CHAPTER 3

Improving Adolescent Health

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Helping communities to meet the 21 Critical Health Objectives for adolescents and young adults requires an understanding of the many factors that influence adolescent health, safety, and well-being. Parents and other family members, peers, schools, health care providers, community agencies that serve youth, faith-based organizations, media, postsecondary institutions, employers, law enforcement, and government agencies all shape young people’s development. Each individual and institution can play an important role in creating environments that support healthy development and encourage adolescents to make healthy decisions. To help young people establish healthy lifestyles, however, we need greater collaboration and commitment among multiple stakeholders. This chapter outlines the National Initiative framework for improving adolescent health and provides an overview for societal influences that shape adolescent lives.

In 1988, the Institute of Medicine published *The Future of Public Health*, an assessment of public health institutions. The report’s major conclusions and recommendations remain salient today; in particular, improving public health requires developing partnerships among multiple societal institutions rather than depending solely on partnerships with traditional public health organizations. Although forming meaningful partnerships outside the public health sector may appear difficult, we have made progress in the past decade, as various sectors of society have more frequently fostered collaborative relationships to address public health and other social concerns. Still, a major challenge to achieving the 21 Critical Health Objectives for adolescents and young adults is forming these partnerships and collaboratively enacting prevention programs and interventions (Turnock 2001).

We must recognize that the 21 Critical Health Objectives represent complex health issues; achieving them requires a more complicated approach than simply assuming the issues are matters of individual behavior and personal lifestyle. In the past, many adults approached working with young people with an attitude of “What’s wrong with these kids, and how can we ‘fix’ them?” This approach overemphasizes the personal attributes and behaviors of adolescents and families and overlooks the effects of their social and environmental contexts. For example, many young people know that tobacco and alcohol use and eating too much unhealthy food are harmful to their health, and yet they are surrounded by images of persons who smoke, drink alcohol, and eat unbalanced diets. Cigarettes and alcohol continue to be relatively accessible and widely promoted to young people. French fries, potato chips, candy, soda, and other processed foods high in fat and/or sugar are depicted as convenient and affordable options, and they are often more accessible than fresh fruits and vegetables. As a population with little political influence, adolescents can personally modify their lifestyles and health choices only to a limited extent. Societal institutions must also share responsibility for adolescent health promotion, as well as disease and injury prevention, by changing the environments that affect the daily lives of young people.

In a nation that highly values individualism, we must shift our frame of thinking by placing the responsibility for helping today’s youth where it belongs—on society and its institutions, including families. We must recognize the value of defining potential roles and working collectively to improve adolescent health. Of course, focusing on the roles of societal institutions does not mean that the personal characteristics of individuals are unimportant, and it does not dismiss the importance of individual differences.

We have entered the new century with an increased awareness of the value of civic engagement and social capital, which together refer to the social networks, connectedness, norms, and social trust that facilitate coordination and cooperation for mutual benefit (Putnam 2000). Higher levels of civic engagement and social connectedness lead to better functioning schools, social services, government, and public health systems. To meet the
21 Critical Health Objectives, we encourage local agencies and communities to develop this sense of social connectedness through collaborative work. Partnerships, collective efforts, and institutional change are essential for substantially improving adolescent health.

This section examines the individuals and institutions that most affect adolescents’ health, safety, and well-being. It provides examples of current collaborative projects that can guide future efforts for advancing and sustaining our progress in promoting adolescent health. We intend to acknowledge the role that institutions can play individually and also to affirm how bringing these institutions together enhances their collective strength. Collaboration and partnership can reinforce the efforts of different stakeholders and foster innovative approaches for improving adolescent health, safety, and well-being.

Communities and society at large incur significant costs from adolescent health problems that are frequently preventable. According to one estimate, federal and state governments annually spent $33.5 billion ($859 per adolescent) to address the effects of adolescent pregnancy, sexually transmitted diseases (STDs), mental disorders, alcohol and drug abuse, motor vehicle injuries, and other unintentional injuries (Gans, Alexander, Chu, and Elster 1995). Yet, U.S. adolescents fare worse on many measures of health than their peers in many other industrialized countries. For example, U.S. adolescents have high rates of injury mortality, pregnancy, STDs, and illicit drug use (Ozer, Macdonald, and Irwin 2002; Morrison and Stone 2000). These figures point to the need for a broad and coordinated effort to promote healthy adolescent development.

In a relatively short time, today’s adolescents will be adults who will share responsibilities for addressing critical issues facing the nation and its states and communities. Adolescents who receive inadequate care and support from their families, schools, and communities are less likely to contribute positively to society as adults. On the other hand, youth supported throughout childhood and adolescence are more likely to become healthy, competent, skilled, and productive members of society.

Risk, Resilience, and Youth Development as a Framework for the 21 Critical Health Objectives

Before discussing societal institutions, we provide a brief background on risk and resilience. The public health field has traditionally focused on specific adolescent problem behaviors or issues in isolation, such as substance abuse, pregnancy, and violence. Yet, problem behavior theory (Donovan and Jessor 1985) has shown that health risk behaviors are interrelated and have similar root causes.

Resilience theory asks why some who grow up in adverse circumstances go on to lead healthy and productive lives when virtually all measures would have predicted otherwise. Resilience is the tendency for a child or teen to rebound from stressful circumstances or events, resume usual activity, and achieve success. Resilient youth do well despite facing multiple risk factors and activities.

Researchers have identified one set of factors that predisposes many adolescents to engage in health risk behaviors and another set that protects many young people from harm. Risk factors, which limit the likelihood of successful development, exist within various spheres: the individual, family, peer group, school, and community. The past 20 years of research have shown that many negative health outcomes are influenced by multiple factors and that many of these outcomes share the same risk factors. For example, antecedent risk factors such as poverty, trouble achieving academically, and access to alcohol and drugs at home, heighten the risk for multiple problems, such as pregnancy, substance use, and delinquent behavior.
To answer the question posed by resilience theory, researchers have identified a set of circumstances, experiences, and factors that seem to buffer young people from involvement in behaviors either harmful to themselves or others. These protective factors seem to moderate or ameliorate the effects of individual vulnerabilities or environmental hazards; they diminish the likelihood of negative health and social outcomes. Just like risk factors, protective factors (or assets) exist within the individual, family, peer group, school, and community and can also be clustered. For example, academic achievement protects against substance use, violence, and high-risk sexual behavior. Some risk and protective

<table>
<thead>
<tr>
<th>Domain</th>
<th>Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>• Biological vulnerability</td>
<td>• Spirituality/religiosity</td>
</tr>
<tr>
<td></td>
<td>• Engaging in health-compromising behaviors</td>
<td>• Social skills</td>
</tr>
<tr>
<td></td>
<td>• Intellectual impairment</td>
<td>• Normal intelligence</td>
</tr>
<tr>
<td></td>
<td>• Early or late onset of puberty</td>
<td>• Late maturation</td>
</tr>
<tr>
<td></td>
<td>• Aggressive temperament</td>
<td>• Higher self-image</td>
</tr>
<tr>
<td></td>
<td>• Impulsivity</td>
<td>• Higher self-efficacy</td>
</tr>
<tr>
<td></td>
<td>• Affective disorder</td>
<td>• Perceived importance of parents</td>
</tr>
<tr>
<td></td>
<td>• Attention deficit hyperactivity disorder (ADHD)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Aggressive behavior</td>
<td></td>
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<tr>
<td></td>
<td>• Stress reactivity</td>
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</tr>
<tr>
<td>Family</td>
<td>• Low parental education</td>
<td>• Connectedness</td>
</tr>
<tr>
<td></td>
<td>• Family mental illness</td>
<td>• Parental presence</td>
</tr>
<tr>
<td></td>
<td>• Maternal stress</td>
<td>• Parental values</td>
</tr>
<tr>
<td></td>
<td>• Large family</td>
<td>– Toward school</td>
</tr>
<tr>
<td></td>
<td>• Overcrowding</td>
<td>– Toward risk behavior</td>
</tr>
<tr>
<td></td>
<td>• Poverty</td>
<td>• Two parents</td>
</tr>
<tr>
<td></td>
<td>• Access to weapons</td>
<td>• Fewer siblings/child spacing</td>
</tr>
<tr>
<td></td>
<td>• Authoritarian or permissive parenting style</td>
<td>• Family cohesion</td>
</tr>
<tr>
<td></td>
<td>• Exposure to family violence</td>
<td>• Authoritative parenting style</td>
</tr>
<tr>
<td>School</td>
<td>• Retention in grade</td>
<td>• Consistency of schools attended</td>
</tr>
<tr>
<td></td>
<td>• Size of school</td>
<td>• School policies</td>
</tr>
<tr>
<td></td>
<td>• Absenteeism</td>
<td></td>
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<tr>
<td></td>
<td>• Suspension</td>
<td></td>
</tr>
<tr>
<td>Peers</td>
<td>• Prejudice from peers</td>
<td>• Being treated fairly by peers</td>
</tr>
<tr>
<td></td>
<td>• Perception of threat</td>
<td>• Having low-risk friends</td>
</tr>
<tr>
<td></td>
<td>• Social isolation</td>
<td>• Peers with pro-social norms</td>
</tr>
<tr>
<td></td>
<td>• Participation in deviant culture</td>
<td></td>
</tr>
<tr>
<td>Social Environment</td>
<td>• Arrests by age, type</td>
<td>• Educational attainment by age</td>
</tr>
<tr>
<td></td>
<td>• Community fertility rates by age</td>
<td>• School enrollment for those aged 16-19</td>
</tr>
<tr>
<td></td>
<td>• Rate of neighborhood unemployment</td>
<td>• Health care accessible</td>
</tr>
<tr>
<td></td>
<td>• Single parent/female head of households</td>
<td>• Health care utilization</td>
</tr>
<tr>
<td></td>
<td>• Age at migration</td>
<td>• Employment rates of adults</td>
</tr>
<tr>
<td></td>
<td>• Exposure to violent media</td>
<td>• Positive support systems</td>
</tr>
<tr>
<td></td>
<td>• Exposure to youth-oriented advertising</td>
<td>• Religious institution</td>
</tr>
<tr>
<td></td>
<td>• Access to tobacco, alcohol, drugs, firearms</td>
<td>• Access to positive role models</td>
</tr>
<tr>
<td></td>
<td>• Television/video watching</td>
<td>• Pro-social media</td>
</tr>
</tbody>
</table>

This table was developed by Dr. Robert Blum, based on a synthesis of available literature, 2002 (University of Minnesota).
Section I: Building National Efforts to Improve Adolescent Health

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Factors found to be empirically associated with either increased or diminished risk for a range of health and social outcomes, including several Critical Health Objectives, are shown in Table 3-1. Table 3-2 presents risk and protective factors within the family domain and their relationship with the following health outcomes and contributing behaviors: emotional distress, suicidal thoughts or attempts, violence, cigarette use, and alcohol use. These risk and protective factors can collectively be considered antecedent factors; in this document, we use the term “antecedent factors” to refer to both risk and protective factors that research has shown are linked to health risk behaviors.

This resilience framework complements a “risk reduction approach” that focuses on preventing health risk behaviors. Although risk reduction remains an important strategy for improving adolescent health, it should be combined with a focus on resiliency and youth development. A youth development approach emphasizes providing opportunities for young people to participate in challenging and engaging activities that build their skills and competencies.

Within a youth development framework, adolescents are seen as able to contribute to their community and participate in community decision-making. To recognize themselves as competent young adults and assets to their communities, young people need adult support and encouragement. A youth development framework turns our attention

### Table 3-2: The Effects of Family Domain Risk and Protective Factors on Youth Behaviors for Grades 9-12

<table>
<thead>
<tr>
<th>Risk or Protective Factor</th>
<th>Emotional Distress</th>
<th>Suicidal Thoughts or Attempts</th>
<th>Violence</th>
<th>Cigarette Use</th>
<th>Alcohol Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent and Family Connectedness</td>
<td>Protective</td>
<td>Protective</td>
<td>Protective</td>
<td>Protective</td>
<td>Protective</td>
</tr>
<tr>
<td>Parental/Adolescent Activities</td>
<td>Neutral</td>
<td>Neutral</td>
<td>Not addressed</td>
<td>Protective</td>
<td>Neutral</td>
</tr>
<tr>
<td>Parental Presence</td>
<td>Protective</td>
<td>Neutral</td>
<td>Protective</td>
<td>Protective</td>
<td>Protective</td>
</tr>
<tr>
<td>Household Access to Guns</td>
<td>Neutral</td>
<td>Risk factor</td>
<td>Risk factor</td>
<td>Not addressed</td>
<td>Not addressed</td>
</tr>
<tr>
<td>Parental School Expectations</td>
<td>Protective</td>
<td>Neutral</td>
<td>Not addressed</td>
<td>Protective</td>
<td>Neutral</td>
</tr>
<tr>
<td>Household Access to Substances</td>
<td>Not addressed</td>
<td>Not addressed</td>
<td>Not addressed</td>
<td>Risk</td>
<td>Risk</td>
</tr>
<tr>
<td>Family Suicide or Attempts</td>
<td>Risk</td>
<td>Risk</td>
<td>Risk</td>
<td>Risk</td>
<td>Risk</td>
</tr>
</tbody>
</table>

**Definitions:**

- **Parent and Family Connectedness:** High degree of closeness, caring and satisfaction with parental relationship, whether resident or non-resident mother or father; feeling understood, loved, wanted, and paid attention to by family members.

- **Parental/Adolescent Activities:** Number of different activities engaged in with resident and/or nonresident parent and/or parents in the past 4 weeks.

- **Parental Presence:** Parent present before school, after school, at dinner, at bedtime.

- **Household Access to Guns:** Do or do not have easy access to guns at home.

- **Parental School Expectations:** Mother’s or father’s expectations for high school and college completion.

- **Household Access to Substances:** Do or do not have easy access to cigarettes, alcohol, and/or illegal drugs at home.

- **Family Suicide or Attempts:** Suicide attempts and/or completions by any family member in the past 12 months.

*(Resnick et al. 1997)*
to creating supportive environments for teens, rather than correcting their deficiencies. It calls for data collection efforts that can measure adolescents’ strengths and assets as well as their problems. Building resilience and supporting protective factors are offered as promising strategies that complement, but do not replace, prevention efforts focusing on individual behaviors. Efforts that directly address negative health outcomes are still important, but these efforts are enhanced when blended with an approach that emphasizes youth development and resilience.

**Strengthening Families: The Foundation for Raising Healthy Adolescents**

Although this document emphasizes the importance of community mobilization and collaboration among societal institutions for addressing adolescent health problems, we also stress the important influence of family on adolescent health outcomes and adolescent development. The National Longitudinal Study on Adolescent Health (Add Health) found that young people who feel a strong sense of connectedness to (or feelings of love and caring toward) their parents or other family members are typically less likely to engage in health risk behaviors (Resnick, Bearman, Blum, et al. 1997). Conversely, adolescents with a lower sense of connectedness engage in higher levels of health risk behaviors. Such findings suggest that strategies designed to include and support families are needed to successfully address the health risk behaviors contained in the 21 Critical Health Objectives.

In view of the significant role the social environment plays in adolescent health and development, efforts to improve adolescent health can be strengthened by supporting familial involvement. For example, to achieve positive outcomes, communities may promote parental involvement in developing policies and programs that affect their teenagers and ensure that human service organizations provide an adequate mix of family support services. These strategies will promote safe and healthy environments for youth. For example, in 1992, the Chatham-Savannah Youth Futures Authority established the St. Pius X Family Resource Center (FRC) in Savannah, Georgia. In collaboration with the Chatham County Health Department, the Department of Family and Children Services, the Economic Opportunity Authority, Lutheran Ministries of Georgia, and the Second Harvest Food Bank, the FRC offers a range of services and activities, including after-school programs, public assistance, summer camp, employment services (for adults and youth), child care, and mental health services (Walsh 1998).

At a broader level, supporting families requires institutional changes that address socioeconomic disparities. Almost 20% of adolescents in this country live in families with incomes below the federal poverty line. One-third of African-American and Hispanic children live in poverty, as do 13% of White children (U.S. Census Bureau 2001). The National Research Council Panel on High Risk Youth (1993) found that a combination of social factors, including inner-city deterioration, discrimination, deteriorating public schools, single-parent households, and low-paying jobs, make it difficult for families to rise out of poverty. Such adverse social factors have a negative impact on adolescent health (Rickel and Becker 1997). Poverty limits adolescents’ access to health care and other community resources and negatively influences their perceptions of their futures. On the other hand, programs that assist poor and near-poor families contribute to the health and well-being of the young people in these families.

**Expanding the Vision: The Role of Community Stakeholders in Improving the Health of Adolescents**

Given the multiple dimensions of adolescent health, the numerous antecedent factors that contribute to health outcomes, and the complexity of health risk behaviors, our efforts to...
improve adolescent health will benefit most from multi-pronged approaches that engage several community sectors. Traditionally, the clinical and public health communities have taken responsibility for adolescent health by developing educational and other program interventions that respond to such problems as substance use, injury, and the negative consequences of sexual behavior.

The audience for this Companion Document is very broad; it includes people from a variety of backgrounds and all sectors of society, including healthcare and public health, parents and families, schools, community agencies that serve youth, faith-based organizations, media, postsecondary institutions, employers, government agencies, and numerous others. In addition to parental and family relationships, personal factors such as aspirations for the future, educational achievement, religiosity, and ties to community are closely associated with health risk behaviors. Clearly, adolescents, families, schools, the faith community, businesses, the juvenile justice system, media, youth-serving organizations, and others can play significant roles in ensuring that all adolescents receive the supports they need for healthy development and a smooth transition to adulthood. We need social, political, educational, economic and health care-related strategies to improve adolescent development and behaviors.

To demonstrate the collaborative and broad vision of the National Initiative, we highlight how in Boston, Massachusetts, a broad coalition of federal, state, and local governmental agencies, nonprofit organizations, businesses, parents, community residents, churches, law enforcement, and the juvenile justice system reduced high rates of youth homicide and gang violence. The strategy consisted of action on multiple levels, including policy changes that required stricter responses to gang violence, creation of gun suppression and interdiction programs; and the development of new partnerships between probation officers and police officers for monitoring youth probationers. In addition, numerous prevention and intervention programs were strengthened or established in an effort to build on existing resources and create a more effective continuum of services. Because of the collaboration, integration of multiple key players, and implementation of an array of community-based strategies, the homicide and violence rates among adolescents dramatically decreased within 5 years of implementing this multifaceted intervention.

Since many adolescent risk behaviors mirror adult behaviors, there is a great need for broad positive adult involvement in, and responsibility for, adolescent well-being. Parents and families are lead members of a broad list of stakeholders and societal institutions with a vital role in assuring and improving the health of adolescents.

Schools

Academic settings have tremendous potential to reach young people. About 53 million youth attend primary and secondary schools each day, and 14 million students attend the nation’s colleges and universities each year (US Department of Education 2002). In addition to providing academic knowledge and skills, schools are largely responsible for providing physical shelter, helping to establish social values, developing social skills, and, ultimately, preparing children and young people to become productive, contributing members of society.

Beyond their institutional functions, schools provide adult role models and are a source of peer influences, which have powerful effects on adolescent health, development, and well-being. Research indicates that school connectedness, or the establishment and maintenance of supportive relationships with teachers and peers, protects against a variety of health risk behaviors (Resnick et al. 1997). School connectedness is a parallel concept to family connectedness. From preschool through senior year in college, teachers and professors are often a source of guidance and support and serve as role models for
their students. Likewise, peer groups affect children’s, adolescents’, and young adults’ perceptions of self and relations to others.

Academic institutions can provide opportune settings for comprehensive health education and life-skills development by employing such creative strategies as peer education, school-wide campaigns, and role plays. Although many schools strive to provide comprehensive, age-appropriate health education to young people on a range of health issues, schools can also serve as a central clearinghouse or coordinating entity where young people can obtain information about what resources are available in the community and obtain referrals to community-based programs.

Key Issues for School Health Programs

- **Health promotion is a priority.** Educators must make health education, the promotion of healthy lifestyles, and prevention of risk behaviors high priorities. Policy-makers need to be educated about the importance of comprehensive health promotion in schools and the link between health and the ability to learn.

- **Health education curriculum.** The health education curriculum should be comprehensive, providing a wide range of information related to adolescent health and health-related behaviors. It should also help students develop their skills in risk assessment, decision-making, and communication.

- **School environment.** In addition to offering a health education curriculum, schools promote healthy behaviors by operating a nutritious food service, maintaining clean and safe buildings, offering physical exercise through sports and physical education classes, and providing preventive health services.

- **Development of awareness and cultural competence.** Educators should be sensitive to diversity in experiences and environments with respect to students’ cultural backgrounds, family structure and composition, socio-economic status, and social settings.

- **Professional training.** School personnel should receive in-service training regarding health promotion and social interactions with adolescents and their families.

- **Policies.** States and communities should establish policies that help local schools effectively implement school health programs and school health guidelines.

Adapted from: Elster, Panzarine, and Holt 1993.

Providing health education to children and young people represents just one of the responsibilities society looks to schools to fulfill. Increasingly, society views educational institutions almost as extensions of the family. Schools are often expected to feed students; provide health services; make referrals to community organizations for substance abuse, human services, and domestic violence; cooperate with law enforcement; provide comprehensive health education; and actively promote safety, social skills, physical activity, and overall healthy lifestyles (Dryfoos 1994). Meanwhile, schools continue to be accountable for their main role of preparing students for educational attainment and success in higher education and/or the work force.

Addressing adolescents’ educational, health, and social needs through schools makes sense, but schools cannot be expected to meet these needs alone, especially with their accountability for higher academic standards and standardized test scores in the face of serious fiscal constraints. They can, however, provide a central facility in which many agencies can work together on these issues. Through partnerships and with strong community support, school-based collaborative programs have been successful in addressing
the health needs of children and adolescents. The CDC’s Division of School and Adolescent Health (DASH) has developed and implemented a model for school health, the Coordinated School Health Program, which includes the following eight components: Health Education, Physical Education, Health Services, Nutrition Services, Health Promotion for Staff, Counseling and Psychological Services, Healthy School Environment, and Parent/Community Involvement. DASH currently monitors school health policies and programs across the country through its School Health Policies and Programs Study.

During the past decade, efforts have increased to link schools with community health and social services. Currently, there are some 1,500 school-linked or school-based health centers (SBHCs) in the U.S. providing elementary, middle, junior, and senior high school students with such services as preventive health care, health screenings, immunizations, counseling, and acute care (Making the Grade 1999; Schlitt, Santelli, Juszczak, et al. 2000; Snyder and Hoffman 2000). Studies indicate that SBHCs can be effective and responsive sources of health care (Kaplan et al. 1998).

A significant effort has emerged for linking a comprehensive array of health and social services through “full-service” or “beacon” schools. In addition to providing health care, full-service schools offer dental services, substance abuse treatment, mental health services, parent education and literacy, child care, employment training, case management, crisis intervention, community policing, and family welfare (housing, food, clothing) services (Dryfoos 1994).

Although every school in every community will not have the resources to incorporate all eight components of the Coordinated School Health Program or to create a full-service school, these models serve as examples of what is possible. Through such strategies as partnerships with community agencies and co-location of services, existing community resources can be maximized and a variety of resources made available to adolescents and their families. These models also facilitate the development of effective referral systems to larger and specialized systems of care.

Colleges and Universities

Colleges and universities can play a critical role in promoting the health of the young adult population. Many institutions use a variety of strategies that focus on changing the physical, social, legal, and economic environment on campus while acknowledging behavior influences at the personal, peer, institutional, community, and public policy levels.

Common health issues addressed on college campuses include alcohol and drug use, unsafe sexual activity and STDs, and violence. Many campuses have developed innovative programs that address these sensitive issues through strategies such as education to develop decision-making and communication skills; programs and policies to decrease alcohol abuse (including restrictions on alcohol marketing and promotion, stricter alcohol sanctions and discipline, and promotion of alcohol-free activities); student-led organizations and task forces that organize campus activities surrounding particular health issues; and curricular and extracurricular educational activities for students.

Examples include:

• Pennsylvania State University persuaded the Tavern Association of State College (Pennsylvania) to adopt a policy that the association’s bars and taverns would wait to serve beer to consumers until 26 hours after their 21st birthday.

• Bowling Green State University (Ohio) surveyed students about attitudes and behaviors related to alcohol use and used the results to develop media campaigns that target misperceptions about drinking norms.
Brown University (Rhode Island) sponsors the Sexual Assault Peer Education program, which mandates attendance for all first-year students.

Ohio State University, in collaboration with the private sector, renovated areas with a high concentration of bars to provide positive places for student activities, including cafes and bookstores.

Community College of Baltimore (Maryland) integrates a general wellness approach and making healthy life choices into its curriculum.

Stanford University (California) launched the Stanford After Midnight program to provide students with late-night, alcohol-free activities.

Administrations from seven Washington (D.C.) universities, law enforcement, non-profit organizations, and other agencies teamed up to enforce underage drinking laws, increase community involvement, and improve university programs and services through their Campus Alcohol Reduction Effort (CARE).

Health Care

The personal health care system has traditionally focused on treating illness and disease rather than preventing problems emanating from health-risk behaviors. However, it still acknowledges the critical importance of prevention. In particular, the health problems identified in the 21 Critical Health Objectives are largely preventable. Nearly three quarters (73%) of American adolescents see a physician at least once per year (Ziv et al. 1999), and 86% of youth have a regular clinician. These visits offer physicians and other clinicians the opportunity to provide preventive services. The medical setting allows multiple health factors to be addressed, including biomedical, behavioral, and emotional problems. Studies indicate that adolescents view their physicians as a trustworthy source of health information and that parents want clinicians to provide these services (Park et al. 2001).

Over the past decade, several national organizations and governmental agencies have developed practice guidelines to support the provision and expansion of clinical preventive services to adolescents. These guidelines define the content of comprehensive preventive health visits for adolescents and recommended intervals between visits. Major sources include the American Academy of Pediatrics, American Academy of Family Physicians, American Medical Association, Maternal and Child Health Bureau/Health Resources and Services Administration, and U.S. Preventive Services Task Force.

Despite the potential of clinical preventive services to improve adolescent health, research indicates that the delivery of these services lags well behind national recommendations. Barriers include financial constraints, with more than 15% of adolescents lacking health insurance (Newacheck, Brindis, Cart, Marchi, and Irwin 1999); a lack of confidentiality or ambiguity regarding confidentiality, which may limit adolescents’ disclosure of potentially crucial information (Ford, Bearman, and Moody 1997); limited physician-patient interaction time (Elster, Panzarine, and Holt 1993); and a lack of confidence among clinicians in their ability to counsel on adolescent health risk behaviors. These factors often result in low levels of screening for health risk behaviors. Fortunately, new developments—including provider-focused interventions that aim to increase the delivery of preventive services and accountability initiatives designed to increase the quality of health care services—have the potential to improve the delivery of clinical preventive services (Park et al. 2001).
Key Issues in Health Care Services for Adolescents:

- **Access to services**: Adolescents and their parents need adequate outreach information on the availability of health services, and they require confidential care, flexible office hours, and transportation to the medical setting.

- **Important characteristics of the health visit include**: (1) systematic health promotion and prevention activities; (2) services tailored to the individual patient and family members; (3) screening for health risks; (4) treatment of the adolescent with dignity and respect; (5) teaching skills to the patient to enhance health; (6) provision of referrals; and (7) the creation of a working partnership among the adolescent health care professional and family.

- **Patient orientation**: Health promotion activities targeting the adolescent should consider personal health beliefs, familial factors, and developmental issues. Physicians should help patients appreciate that health education is a vital component of their overall care.

Adapted from: Elster, Panzarine, and Holt 1993.

Community Organizations that Serve Young People

Communities have the ability to influence youth on a wide scale. They can also target those young people who are not reached by school health activities (including classroom education), such as youth who have dropped out of school and those who are homeschooled.

**Asset-Building Strategies**

Many community programs offer asset-building opportunities for young people, opportunities that, while not necessarily labeled as health promotion, nonetheless contribute substantially to adolescent health and well-being. Such programs include mentoring, family education and support, extracurricular activities in schools, programs offered by clubs and congregations, and volunteer and employment initiatives. Asset-building programs can foster self-esteem, positive identity and pride among young people. They can also promote a commitment to education and promote values that help young people become productive members of society. To build youth assets, community organizations should involve young people as volunteers and leaders in their programs; provide asset-building skills to families as well as to youth; examine which program strategies and designs most effectively engage youth; integrate intergenerational perspectives; and provide leadership and financial assistance to programs with asset-building initiatives (Benson 1997).

**Key Issues in Community Adolescent Health Programs**

Communities need to develop comprehensive services for youth that address multiple health and safety issues. Categorical funding has often prevented communities from developing multifaceted programs, including “wraparound” services (such as case management, tutoring, and mentoring programs) that bridge the gaps in health care delivery systems (Brindis, Hughes, Newacheck, and Halfon 1998).

Key Issues in Providing Services to Youth at the Community Level:

- **Composition of services**: Community health promotion services targeting adolescents should be (1) affordable, (2) convenient, (3) confidential, (4) culturally aware, (5) communicative, and (6) compassionate.
• **Life span approach:** Health promotion programming should address multiple life stages, focusing on beliefs and behaviors that develop over time as well as the transitions into adolescence and into adulthood.

• **Family orientation:** Health activities should focus on adolescents in the context of their families.

• **Community orientation:** Adolescents, parents, and other community members should offer input regarding the types of health strategies implemented so as to develop the community’s sense of ownership of these programs.

• **Involvement of the health sector:** Key professionals in the public and private sectors must become involved in setting the adolescent health agenda, including a comprehensive health approach. 

(Elster, Panzarine, and Holt 1993).

### Faith-based Organizations

Faith-based organizations can play a key role in promoting the health and well-being of adolescents for several reasons: they are instrumental in shaping the values of young people; they are trusted institutions with community credibility; they have a long tradition of offering community support services; and they have access to large numbers of young people, parents, and volunteers. Furthermore, research has identified an adolescent’s attachment to faith communities as a protective factor; young people who identify religion and prayer as important to them are less likely to engage in certain risk behaviors (Resnick et al. 1997). Many churches and religious institutions are deeply involved in their communities and may be the only trusted institutions, especially in some communities of color or those with many undocumented residents.

As partners in adolescent health promotion initiatives, faith-based organizations can help facilitate access to young people and their families and lend credibility to groups from outside the community. Faith groups have partnered with many institutions and agencies in preventing violence, crime, and substance abuse. For example, in partnership with local juvenile justice systems, faith groups often provide mentoring and community service programs for court-diverted youth. Some urban schools welcome the support of faith-based institutions as both sources of volunteers and teachers of values. In Detroit, for example, the Second Ebenezer Church sends a youth worker to middle schools during the lunch hour to meet with young people who exhibit violent behavior and are at risk for suspension. The youth worker talks with students about life issues and choices, self-control, conflict resolution, and anger management. School and congregation officials are careful to avoid religious programming in the schools; they focus instead on modeling clear values.

Throughout the United States, faith-based organizations have initiated their own programs to assist persons in need. Ninety-one percent of congregations actively serve their community in one or more programs, such as day care, tutoring, after-school activities, and health-related issues. On average, these congregations provide 5,300 hours a year in community volunteer work. Eighty percent of the beneficiaries are not congregation members; most are neighborhood children. Faith-based groups have spearheaded initiatives on such health issues as violence prevention, substance use prevention, and nutrition and physical activity. For example, the Early Grove Baptist Church in Memphis, Tennessee, established Project Vision, a health promotion program designed to reduce risk factors for cardiovascular disease. Project Vision targets youth aged 5-18 and...
adult women through health education, exercise classes (with child care provided), and blood pressure and cholesterol screenings.

Faith-based groups offering youth groups, after-school programs, and mentoring activities provide an excellent opportunity to incorporate health promotion in existing programs. Alternatively, they have value simply by offering safe and drug-free social events to young people, such as weekend dances and other structured recreational activities during after-school hours. Faith-based communities also serve as a support network for families in crisis, helping guide parents through difficult parenting issues and offering parent-child communication workshops.

By joining in interfaith or multi-congregation collaborations, many groups have been able to create new and separate organizations with not-for-profit status and develop clear missions to improve outcomes for young people. Such efforts help increase capacity for fundraising and mobilizing around adolescent health issues. Finally, many faith-based organizations advocate for health-related policies, which makes them valuable allies in policy-oriented interventions.

**Media**

The media are powerful influences in the socialization and cognitive development of youth (Brown and Cantor 2000). Advertising, television, movies, and other forms of media send a steady stream of messages to adolescents that portray adults as well as teens using tobacco, alcohol or other substances, and participating in sexual relationships, violence, and the unsafe operation of motor vehicles. Studies have shown an association between the media content to which young people are exposed and their attitudes and behavior related to substance use, violence, and sex. Since the 1950s, more than 1,000 studies have examined the effects of violence in television and movies; the majority have concluded that children who watch significant amounts of television and movie violence are more likely to exhibit aggressive behavior, attitudes, and values (National Institute on Media and the Family 2002). In addition, of the 40,000 commercials that children view each year, 2,000 are for beer and wine (Strasburger 2001; American Academy of Pediatrics 1995); advertisements also abound for processed and fast food, soda, and tobacco. Studies also show that television advertising changes young people’s attitudes about engaging in unhealthy behaviors. For example, young people reported more positive feelings about drinking and their own likelihood of drinking after viewing advertisements for alcohol (Grube 1994).

Given their powerful influence, the media warrant substantial focus in any adolescent health initiative. It is important to work with the media to distribute healthy messages and to develop social marketing campaigns that promote healthy lifestyles. The National Campaign to Prevent Teen Pregnancy (The National Campaign) has co-developed successful efforts with several television shows as well as with Teen People magazine. As part of the Teen People partnership, an annual contest is sponsored to identify the best media messages aimed at reducing teenage pregnancy. The winning entries are highlighted in an article in the magazine and, in turn, The National Campaign uses the ads as part of its national efforts. In another effort to combine public health advocacy and popular culture, the CDC developed an anti-tobacco campaign featuring supermodel Christy Turlington as a prominent spokesperson.

Attempting to regulate the media remains a controversial issue. After a decade marked by several high school shootings, the level of violence and violent behaviors in television, movies, music, and video games remains high. In San Antonio, a youth-led movement to remove billboards advertising alcohol and tobacco products placed in low-income communities and near schools required more than advocacy. One clear-cut strategy, however, the use of media literacy education for children, youth and parents, appears to
be taking hold. The New Mexico Media Literacy Project, for example, is a public/private partnership that includes the Albuquerque Academy, the state departments of health and education, and the McCune Foundation. Among its activities, the Project provides curricula as well as tools on media literacy to schools, conducts workshops, and offers trainings to teachers in media literacy related to health.

Communities can also turn to media other than the entertainment industry to promote adolescent health. State health departments often invest in social marketing campaigns that promote healthy behavior messages on billboards and television commercials. Communities can also undertake local media projects; for example, young people can create their own health promotion messages in the form of television commercials and public service announcements aired on local television and radio. Communities can also organize health promotion events that attract media attention or write opinion pieces for the local newspaper (local media strategies are discussed in Chapter 7).

Employers

The number of adolescents entering the workforce is steadily increasing; by 2006, nearly 9 million workers will be aged 16 to 19. Research indicates that employment can promote healthy development, as it instills self-discipline, makes constructive use of time, and allows teens to make money. Employment has been associated with an increased sense of independence and responsibility, and teens with paid jobs are more likely to find employment once they graduate from high school (Brown 2001). In addition, working moderate hours is associated with higher educational attainment.

Unfortunately, working too many hours can have negative effects on a teen’s health, education, and family relationships. The Add Health Study found that working more than 20 hours a week was associated with emotional distress, substance use, and earlier age of sexual debut (Resnick et al. 1997). Although teens who work can contribute to family income, they spend less time with their families (Steinberg, Greenberger, Garduque, Ruggiero, and Vaux 1982). Furthermore, working long hours is associated with poorer academic performance (Steinberg and Dornbusch 1991) and deficits in sleep, nutrition, and exercise (Bachman and Schulenberg 1993).

With these facts in mind, families and employers should be sensitive to the competing needs in young people’s lives. Where possible, families can instill a commitment to education in their teens who have jobs by prioritizing their homework and limiting work hours. In addition, employers can promote health and safety in the workplace through employee training programs; by hanging posters with healthy messages; and by implementing work programs aimed at preventing substance abuse and injuries and promoting healthy nutrition. Employers can also contribute to positive youth development by offering internships and work programs to teens involved in community-based programs. For example, in San Francisco, a youth-focused nonprofit organization called Juma Ventures has partnered with food vendors and companies. It owns and operates concession stands at professional sports venues. Through the youth-run concessions, the organization provides jobs and job training for teens and young adults recruited from local low-income, at-risk neighborhoods. Juma Ventures also offers its young employees programs in saving money, writing resumes, and searching for jobs as well as referrals to other services.

Employment programs are also offered as rehabilitative programs or alternative sentencing options for youth in the juvenile justice system. For example, at the Avon Park Youth Academy (Florida), male repeat offenders aged 16-18 participate in a 9-month program that prepares them to hold jobs with living wages. Participants receive certification and wage-earning, work-based experience in the culinary arts, masonry, flooring, horticulture, plumbing, electricity, carpentry, building maintenance, landscaping, and auto
mechanics. The program has shown promising results, with a recidivism rate below 10%. Furthermore, 78% of students complete the program; 40% earn General Educational Development (GED) certificates or high school diplomas; 78% receive vocational certification; and 81% remain employed after 6 months.

### The Role of Law Enforcement, Corrections, and Juvenile Justice

The federal Office of Juvenile Justice and Delinquency Prevention recommends a collaborative approach for preventing youth involvement in the justice system, an approach that focuses on youth development, addresses both risk and protective factors, and calls on different sectors to coordinate programming. The factors that place young people at risk for delinquent behaviors are the same that place them at risk for negative health outcomes and include poverty, family violence, lack of school connectedness, and access to drugs and firearms. Correspondingly, law enforcement and juvenile justice are natural allies for adolescent health promotion. Many of the efforts to prevent youth involvement in the juvenile justice system focus on such strategies as providing mentoring, employment training, and other youth development programs; increasing the number of recreation and after-school programs available to young people; providing mental health services; and offering support for the development of skills in anger management and conflict resolution.

Juvenile justice programs could benefit from partnerships with public health and human services programs addressing Critical Health Objectives in the areas of substance abuse, violence, and mental health. Court-involved and incarcerated youth face the same health issues as the general youth population but are often harder for community-based programs to reach. They may have been expelled from school or removed from their neighborhood or the community settings where most interventions take place. In some instances, young people involved in the juvenile justice system are among the groups at highest risk for such negative health outcomes as STDs, HIV infection, pregnancy, substance abuse, and other serious consequences from injuries sustained during fights and altercations with the police. Prevention programs, where they exist, take place in group homes, juvenile detention centers, and other correctional facilities using curricula specifically developed for incarcerated youth.

Community-based youth development programs are available for youth involved in the juvenile justice system as rehabilitative or court diversion programs. Local police departments frequently offer community programming in addition to their policing duties. Many officers arrange jobs for youth, create sports leagues and other recreation programs, and conduct violence prevention and mentoring programs. Local police are key partners for prevention programs seeking to expand their efforts into high-risk communities.

### Government Agencies

Government agencies—at the federal, state, and local levels—play both direct and indirect roles in adolescent health by developing policies, implementing programs, and providing funding for research. Locally, such bodies and agencies as the city council, county commissioners, county departments of health, and school districts affect a community’s awareness and its willingness to address the health needs of adolescents. Conversely, government agencies and policy makers can be encouraged to take action as a result of the advocacy efforts of individuals and communities. For example, after their 16-year-old son committed suicide in January 1992, Scott and Leah Simpson mobilized their community to increase its knowledge of suicide and mental health issues. By September of that year, the Simpsons had convinced their local legislator to sponsor a youth suicide prevention bill in the Washington State House of Representatives. The bill did not
pass, but as a compromise the legislature allocated funds for the development of a state-
wide youth suicide prevention plan (http://www.yspp.org/index.htm).

Similarly, support from state government agencies often provides impetus for program
and policy development; the assistance of these agencies in developing strategic plans or
reports on adolescent health can help make adolescent health a priority. The California
Adolescent Health Collaborative is a statewide partnership between public and private
agencies aimed at promoting adolescent health (http://www.californiateenhealth.org).
The collaborative created a comprehensive strategic plan for adolescent health that is
multidisciplinary, noncategorical, and serves as a call to action to a broad array of stake-
holders. The project was supported by the California State Department of Health
Services, Maternal and Child Health Branch, and is now being put into action by county
adolescent health coordinators throughout the state.

At the federal level, policies are set that affect how young people access health care and
what type of health education they receive. Federal agencies also help set priorities and
provide guidelines by disseminating research, information, and guidelines on best prac-
tices and program approaches. For example, the Center for Substance Abuse Prevention/
Substance Abuse and Mental Health Services Administration (CSAP/SAMHSA) devel-
oped “SAMHSA Model Programs,” which consist of curricula and other programs
centered on preventing substance abuse (http://www.modelprograms.samhsa.gov).
These types of tools elevate the government’s role in community health promotion by fa-
cilitating dissemination of information on effective programs to greater numbers of
communities.

Academic Institutions

Academic institutions can play many roles in promoting adolescent health that go be-
yond the campus-based health promotion programs described above under “Colleges
and Universities.”

First, they have the potential to train future leaders in the adolescent health field. Rela-
tively few institutions of higher learning, however, offer comprehensive, practical
programs that teach future health professionals how to address the many sensitive health
topics important to adolescents. Thus, schools of public health, medicine, nursing, law,
social work, education, and divinity as well as university departments of nutrition and
psychology, have an important role in training practitioners about the specific health is-
ues and concerns faced by adolescents. They can also train practitioners to deliver
health care in a way that is youth-friendly and developmentally and culturally appropri-
ate.

Schools of medicine, public health, and nursing, as well as other postsecondary institu-
tions also have the resources and skills to conduct research that advances our knowledge
about adolescent health. New research informs us about health behaviors, the underly-
ing causes of important health issues, and the elements of successful health programs for
young people. Academic institutions can also translate research into meaningful practice
for a variety of health and youth-serving professionals through partnerships with non-
profit organizations, hospitals, departments of public health, and other institutions
providing direct services. In addition, university students can bring valuable skills and
resources to communities through field experiences and internships. With appropriate
supervision as well as as community support, students and trainees can be placed as
health providers in underserved communities, provide research and data collection ser-
ices to communities that are conducting needs assessments or evaluating programs, and
offer a wide range of affordable professional skills that are otherwise not easily available
to community programs.
Lessons Learned

Many interventions have focused on providing information and skills so that young people develop a portfolio of knowledge, attitudes, and life skills that foster healthy decision-making. Research has clearly demonstrated that interventions focused only on providing knowledge have limited effectiveness. Program evaluations have also helped to create a scientific base for best practices and effective programs in numerous areas. A limited number of adolescents across the country have benefited from these model programs, but efforts to “go to scale” on most well-evaluated interventions have not occurred. Replication of best practices and model programs has been challenging for several reasons, such as dilution of program components and reduction in program time that are based on financial constraints. In Chapter 6, we discuss how to maintain a successful program’s core elements when adapting it to new groups of youth. Research on health risk behaviors indicates that different groups of adolescents may need different interventions. For example, some programs found to be effective in preventing use of tobacco or teen pregnancy have not yet been evaluated with certain subgroups, such as rural teens, some racial/ethnic groups, and youth with special needs. In addition, male and female teenagers may respond differently to some health promotion messages. Lessons learned from past efforts offer valuable insights on the ingredients needed to meet the 21 Critical Health Objectives. To illustrate an effective “recipe” for success, we shall consider the issue of alcohol consumption in relation to motor vehicle crashes, which is directly related to 3 of the 21 Critical Health Objectives. First, widespread societal consensus needs to be reached about acceptable approaches to improving health needs. For example, public education campaigns with messages such as “If you drink, don’t drive” have helped to create strong support for the concept of “designated driver,” which, in turn, has contributed to a reduction in drunk driving among youth and adults. Second, to establish broader-level changes, there must be sound financial backing of policy and program initiatives. To curb driving under the influence of alcohol, policy makers have created policies to fund programs that increase penalties and fines for drunken drivers. Third, effective strategies must engage multiple stakeholders from a variety of perspectives. Involving bar owners in setting moderate drinking limits, creating Mothers Against Drunk Driving (MADD) and Students Against Destructive Decisions (SADD) chapters, and implementing media campaigns have all reinforced messages across multiple sectors about the consequences of drunk driving. Fourth, research-based, data-driven programs and policies are important to assure effective use of resources. For instance, federal policy has rewarded those states that have made penalties against drunk drivers more severe. Finally, clear professional commitment and advocacy play a role in assuring that a policy issue remains highly visible. For example, organizations such as MADD have continually educated the public about the societal impact of drunk driving and advocated for policies that will reduce the incidence of alcohol-related traffic deaths. This organization was instrumental in advocating for graduated driver licensing laws, which allow for better supervision of new and young drivers by regulating the time of day adolescents can drive, in stipulating the length of time an adult must accompany new adolescent drivers, and in limiting the number of passengers allowed in a vehicle operated by a new adolescent driver.

Summary

The lives of today’s adolescents cannot be neatly divided by health problem or risk behavior, or by topic and agency; instead, there is a continuum among home, school, community, and multiple additional influences. Because many societal factors contribute to adolescent health, safety, and well-being, health promotion and prevention strategies should not be implemented in isolation; a collaborative effort across multiple societal in-
Cooperation across systems is necessary. Coordination and cooperation across systems can strengthen efforts to address categorical health issues. Such joint efforts can also help to promote a more comprehensive approach to addressing adolescent health—an approach that views adolescents as whole persons who need many supports and opportunities for healthy development. By working across systems and health issues in a coordinated effort, individuals and institutions can together bring about significant positive changes. It is through this joint effort that the 21 Critical Health Objectives for adolescents and young adults can be achieved.