interfere with exercise of good judgment and have particular implications for school-based professionals, who are acting "in loco parentis" of children and youth. Consequently, school employees should have access to prevention and intervention programs to prohibit on-site use of alcohol and other drugs and to aggressively discourage excessive use off-site. Readily available employee assistance programming that assures confidentiality protection for those whose work performance suggests intervention is necessary.[3] Support for staff development programs and additional technical expertise is available through:

Alcoholics Anonymous
American Council for Drug Education
Mothers Against Drunk Driving
National Institute on Drug Abuse
National Clearinghouse for Alcohol and Drug Abuse Information
State Health, Mental Health, and Education departments

Objective 6.11. Increase to at least 40% the proportion of worksites employing 50 or more people that provide programs to reduce employee stress.

School-based stress management programs can be important in reducing stress-related disorders by identifying key risk factors for occupational stress and conducting and evaluating job redesign and organizational changes that will reduce stress.[14] With the identification of strategies to reduce stress and of incentives for intervention, schools will be more likely to participate in such programming with support from agencies, such as:

American Association for Suicidology
American Psychiatric Association
American Psychological Association
National Coalition Against Sexual Assault
National Crime Prevention Council
National Institute of Mental Health
National Mental Health Association
Planned Parenthood Federation of America
Rape Crisis Services
State Health, Mental Health, and Human Services departments, and community and private mental health centers

Objective 17.19. Increase to at least 75% the proportion of worksites with 50 or more employees that have a voluntary established policy or program for the hiring of people with disabilities.

A 1985 survey of Americans with disabilities found that two-thirds of all working-age disabled persons are not employed, while a large majority report a desire to work. People with disabilities are therefore much less likely to be working than any other demographic group under the age of 65. Other studies have documented the positive impact that employment has on the lives of people with disabilities.[15] Such professionals employed in schools, moreover, also provide a powerful model for school-age children and youth. Recruitment and retention policies for hiring disabled persons greatly increases the likelihood that such people will be hired.[3] Key resources for the development of such policies include:

American Cancer Society
American Diabetes Association
American Lung Association
Lupus Foundation of America, Inc.
March of Dimes
National Kidney Foundation
National Multiple Sclerosis Society
President's Commission on Employment of People with Disabilities (Each state has a Governor's Commission on Employment of People with Disabilities)
State Health departments

Objective 10.6. Increase to at least 75% the proportion of worksites with 50 or more employees that mandate employee use of occupant protection systems, such as seatbelts, during all work-related motor vehicle travel.

In 1987 motor vehicle crashes accounted for more than one-third (approximately 4,000) of all job-related deaths. Crashes are the single largest cause of lost work time.[16] Although mandatory approaches show promise, most successful initiatives incorporate both incentives (awards, lottery tickets, extended insurance coverage) and education. School districts have addressed school bus safety through various strategies, and other protective

measures for school staff which include regular inspections, preventive maintenance, and training of operators. Since employers absorb approximately $10 billion annually in insurance costs for off-the-job crashes, some school districts also are providing programs that support use of seat belts off the job as well.[17] Resources are available through:

American Automobile Association
American Heart Association
American Red Cross
Clearinghouse for Occupational Safety and Health Information - Technical Information Branch
Metropolitan Life Insurance Company
National Safety Council
State Health departments

Objective 15.16. Increase to at least 50% the proportion of worksites with 50 or more employees that offer high blood pressure and/or cholesterol education and control activities to their employees.

Schools are an ideal place for reaching at-risk populations with hypertension and cholesterol screening, education, referral, control, and follow-up activities. Optimally, programs should be part of a comprehensive health promotion program. Barriers can be overcome through collaboration with the following agencies:

American Heart Association
American Red Cross
National Heart, Lung and Blood Institute
National High Blood Pressure Information Center
State Health and Education departments

Summary

To improve the health status of both employees and students, schools and communities should combine resources for mutual benefit. School boards and school-based employee unions can cooperatively sponsor health promotion and employee assistance programs. Coverage for effective preventive services can be sought in contract negotiations. Employees can work to make community health promotion services available at the schoolsite for themselves, dependents, and retirees. Many important activities, such as smoking cessation, dietary modification, and physical conditioning, can be organized effectively at the schoolsite. By enforcing safety procedures, mandating smoke-free schools, and ensuring that healthful food choices are available in cafeterias, school personnel have multiple opportunities to improve the health of their employees and students.[3] *Healthy People 2000* concludes that "schools offer a natural locus for the provision of crosscutting educational interventions in health."[3]

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16. *Accident Facts*. 1988 ed. Chicago, Ill: National Safety Council; 1988.

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Figure 10.2

Resource Agencies

Alcoholics Anonymous World Services
475 Riverside Drive
New York, NY 10115
(212) 870-3400

American Association of School Administrators
1801 N. Moore St.
Arlington, VA 22209
(703) 528-0700

American Automobile Association
1000 AAA Drive
Heathrow, FL 32746
(407) 444-4300

American Alliance for Health, Physical Education, Recreation and Dance
1900 Association Drive
Reston, VA 22091
(703) 476-3400

American Association for Suicidology
2459 S. Ash
Denver, CO 80222
(303) 692-0985

American Cancer Society
1599 Clifton Road, NE
Atlanta, GA 30329
(800) ACS-2435

American Council for Drug Education
204 Monroe St.
Rockville, MD 20852
(301) 294-0600

American Psychiatric Association
1400 K St., NW
Washington, DC 20005
(202) 682-6000

American Psychological Association
1200 17th St., NW
Washington, DC 20036
(202) 336-5500

American Red Cross
17th and D Streets, NW
Washington, DC 20006
(202) 737-8300

Metropolitan Life Insurance Company
Health and Safety Education Division
One Madison Ave.
New York, NY 10010
(212) 578-2211

American School Health Association
7263 State Route 43, P.O. Box 708
Kent, OH 44240
(216) 678-1601

Lupus Foundation of America, Inc.
4 Research Place, Suite 180
Rockville, MD 20850-3226
(301) 670-9292

March of Dimes, Birth Defects Foundation
Public Health Education Department
1275 Mamaroneck Ave.
White Plains, NY 10605
(914) 428-7100

Mothers Against Drunk Driving
P.O. Box 541688
Dallas, TX 75354-1688
(800) 438-6233

National Clearinghouse for Alcohol and Drug Information
P.O. Box 2345
Rockville, MD 20847-2345
(301) 468-2600

National Crime Prevention Council
1700 K St., NW, 2nd Floor
Washington, DC 20006
(202) 466-6272

National Dairy Council
O'Hare International Center
10255 W. Higgins Road
Rosemont, IL 60018-5616
(708) 803-2000

National Education Association
1201 16th St., NW
Washington, DC 20036
(202) 833-4000

Figure 10.2, continued

National Heart, Lung and Blood Institute
9000 Rockville Pike
Bldg. 31, Room 4A21
Bethesda, MD 20892
(301) 496-4236

National
High Blood Pressure Information Center
National Institutes of Health, Box UR
Bethesda, MD 20205
(301)496-4000

National Institute on Drug Abuse
U.S. Dept. of Health and Human Services
11426 Rockville Pike, Suite 410
Rockville, MD 20852
(800) 662-HELP

National Institute of Mental Health
5600 Fishers Lane, Room 7C02
Rockville, MD 20857
(301) 443-4513

National Kidney Foundation
30 E. 33rd St.
New York, NY 10016
(212) 889-2210

National Mental Health Association
1021 Prince St.
Alexandria, VA 22314-7971
(703) 684-7722

National Multiple Sclerosis Society
733 Third Ave.
New York, NY 10017
(212) 986-3240

National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
(708) 285-1121

National School Boards Association
1680 Duke St.
Alexandria, VA 22314
(703) 838-NSBA

Office of Disease Prevention
and Health Promotion
National Center for Health Information
and Communication Technology
P.O. Box 1133
Washington, DC 20013-1133
(800) 336-4797, (202) 429-9091 (DC)

Planned Parenthood Federation of America
810 Seventh Ave.
New York, NY 10019
(212) 541-7800

President's Committee
on Employment of People with Disabilities
1331 F St., NW, 3rd Floor
Washington, DC 20004
(202) 376-6200

Weight Watchers International, Inc.
500 N. Broadway
Jericho, NY 11753-2196
(516) 939-0400

Appendix A
Eight Component Assessment

Health Services

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" to 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1-5	C School Necessity Rating 1-5
Physical Fitness and Exercise				
1. Are physical activities (frequency, duration, type, intensity) recorded on each student's health record?				
2. Are students routinely counseled in regard to the frequency, duration, type, and intensity of physical activity that is needed?				
3. Are periodic health-related fitness screenings conducted in conjunction with the physical education program?				
4. Are the results of the fitness screenings recorded on the students' permanent records?				
5. Has a system of parental notification and appropriate prescriptive follow-up of fitness activities been implemented?				
Nutrition				
6. Are periodic screenings conducted for lean body mass?				
7. Are nursing care plans instituted for overweight students?				
8. Is nutritional assessment provided to students?				
9. Is nutritional counseling provided to students?				
10. Has a program been established to provide information regarding nutrition to students?				
Tobacco				
11. Are students asked about their use of tobacco products during a health history?				
12. Is advice on smoking cessation/tobacco use routinely provided to students who use tobacco?				
13. Are all tobacco-using students routinely referred to cessation programs?				
14. Has a cessation program for students been implemented?				
15. Has a prevention program been established to prevent the onset of using tobacco?				
16. Is information provided to families on the deleterious effects of passive smoke?				

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Health Services (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Alcohol and Other Drugs			
17. Are students screened for alcohol and other drug use problems?			
18. Are students with alcohol and other drug use problems provided counseling and referral as needed?			
19. Has a student assistance program been established to provide information on the deleterious effects of alcohol and other drug misuse?			
Family Planning			
20. Are students asked about their reproductive health during a health history?			
21. Is there a program to reduce the number of unintended adolescent pregnancies?			
22. Is there a program to postpone sexual intercourse during adolescence?			
23. Is there a program to promote abstinence among students?			
24. Is there a program for those students who are sexually active to promote the use of contraception (especially those methods which combine contraception that effectively prevents pregnancy and provides barrier protection against disease)?			
25. Are unmarried students with unintended pregnancies provided information about adoption?			
Mental Health and Mental Disorders			
26. Do providers of primary care for children include cognitive, emotional, and parent-child functioning with appropriate counseling, referral, and follow up?			
27. Are students offered stress reduction programs?			
28. Is there a program to identify those students with mental disorders and refer them to appropriate health care services?			
Violent and Abusive Behaviors			
29. Has a program been established to provide information regarding nonviolent conflict resolutions?			
30. Has a program been instituted to reduce the carrying of weapons?			
31. Has a child abuse prevention program been instituted?			
32. Has a suicide prevention program been instituted?			
33. Has a conflict mediation program been instituted?			
34. Has a program been instituted to reduce physical assault injuries?			
35. Has a program been instituted to reduce rape?			

Health Services (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C", rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Unintentional Injuries				
36. Has an accidental injury reporting and recording system been established for all injuries requiring medical care or resulting in absenteeism?				
If yes, is data analyzed annually to determine programming needs?				
37. Has a program been established to provide age-appropriate counseling and information on safety precautions to prevent unintentional injuries?				
38. Has a program been instituted to reduce death by motor vehicle accidents?				
39. Does an individual with first aid or nursing skills provide first aid and emergency care to the sick and injured?				
40. Has a program been instituted to increase use of occupant protection systems (seat belt and shoulder restraints)?				
41. Has a program been instituted to increase use of helmets by cyclists?				
Environmental Health				
42. Has a supplemental asthma management program been instituted for those students with asthma?				
Oral Health				
43. Do all children entering school receive oral health screening, referral and follow-up for necessary diagnostic, preventive, and treatment services?				
44. Are periodic oral health assessments offered by dental health professionals and follow-up programs?				
45. In areas not served by a fluoridated water system, has the school installed a fluoridation system or fluoride supplement program?				
46. Has a supplemental instructional program been established to provide information on oral health including the need for sealants and topical or systematic fluorides for those who do not have fluoridated public water?				
Maternal and Infant Health				
47. Has an instructional program been established to provide programs on parenting, teenage sexual health, and family planning?				
48. Has a program been established to encourage pregnant students to complete high school?				
49. Has a program been established to encourage pregnant students to receive prenatal care?				

Health Services (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Maternal and Infant Health				
50. Is information on adoption provided to unmarried pregnant students?				
51. Do pregnant students receive information on the deleterious effects of alcohol, tobacco, cocaine, and marijuana?				
Heart Disease and Stroke				
52. Are periodic screenings conducted for high blood pressure?				
53. Are nursing care plans instituted for hypertensive and overweight students?				
54. Has a high blood pressure and/or cholesterol education and control program been established for students?				
Cancer				
55. Do providers of primary care for students routinely counsel patients about tobacco use cessation, diet modification, and cancer screening recommendations?				
Chronic Disabling Conditions				
56. Are students routinely screened for vision impairment every 2-3 years?				
57. Are students routinely screened for hearing impairment every 2-3 years?				
58. Are students routinely screened for speech and language impairment?				
59. Are students routinely screened for developmental milestones?				
60. Has an integrated service system been established for students with chronic and disabling conditions?				
61. Are teaching staff notified at least annually of impairments that could impact on learning?				
62. Are Individual Health Plans developed for students with chronic or disabling conditions?				
63. Are Individual Health Plans developed for all students?				
64. Are families provided information and counseling to address chronic and disabling conditions of their children?				

Health Services (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" to 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
HIV Infection				
65. Are students provided age-appropriate counseling and supplemental instruction on the prevention of HIV?				
66. Are students provided counseling on anonymous testing sites?				
Sexually Transmitted Diseases				
67. Has a program been established to prevent the transmission of sexually transmitted diseases?				
68. Are students provided information on STD testing sites?				
Immunization				
69. Are the records of immunization status of all students maintained?				
70. Have all students received immunizations for all vaccine-preventable diseases?				
71. Has a surveillance system been established to ensure booster immunizations are received at appropriate intervals?				
Clinical Preventive Services				
72. Do at least 95% of the students have a specific source of ongoing primary care for coordination of their preventive and episodic health care?				
73. If the answer to question #72 is no, has a coalition of community agencies implemented a full service school-based or school-linked clinic to provide primary care to students?				
74. Has information been provided to secure family involvement in:				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success?				
j. Enhancing parent-child communication?				
k. Enhancing self-esteem in their child?				

Health Services (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
75. Has your school organized any interdisciplinary teams of school staff to implement programming in any of the following areas: (If yes, rate this activity exemplary (5) if the team has conducted more than 13 activities per year; rate 4 for 10-12 activities; rate 3 for 7-9 activities; rate 2 for 4-6 activities; rate 1 for 2-3 activities.)				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success?				
(For any program that an interdisciplinary team addresses, write the approximate number of times that the team meets each semester in the parenthesis beside each program.)				
76. Has your school organized school-community teams to implement programming in any of the following areas:				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success?				
(For any program that an interdisciplinary team addresses, write the approximate number of times that the team meets each semester in the parenthesis beside each program.)				
77. Is there an individual at the district level that supervises or directs the health services program?				
78. Is there an individual at the school level that supervises or directs the health services program?				
79. Does the ratio of school nurse to students meet recommended standards?				

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Healthy School Environment

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 and 5, with 1 being "Not Needed" to 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Heart Disease and Stroke				
1. Are low-salt, low-cholesterol, or low-calorie foods provided in vending machines?				
2. Are only low-salt, low-cholesterol, or low-calorie foods used in fund raising?				
3. Are blood pressure screening programs for all faculty, staff, and students conducted periodically?				
Family Planning				
4. Have teenage pregnancy prevention programs been established?				
5. Is there sequential instruction in human sexuality as part of the comprehensive school health curriculum?				
Maternal and Infant Health				
6. Are there special incentives or programs to encourage the pregnant girl to complete high school?				
7. Has the school established a day-care program for the infants of teen mothers?				
8. Is there sequential instruction in human sexuality as part of the comprehensive school health curriculum?				
Immunizations				
9. Can the basic immunization series for all students be assessed as current?				
10. Has a communicable disease policy been implemented?				
Sexually Transmitted Disease				
11. Has a policy been established detailing the conditions for allowing an individual or staff with HIV to attend school?				
12. Is there sequential instruction that focuses on HIV and other STDs as part of the comprehensive school health curriculum?				

Healthy School Environment (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Accident Prevention and Injury Control				
13. Have policies and procedures been established regarding the reporting of accidental injuries?				
14. Are safety evacuation drills conducted?				
15. Is there specific sequential K-12 instruction on injury prevention and control as part of the school health curriculum?				
16. Is there a policy which mandates employees to use occupant protection systems during work-related travel?				
17. Has a policy been established requiring faculty and staff to be proficient in first aid and cardiopulmonary resuscitation?				
Immunizations				
18. Has a policy been established requiring students to have current immunizations to attend school?				
Tobacco				
19. Has a policy been established to promote a tobacco-free environment for students and staff?				
20. Is there tobacco use prevention instruction in elementary, middle, and high school?				
Alcohol and Drug Abuse				
21. Has a policy regarding alcohol and drug misuse been articulated and enforced?				
22. Has an integrated community and school alcohol and drug intervention program been established?				
23. Is there specific alcohol and other drug prevention instruction provided as a part of a comprehensive school health education in elementary, middle, and high school?				
24. Has a student assistance program and an employee assistance program been implemented?				
Physical Fitness and Exercise				
25. Do all students participate in daily PE?				
26. Have walking, jogging, or cycling fitness trails or a par course been constructed around the school?				
27. Are effective head, face, eye, and mouth protection required for sports and recreation that pose risk of injury?				

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Healthy School Environment (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Nutrition				
28. Is there specific sequential K-12 nutrition instruction as part of the comprehensive school health curriculum?				
29. Does the school lunch and breakfast program provide menus consistent with the concepts in Dietary Guidelines for Americans?				
Oral Health				
30. Has a policy been established that promotes the use of mouth guards for those athletes who participate in contact sports?				
31. Have all children entering school received oral health screening, referral and follow-up services?				
Violent and Abusive Behavior				
32. Has a periodic survey of the school's emotional climate been conducted?				
33. Has a student conduct policy been established and enforced?				
34. Is there sequential K-12 instruction that teaches nonviolent conflict resolution skills as part of the comprehensive school health curriculum?				
Schoolsite Health Promotion Program				
35. Has a school site health promotion program for faculty and staff been instituted and funded?				
36. Are faculty and staff offered nutrition and weight management programs?				
37. Are faculty and staff offered smoking cessation programs?				
38. Are faculty and staff offered an Employee Assistance Program (EAP)?				
39. Are faculty and staff offered stress reduction programs?				
40. Are faculty and staff offered blood pressure and cholesterol education?				

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Healthy School Environment (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Integrated School and Community				
41. Has a school health committee been established with representatives from health services, health instruction, physical education, food services, guidance and counseling, and the school's administration?				
42. Has the school instituted a fluoride program if the community water system is not fluoridated?				
43. Has a School Health Coordinating Council been established with members representing community health agencies?				
44. Have school and community health education programs that target the school-age child been integrated?				
45. Is there a policy which states the district will not discriminate against hiring people with disabilities?				
46. Is there a plan to increase the graduation rate to at least 90%?				
47. Is there a plan to provide all disadvantaged children and children with disabilities access to high quality, developmentally appropriate preschool programs?				
48. Has your school organized school-community teams to implement programming in any of the following areas:				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success?				
(For any program that an interdisciplinary team addresses, write the appropriate number of times that the team meets each semester in the parenthesis beside each program.)				

Worksite Health Promotion for Faculty and Staff

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" to 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" to 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Physical Activity and Fitness				
1. Are periodic fitness screenings being conducted?				
2. Has a personalized fitness program been provided based on screening results?				
3. Have specific fitness activities been organized (walking, cycling, swimming, fitness challenges)?				
4. Have fitness trails surrounding the school been identified?				
5. Have exercise support groups been formed?				
6. Has a program been established to provide instruction regarding physical fitness and exercise?				
Nutrition				
7. Are weight management classes provided?				
8. Are weight loss competitions conducted?				
9. Have nutrition education programs been established?				
10. Does the cafeteria offer menus consistent with the nutrition principles in Dietary Guidelines for Americans?				
Tobacco				
11. Has the school been declared a smoke-free area?				
12. Has a smoking cessation program been implemented for staff?				
13. Has an instructional program been established to provide information on the deleterious effects resulting from using tobacco products?				
14. Is there a policy that prohibits smoking at school?				
Alcohol and Other Drugs				
15. Has an Employee Assistance Program (EAP) been established?				
16. Is there a program that discourages excessive use of alcohol and other drugs?				
Mental Health and Mental Disorders				
17. Are stress reduction programs provided?				
18. Has the school conducted an organizational analysis to identify organizational changes that could be employed to reduce individual staff stress?				

Worksite Health Promotion for Faculty and Staff (Continued)

The Status of School Health Programs In Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
Heart Disease and Stroke				
19. Can faculty and staff identify their blood pressure?				
20. Are periodic screenings conducted for high blood pressure?				
21. Are cholesterol screenings conducted periodically?				
22. Has an instructional program been established on hypertension and hypercholesterolemia management?				
Cancer				
23. Have programs been conducted that encourage diet modification, smoking cessation, reduction in direct sunlight exposure, and specific cancer screenings?				
Violent and Abusive Behavior				
24. Has a supplemental instruction system been established to provide information regarding stress, violence, sexual and child abuse recognition and management?				
Unintentional Injury and Occupational Health				
25. Are employees mandated to use occupant protection systems? (safety belts during work-related travel)?				
26. Are instructional programs on injury prevention provided?				

Health Instruction

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes " or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
1. Does the school system have a written K-12 school health curriculum?				
2. Are the following topics contained in the *Healthy People 2000* presented as part of a planned, sequential instructional K-12 program?				
Nutrition				
Tobacco prevention				
Alcohol and other drugs				
Human sexuality				
Non-violent conflict resolution				
Injury prevention and control				
HIV prevention				
Sexually transmitted diseases				
Physical fitness				
3. Are all the topics contained in the *Healthy People 2000* objectives correlated with other subjects in a planned, sequential manner?				
4. Is the library used as a resource to promote supplemental learning in regard to the topics contained in the *Healthy People 2000* objectives?				
5. Is parental involvement solicited on health lessons related to nutrition, physical activity, sexual behavior, tobacco, alcohol and other drugs, and safety?				
6. Does the health instruction program focus on the following behavioral outcomes?				
High Blood Pressure Control				
a. participating in a blood pressure screening assessment				
b. participating in aerobic exercises three times a week for a minimum of 15 to 20 minutes				
c. maintaining appropriate weight through balancing caloric intake and exercise				
d. refraining from smoking				
e. choosing foods low in cholesterol				
f. choosing foods low in salt				
g. reducing dietary fat				
h. practicing relaxation techniques				

Health Instruction (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
7. Does the health instruction program focus on the following behavior outcomes?				
Family Planning				
a. abstaining from irresponsible sexual activity				
b. using effective contraceptives if sexually active				
c. completing high school, even if pregnant				
Pregnancy and Infant Health				
a. receiving appropriate prenatal care when pregnant				
b. consuming an appropriate nutritious diet when pregnant				
c. avoiding drugs, alcohol, and tobacco products				
d. reducing the number of teen pregnancies				
e. postponing the initiation of sexual intercourse				
f. abstaining from irresponsible sexual activity				
g. using effective contraception that prevents pregnancy and disease, if sexually active				
h. completing high school, even if pregnant				
Tobacco				
a. refraining from smokeless tobacco use				
b. refraining from cigarette smoking				
c. reducing smoking in pregnant women				
d. reducing number of children exposed to tobacco smoke at home				
Immunizations				
a. seeking initial and booster immunizations for all vaccine preventable diseases at appropriate intervals				
Sexually Transmitted Diseases				
a. abstaining from irresponsible sexual activity				
b. using condoms if sexually active				
c. decreasing the total number of sexual partners if sexually active				
d. seeking diagnosis and treatment for STDs, if sexually active				
Unintentional Injury				
a. wearing a safety restraint when riding in a moving vehicle				
b. seeking professional dental care at appropriate intervals				
c. wearing mouth guards during contact sports				
d. receiving protective sealants on permanent molar teeth				
e. using topical or systemic (dietary fluoride) if water is not optimally fluoridated				

Health Instruction (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1-5	C School Necessity Rating 1-5
8. Does the health instruction program focus on the following behavior outcomes?				
Surveillance and Control of Infectious Diseases				
a. seeking appropriate health services when needed				
b. practicing appropriate sanitary practices/universal precautions				
Alcohol and Other Drugs				
a. refraining from alcohol and drug use				
b. avoiding driving while under the influence of alcohol or drugs				
c. stating disapproval for heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine				
d. stating that physical or psychological harm is associated with heavy use of alcohol, regular use of marijuana, and experimentation with cocaine				
e. reducing occasions of heavy drinking of alcoholic beverages				
Nutrition				
a. choosing foods low in cholesterol				
b. decreasing consumption of total fat and saturated fat				
c. using food labels to make nutritious food selections				
d. choosing foods low in salt				
e. attaining and maintaining appropriate weight through balancing caloric intake and exercise				
f. choosing at least three servings daily of food rich in calcium				
g. increasing dietary fiber to five or more servings daily of vegetables and fruits; six of grain products				
Physical Fitness and Exercise				
a. participating regularly in light to moderate exercise for a minimum of 30 minutes, preferably daily				
b. participating in vigorous exercise that promotes cardiovascular fitness three times a week for 20 minutes or more per occasion				
c. regularly performing physical activities that enhance or maintain muscular strength, endurance, and flexibility				

Health Instruction (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
9. Does the health instruction program focus on the following behavior outcomes?				
Sexually Transmitted Diseases/HIV Prevention				
a. abstaining from irresponsible sexual activity				
b. decreasing the total number of sexual partners, if sexually active				
c. seeking diagnosis and treatment for STDs, if sexually active				
d. using condoms, if sexually active				
Violent and Abusive Behavior				
a. reporting neglect, physical, emotional and sexual abuse				
b. reducing violent and abusive behavior (rape, abuse, homicide, suicide)				
c. abstaining from carrying a weapon				
d. abstaining from physical fighting				
e. participating in violence prevention programs				
Mental Health				
a. reducing the incidence of suicide attempts				
b. reducing the prevalence of adverse health effects from stress				
c. reducing stress levels				
d. increasing activities to reduce or control stress				
Cancer				
a. reducing cigarette smoking				
b. reducing intake of dietary fat				
c. increasing intake of complex carbohydrates and fiber foods				
d. increasing consumption of cruciferous and other vegetables high in Vitamin A				
e. wearing sunscreen and protective clothes when outdoors				
10. Are opportunities for peer instruction provided in:				
a. Tobacco prevention				
b. Nutrition promotion				
c. Alcohol and other drug prevention				
d. Intentional injury prevention				
e. Unintentional injury prevention				
f. Physical fitness				
g. HIV prevention				
h. Reproductive health				

School Counseling and Psychology

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Rating Yes	A Activity Rating No	B Quality Rating 1-5	C School Necessity Rating 1-5
1. In your school, have guidance programs been developed to:				
a. Reduce mental and emotional disability and improve mental health?				
b. Assist in the identification, referral, and prevention of child sexual and physical abuse?				
c. Prevent suicide?				
d. Prevent homicide and weapon carrying?				
e. Prevent rape?				
f. Prevent high school drop out?				
g. Improve conflict mediation skills?				
h. Provide stress manangement techniques?				
i. Reduce alcohol and other drug abuse?				
j. Reduce tobacco use?				
k. Provide stress management techniques?				
l. Reduce STDs, including HIV?				
m. Reduce accidental injury?				
n. Improve fitness?				
o. Improve nutrition?				
p. Improve career planning and goal setting?				
q. Enhance transitions to middle and high school?				
r. Enhance human relations?				
s. Enhance interpersonal development?				
t. Reduce absenteeism?				
2. Have students been organized to deliver peer counseling and education programs on issues contained within the Healthy People 2000 Objectives:				
a. Nutrition and weight management?				
b. Prevention of misuse of alcohol and other drugs?				
c. Prevention and cessation of tobacco use?				
d. HIV prevention and human sexuality?				
e. Sexually transmitted diseases?				
f. Intentional injury prevention (conflict management)?				
g. Unintentional injury prevention (accidents)?				
h. Teen pregnancy prevention?				
i. Stress management?				

School Counseling and Psychology (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

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If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1-5	C School Necessity Rating 1-5
3. Are group counseling services offered in regard to issues contained within the priority areas of the *Healthy People 2000* objectives:				
a. Conflict management?				
b. Weight management?				
c. Alcohol abuse prevention?				
d. Tobacco use prevention/cessation?				
e. Children of alcoholics?				
f. Human sexuality?				
g. Stress management?				
h. Anorexia and bulimia management?				
i. Violence prevention?				
j. Date rape prevention?				
k. Adolescent parenting programs?				
l. Unintentional injury prevention?				
m. STD/HIV prevention?				
4. Have resources/workshops been developed for teachers, health service personnel, and administrators in regard to:				
a. Recognition and referral of sedentary students?				
b. Recognition and referral of overweight or underweight students?				
c. Recognition and referral of substance abusing students?				
d. Prevention of alcohol and other drug abuse?				
e. Prevention of teen pregnancy?				
f. Prevention of STDs/HIV?				
g. Recognition and referral of student with nutritional disorder?				
h. Prevention of violence and abusive behavior?				
i. Recognition and referral of children of alcoholics?				
j. Recognition and referral of child abuse victims?				
k. Recognition and referral of potential suicide victim?				
l. Promotion of academic success?				
m. Promotion of interpersonal development of students?				
n. Promotion of healthy classroom environment?				
o. Recognition, referral, and remediation of student with developmental deficiencies or school adjustment problems?				

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School Counseling and Psychology (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

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Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
5. Have support groups been developed which address:				
a. Mental health?				
b. Children of alcoholics?				
c. Alcohol and other drug abuse?				
d. Stress management?				
e. Weight management?				
f. Fitness management?				
g. Other (_____)				
6. Has information been provided to secure family involvement in:				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intention injury) prevention?				
i. Academic success?				
j. Enhancing parent-child communication?				
k. Enhancing self esteem in their child?				
7. Has your school organized any interdisciplinary teams of school staff to implement programming in any of the following areas: (If yes, rate this activity exemplary (5) if the team has conducted more than 13 activities per year; rate 4 for 10-12 activities; rate 3 for 7-9 activities; rate 2 for 4-6 activities; rate 1 for 2-3 activities)				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success? (For any program that an interdiscplinary team addresses, write the approximate number of times that the team meets each semester in the parenthesis beside each program.)				

School Counseling and Psychology (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

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If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1-5	C School Necessity Rating 1-5
8. Has your school organized school-community teams to implement programming in any of the following areas: (If yes, rate the activity exemplary (5) if the team has conducted more than 13 activities per year; rate 4 for 10-12 activities; rate 3 for 7-9 activities; rate 2 for 4-6 activities; rate 1 for 1-3 activities.)				
a. Alcohol and other drug prevention?				
b. Smoking prevention?				
c. Nutrition promotion?				
d. Fitness promotion?				
e. Pregnancy prevention?				
f. STD/HIV prevention?				
g. Accident (unintentional injury) prevention?				
h. Violence (intentional injury) prevention?				
i. Academic success? (For any program that a school-community team addresses, write the approximate number of times that the team meets each semester in the parenthesis beside each program.)				
9. Is there an individual at the district office that directs or supervises the guidance program?				
10. Is there an individual at the school level that directs or supervises the guidance program?				

Food Service

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes " or "no" in Column A to indicate if the activity is conducted in your school. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column "C," rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
1. Do all school meals meet USDA/DHHS requirement guidelines and nutrition principles outlined in Dietary Guidelines for Americans?				
2. Are lower calorie dietary selections promoted in the school cafeteria?				
3. Are lower cholesterol dietary selections promoted in the school cafeteria?				
4. Are lower salt dietary selections promoted in the school cafeteria?				
5. Are higher fiber dietary selections promoted in the school cafeteria?				
6. Are lower calorie, lower cholesterol, lower salt, and higher fiber dietary selections labeled in the cafeteria line?				
7. Are students encouraged to use food labels to make nutritious food selections?				
8. Are students encouraged to select at least three servings daily of foods that are rich in calcium?				
9. Are students encouraged to select five or more servings of vegetables and fruits?				
10. Are students encouraged to select six or more servings of grain products?				
11. Do school fund-raising projects promote only those food choices that are lower in salt and fat, and not highly cariogenic?				
12. Do vending machines provide food choices that are lower in salt and cholesterol, and not highly cariogenic?				
13. Does the food service director act as a resource for supplemental instruction on nutrition?				
14. Has a student nutrition Youth Advisory Council been convened to provide input on menu choice and supplemental nutrition education activities?				
15. Is a bulletin board used in the school cafeteria to provide supplemental nutrition information?				
16. Is breakfast provided for chapter one students?				

Physical Education

The Status of School Health Programs in Regard to the Healthy People 2000

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
1. Do all students engage in light to moderate exercise for 30 minutes daily?				
2. Do students in physical education classes participate in continuous large muscle exercises that cause them to breathe rapidly and to experience a significant increase in heart rate for at least 20 minutes at least three times per week?				
3. Are students provided skills and encouragement to engage in leisure time physical activity?				
4. Does the physical education program provide instruction that requires muscular strength, muscular endurance, and flexibility?				
5. Are students provided instruction on balancing the importance of sound dietary practices with regular physical activity to maintain appropriate weight?				
6. Do students ages 6 to 17 participate daily in organized physical education program?				
7. Are students in the physical education program physically active for at least half of the physical education class in activities which can be classified as lifetime sports?				

Physical Education (Continued)

The Status of School Health Programs in Regard to the Healthy People 2000 Objectives

Please complete the items below to help evaluate how adequately your program contributes to attaining the *Healthy People 2000* initiative.

For each item below, check "yes" or "no" in Column A to indicate if the activity is conducted. If yes, in Column "B," rate the quality of the conducted activity on a scale of 1 to 5, with 1 being "Poor" and 5 being "Exemplary."

If the activity is not conducted, in Column C, rate how necessary you feel the activity is to your school on a scale of 1 to 5, with 1 being "Not Needed" and 5 being "High Priority."

Questions	A Activity Conducted Yes	A Activity Conducted No	B Quality Rating 1 - 5	C School Necessity Rating 1 - 5
8. Is testing of health-related fitness conducted periodically for all students?				
9. Are the results of the fitness tests recorded on students' permanent records?				
10. Do students receive some form of recognition for their participation in the fitness testing?				
11. Are the results used to develop an individualized fitness program?				
12. Do all students who participate in organized contact sports routinely wear proper mouth guards? .				
13. Are students encouraged to use school facilities at times other than during organized physical education classes?				
14. Have fitness trails been marked around the school?				
15. Are students and staff encouraged to participate in at least one physical activity sponsored by community organizations?				

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Appendix B
1994 National Health Observances

When is Child Health Day? How about National Child Abuse Prevention Month? You'll find these answers in this compilation of more than 125 national health observances. Call or write the sponsoring organizations for materials and information on how to participate.

JANUARY

National Volunteer Blood Donor Month
American Assoc. of Blood Banks,
8101 Glenbrook Rd.,
Bethesda, MD 20814;
301/907-6977.
Materials: posters, bumper stickers, public service announcements.
Contact: Dept. of Communications and Public Relations.

National Autism Awareness Week, January 10-16
Autism Society of America,
7910 Woodmont Ave., Suite 650,
Bethesda, MD 20814-3015;
301/657-0881.
Contact: Veronica Zysk.

Sight-Saving Sabbath, January 23 and 29
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

National Glaucoma Awareness Week, January 23-29
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

School Nurse Day, January 26
Nat'l Association
of School Nurses, Inc.,
Lamplighter Lane, P.O. Box 1300,
Scarborough, ME 04074;
207/883-2117.

FEBRUARY

American Heart Month
American Heart Association,
7320 Greenville Ave.,
Dallas, TX 75231;
214/373-6300.
Contact: Local chapters.

Macular Degeneration Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020; 708/843-2020.
Contact: Director of Marketing.

National Children's Dental Health Month
American Dental Association,
211 E. Chicago Ave.,
Chicago, IL 60611; 312/440-2593.
Contact: Nina Koziol.

National Cardiac Rehabilitation Week, February 13-19
American Association of Cardiovascular and Pulmonary Rehabilitation,
7611 Elmwood Ave., Suite 201,
Middleton, WI 53562;
608/831-6989.

National Child Passenger Safety Awareness Week, February 13-19
U.S. Dept. of Transportation
Nat'l Highway Traffic Safety Admn.,
400 Seventh St., SW,
Washington, DC 20590;
202/366-9550.
Contact: Belinda Cunningham,
Beth Poris.

National Girls and Women in Sports Day, February 3
Women's Sports Foundation,
Eisenhower Park, East Meadow, NY
11554;516/542-4700
Contact: Special Project Office.

MARCH

Cataract Awareness Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

Foot Health Month
American Podiatric
Medical Association,
9312 Old Georgetown Road,
Bethesda, MD 20814;
301/571-9200.

Hemophilia Month
National Hemophilia Foundation,
Soho Building,
110 Greene St., Suite 303,
New York, NY 10012;
212/219-8180.
Contact: Anne King.

Mental Retardation Month
The Arc, P.O. Box 1047,
Arlington, TX 76004;
817/261-6003.
Contact: Communications and Development Dept. or Liz Moore.

National Kidney Month
National Kidney Foundation,
30 E. 33rd St.,
New York, NY 10016;
800/622-9010; 212/889-2210.
Contact: Local chapters.

National Chronic Fatigue Syndrome Awareness Month
National Chronic Fatigue
Syndrome Association,
3521 Broadway, Suite 222,
Kansas City, MO 64111;
816/931-4777.

National Eye Donor Month
Eye Bank Assoc. of America, Inc.,
1001 Connecticut Ave., NW,
Suite 601, Washington, DC
20036-5504; 202/775-4999.
FAX 202/429-6036.

National Nutrition Month
American Dietetic Association,
216 W. Jackson Blvd., Suite 800,
Chicago, IL 60606-6995;
312/899-0040.

Red Cross Month
American Red Cross,
430 17 St., NW,
Washington, D.C., 20006;
202/737-8300.

National PTA Drug and Alcohol Awareness Week, March 6-12
National PTA,
330 N. Wabash St., Chicago, IL
60611-2571; 312/670-6782.

Save Your Vision Week, March 6-12
American Optometric Association,
243 N. Lindbergh Blvd.,
St. Louis, MO 63141;
314/991-4100.
Contact: Barb Fischer.

National School Breakfast Week, March 7-11
American School
Food Service Association,
1600 Duke St., 7th Floor,
Alexandria, VA 22314;
703/739-3900.
Contact: Gloria Garrison.

Children and Hospitals Week, March 20-26
Association for the
Care of Children's Health,
7910 Woodmont Ave., Suite 300,
Bethesda, MD 20814;
301/654-6549.
Contact: Trish McClean.

National Poison Prevention Week, March 20-26
Poison Prevention Week Council,
P.O. Box 1543, Washington, DC
20013; 301/504-0580.
Contact: Ken Giles.

National Pulmonary Rehabilitation Week, March 20-26
American Association of Cardiovascular and Pulmonary Rehabilitation,
7611 Elmwood Ave., Suite 201,
Middleton, WI 53562;
608/831-6989.

American Diabetes Alert, March 22
American Diabetes Association,
1660 Duke St.,
Alexandria, VA 22314;
800/232-3472; 703/549-1500.
Contact: Local chapters

APRIL

National Alcohol Awareness Month
National Council on Alcoholism
and Drug Dependence, Inc.,
12 W. 21st St.,
New York, NY 10010;
212/206-6770.
Contact: Rebecca Fenson.

National Cancer Control Month
American Cancer Society,
1599 Clifton Road, NE,
Atlanta, GA 30329-4251;
800/ACS-2345; 404/320-3333.
Contact: Local chapters.

National Child Abuse Prevention Month
National Committee
for Prevention of Child Abuse,
332 S. Michigan Ave., Suite 1600,
Chicago, IL 60604;
312/663-3520.
Contact: Public Awareness.

Occupational Therapy Month
American Occupational
Therapy Association,
1383 Piccard Drive,
Rockville, MD 20850-4375;
301/948-9626.
Contact: Public Relations.

Sports Eye Safety Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

Alcohol-Free Weekend, April 1-3
National Council on Alcoholism
and Drug Dependence, Inc.,
Rhode Island Council on
Alcohol and Drug Dependence,
500 Prospect St.,
Pawtucket, RI 02860
401/725-0410.
Contact: David Dean.

World Health Day, April 7
American Assoc. for World Health,
1129 20th St., NW, Suite 400,
Washington, DC 20036;
202/466-5883.

National Building Safety Week, April 10-16
National Conference of States
on Building Codes and Standards,
505 Huntmar Park Drive,
Herndon, VA 22070;
703/437-0100.
Contact: Deborah Brettner.

National Medical Lab Week, April 10-16
American Society
of Clinical Pathologists,
2100 W. Harrison St.,
Chicago, IL 60612;
312/738-4886.
Contact: Suzanne Stock.

Red Nose Day, USA, April 15
SIDS Alliance,
10500 Little Patuxent Parkway,
Suite 420,
Columbia, MD 21044;
800/221-SIDS.

Minority Cancer Awareness Week, April 11-17
National Cancer Institute,
Building 31, Room 10A10,
9000 Rockville Pike,
Bethesda, MD 20892;
301/496-6792, 800/4-CANCER.

National Eye and Tissue Donor Awareness Week, April 17-23
Eye Bank Assoc. of America, Inc.,
1001 Connecticut Ave., NW,
Suite 601,
Washington, DE 20036-5504;
202/775-4999, FAX 202/429-6036.

National Organ and Tissue Donor Awareness Week, April 19-23
National Kidney Foundation,
30 E. 33rd St., New York, NY 10016; 800/622-9010, 212/889-2210.
Contact: Information Office.

National Preschool Immunization Week, April 24-30
Healthy Mothers-Healthy Babies,
409 12th St., SW,
Washington, DC 20024;
202/863-2438
Contact: Lucy Andris.

MAY

Asthma and Allergy Awareness Month
Asthma and Allergy Foundation of America,
1125 15th St., NW, Suite 502,
Washington, DC 20005;
202/466-7643; 800/7-ASTHMA.

Better Hearing and Speech Month
American Speech-Language-Hearing Association,
10801 Rockville Pike,
Rockville, MD 20852;
800/638-8255, 301/897-8682.

Better Sleep Month
Better Sleep Council,
333 Commerce St.,
Alexandria, VA 22314;
800/368-3083.

Correct Posture Month
American Chiropractic Assoc.,
1701 Clarendon Blvd.,
Arlington, VA 22209;
703/276-8800, 800/368-3083

Huntington's Disease Awareness Month
Huntington's Disease Society of America, 140 W. 22nd St.,
New York, NY 10011-2420;
212/242-1968, 800/345-4372.
Contact: Local chapters.

Mental Health Month
National Mental Health Association,
1021 Prince St.,
Alexandria, VA 22314-7722.
703/684-7722.

National Arthritis Month
Arthritis Foundation,
1314 Spring St., NW,
Atlanta, GA 30309;
404/872-7100.
Contact: Local chapters.

National Bike Month
League of American Wheelmen,
190 W. Osterd St., Suite 120,
Baltimore, MD 21230-3755;
410/539-3399.
Contact: Susan Jones.

National Digestive Diseases Awareness Month
Digestive Disease Nat'l Coalition,
711 2nd St., NE, Suite 200,
Washington, DC 20002;
202/544-7499.
Contact: Glenn Gebler.

National High Blood Pressure Month
Nat'l High Blood Pressure Education Program Information Center,
P.O. Box 30105,
Bethesda, MD 20824-0105;
301/251-1222.

National Melanoma/Skin Cancer Detection and Prevention Month
American Academy of Dermatology,
930 N. Meacham Road,
P.O. Box 4014,
Schaumburg, IL 60168;
708/330-0230.
Contact: Ruth Sikes.

National Neurofibromatosis Month
Nat'l Neurofibromatosis Foundation,
141 Fifth Ave., Suite 7-S,
New York, NY 10010;
800/323-7938, 212/460-8980.

National Physical Fitness and Sports Month
President's Council on Physical Fitness and Sports,
701 Pennsylvania Ave., NW,
Suite 250,
Washington, DC 20004;
202/272-3424.

National Sight-Saving Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

National Trauma Awareness Month
American Trauma Society,
8903 Presidential Parkway,
Suite 512,
Upper Marlboro, MD 20772-2656;
800/556-7890, 301/420-4189.
Contact: Ruth Pollack.

Older Americans Month
Administration on Aging,
330 Independence Ave., SW,
Washington, DC 20201;
202/619-2598.
Contact: June Ferris.

Stroke Awareness Month
National Stroke Association,
8480 E. Orchard Road, Suite 1000,
Englewood, CO 80111-5015;
303/762-9922.
Contact: Marjorie Anderson.

Tuberous Sclerosis Awareness Month (kicks off with World's Largest Garage Sale, May 13-15)
National Tuberous Sclerosis Association, 8000 Corporate Drive,
Suite 120, Landover, MD 20785;
800/225-6872, 301/459-9888.

National Physical Education and Sports Week, May 1-7
National Association for Sport and Physical Education, 1900 Association Drive, Reston, VA 22091;
703/476-3410.

World Red Cross Day, May 8
American Red Cross,
430 17th St., NW,
Washington, DC 20006;
202/737-8300.

National Alcohol and other Drug-Related Birth Defects Awareness Week, May 8-14
National Council on Alcoholism and Drug Dependence, Inc.,
12 W. 21st St.,
New York, NY 10010;
212/206-6770.
Contact: Jeffery Hon.

National Hospital Week, May 8-14
American Hospital Association,
840 N. Lake Shore Drive,
Chicago, IL 60611;
312/280-6000.

National Nursing Home Week, May 8-14
American Health Care Association,
1201 L St., NW,
Washington, DC 20005;
202/842-4444.
Contact: Angela Thimis.

National Osteoporosis Prevention Week, May 8-14
National Osteoporosis Foundation,
1150 17th St., NW, Suite 500,
Washington, DC 20036-4603;
202/223-2226.

National Running and Fitness Week, May 8-14
American Running and Fitness Association,
4405 East-West Highway,
Suite 405,
Bethesda, MD 20814;
301/913-9517.

National Safe Kids Week, May 8-14
National Safe Kids Campaign,
111 Michigan Ave., NW,
Washington, DC 20010-2970;
202/939-4993.
Contact: Field Department.

National Medic Alert Week, May 8-15
Medic Alert Foundation Internat'l,
3232 Colorado Ave.,
Turlock, CA 95381;
800/344-3226.

National Senior Smile Week, May 15-21
American Dental Association,
211 E. Chicago Ave.,
Chicago, IL 60611;
312/440-2593.
Contact: Suzanne Bradley.

National Employee Health and Fitness Day, May 18
Nat'l Assoc. of Governor's Councils on Physical Fitness and Sports,
201 S. Capitol Ave., Suite 560,
Indianapolis, IN 46225-1072;
317/237-5630.

Buckle Up America Week, May 23-30
U.S. Dept. of Transportation,
Nat'l Hgwy. Traffic Safety Admn.,
400 Seventh St., SW,
Washington, DC 20590;
202/366-9550.
Contact: Belinda Cunningham, Beth Poris.

The Great American Workout, (Day to be determined)
President's Council on Physical Fitness and Sports,
701 Pennsylvania Ave., NW,
Suite 250,
Washington, DC 20004;
202/272-3424.

World No Tobacco Day, May 31
American Assoc. for World Health,
1129 20th St., NW, Suite 400,
Washington, DC 20036;
202/466-5883.

JUNE

Dairy Month
American Dairy Association,
O'Hare International Center,
10255 W. Higgins Road, Suite 900,
Rosemont, IL 60018-5615;
708/803-2000.

Firework Safety Month (through July 4)
Nat'l Society to Prevent Blindness,
500 East Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

National Ragweed Control Month
Air Pollution Control League,
18 E. Fourth St., Room 211,
Cincinnati, OH 45202;
513/621-1669.
Contact: Charles Howison.

National Scleroderma Awareness Month
United Scleroderma Foundation, Inc.
P.O. Box 399,
Watsonville, CA 95077;
800/722-HOPE, 408/728-2202.

National Safe Boating Week, June 5-11
U.S. Coast Guard,
2100 Second St., SW,
Washington, DC 20593-0001;
800/368-5647, 202/267-1060.

National Safety Week, June 5-11
American Society of Safety Engineers,
1800 E. Oakton,
Des Plaines, IL 60018-2187;
708/692-4121.
Contact: Charlyn Haguewood.

Helen Keller Deaf-Blind Awareness Week, June 19-25
Helen Keller National Center,
111 Middle Neck Road,
Sands Point, NY 11050;
516/944-8900, ext. 325.
Contact: Barbara Hausman.

JULY

Hemochromatosis Screening Awareness Month
Hemochromatosis Research Foundation,
P.O. Box 8569,
Albany, NY 12208;
518/489-0972.

National Therapeutic Recreation Week, July 10-16
National Therapeutic Recreation Society,
2775 Quincy St., Suite 300,
Arlington, VA 22206.
703/820-4940.
Contact: Rikki Epstein.

AUGUST

National Water Quality Month
Culligan International,
One Culligan Parkway,
Northbrook, IL 60062;
708/205-6000.
Contact: Dana Buckbee.

SEPTEMBER

Bed Check Month
Better Sleep Council,
333 Commerce St.,
Alexandria, VA 22314;
202/333-0700.
Contact: Nancy Butler.

Children's Eye and Health Safety Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

Christmas Seals Campaign
American Lung Association,
1740 Broadway,
New York, NY 10019-4374;
212/315-8700.
Contact: Ruth Kasloff.

Leukemia Society Month
Leukemia Society of America, Inc.,
600 Third Ave.,
New York, NY 10016;
212/573-8484.
Contact: Local chapters.

National Cholesterol Education Month
National Cholesterol Education
Program Information Center,
P.O. Box 30105,
Bethesda, MD 20824-0105;
301/251-1222.
Contact: Information Center.

National Pediculosis Prevention Month
National Pediculosis Association,
P.O. Box 149,
Newton, MA 02161;
800/446-4NPA, 617/449-6487.

National Sickle Cell Month
Nat'l Assoc. for Sickle Cell Disease,
3345 Wilshire Blvd., Suite 1106,
Los Angeles, CA 90010-1880;
800/421-8453.
Contact: Ralph Sutton.

Teen Sleeplessness Month
Better Sleep Council,
333 Commerce St.,
Alexandria, VA 22314;
202/333-0700.
Contact: Nancy Butler.

National Rehabilitation Week, September 18-24
Allied Services, Inc.,
P.O. Box 1103,
Scranton, PA 18501-1103;
717/348-1300.
Contact: Alexandra Yantorn.

OCTOBER

Celiac Sprue Awareness Month
Celiac Sprue Association/
United States of America, Inc.,
P.O. Box 31700,
Omaha, NE 68131;
402/558-0600.

Child Health Month
American Academy of Pediatrics,
141 Northwest Point Blvd.,
P.O. Box 927,
Elk Grove, IL 60009-0927;
708/228-5005.
Contact: Dept. of Communications.

Family Health Month
American Academy
of Family Physicians,
8880 Ward Parkway,
Kansas City, MO 64114;
800/274-2237; 816/333-9700.

National Breast Cancer Awareness Month
Foresight Communications,
P.O. Box 57424,
Washington, DC 20036;
202/785-0710.

National Dental Hygiene Month
American Dental Hygienists' Assoc.,
444 N. Michigan Ave., Suite 3400,
Chicago, IL 60611;
312/440-8900.
Contact: Public Relations.

National Disability Employment Awareness Month
President's Committee on Employment of People with Disabilities,
1331 F St., NW, Suite 300,
Washington, DC 20004;
202/376-6200.
Contact: Faith Kirk.

National Liver Awareness Month
American Liver Foundation,
1425 Pompton Ave.,
Cedar Grove, NJ 07009;
800/223-0179; 201/256-2550.

National Lupus Awareness Month
Lupus Foundation of America,
4 Research Place, Suite 180,
Rockville, MD 20850;
800/558-0121, 301/670-9292.
Contact: Deb Blom.

National Physical Therapy Month
American Physical Therapy Assoc.,
1111 N. Fairfax St.,
Alexandria, VA 22314;
703/706-3248.

National Spina Bifida Month
Spina Bifida Assoc. of America,
4590 MacArthur Blvd., NW,
Suite 250,
Washington, DC 20007;
800/621-3141, 202/944-3285.

National Spinal Health Month
American Chiropractic Association,
1701 Clarendon Blvd.,
Arlington, VA 22209;
703/276-8800.

Sudden Infant Death Syndrome Awareness Month
SIDS Alliance,
10500 Little Patuxent Parkway,
Suite 420,
Columbia, MD 21044;
800/221-SIDS, 310/964-8000.

Talk About Prescriptions Month
National Council on Patient Information and Education,
666 11th St., NW, Suite 810,
Washington, DC 20001;
202/347-6711.
Contact: Charles Howison.

Mental Illness Awareness Week, October 2-8
American Psychiatric Association,
1400 K St., NW, Suite 501,
Washington, DC 20005;
202/682-6000.

Child Health Day, October 3
U.S. Dept. Health and Human Serv.,
Maternal and Child Health Bureau,
Parklawn Building, Room 18A55,
5600 Fishers Lane,
Rockville, MD 20857;
301/443-3163.

National Nurse-Midwifery Week, October 3-9
American College
of Nurse-Midwives,
818 Connecticut Ave., Suite 900,
Washington, DC 20005;
202/728-9875.

National Fire Prevention Week, October 9-15
National Fire Protection Association,
P.O. Box 9101,
One Batterymarch Park,
Quincy, MA 02269-9107;
617/984-7270.

American Heart Association's Heartfest, October 10-16
American Heart Association,
7272 Greenville Ave.,
Dallas, TX 75231.
Contact: Local chapters.

National School Lunch Week, October 10-16
American School
Food Service Association,
1600 Duke St., 7th Floor,
Alexandria, VA 22314;
703/739-3900.
Contact: Gloria Garrison.

National Infection Control Week, October 17-23
Association for Practitioners
in Infection Control,
1202 Allanson Road,
Mundelein, IL 60060;
708/949-6052.

World Food Day, October 16
National Committee
for World Food Day,
1001 22nd St., NW,
Washington, DC 20437;
202/653-2404.
Contact: Patricia Young.

National School Bus Safety Week, October 16-22
Nat'l School Transportation Assoc.,
P.O. Box 2639,
Springfield, VA 22152;
703/644-0700.
Contact: Executive Director.

National Adult Immunization Awareness Week, October 23-29
Nat'l Coalition for Adult
Immunization and Nat'l Foundation
for Infectious Diseases,
4733 Bethesda Ave., Suite 750,
Bethesda, MD 20814;
301/656-0003.
Contact: Bettie Orr.

National Cleaner Air Week, October 23-29
Air Pollution Control League,
18 E. Fourth St., Room 211,
Cincinnati, OH 45202;
513/621-1669.

NOVEMBER

Child Safety and Protection Month
National PTA,
330 N. Wabash St., Suite 2100,
Chicago, IL 60611;
312/670-6782.

Diabetic Eye Disease Awareness Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

National Alzheimer's Awareness Month
Alzheimer's Disease
and Related Disorders Association,
919 N. Michigan Ave., Suite 1000,
Chicago, IL 60611-1676;
800/272-3900, 312/335-8700.
Contact: Local chapters.

National Diabetes Month
American Diabetes Association,
1660 Duke St.,
Alexandria, VA 22314;
800/232-3472.
Contact: Local chapters.

National Epilepsy Month
Epilepsy Foundation of America,
4351 Garden City Dr., Suite 406,
Landover, MD 20785;
800/EFA-1000, 301/459-3700.
Contact: Pat Roose.

National Hospice Month
National Hospice Association,
1901 N. Moore St., Suite 901,
Arlington, VA 22209;
703/243-5900.
Contact: David Schneider.

Great American Smokeout, November 17
American Cancer Society,
1599 Clifton Road, NE,
Atlanta, GA 30329-4251;
800/ACS-2345.
Contact: Local chapters.

National Home Care Week, November 28 - December 4
National Association for Home Care,
519 C St., NE,
Washington, DC 20002;
202/547-7424.

DECEMBER

National Drunk and Drugged Driving Awareness Month
National Safety Council,
1121 Spring Lake Drive,
Itasca, IL 60143-3201
708/285-1121.

Safe Toys Month
Nat'l Society to Prevent Blindness,
500 E. Remington Road,
Schaumburg, IL 60173;
800/331-2020, 708/843-2020.
Contact: Director of Marketing.

National Aplastic Anemia Awareness Week, December 1-7
Aplastic Anemia
Foundation of America,
P.O. Box 22689,
Baltimore, MD 21203;
800/747-2820, 410/955-2803.

World AIDS Day, December 1
American Assoc. for World Health,
1129 20th St., NW, Suite 400,
Washington, DC 20036;
202/466-5883.

Appendix C
Youth Risk Behavior Survey

This survey is about health. It has been developed so you can tell us what *you* do that may affect your health and what *you* know about AIDS/HIV. The information you give will be used to develop better health education and AIDS/HIV education programs for young people like yourself.

DO NOT write your name on this survey *or* the answer sheet. The answers you give will be kept *private*. No one will know what you write. Answer the questions based on what you really do or really know.

This survey is conducted under the authority of the Public Health Services Act (42 USC 241). Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class.

The questions that ask about your background will only be used to describe the types of students completing this survey. The information will **not** be used to find out your name. *No names will ever be reported.*

Place all your answers on the answer sheet. Fill in the ovals completely. Make sure to answer every question. When you are finished, follow the instructions of the person giving you the survey. Put your answer sheet in the envelope and seal the envelope.

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions and for completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: PHS Reports Clearance Officer, Attention: PRA, Hubert Humphrey Building, Room 721-H, 2000 Independence Avenue, S.W., Washington, D.C. 20201 and to the Office of Management and Budget, Paperwork Reduction Project (0920-0258) Washington, DC 20503.

THANK YOU VERY MUCH FOR YOUR HELP

Column 1

INSTRUCTIONS:

Read each question carefully. Fill in the circle on your answer sheet that matches the letter of your answer. CHOOSE THE ONE BEST ANSWER FOR EACH QUESTION.

1. How old were you on your last birthday?

   a. 12 years old or younger
   b. 13 years old
   c. 14 years old
   d. 15 years old
   e. 16 years old
   f. 17 years old
   g. 18 years old or older

2. What sex are you?

   a. Female
   b. Male

3. What grade are you in?

   a. 9th grade
   b. 10th grade
   c. 11th grade
   d. 12th grade
   e. Ungraded or other

4. How do you describe yourself?

   a. White - not Hispanic
   b. Black - not Hispanic
   c. Hispanic
   d. Asian or Pacific Islander
   e. Native American or Alaskan Native
   f. Other

5. During the past 30 days, how many time have you been in a car or truck or on a motorcycle driven by someone who was or had been drinking alcohol or using drugs?

   a. None
   b. 1 time
   c. 2 or 3 times
   d. 4 or 5 times
   e. 6 or more times

Column 2

6. During the past 30 days, how many times did you **drive** a car, truck, or motorcycle while or after drinking alcohol or using drugs?

   a. None
   b. 1 time
   c. 2 or 3 times
   d. 4 or 5 times
   e. 6 or more times

7. How often do you wear a seat belt when riding in a car or truck driven by someone else?

   a. Never
   b. Rarely
   c. Sometimes
   d. Most of the time
   e. Always

8. How often do you wear a helmet when riding a bicycle?

   a. I do not ride bicycles
   b. Never
   c. Rarely
   d. Sometimes
   e. Most of the time
   f. Always

9. How often do you wear a helmet when riding a motorcycle?

   a. I do not ride motorcycles
   b. Never
   c. Rarely
   d. Sometimes
   e. Most of the time
   f. Always

10. Last summer, during June through August, how many times did you swim or surf with or without friends in an area that was not supervised by an adult or a lifeguard?

    a. None
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

Column 3

11. During the past 30 days, how many times have you carried a weapon, such as a gun, knife, or club for self-protection or because you thought you might need it in a fight?

    a. None
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

12. What kind of weapon did you usually carry?

    a. I did not carry a weapon
    b. A handgun
    c. Other guns such as a rifle or a shotgun
    d. A knife or razor
    e. A club

13. During the past 30 days, how many times have you been in a physical fight in which you or the person you were fighting were injured and had to be treated by a doctor or nurse?

    a. None
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

14. Who did you fight with the last time you were in a physical fight?

    a. I have not been in a physical fight
    b. A stranger
    c. A friend
    d. A boyfriend, girlfriend, or a date
    e. A family member
    f. More than one of the above

Some people sometimes feel so depressed and hopeless about the future that they may even consider attempting suicide, that is, taking some action to end their own life.

15. During the past 12 months, have you ever **seriously** thought about attempting suicide?

    a. Yes
    b. No

Column 4

16. During the past 12 months, did you make a specific plan about how you would attempt suicide?

    a. Yes
    b. No

17. During the past 12 months, how many times did you actually make a suicide attempt?

    a. None
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or more times

18. If you attempted suicide during the past 12 months, did that attempt result in an injury or poisoning that had to be treated by a doctor or nurse?

    a. I did not attempt suicide
    b. Yes
    c. No

19. Have you ever tried or experimented with cigarette smoking, even a few puffs?

    a. Yes
    b. No

20. Do you think that you will smoke a cigarette soon?

    a. Yes
    b. No

21. On how many of the past 30 days did you smoke cigarettes?

    a. I have never smoked cigarettes
    b. None
    c. Less than 5 days
    d. 5 to 15 days
    e. 16 to 25 days
    f. More than 25 days

22. On the days that you did smoke, how many cigarettes did you usually smoke?

    a. I did not smoke cigarettes
    b. Less than 1 per day
    c. 1 to 5 cigarettes
    d. 6 to 10 cigarettes
    e. 11 to 20 cigarettes
    f. More than 20 cigarettes

Column 5

23. How old were you when you smoked your first full cigarette?

    a. I have never smoked a full cigarette
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    e. 17 or more years old

24. Have you ever tried chewing tobacco or snuff?

    a. Yes
    b. No

25. On how many of the past 30 days did you use chewing tobacco or snuff?

    a. I have never used chewing tobacco or snuff
    b. None
    c. Less than 5 days
    d. 5 to 15 days
    e. 16 to 25 days
    f. More than 25 days

26. On how many of the past 30 days did you smoke a cigarette on the school property?

    a. I do not smoke cigarettes
    b. None
    c. Less than 5 days
    d. 5 to 15 days
    e. 16 to 25 days
    f. More than 25 days

27. During your life, on how many occasions did you drink alcohol (including wine, wine coolers, beer, liquor, or mixed drinks)?

    a. I have never drunk alcohol
    b. 1 or 2 occasions
    c. 3 to 9 occasions
    d. 10 to 19 occasions
    e. 20 to 39 occasions
    f. 40 to 99 occasions
    g. 100 or more occasions

Column 6

28. During the past 30 days, on how many occasions did you drink alcohol (including wine, wine coolers, beer, liquor, or mixed drinks)?

    a. I have never drunk alcohol
    b. None
    c. 1 or 2 occasions
    d. 3 to 9 occasions
    e. 10 to 19 occasions
    f. 20 to 39 occasions
    g. 40 or more occasions

29. During the past 30 days, how many times did you have 5 or more drinks on one occasion (A "drink" is a glass of wine, a wine-cooler, a bottle or can of beer, a shot glass of liquor, or one mixed drink).

    a. I have never drunk alcohol
    b. None
    c. 1 time
    d. 2 times
    e. 3 to 5 times
    f. 6 to 9 times
    g. 10 or more times

30. How old were you when you had your first drink of alcohol (other than a sip)?

    a. I have never drunk alcohol
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

31. During your life, on how many occasions have you used marijuana?

    a. I have never used marijuana
    b. 1 or 2 occasions
    c. 3 to 9 occasions
    d. 10 to 19 occasions
    e. 20 to 39 occasions
    f. 40 to 99 occasions
    g. 100 or more occasions

COLUMN 7

32. During the past 30 days, on how many occasions have you used marijuana?

    a. I have never used marijuana
    b. None
    c. 1 or 2 occasions
    d. 3 to 9 occasions
    e. 10 to 19 occasions
    f. 20 to 39 occasions
    g. 40 or more occasions

33. How old were you when you used marijuana for the first time?

    a. I have never used marijuana
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

34. During your life, on how many occasions have you used cocaine in any form (including powder, crack, or freebase)?

    a. I have never used cocaine in any form
    b. 1 or 2 occasions
    c. 3 to 9 occasions
    d. 10 to 19 occasions
    e. 20 to 39 occasions
    f. 40 to 99 occasions
    g. 100 or more occasions

35. During the past 30 days, on how many occasions have you used cocaine in any form (including powder, crack, or freebase)?

    a. I have never used cocaine in any form
    b. None
    c. 1 or 2 occasions
    d. 3 to 9 occasions
    e. 10 to 19 occasions
    f. 20 to 39 occasions
    g. 40 or more occasions

COLUMN 8

36. How old were you when you used cocaine in any form (including powder, crack, or freebase)?

    a. I have never used cocaine in any form
    b. Less than 9 years old
    c. 9 or 10 years old
    d. 11 or 12 years old
    e. 13 or 14 years old
    f. 15 or 16 years old
    g. 17 or more years old

37. During your life, on how many occasions have you used the crack or freebase forms of cocaine?

    a. I have never used the crack or freebase forms
    b. 1 or 2 occasions
    c. 3 to 9 occasions
    d. 10 to 19 occasions
    e. 20 to 39 occasions
    f. 40 to 99 occasions
    g. 100 or more occasions

38. During your life, on how many occasions have you used any other type of illegal drugs such as LSD, PCP, MDMA, "Ecstasy," mushrooms, speed, or heroin?

    a. I have never used these illegal drugs
    b. 1 or 2 occasions
    c. 3 to 9 occasions
    d. 10 to 19 occasions
    e. 20 to 39 occasions
    f. 40 to 99 occasions
    g. 100 or more occasions

39. During your life, have you ever injected (shot up) any drug not prescribed by a doctor, such as steroids, cocaine, amphetamines, or heroin?

    a. Yes
    b. No

40. Do you think of yourself as:

    a. Too thin (underweight)
    b. About the right weight
    c. Too fat (overweight)

Column 9

41. Which of the following are you doing about your weight?

    a. I am not trying to do anything about my weight
    b. Trying to lose weight
    c. Trying to keep from gaining any more weight
    c. Trying to gain more weight

42. Think about all the meals and snacks you ate yesterday. How many servings of green or yellow vegetables did you eat yesterday? (For example, a salad, corn, carrots, or green beans)

    a. I did not eat vegetables yesterday
    b. 1 or 2 servings
    c. 3 or 4 servings
    d. 5 or 6 servings
    e. 7 or more servings

43. Think about all the meals and snacks you ate yesterday. How many servings of fruits or fruit juice did you have yesterday? (For example, a glass of fruit juice, an apple, or an orange)

    a. I did not eat fruits yesterday
    b. 1 or 2 servings
    c. 3 or 4 servings
    d. 5 or 6 servings
    e. 7 or more servings

44. Think about all the meals and snacks you ate yesterday. How many servings of fried foods did you eat yesterday? (For example, french fries, fried chicken, or fried fish)

    a. I did not eat fried foods yesterday
    b. 1 or 2 servings
    c. 3 or 4 servings
    d. 5 or 6 servings
    e. 7 or more servings

45. During the past 7 days, how many meals did you skip to try to lose weight or to keep from gaining weight?

    a. None
    b. 1 or 2 meals
    c. 3 to 6 meals
    d. 7 to 14 meals
    e. 15 or more meals

Column 10

46. During the past 7 days, how many times did you take a diet pill to try to lose weight or to keep from gaining weight?

    a. I have never done this
    b. I have done this but not in the past 7 days
    c. 1 or 2 times
    d. 3 to 6 times
    e. 7 to 14 times
    f. 15 or more times

47. During the past 7 days, how many times did you vomit on purpose to try to lose weight or to keep from gaining weight?

    a. I have never done this
    b. I have done this but not in the past 7 days
    c. 1 or 2 times
    d. 3 to 6 times
    e. 7 to 14 times
    f. 15 or more times

48. During the past 7 days, how many times did you exercise to try to lose weight or to keep from gaining weight?

    a. I have never done this
    b. I have done this but not in the past 7 days
    c. 1 or 2 times
    d. 3 to 6 times
    e. 7 to 14 times
    f. 15 or more times

49. On how many of the past 14 days have you done at least 20 minutes of hard exercise that made you breathe heavily and made your heart beat fast? (For example, playing basketball, jogging, fast dancing, or fast bicycling.)

    a. None
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 8 days
    e. 9 or more days

Column 11

50. On how many of the past 14 days have you done at least 20 minutes of light exercise that made you breathe a little more than usual and made your heart beat a little faster than usual? (For example, playing baseball, walking, or slow bicycling)

    a. None
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 8 days
    e. 9 or more days

51. On how many of the past 14 days did you do any kind of exercise in a place such as a "Y", sports league, dance class, recreational center, or any other community center?

    a. None
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 8 days
    e. 9 or more days

52. On how many of the past 14 days did you go to a physical education (P.E.) class?

    a. I do not take P.E.
    b. I take P.E., but did not go to class
    c. 1 or 2 days
    d. 3 to 5 days
    e. 6 to 8 days
    f. 9 or 10 days

53. On how many of the past 14 days did you do light or hard exercise during physical education (P.E.) classes for at least 20 minutes?

    a. I do not take P.E.
    b. I take P.E., but did not go to class
    c. I take P.E. and went to class, but did not get 20 minutes of exercise
    d. 1 or 2 days
    e. 3 to 5 days
    f. 6 to 8 days
    g. 9 or 10 days

54. During the past 12 months, on how many varsity or junior varsity sports teams did you play at school?

    a. I did not play on a team at school
    b. 1 team
    c. 2 teams
    d. 3 teams
    e. 4 or more teams

Column 12

55. During the past 14 days, on an average school day, how many hours a day did you watch television and videos or play computer or video games before or after school?

    a. None
    b. 1 hour or less per day
    c. More than 1 but less than 3 hours per day
    d. Between 3 and 4 hours per day
    e. More than 4 but less than 6 hours per day
    f. 6 or more hours per day

56. Have you ever been taught about AIDS/HIV infection in school?

    a. Yes
    b. No
    c. Not sure

57. Do you know where to get good information about AIDS/HIV infection?

    a. Yes
    b. No
    c. Not sure

58. Have you ever talked about AIDS/HIV infection with your parents or other adults in your family?

    a. Yes
    b. No
    c. Not sure

59. Can a person get AIDS/HIV infection from being bitten by mosquitoes or insects?

    a. Yes
    b. No
    c. Not sure

60. Can a person get AIDS/HIV infection from donating blood?

    a. Yes
    b. No
    c. Not sure

61. Have you ever had sexual intercourse?

    a. Yes
    b. No

Column 13

62. With how many persons have you had sexual intercourse in your life?

    a. I have never had sexual intercourse
    b. 1 person
    c. 2 persons
    d. 3 persons
    e. 4 or more persons

62. During the last 3 months, with how many persons have you had sexual intercourse?

    a. I have never had sexual intercourse
    b. 1 person
    c. 2 persons
    d. 3 persons
    e. 4 or more persons

64. How old were you the first time you had sexual intercourse?

    a. I have never had sexual intercourse
    b. Less than 13 years old
    c. 13 years old
    d. 14 years old
    e. 15 years old
    f. 16 years old
    g. 17 years old

65. The last time you had sexual intercourse, did you or your partner drink alcohol or use drugs?

    a. I have never had sexual intercourse
    b. Yes, alcohol only
    c. Yes, drugs only
    d. Yes, both alcohol and drugs
    e. Neither alcohol or drugs

66. The last time you had sexual intercourse, what method did you or your partner use to prevent pregnancy?

    a. I have never had sexual intercourse
    b. No method was used
    c. Birth control pills
    d. Condoms
    e. Withdrawal
    f. Another method not listed above
    g. Not sure

Column 14

67. How many times have you been pregnant or gotten someone pregnant?

    a. I have never been pregnant or gotten someone pregnant
    b. 1 time
    c. 2 or more times
    d. Not sure

68. The last time you had sexual intercourse, did you or your partner use a condom to prevent sexually transmitted diseases such as genital herpes, genital warts, gonorrhea, syphilis, clap, drip, or AIDS/HIV infection?

    a. I have never had sexual intercourse
    b. Yes
    c. No

69. Have you ever been told by a doctor or nurse that you had a sexually transmitted disease such as genital herpes, genital warts, gonorrhea, syphilis, clap, drip, or AIDS/HIV infection?

    a. Yes
    b. No
    c. Not sure

70. Compared to other students in your class, what kind of student would you say you are?

    a. One of the best
    b. Far above the middle
    c. A little above the middle
    d. In the middle
    e. A little below the middle
    f. Far below the middle
    g. Near the bottom

Appendix D
Comprehensive School Health Program Worksheets

Worksheet #1
Improving the School Health Environment
Comprehensive School Health Program

Definition:
"A school health environment includes the psychological climate and physical surroundings in which students and school personnel are expected to work. Factors that contribute to the physical environment include the school, its location and the area that surrounds it, and the school building, including the biological or chemical agents that may be detrimental to health, and physical conditions such as temperature, humidity, electromagnetic radiation, mechanical vibration, noise, lighting, and heat. The psychological environment comprises the interrelated physical, emotional, and social conditions that affect the well-being and productivity of students and school personnel. The nature of the school environment often is established by formal and informal administrative policies. Those responsible for the school environment must address safety needs (reduce potential hazards including physical or psychological abuse), social needs (facilitate establishment of positive relationships), and recognition needs (recognize the worth and success of individuals and facilitate the establishment of self-esteem for students and school personnel)." (*J Sch Health*; 1987;57(10):411)

Goal: Increase the monitoring and management of the psychological and physical environment so that 90% of students, staff, and parents evaluate it as safe, aesthetically pleasing, sanitary, environmentally sound, friendly, supportive, and conducive to learning.

Sample Objectives and Strategies:

Objective #1 Establish in all schools a multifaceted program to reduce violence.

Strategies:
* Survey the school to analyze the extent of student-to-student conflict and violence, gang organization, and weapon carrying.
* Institute a K-12 course on conflict mediation as part of a comprehensive school health program.
* Develop peer educator programs which address the issues of violence and conflict.

Objective #2 Designate all schools as tobacco-free and drug-free zones.

Strategies:
* Solicit policy from the school board that prohibits staff and students from smoking on school property.
* Work with city hall and local police to establish the school as a drug-free zone.
* Organize a student assistance program for students who violate the tobacco-free and drug-free policy.

List objectives and strategies for improving the school health environment.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #2
Improving School Health Instruction
Comprehensive School Health Program

Definition:
"The comprehensive health education program comprises a planned sequential prekindergarten-12 curriculum that addresses the physical, mental, emotional, and social dimensions of health. The curriculum is designed to motivate and enable students to maintain and improve their health and not merely to prevent disease. The health education program is integrated with the other seven components of the school health program, and provides opportunities for students to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skill, and practices." (*J Sch Health*. 1987;57(10):411)

"The ten health instruction content areas are community health, consumer health, environmental health, family life, growth and development, nutritional health, personal health, prevention and control of disease and disorders, safety and accident (injury) prevention, and substance use and abuse." (*J Sch Health*. 1987;57;(10):420)

Goal: Increasing the quantity and quality of health instruction received by the students.

Sample Objectives and Strategies:

Objective #1 Implement in all schools a health education curriculum that focuses on maintaining and adopting health enhancing behaviors.

Strategies:
* Provide inservice workshops for supervisors and teachers to assist in the development and selection of a curriculum that focuses on the adoption of health enhancing behaviors.
* Organize inservice staff meetings to help teachers become more adept at using techniques which facilitate behavior change.

Objective #2 Infuse health lessons into the curriculum of (#) disciplines as part of the comprehensive school health education program.

Strategies:
* Utilize results of the Youth Risk Behavior Survey (YRBS) to dramatize the need for providing multiple lessons on specific health issues to students.
* Develop/purchase lessons on specific health issues that can be used in the English, science, mathematics, social studies curriculum in which all teachers focus lessons on a specific health issue.

List objectives and strategies for improving the school health instruction.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #3
Improving School Health Services
Comprehensive School Health Program

Definition:
"School health service programs promote the health of students through prevention, case finding, early intervention, and remediation of specific health problems, provision of first aid and triage of illness and injuries, provision of direct services for handicapped students, and provision of health counseling and health instruction for faculty, staff, and students. Professionally prepared school nurses most often coordinate and provide the health services program. However, there are other professionals who provide specific services to promote the health and well-being of the school-age child, including school physicians, dentists, social workers, and speech pathologists." (*J Sch Health*. 1987;57(10): 411)

Goal: Increase the quality and quantity of school health services provided to students.

Sample Objectives and Strategies:

Objective #1 Two-thirds of the school staff, parents, and students will affirm the need and value of school health services as an integral part of a comprehensive school health program.

Strategies:
* Conduct district inservice for school staff and administrators describing the scope and value of the health services program.
* Develop a handbook for students and parents describing the need for and scope of school health services.
* Publish an article a month in the local newspaper describing the value of school health services program to academic achievement.

Objective #2 Increase by (___%) the number of schools having a certified school nurse specialist in the ratio of 1:750.

Strategies:
* Conduct a survey of current staffing patterns to determine need. Include an analysis of different professionals who might be assigned responsibility that the nurse should be doing.
* Solicit volunteers from parents, professional nursing associations to work in health services.
* Ask hospitals or public health department to co-locate services in the school.

List objectives and strategies for improving the school health services.

Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #4
Improving School Nutrition Services
Comprehensive School Health Program

Definition:
School food services support nutrition education programs that help students learn how to select nutritionally appropriate foods. They provide as much as "one-third to one-half of the daily nutritional intake for many of American students." In general, programs are aimed to: "1) meet the school-day nutritional needs of (all) students by making accessible nutritionally adequate and acceptable meals available at a reasonable price, and 2) serve as a laboratory for health and nutrition." (*J Sch Health*. 1987;57(10):412, 451-458.)

Goal: Improve the quantity and quality of nutrition education provided to students.

Sample Objectives and Strategies:

Objective #1 The food services program at each school will provide nutrition education daily.

Strategies:
* Create partnerships between the food services director and health educator to develop a plan in which students could prepare nutrition education messages for table tents, displays, and posters in the cafeteria.
* Label food choice high in vitamins A, C, B, low in fat, etc.
* Identify the nutrient content of all food on a display at the head of the cafeteria line.

Objective #2 All schools will use the cafeteria as a nutrition learning laboratory.

Strategies:
* Organize a school health council which integrates programming between nutrition instruction and the school food services program.
* Organize a Student Food Services Advisory Board to increase the number of students self-selecting a healthy, nutritious meal.
* Establish policies prohibiting sale of highly carciogenic foods as fund raisers.

List objectives and strategies for improving the school food services.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #5
Improving School Counseling and Psychological Services
Comprehensive School Health Program

Definition:
"Though the school counseling program originally was implemented to provide vocational guidance for students, by the mid 1960's, the program had evolved to also provide developmental guidance. Counselors provide broad-based intervention programs to promote the physical and emotional health of students. Interventions include assertiveness training, life skills training, peer led discussions, problem-solving training, and programs to address esteem, loss of control, peer pressure and adolescent rebellion.

The school psychology program provides psychological assessment, consultations, and interventions to improve the performance and adjustment of students. The role and function of the psychologist varies greatly from state to state. The school psychologist conducts psycho-educational evaluations and recommends educational and other interventions for students with perceived learning, behavioral, or emotional problems. A significant portion of the school psychologist's time is devoted to implementing Public Law 94-142, the Education for all Handicapped Children Act, which requires schools to identify, assess, provide educational prescriptions for, and subsequently, reevaluate students who may have handicaps that retard learning." (*J Sch Health*. 1987;57(!0):411-412)

Goal: Improve the quantity and quality of health promotion activities provided by the guidance and school psychological program.

Sample Objectives and Strategies:

Objective #1 All schools will develop a plan for integrating health promotion activities into the counseling and psychological program.

Strategies:
* Organize a school health council which would service the co-ordination of health promotion programming.
* Develop a handbook that describes how health promotion activities can be integrated into school counseling services.
* Conduct inservice training for school counselors on how to integrate health promotion activities into the school counseling services.

Objective #2 Increase to (__%) the number of schools that have elementary and secondary student assistance programs.

Strategies:
* Conduct a needs assessment to determine the need for a student assistance program.
* Invite community agency personnel to participate in the establishment of a student assistance program.
* Submit articles to the community newspaper documenting the need and value of a student assistance program.

List objectives and strategies for improving the school counseling and psychological services.
Objective 1:

Strategies: *

*

Objective 2:

Strategies: *

*

Worksheet #6
Improving Schoolsite Health Promotion for Faculty and Staff
Comprehensive School Health Program

Definition:
Schoolsite wellness programs encourage staff to maintain and improve their health, thereby providing strong role models for students. Model programs consist of three components: product/services (print and audiovisual materials, expert classes/counseling, health assessment/screening, community resources, equipment, facility modifications, computer software, policy changes, environmental changes, and employee assistance programs); processes (awareness, education/motivation, and intervention); and content (varies, but may include exercise, nutrition, weight control, stress management, substance abuse, and safety). "Schools are ideal for worksite health promotion programs because they already have the facilities and professional resources required to develop and implement the program....programs for faculty and staff can provide economic benefits for the district and can improve the productivity of personnel." (*J Sch Health*. 1987;57(10):469-472)

Goal: Improve the quantity and quality of schoolsite health promotion for faculty and staff.

Sample Objectives and Strategies:

Objective #1 (__%) of school staff will become aware of the need for and advantages of schoolsite health promotion program for faculty and staff.

Strategies:
* Present regional workshops for administrators, faculty, and staff on the value and scope of schoolsite health promotion programs.
* Solicit funding from local corporations and foundations to support schoolsite health promotion programs.
* Solicit free and inexpensive materials from local voluntary health agencies to support schoolsite health promotion programming.

Objective #2 All schools will institute a schoolsite health promotion program.

Strategies:
* Organize a schoolsite health promotion task force.
* Allow specific staff planning time to prepare programs for schoolsite health promotion programs.
* Secure a policy that allows faculty time to exercise in their free planning period.

List objectives and strategies for improving schoolsite health promotion for faculty and staff.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #7
Improving School Physical Education Programs
Comprehensive School Health Program

Definition:
School physical education can and should serve as a primary intervention tool to enhance the health of children and youth, promoting acquisition of large-muscle motor skills and physical fitness. Physical education activities promote cardiovascular and respiratory efficiency, self expression and social development, as well as relief for stress. These activities can also improve motor performance (endurance, strength, agility, balance, and flexibility), physiological and metabolic function, aerobic capacity, frequency and duration of exercise, and cognitive performance. (*J Sch Health*. 1987;57(10):445-449)

Goal: Improve the quantity and quality of physical education programming.

Sample Objectives and Strategies:

Objective #1 Establish daily physical education programs for (___%) of students by year 2000.

Strategies:
* Establish 15 minute stretching exercises once a day via announcements over the public address system.
* Draft legislation requiring daily physical education for all students. Petition legislators for passage.
* Provide elective programs for study hall students.

Objective #2 Increase to 80% the number of physical education classes which focus on life-long fitness activities.

Strategies:
* Provide an inservice program which assists physical educators to develop lessons on life-long fitness activities.
* Change class activities to assure that all students receive a minimum of 15 minutes of aerobic activity at each class.
* Institute before and after school fitness clubs which provide practice in life-long fitness activities.

List objectives and strategies for improving school physical education programs.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

Worksheet #8
Improving School Physical Education Program
Comprehensive School Health Education

Definition:
School physical education can and should serve as a primary intervention tool to enhance the health of children and youth, promoting acquisition of large-muscle motor skills and physical fitness. (*J Sch Health*. 1987;57(10):445-449.) Physical education activities promote cardiovascular and respiratory efficiency, self-expression and social development and relief for stress, and can improve motor performance (endurance, strength, agility, balance, and flexibility,) physiological and metabolic function, aerobic capacity, frequency and duration of exercise and cognitive performance.

Goal: Improve the quantity and quality of physical education programming.

Sample Objectives and Strategies:

Objective #1 Establish daily physical education for (___%) of students by year 2000.

Strategies:
* Establish 15-minute stretching exercises once a day via announcements over the public address system.
* Draft legislation requiring daily physical education for all students. Petition legislators for passage.
* Provide elective programs for study hall students.

Objective #2 Increase to 80% the number of physical education classes which focus on lifelong fitness activities.

Strategies:
* Provide an inservice program that assists physical educators to develop lessons on lifetime fitness activities.
* Change class activities to assure that all students receive a minimum of 15 minutes of aerobic activity at each class.
* Institute school fitness clubs before and after school that provide practice in lifelong fitness activities.

List objectives and strategies for improving physical education programs.
Objective #1:

Strategies: *

*

Objective #2:

Strategies: *

*

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Comprehensive School Health Programs

A *Journal of School Health*

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